# Discourse and Function 

A Framework of Sentence Structure

by Anthony C. Pick

## Dedication

This book is dedicated to the memory of Irene Pick (1939-2007).

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Discourse and Function: Introduction .....  .7
Background and Objectives .....  7
Discourse Structure of a Sentence ..... 10
Functional Structure of a Sentence ..... 13
Component Structure of a Sentence ..... 15
The Adverbial Component ..... 17

1. Subject and Topic ..... 19
Summary ..... 19
Subject and Predicate ..... 19
Exclamation ..... 21
Possession Sentence ..... 21
Existence and Non-Existence ..... 22
Focus ..... 25
Topic and Comment ..... 27
Topic and Enquiry ..... 31
Topic and Hypothesis ..... 33
Conclusion ..... 34
2. Identity and Quantity ..... 35
Summary ..... 35
Definite and Indefinite Noun ..... 36
Definite and Indefinite Article ..... 37
Individual Noun ..... 38
Definite Topic or Subject ..... 38
Definite and Indefinite Object ..... 38
Restrictive Qualifier ..... 39
Pronoun ..... 43
Definite and Indefinite Verbs ..... 44
Specific and General Concepts ..... 45
Generic and Nonspecific Concepts ..... 48
Specific and General Sentences ..... 52
General Pronoun ..... 52
Quantity ..... 53
3. Sentences Containing an Indefinable Element ..... 57
Summary ..... 57
Indefinables ..... 58
Negatives ..... 59
Selection and Comparison ..... 64
Questions ..... 67
Hypotheses ..... 71
Conditions ..... 73
Conclusion ..... 77
4. Grammar and Syntax ..... 78
Summary ..... 78
Grammar and Syntax ..... 79
Auxiliary Words ..... 80
Articles ..... 81
Links ..... 82
Relative Pronoun ..... 84
Word Order ..... 86
5. Aspect, Tense, and Viewpoint ..... 95
Summary ..... 95
Aspect ..... 95
Tense ..... 99
Conjunctions ..... 102
Gerund ..... 103
Aspect of Qualifiers ..... 106
Perfective Participle. ..... 107
Imperfective Participle ..... 109
Stative Participle ..... 110
Possessive and Recipient Participles ..... 111
Beneficiary Participle ..... 112
Prospective Participle ..... 112
General Participle ..... 113
Conclusion ..... 115
6. Transitive Sentences and their Stative Resultants ..... 116
Summary ..... 116
Background ..... 117
Transitive Sentence and Stative Resultant ..... 118
Agent and Instrument ..... 120
The Passive Construction ..... 121
Attributive Sentence and Verb ..... 125
The Ergative Construction ..... 127
Functions of the Transitive Verb ..... 129
The Creation and Destruction Functions ..... 129
The Transformation Function ..... 130
The Locative Function ..... 131
The Constituent Function ..... 134
The Effect Function ..... 135
The Dependency Function ..... 138
The Appliance Function ..... 138
The Identification Function ..... 140
7. Intransitive Sentences and their Stative Resultants ..... 143
Summary ..... 143
Overview ..... 143
The Agential Intransitive or Reflexive Sentence ..... 144
The Instrumental Intransitive or Reflexive Sentence ..... 148
The Inceptive Sentence. ..... 149
The Participation Function ..... 153
Conclusion ..... 157
8. Transfer and Possession Sentences ..... 159
Summary ..... 159
The Transfer Function ..... 159
The Possession Function ..... 163
The Transfer and Possession Functions ..... 169
The Exchange Function ..... 170
The Provision Function ..... 171
The Opinion Function ..... 171
The Communication and Perception Functions ..... 176
The Interrogation Function ..... 178
The Volition and Imperative Functions ..... 179
The Representation Function ..... 182
9. Receptive and Adoptive Sentences ..... 184
Summary ..... 184
Overview ..... 184
The Receptive Sentence ..... 185
The Adoptive Sentence. ..... 188
Conclusion ..... 192
10. The Benefactive and Adversative Functions ..... 194
Summary ..... 194
The Benefactive Function ..... 194
The Adversative Function ..... 198
11. Sentences with a Dynamic Resultant Sentence ..... 200
Summary ..... 200
The Causative Function ..... 200
The Inchoative Function ..... 203
The Facilitative and Modal Functions ..... 206
The Adoptive Modal Function ..... 210
The Responsibility Function ..... 211
12. Functional Nouns ..... 213
Summary ..... 213
Nouns Describing Verbs and Attributes ..... 213
General Action Noun ..... 214
Role ..... 215
Attributive Noun ..... 216
Event Noun. ..... 217
Creation Noun ..... 219
Transport Noun ..... 220
Effect Noun ..... 220
Dependency Noun ..... 220
Appliance. ..... 221
Participation ..... 221
Inchoative Noun ..... 222
Communication Noun ..... 222
Possession ..... 223
Benefit and Adversity ..... 225
Genitive Link ..... 227
Comitative Link ..... 229
13. The Discourse Analysis of Sentence Structure ..... 230
Summary ..... 230
Introduction ..... 230
Background ..... 231
Overview ..... 234
Existential Sentence. ..... 236
Existential Negatives and Questions ..... 239
Statement ..... 240
Negative Statement ..... 245
Questions ..... 247
Hypothesis ..... 249
14. The Syntax of Sentence Discourse ..... 251
Summary ..... 251
Introduction ..... 251
Topic, Comment, Enquiry, and Hypothesis. ..... 252
Identity ..... 254
Addition ..... 256
Alternative ..... 257
Stative Relations ..... 257
Dynamic Sentences ..... 259
Aspect. ..... 260
Generality ..... 264
Inference ..... 267
15. The Functional Analysis of Sentence Structure ..... 270
Summary ..... 270
Introduction ..... 273
The Creation Sentence ..... 274
The Transformation Sentence ..... 274
The Locative and Movement Sentences ..... 277
The Transformation Locative Sentence ..... 280
The Time Sentence ..... 281
The Attributive Sentence ..... 282
The Constituent Sentence ..... 284
The Effect Sentence ..... 286
The Freedom Sentence ..... 287
The Dependency Sentence ..... 288
The Relief Sentence. ..... 289
The Identification Sentence ..... 289
The Substitution Sentence ..... 290
The Comparison Sentence ..... 291
The Participation Sentence ..... 294
The Role Sentence ..... 296
The Style Sentence ..... 297
The Possession Sentence ..... 298
The Deficiency Sentence ..... 301
The Exchange Sentence ..... 303
The Perception Sentence ..... 304
The Negative Perception Sentence ..... 306
The Opinion Sentence ..... 307
The Supposition Sentence ..... 311
The Communication Sentence ..... 314
The Negative Communication Sentence ..... 316
The Proposal Sentence ..... 317
The Interrogation Sentence ..... 319
The Representation Sentence ..... 320
The Benefit Sentence ..... 321
The Warranty Sentence ..... 324
The Ability Sentence ..... 325
The Necessity Sentence ..... 327
The Responsibility Sentence ..... 329
The Causative and Preventive Sentences ..... 332
The Inchoative and Cessative Sentences ..... 334
The Error Sentence ..... 337
16. The Components of a Sentence ..... 340
Summary ..... 340
Overview ..... 341
Classification of Sentence Elements ..... 344
The Verb Component ..... 345
The Subject Component ..... 349
The Object Component ..... 352
The Complement Component ..... 356
The Noun Component ..... 358
The Subject as Topic ..... 361
17. Adverbials ..... 369
Summary ..... 369
Adverbials in Grammar ..... 369
Adverbials in Discourse ..... 372
Adverbials of Space ..... 374
Adverbials of Time ..... 375
Adverbials of Causation ..... 377
Adverbials of Condition ..... 378
Adverbials of Concession ..... 379
Adverbials of Comparison. ..... 381
Adverbials of Observation and Supposition ..... 382
Adverbials of Generality ..... 382
Adverbials of Benefit ..... 383
Adverbials of Quantity ..... 383
18. The Components of a Question and a Negative Sentence ..... 384
Summary ..... 384
Background ..... 384
Verbal Sentence ..... 386
Nominal Sentence. ..... 390
Complementary Sentence ..... 392
Adverbial Sentence ..... 395
Gerundial Sentence ..... 397
19. Illustrations ..... 399
Notation and Transliteration ..... 406
Glossary ..... 407
Discourse and Function: References ..... 417

## Discourse and Function: Introduction

"Ideally, our discussion of the syntactic structure of the nuclei of kernel-sentences should be conducted within the framework of some generally accepted and universally applicable system of grammatical analysis. Unfortunately, no such system exists." (Sir John Lyons, 1994) ${ }^{1}$

## Background and Objectives

The starting point for linguistic research, in both its history and its method, is study of the grammar of individual languages. Whichever language is examined, linguists find that it has a set of precise rules under which an utterance is considered by a hearer to be correct or not. Often a language possesses more than one such set of rules, for each of which it is said to have a dialect. However, the rules for each dialect are precise and under them an utterance is correct or not. For most major languages, a particular set of rules has become standardised as the received or standard language. We employ in this book examples from the standard versions of 20 sample languages, of which 9 are not IndoEuropean, supported by examples from 9 further languages. ${ }^{2}$

These precise rules provide a firm basis for research into each language, and is its grammar. The grammar of a language prescribes how words link together, and in what order, to express any meaning which the speaker wishes to convey. Most grammars, when studied in any detail, turn out to be quite detailed. The core rules may be simple, but when they are applied to all the variety of circumstances which occur in the world, the application can be complex. Much of linguistic research is dedicated to eliciting the fine detail of this complexity, in order to discern how each language addresses the needs of its speakers.

A common feature of all languages is that they possess a unit of meaning, which we call a sentence. Linguists have found that in general sentences have a simple core structure which can be summarised by the following terminology, and that this structure appears to be universal:

- The action or state of a sentence is its verb.
- A person or thing which is not an action or state is a noun (or a pronoun).
- A noun which engages in the action or state of a verb, and agrees with the verb, is its subject.
- In the case of a verb describing an action, the noun towards which it is directed is its object.
- The state or condition of an object after action of a verb is its complement.
- The state or condition of a noun is an adjective (or attribute).
- A state or condition of a verb or adjective is an adverb.

This terminology, which we can call "conventional", allows sentences to be divided into transitive, which consist of "subject-verb-object-complement" and intransitive, which are "subject-verbcomplement", although the order of the elements may vary. Originally conceived to interpret the grammar of Latin and Ancient Greek, it adequately describes the structure of such straightforward sentences as:
"I read your book today"; "She went to London by train"; "The train is late";
and many others of the almost unlimited number of sentences which any language can construct. However, linguists have only been able to apply it to certain sentence structures by distorting or altering the terms, or by devising additional categories such as "topic", "comment", or "ergative". For example, linguists have puzzled over what is the subject of the Italian:

[^0]"Mi piace cioccolato." "I like chocolate." [To-me pleases chocolate.]
Is it "cioccolato", which is in object position, or "mi"? Or of the Japanese:
"Watashi wa Eigo ga wakaru." "I understand English."
[ $\mathrm{I}_{\text {(topic) }}$ English (subject) is-understandable.]
which has both a topic and a subject, or of the Hindi:
"usne kitāb likh $\overline{\mathrm{r}}$ " "He wrote the book." ${ }^{[H e}{ }_{\text {(agent) }}$ book written.]
where the verb agrees with the object. Moreover, what is the subject and verb of the Russian:
"U menya kniga." "I have a book." [With me book.] or of the Welsh:
"Bydd yn rhaid i mi godi." "I shall have to get up." [Will-be in necessity to me rise.] or of an "impersonal" sentence, such as:
"It was by John that the ball was hit."?
European languages include "be" in the category of verb, so that "The weather is fine" and "The Chairman is Jack Smith" fit into the "subject-verb-complement" pattern. However, many languages do not have a verb "be", or do not use it in the present tense. What is the verb in these instances?

Arabic: "al-ḍawPu nāṣifun""The light [is] clear."
"hā?ulā?i hunna banātī" "These are my daughters." [These they daughters-my.]
Indonesian:
"Dia amat sangat kaya." "He [is] exceedingly rich."
"Ini keputusan saya." "This is my decision." [This decision me.]
Chinese:"Zhè ge fángjiān shí mĭ kuān." "This room is ten metres wide." [This unit room ten metre wide.]

Similarly, many European languages possess a verb "have", but others employ a different construction for this concept. In these constructions, the subject and verb may not be evident:

Finnish: "Rasialla on outo historia." "The box has a strange history."
[Box-at there-is strange history.]
Hungarian:
"Jóska feleségének jó állása van." "Joska’s wife has a good job." [Joska wife-his-to good job-her is.]

Welsh: "Y mae'r fasged gan Mair." "Mary has the basket."
[There-is the basket with Mary.]
Irish: "Tá gúna nua ag Eibhlín." "Eileen has a new dress."
[Is new dress at Eileen.]
Turkish: "Evin bahçesi var." "The house has a garden." [House-of garden-its there-is.]
Arabic: "lahu banūna fì l-jāmi§ati" "He has sons in the University."
[For-him sons in the-University.]
Hindi: "mere pās ek gāṝ̄ hai" "I have a car." [Me-with a car is.]

Maori: "He pōtae hou tō Hine." "Hine has a new hat." [A hat new the-of Hine.]
These conceptual difficulties occurs because in conventional terminology "verb" and hence "subject" are not defined with sufficient precision. A similar lack of clarity arises with "object". We noted that in conventional terms a transitive verb operates directly on an object, while an intransitive verb does not. However, there are many verbs which are "transitive" in one language and "intransitive" in another:

```
French:"Je lui ai résisté." "I resisted him." [I to-him have resisted.]
    Italian: "I ragazzi hanno ubbidito al professore."
        "The boys [have] obeyed [to] the teacher."
    Russian:"Ona igraet na pianino." "She is playing [on the] piano."
    Persian: "bar došmanan taxtand" "They attacked the enemy." [On enemy they-attacked.]
    Hindi: "hamne duśman par hamlā kiyā""We attacked the enemy."
                            [By-us enemy-on attack made.]
Samoan:"Sa e va'ai ia Malia i le asō?""Have you seen [to] Mary today?"
```

In English, one verb can be "transitive" while another with the same meaning is "intransitive":

$$
\begin{array}{ll}
\text { "She met her friend." } & \text { "She met with her friend." } \\
\text { "We attended the meeting." } & \text { "We came to the meeting." } \\
\text { "She tackled the problem." } & \text { "She dealt with the problem." } \\
\text { "I processed the batch." } & \text { "I worked on the batch." } \\
\text { "She visited her neighbour." } & \text { "She called on her neighbour." }
\end{array}
$$

These inconsistencies bring into question the concept of "object". Is an object a target towards which the verb is working, or a patient which it alters?

These dilemmas are not new. In the same section of his standard work on syntax quoted above, Lyons put forward six kernel sentences, comprising six nuclear components: noun-phrase, verb, noun, adjective, locative, and possessive, with an optional copula. J.M. Anderson ${ }^{3}$ proposes a set of four core semantic relations (erg [ergative], abs [absolute], loc [locative], and abl [ablative]), to which he later adds a fifth (prt [partitive]). However, both scholars have to sustain these generalisations by detailed argumentation, qualifications, and exceptions. Moreover, Anderson's system does not include the action or state expressed by the verb.

In his well-known work on ergativity, R.M.W. Dixon ${ }^{4}$ maintains that all languages function with three primitive relations: A (transitive subject), S (intransitive subject), and O (transitive object). In discussing the concept of "subject", he assigns A and S to the "underlying-structural category of subject", while passive subjects, for example, are assigned to a "derived structure". However, the ordinary user of English will regard "boy" in "The boy stood on the burning deck" and "The boy was bitten by the dog" as equally the subjects of their sentences, without being concerned that one is "underlying-structural" and the other is "derived-structural".

Our contention is that resolution of the problem does not lie with searching for a yet more recondite general definition of "subject", "verb", and "object". The terms are of course meaningful, but only with respect to particular sentence structures. For each sentence type, "subject", "verb", "object", etc have a different function, not necessarily the same in another sentence type. A "transitive" sentence such as:
"Mary planted the tree"

[^1]has no more in common with another "transitive" sentence such as:

> "John's arrival pleased Mary" or "Mary heard a sudden noise"
than it has with an "intransitive" sentence such as "Mary got up" or "Mary felt ill" or "Mary has fair hair". The five sentences convey different things, and their elements have different functions.

Moreover, use of the terms "subject", "verb", "object" etc, has been confused with two other considerations. One arises from the fact that, in most sentences, the subject is the topic (what the sentence is about) and the verb is the leading element in the comment (what the sentence says about it). Definitions have accordingly attempted to reconcile "subject" as a topic, "subject" as the agent of a transitive verb, and "subject" as the patient of an intransitive verb. This reconciliation is not possible. The topic-comment structure is independent of the elements which make a sentence up, such as agent, action, state, patient, beneficiary, etc.

The second cause of confusion is the fact that, in many sentences, a subject is a person, an object is a thing, and a verb is an action. Definitions have accordingly attempted to reconcile "subject" as a person with "subject" as the instigator of an action, and "object" as a thing with "object" as an entity undergoing some process. Definitions of "verb" have tried to reconcile "verb" as an action with "verb" as an auxiliary such as "be" or "have" which connects the subject to a quality or possession. Again, we do not believe that such reconciliations can be achieved. According to the sentence type, "subject", "verb", and "object" may be a person, object, action, state, or relationship.

The task of this book is to address this lack or precision in the terminology of grammar, which arises despite that fact that, as we have noted, grammar is very precise. To do so, we do not follow the route of further researching the details of grammar, which for each of our sample languages has already been thoroughly analysed. Our approach is to consider the purpose of grammar, namely how languages describe, question, or comment upon the situations in the world that the speaker of a language encounters. In doing this, we find that we can formulate those situations in terms of two conceptual models, which are independent both of each other and of grammar. The common feature of both models is that they describe the purpose of a sentence.

The first purpose of a sentence is that it introduces new information for discussion, or refers to that information and conveys new information concerning it, or asks a question or makes a suggestion concerning it. In addition, it can deny the information or suggestion. By this means, a sentence fits into a sequence of sentences to build up a dialogue or narrative. We call this purpose of language discourse. The way in which a sentence satisfies the requirements of discourse is its discourse structure and study of it is discourse analysis.

Secondly, a sentence describes an action or state which someone or something is engaged in or undergoing. It has to model all the situations in the world which a speaker may encounter and wish to discuss. Since the world is always more complex than any system for describing it, language is continually evolving through its vocabulary and grammar to adapt to it. Nevertheless, it is possible to categorise the principal actions and states, and to study how languages equip themselves to express them. We call this purpose of language its function. The way in which a sentence describes functions is its functional structure and study of it is functional analysis.

Equipped with these theoretical models, we find that grammar does indeed present an exact mechanism for describing the world, and that its terminology can be adapted to provide robust definitions for subject, verb, object, complement, and adverbial which overcome the limitations we have identified. We give this more precise terminology the term components. A grammar based on components is called component structure and its study is component analysis.

Until we can demonstrate component structure in Chapters 16. and 17., we shall refer to the grammatical terms "subject", "verb", "object", "complement", "adverbial", "noun", and "adjective" or "attribute", in the conventional or empirical senses described above.

## Discourse Structure of a Sentence

By discourse, we mean the dialogue or narrative within which a sentence is expressed. A sentence supplies or enquires into information within that discourse. For this purpose, a sentence consists of two parts: information which is already known to the speaker and which the speaker assumes is also known to the hearer, and new information about that known information. If the new information is to be useful, the known information must both exist and relate to something or someone which is identified. Both known and new information consists of words.

We call the known information the topic and the new information the comment. The comment is the core of the sentence, and can take many forms: the sentence can state that a comment exists (in which case there is no topic), can select a comment from a class of known or new information, can deny that a comment exists, can deny a connection between the topic and the comment, can enquire whether a comment exists, can enquire whether a connection exists between the topic and the comment, or can hypothesise whether the comment might exist. Each of these different forms of comment require a different type of sentence. In order to deliver it, a language has to mark the topic and the comment in some way, and to mark the different types of comment to indicate what is being communicated.

The way in which languages differentiate the topic and comment of a sentence is its means for delivering discourse structure. It seems that all languages have a basic sentence pattern which is termed "subject-predicate". The predicate includes a core element, the verb, which describes an action or state which applies to the subject. The basic sentence structure is therefore "subject-verb-etc", where "etc" is the rest of the predicate. There is therefore a simple model for discourse structure: the subject is the topic and the predicate, led by the verb, is the comment. The meaning of the sentence depends on what action or state the verb is conveying about the topic.

Unfortunately, this simple model only applies if the verb is sufficiently flexible to describe all the possible actions or states which apply to all topics. In most languages, this is not the case. Topics and comments can take any form, since they are determined by what the speaker needs to talk about and what he/she needs to say about it. Languages are usually well equipped if the topic is a human agent of an action or is a person or object in some state or condition. However, what if the topic is an inanimate instrument, or a person or object on, to or for whom an action is occurring, or the action or state itself, or the time or place that the action occurs? Most languages do not provide verbs to describe the actions or states of all these topics. For example, in Japanese and Russian a subject cannot be a inanimate instrument, so an impersonal construction is adopted:

$$
\begin{aligned}
& \text { "Tamago de arerugī ni naru." "Eggs cause me an allergy." [Egg-by allergy-to becomes.] } \\
& \text { "Podval zalilo vodoi." "The cellar was flooded." [Cellar }{ }_{(\text {object })} \text { it-flooded by-water.] }
\end{aligned}
$$

In Welsh, Finnish, and Hungarian, an impersonal expression is used if a subject is also the object of the verb:
"Gwisgir y wisg Gymreig ganddi hi." "Welsh costume is worn by her."
[There-is-wearing the costume Welsh by her.]
"Ovi suljetaan avaimella." "The door is closed with a key."
[Door one-closes with key.]
"Óránként közlik a hireket." "The news is broadcast every hour."
[Every-hour they-broadcast the news.]
Moreover, in discourse structure a topic can be either a single word, or most of the sentence:
"What did he do today?" "He went to town at 10.00."
"When did he go to town today?" "He went at 10.00."
"What happened today?" "He went to town at 10.00."

[^2]The subject of these three pairs of sentences is "he" and the verb is "went". However, the topic of the first pair is "he", of the second pair is "his going to town today", and of the third pair is "today".

English does not possess a grammatical verb for all these purposes. Since every sentence refers to an action or a state, every sentence has a verb and a subject which the verb applies to, but these may not correspond to the discourse structure. Where they do not, a sentence construction is used to mark the topic and comment.

The first part of this book (Chapters 1. to 5.) is concerned with how this problem is overcome. For each sample language, we examine its discourse structure: how the topic and comment are marked for all the varieties of topic and comment, and how the various types of comment (statement, negative statement, question, etc) are expressed. For this purpose, each word is shown to possess one of three classes of identity: known information (definite), new information from a class of information which is known (indefinite), or information whose existence is not certain. For this last category of unknown information we have devised the new term "indefinable"; for example, many languages employ a subjunctive for indefinable verbs. Indefinable words occur in some questions and negative statements, and in sentences which refer to suppositions and proposals.

In Chapters 13. and 14., we present a formal notation for analysing the discourse structure of any sentence in terms of what we call elements, that is a class of words fulfilling a certain purpose in discourse ${ }^{6}$. Discourse elements include \{definite\}, \{indefinite\}, \{indefinable\}, \{select\}, \{circumstance\}, $\{$ not $\}$, $\{$ but $\}$, and $\{$ query \}. A topic is by its nature unique and \{definite $\}$. A comment is by its nature selected from a class of possible comments. If the class is definite, the comment is \{select\}. If the class is indefinite, it is given an identity by a definite \{circumstance\}:
"She took the train to work (not her car)."
"She drove to work in her car (not took a train from the station)."
An indefinite comment in a question or negative sentence is not possible. The elements of such sentences are $\{$ definite $\}$ or $\{$ indefinable $\}$ :
"Did she take a train to work?" "She did not take a train to work."
The comments of all classes of sentence can be represented by means of one or more of these discourse elements. It is shown that an existential sentence consists of the elements \{indefinite - circumstance\}. The utility of this approach appears when it is applied to sentences such as:
"Opening his ledger, he entered his accounts."
"He entered his accounts, as he did every month."
"He entered his accounts, which showed a profit."
"He diligently entered his accounts for that month."
These sentences contain a qualifier which adds further information, that is a non-restrictive qualifier. Using the formal notation, we can show that they have more than one comment and/or more than one topic. Each is in fact two sentences, in the same way that other compound sentences are understood:
"He opened his ledger and entered his accounts."
"He entered his accounts; he did so every month."
"He entered his accounts; they showed a profit."
"He entered that month's accounts; he did so diligently."
Conversely, other apparent compound sentences contain restrictive qualifiers, that is a qualifier which assigns an identity to an element. They are a single sentence:
"He opened a ledger to enter his accounts."

[^3]"He entered his accounts for that month."
"He entered an account which showed a profit."
"He was diligent in entering that month's accounts."
A great many sentences refer not to single instances of nouns or verbs, but to classes or groups of them. Our analysis of information into definite, indefinite, and indefinable must also apply to such groups. To achieve this, we distinguish between classes which are defined and limited ("generic") and those which are undefined and unlimited ("nonspecific"). For example, in:
"Meetings take place on Fridays."
"Meetings" is generic while "Fridays" is nonspecific. The reverse is true in:
"On Fridays, meetings take place."
The instruction:

## "Dogs must be carried"

can only be understood correctly if "dogs" is nonspecific.
The relationship between a generic and a nonspecific group is the same as that between a definite and indefinite entity, and in this way the definite/indefinite distinction is preserved. Many languages make the distinction more explicit, for example in Spanish:

| dio las novelas di ciencia ficciòn.' | te science fiction novels." | (generic) |
| :---: | :---: | :---: |
|  | [I-hate the novels of science fiction.] |  |
| "Escribo novelas di ciencia ficciòn." | "I write science fiction novels." | (nonspecific) |
|  | -write novels of science fiction.] |  |

Discourse structure is the way in which a language fits a sentence into the discourse of which it is a part. In addition to the distinction between topic and comment, the time over which a sentence occurs (its occurrence) can also be related to the occurrence of other sentences before and after it:
"Having shut the door, he went to town." "He was walking in town when he met Mr Jones."
Because the verb of a sentence describes its action or state, its relative occurrence is generally expressed by marking the verb appropriately. This feature of a verb is called its "aspect". An aspect can be a permanent state, a completed action, an action which is not completed when another action occurs, an action which is about to occur, or an action or state which occur earlier or later than expected. By adding suitable additional elements to the definite/indefinite/indefinable terminology of a sequence of sentences, their aspect is represented by the formal notation we have developed.

A further feature of dialogue or narrative is that the speaker may wish to indicate that a sentence is or is not a consequence of an earlier one:
"I feel unwell; perhaps I shall not go to work today."
"I feel unwell; nevertheless, I shall go to work today."
We us the term "inference" and the element \{infer\} for this logical consequence. Inference may be precise or vague, depending on whether the discourse is formal or informal. It expresses the degree of likelihood that the consequence sentence will or will not occur, for example by use of the adverbials "therefore", "doubtless", "probably", "perhaps", "however", or "nonetheless".

## Functional Structure of a Sentence

By function, we mean that action or state which a sentence describes. Our approach to functional analysis is to classify and survey, so far as possible, all the processes and states which languages must describe, and to identify the functional elements which are needed for each one to construct a meaningful sentence. A functional element is an idea such as \{agent\}, \{object\}, \{instrument\},
\{target\}, \{recipient\}, and \{beneficiary\}, which stand for classes of words which perform a particular function in a sentence. Functional analysis is different from discourse analysis, in that while discourse analysis refers to the connection of a sentence with other sentences, functional analysis is only concerned with the action or state which a particular sentence describes. Since this action or state can be expressed independently of any other action or state, functional analysis is contained within the sentence. Moreover, since the two modes of analysis are independent of each other, any functional element can in principle be identified with any discourse element, and vice versa.

The groundwork for functional analysis is laid out in Chapters 6. to 11. By this means, we find that sentences can be classified into about 37 functional sentence types, each one defined by the functional elements which it uses. The number 37 is not especially significant, and depends on the judgement of the author on what constitutes a separate sentence type. We find that the distinction between transitive and intransitive does not seem very important. The sentences:
"The mother put the child to bed" and "The child went to bed";
"John lent Mary the book" and "Mary was given the book on loan"
have the same functional elements, but they are arranged so that a different one is the topic. The first sentence gives information on "the mother", the second on "the child", the third on "John", and the fourth on "Mary". The distinction between transitive and intransitive is more relevant to the role of the sentence in the discourse than to its functional meaning. We find also that the functional elements are the same whether the sentence relates to an action or the resultant state. The sequence of sentences:
"Julius Caesar was assassinated by Brutus" and
"Julius Caesar lay dead at the hands of Brutus";
"John lent Mary the book" and "Mary had the book on loan from John"
are relevant for following their narratives, but again they have the same functional elements. As we observe above, it is the discourse structure which determines whether a sentence describes an action or a state resulting from that action, not the functional structure.

The most basic distinction between functional sentence types appears to be between those which perform some action on an object, and result in an object being in a state, and those which describe a relationship between an object and a person. The first category of sentences has two core elements, the verb and the object:
"John cut the tree down"; "Mary wrapped the present in a box"
while the second has three core elements, the verb, the object and the person (whom we call the recipient):
"Mary reminded John of the appointment"; "John thought the idea stupid".
Sentences in the first category area analysed in Chapters 6 . and 7, and are concerned with what happens to an object, and how, and what state it is in. Sentences in the second category are analysed in Chapters 8. and 9., and are concerned with what is the relationship between an object and its recipient and how that relationship arises. We have so far as possible used the traditional terminology to talk about sentences, but the new distinctions we are suggesting mean that some new terms are needed. For example, a category of sentences of the second type involves an agent causing him/herself to have something, in other words to take it. We call this construction "adoptive":

> Spanish: "Se gana la vida bailando." "She earns her living dancing." [To-herself she-earns the living dancing.]
> Russian: "Mogu sebe predstavit', chto on govoril." "I can imagine, what he said."
> [I-can to-myself imagine, what he said.]

In another category of sentence, called an "appliance", the elements object and instrument are combined:

Arabic: "istaimala 1-sarīra maq¢adan" "He used the bed as a seat."
[He used-himself the bed a seat.]
Chapter 10. is concerned with the additional functional elements "for" or "against". Chapter 11. describes sentences whose outcome is another sentence.

Chapter 12. shows how the various functional categories of verb can be expressed as nouns. Across the functional classification, nouns are divided into three groups:

| Event noun: | The instrument or event of a human activity. |
| :--- | :--- |
| Role: | The participant of a human activity. |
| General noun: | A general category of the other two. |

In Chapter 15., the 37 different functional sentence types are summarised in terms of the elements which is unique to each one, such as \{create\}, \{transform\}, \{locative\}, \{time\}, \{constitute\}, \{role\}, \{possession\}, \{perceive\}, \{opinion\}, \{able\}, and \{error\}, and the elements which are necessary to complete the sentence but are common to more than one sentence type, such as \{agent\}, \{object\}, \{attribute\}, \{location\}, \{resultant\}, \{target\}, \{recipient\}, and \{beneficiary\}. Each of these elements is so far as possible given a precise definition. The following five randomly selected examples illustrate the notation:

> "Sheila mowed the grass very short"
> "This building has 25 baroque details"
> "Mary is the elected Treasurer of the Society"
> "We were pleased by the performance of the play"
> "Mr Smith can speak French"

```
{agent - transform - object - attribute};
{object - constitute - attribute};
{object - role - competence - target};
{recipient - opinion - definite};
{recipient - able - definite -
indefinable}.
```


## Component Structure of a Sentence

Chapters 16. and 18. re-examine the structure of a sentence which arises from a study of its grammar, and which accordingly uses the standard grammatical terms, in the light of our two conceptual models of discourse and function. In so doing, they provide more robust definitions of the grammatical concepts of subject, verb, object, and complement, called the components of a sentence. They also show how the discourse and functional methodologies can be aligned.

Chapters 6. to 12 . and 15 . of the book attempt to classify all sentences in terms of about 37 functional types, each of which is identified by:

- a single component which is unique to the functional sentence type, and which expresses its action or state;
- components which are common to more than one action or state, but whose combination is unique to the functional sentence type.

We may call the component which expresses the action or state of the sentence, and which is unique to its functional sentence type, its \{verb\}, and in this way the functional approach is aligned with the conventional usage "verb". We may call all the other components in a sentence, whose combination is unique to the functional sentence type, \{noun\}. Since a sentence conveys only one action or state, it has only one \{verb\}, but depending on its nature may have more than one \{noun\}.

If we define a component $\{$ subject \} as the \{noun\} which is engaged in the action or undergoing the state of the $\{$ verb $\}$, so that $\{$ subject - verb\} is a semantic unit, we have a definition of "subject". By suggesting that \{subject\} is the topic of a sentence, we have a way of aligning it also with the discourse structure. However, as noted above this interpretation assumes that the verb of every sentence in every language is sufficiently flexible to form a semantic unit with its topic. While this is so for the great majority of sentences, it is evidently not so in all instances. The methodology also requires that a \{verb\} always means a concept in the world, excluding auxiliaries such as "is" or "have". A \{verb\} is both the auxiliary and the word that it supports. In the following sentences, the underlined words are \{verb\}:
"I have an interest in stamp-collecting." "This is difficult"; "She is in love";
"He is a grocer"; "They are in the shop"; "The computer was on".
It also appears that every sentence has a component which the sentence places in a state or relationship, which we can call its \{object $\}$. The state or relationship in which the sentence places the $\{$ object $\}$ is its \{complement \}. This also supplies a definition of transitive and intransitive: a transitive sentence is one whose $\{$ subject $\}$ is different from its $\{$ object $\}$ :
"He drove his wife to work"
while an intransitive sentence is one whose $\{$ subject $\}$ and \{object $\}$ are the same:
"His wife drove to work".
While this is hardly innovative, it also means that that the following are also intransitive:
"He followed his wife to work". "His wife was at work." "He was driven to work."
Since a \{verb\} of an existential sentence is a state of existence, it is the background information (underlined):
"There is a fly in the room." "There is a commotion outside."
Moreover, the subject "a fly" or "a commotion" are indefinite by the nature of an existential sentence, and can therefore not be the topic. If we assume that the topic of a sentence is its \{subject\}, they cannot be the $\{$ subject $\}$ and must be the $\{$ object $\}$. It follows from this argument that the component structure of an existential sentence is $\{$ object - verb $\}$.

One limitation of the component description of sentence structure is that the concepts of \{subject\}, \{verb\}, \{object\}, and \{complement\}, even on our more rigorous interpretation, do not adequately describe a sentence. There are in addition the elements \{agent\}, \{instrument\}, \{location\}, \{base\}, \{participant\}, \{target\}, \{attribute\}, \{recipient\}, \{beneficiary\}, and \{causer\}. Any of these elements can be the \{subject\} if the language so permits, but if they are not, they must be expressed with cases or prepositions such as "by", "at", "on", "from", "with", "to", or "for". These are commonly treated as adverbials but are in fact an integral part of the sentence. The only one which is universally recognised is the \{recipient\}, which is called the "indirect object" marked with "to" in "Mary gave the book to John". In our terminology this is $\{$ subject - verb - object - recipient $\}$.

We have proposed the usage \{noun\} for all those components in a sentence which are not the \{verb\}. In the conventional usage, sentences often contain a main verb and a subordinate one:
"The man whom you have just spoken to is Mr Jones."
"You have just spoken to a man who is Mr Jones."
The clauses "whom you have just spoken to" and "who is Mr Jones" are restrictive relative clauses whose purpose is to identify "the/a man". They are therefore part of the \{noun\} "the/a man". The sentence:
"You have just spoken to our Chairman, who is Mr Jones"
comprises in reality two sentences: "You have just spoken to our Chairman; our Chairman is Mr Jones." A subordinate verb is also found in:
"We are glad that you are well". "We hear that you are well". "We wonder if you are well".
"They said that you are well". "They suggested that you might be well".
In all these sentences, "that you are well" is a \{noun\}, and they could equally well be expressed:
"We are glad at your health". "We hear of your health". "We wonder about your health".
"They reported your health". "They speculated on your health".
Chapter 18. applies these definitions of $\{$ subject $\}$, $\{$ verb\}, $\{$ object \}, and $\{$ complement $\}$ to questions and their replies, both non-negative and negative. These are shown to be divided into verbal sentences, which query, assert, or deny an action or state:
"What did he do today?" "He went to town at 10.00 ";
"Did he go to town today?" "Yes"/"No";
nominal sentences, which question, assert, or deny the connection of an entity to an action or state:
"Who went to town today?" "John, not Mary";
"Did John go to town today?" "Yes"/"No";
complementary sentences, which query, assert, deny, or reverse a state or condition in which a sentences places an $\{$ object $\}$ :
"Where did he go today?""He went to town, not to work."
"He unlocked the door." "She withdrew her approval."
adverbial sentences, which query, asset, or deny the state or condition of an action or state:
"When did he go to town today?" "He went at 10.00 , not at 11.00 ";
and gerundial sentences, which query, assert, or deny the state or condition of the \{subject $\}$ of an action or state:
"Why did he go to town at 10.00 ?" "To catch the bus";
"How was he when he went to town today?" "Happy, not sad."
In this way, components are used to distinguish between the various topic-comment constructions mentioned earlier. For both a verbal and a nominal sentence, it is shown that the elements \{not\} or \{query\} are the action or state expressed by the sentence. Examples are quoted of languages for which this is explicit in the construction of a negative sentence or question:

$$
\begin{aligned}
& \text { Welsh: "Nid wyf i yn byw yn y wlad." "I do not live in the country." } \\
& \text { [Not am-I in living in the country.] } \\
& \text { Irish: "An bhfacaís i n-aon áit iad?" "Have you seen them anywhere?" } \\
& \text { [Query that-you-have-seen in any place them?] } \\
& \text { "Cá bhfuil tigh Dhomhnaill Uí Chonaill?" "Where is Daniel O'Connell’s house?" } \\
& \text { [Where that-is house of-Daniel O’Connell?] }
\end{aligned}
$$

Finnish: "Minä en osta taloa." "I shall not buy a/the house." [I not buy house ${ }_{\text {(partitive) }}$ ].
Hausa: "İnā ka tàfi dà mōtàrmù?" "Where did you go with our car?" [Where which-you-did go with car-the-our?]

Maori: "Kāhore ōu hoa i te whare kura." "Your friends are not at the school."
[Not your friends at the school.]

## The Adverbial Component

Chapter 17. examines the various expressions and compound sentences which are collectively termed "adverbials" in grammar, that is an expression (underlined) which appears outside the main sentence structure:
"We held the meeting in the Board Room." "We held the meeting at 9.00."
"Because he was ill, he did not attend the meeting." "Although ill, he went to the meeting."
"If he is well, he will attend the meeting." "As expected, he attended the meeting."

For this purpose, an analytic device is used which we call an "adverbial sentence". The sentence containing an adverbial is reformulated with the adverbial as predicate (underlined):
"The meeting took place in the Board Room." "The meeting took place at 9.00."
"His illness prevented his attendance at the meeting."
"His illness did not prevent his attendance at the meeting."
"His attendance at the meeting depends on his fitness."
"His attendance at the meeting had been expected."
The subject of an adverbial sentence is the \{verb\} which the adverbial qualifies. By studying different adverbial sentences, we divide them into at least nine types. Each type of adverbial has a distinct discourse and functional structure in relation to the sentence that it qualifies. On this analysis, what appear to be a causal adverbial "because he was ill" and a concession adverbial "although ill" are not in fact adverbials but main sentences; the adverbials in each case are "he went to the meeting."

The above examples are of adverbials which:

- qualify a $\{$ verb $\}$;
- contain new information beyond the qualified $\{v e r b\}$.

This definition is narrower than the conventional description, and is designated as the component \{adverbial\}. It is distinguished from two usages conventionally described as adverbials: those not providing new information, and \{gerund\}. A conventional adverbial not providing new information is a \{circumstance $\}$ to an indefinite $\{$ verb $\}$ or $\{$ object $\}$ :
"We held a meeting at 9.00 in the board room."
"He took some medicine for his illness."
"She booked a room for the meeting."
Such a sentence cannot reformulated as an adverbial sentence, but as an existential sentence:
"There was a meeting at 9.00 in the Board Room."
"There was some medicine he took for his illness."
"There was a room which she booked."
A $\{$ gerund $\}$ expresses the state or condition of an $\{$ agent $\}$ performing an action:
"We willingly held a meeting in the Board Room."
"He happily did as he was asked."
Although "willingly" and "happily" appear to be adverbials, an adverbial sentence is artificial or not possible:
*"Our meeting in the Board Room was willing."
*"His doing as he was asked was happy."
We therefore define an \{adverbial\} as a qualifier of a \{verb\} which is non-restrictive, that is it does not identify any element in the sentence, but provides new information on the $\{$ verb $\}$.

Chapter 19. contains worked examples which apply the discourse and functional methodology to different sentence constructions.

## 1. Subject and Topic

## Summary

The majority of sentences in a narrative or dialogue describe a subject and an action or state that the subject is engaged in. The action or state is expressed by a verb, and by any object or other words attached to the verb (the predicate). However, this structure turns out not to be a good description of certain types of sentence, of which the most important are: some possession relations; a sentence which introduces a new item into the discussion (existential); and a sentence in which one element is marked as providing new information (the focus) while the rest is assumed to be known.

Consideration of how a sentence fits into a narrative or dialogue leads to an analysis of sentences which convey information into two parts: the topic, the known information which the sentence is referring to, and the comment, the new information which it is providing. A sentence must contain a comment if it is not to be tautologous. Subject-verb-object is one realisation of topic-comment, where the subject is the topic and the verb and object (called the predicate) is the comment. However, the dialogue may require that the object or some other element is the topic. The subject is identified by its relationship with the verb, and is the topic only when the dialogue so permits.

An existential sentence consists of the new information which is being introduced, and known information as a background or context (called the circumstance).

In a sentence which has focus, the focus is the comment and is a single sentence element. It may be the subject, object, or other sentence element, and is marked to distinguish it from the topic. All that part of the sentence which is not the focus is the topic.

In addition to sentences which convey information, language includes two other categories: sentences which ask a question and sentences which express a hypothesis. Each of these sentences includes a topic, concerning which the question is asked or the hypothesis is expressed. The element in a question which is not the topic is termed the enquiry. A suitable reply to a question consists of a comment on the same topic.

## Terms Defined or Introduced

Subject, verb, object, noun, pronoun, predicate, recipient, possession, existential, circumstance, focus, topic, comment, enquiry, hypothesis.

## Subject and Predicate

The usual understanding of a basic sentence is that it consists of a subject, verb, and object, for example "he read the book" or "she saw the postman". The subject is what the sentence is about, the verb describes the action that the subject is engaged in, and the object is what the action is directed towards. There is, of course, much additional information which can be added, thus: "The busy man quickly read the book which he had bought that morning" and "On Tuesday the women who was about to leave for work saw the postman deliver the letters". There is much to be said on this additional information, but for the moment we are only concerned with the basic structure of subject, verb, and object. It is usually called a transitive sentence, because the action of the verb is said to "transit" or pass over onto the object. The subject and object are called a noun or (if they stand for a noun) a pronoun.

There is a further sort of transitive sentence which has two objects, one without a preposition in front and one with a preposition, for example "He cooked the dinner for his family" or "She wrote a letter to her bank manager". The object without a preposition is a direct object, and that with a preposition is an indirect object. Some grammarians use the term "ditransitive sentence" for this type. This pattern of sentence is usually represented as a variation of the subject-verb-object structure, requiring only particular remarks.

Some sentences do not conform to this pattern, for example "He went shopping" or "She came to dinner". These evidently do not have an object onto which the action of the verb can be passed, and are therefore called an intransitive sentence, with the structure "subject-verb". There is also a category of sentence in which the subject is not doing anything but the sentence is describing him or her in some way, as: "Louis XIV was king of France" or "We became ill with food poisoning" or "You look well today". Since this type of sentence is clearly not transitive, it is usually put in the intransitive class. The difference is that in it the subject is not engaged in an action, but is in a state which the verb describes. The pattern "subject-verb" can be retained if we categorise the verb as stative and representing an attribute of the subject. Attached to intransitive and stative verbs is other information which is usually called the "complement".

A more general categorisation of all these sentences is subject-predicate, where the subject is what the sentence is about and the predicate is new information concerning it, whether an action or a state. The predicate comprises a verb and other information which the verb connects to the subject. In the case of a transitive sentence, the other information includes the object.

A large part of the grammars of most languages are devoted to explaining how subject-verb-object or subject-predicate works. Some languages have a different standard sequence (subject-object-verb or verb-subject-object). Some mark the subject, object, and indirect object in various ways. Many languages alter verbs in complicated ways, for tense (when the action took place), or aspect (whether its action is going on or completed), or the viewpoint from which the tense or aspect are regarded. Languages also use verbs to express something other than a fact, for example "he should read the book" (obligation) or "she can see the postman" (ability) or "he may go shopping" (supposition) or "she would come to dinner" (conditional). In English, this is done by placing an auxiliary in front of the verb. Other languages alter the verb for some of these purposes and not for others. Chinese and Malay, for example, do not alter the verb and only use auxiliaries.

As examples of a different basic word order, in Japanese it is subject-object-verb, and in Welsh it is verb-subject-object:

$$
\begin{aligned}
& \text { "Sasaki-san wa sake o nonde iru." "Mr Sasaki is drinking sake." } \\
& \begin{array}{l}
\text { SSasaki-Mr }{ }_{\text {(topic) }} \text { sake }{ }_{\text {(object) }} \text { drinking there-is.] }
\end{array} \\
& \text { "Gwelwyd llawer o bobl yn y neuadd." "Many people were seen in the hall." } \\
& \text { [Were-seen many of people in the hall.] }
\end{aligned}
$$

The variations are usually all fitted into subject-verb-object and are considered to reinforce it as a general sentence pattern.

A further purpose of language grammars is to explain how the subject-verb-object structure is altered when the speaker wishes to ask a question: "Did he go shopping?" or to give an instruction: "Go shopping!", or when the sentence is qualifying another noun: "the postman whom the woman saw" or "the book which he should have read". A sentence qualifying a noun is called a relative clause. Most languages allow a variation of the transitive sentence called the passive, in which the object becomes the subject, as: "the book was read by him" or "the postman was seen by her"; this term arises because the object "suffers" the action of the verb. These variations of meaning usually involve a change in the usual order for subject, verb, and object according to various rules, and are therefore sometimes called "transformations" of subject-verb-object. They operate differently in different languages. In Chinese, word order does not change for a question, and a relative clause appears in front of the noun:

$$
\begin{aligned}
& \text { "Qìchē jiāle yóu ma?" "Have you filled your car with petrol?" } \\
& \text { [Car added-have petrol query?] } \\
& \text { "mài bàozhĭ de shāngdiàn""a shop that sells newspapers" [sell newspaper of shop] }
\end{aligned}
$$

The passive in Finnish uses a form of the verb without a subject. In Spanish, it may assume that the object is acting on itself:

> "Ovi suljetaan avaimella." "The door is closed with a key." [Door one-closes with key.]

> "Se tienen que resolver varios problemas""Several problem must be solved."
[Itself must solve various problems.]
This method of sentence analysis is entirely proper and has stood the test of time and experience. The problem is that while it describes most sentences, it does not describe them all. It is true that nearly all sentences have a verb, and that nearly all sentences have a subject. Moreover, the subject-verb-object structure appears to occur in all languages, suggesting that it provides a powerful and complete solution. However, to apply it to all sentences, it is necessary to distort it by pretending that something is a subject when it is not, and that a verb is present when it is not. An example is the above Finnish passive construction, which has no subject. A more careful look at the possible types of sentence reveals four which do not lie adequately within the subject-verb-object pattern. They are exclamation, possession, existential, and focus.

## Exclamation

In an exclamation, the speaker draws attention to some condition or behaviour of the subject but does not communicate it as new information. An exclamation therefore has a subject but may have no verb. Even if there is a verb, it does not fulfil the function of the verb in subject-verb-object of communicating new information on the subject. It is assumed that the subject's condition or behaviour is already known to the hearer:
"What a beautiful day!" "How cold it is here!""How well she speaks!"

## Possession Sentence

A possession sentence is one which links an object with a recipient. As we shall see in Chapter 8., there is a good reason to include under this heading both material and mental possession, the common factor being that the recipient has received it. Material possessions include suitabilities and needs. Mental possessions include perceptions ("see" or "hear"), cognitions ("know" or "understand"), wishes, responsibilities, and opinions ("fear" or "like"). Instead of "recipient", we could equally use the word "possessor", but have chosen "recipient". Many possession sentences in many languages employ the subject-verb-object pattern:

| English: | "I have a car." "I see the landscape." "I need some water." |
| :--- | :--- |
| French: | "J'ai pitié de lui." "I have pity for him." |
| Russian: "Ya videla v sadu kakikh-to lyudei." "I saw some people in the garden." |  |
| [I saw in garden some people.] |  |
| Persian: | "do bab xane darad" "He has two houses." [Two unit houses he-has.] |
| Chinese: "Wŏ yŏu gè dìdi." "I have a younger brother." |  |
|  | [I there-is unit younger-brother.] |

However, many other possession sentences employ a different structure, which can be described as "indirect recipient". It takes the general form "at/for/to/with the recipient, there is" and is discussed further in Chapter 8. The word expressing possession is applied to the possession, not to the recipient:

English: "It is/becomes clear to me that you are right."
French: "Il leur faudra cent francs." "They will need 100 francs."
[It to-them will-be-necessary 100 francs.]
Italian: "Mi rincresce che tu parta." "I am sorry that you are leaving."
[To-me it-regrets that you should-leave.]
Welsh "Y mae'n well gennyf i weithio yn yr ardd."
"I prefer to work in the garden." [It-is in better with me to work in the garden.]

> Irish: "Tá eolas an bhaile go maith aige." "He knows the town well." [Is knowledge of-the town well at-him.]
> Finnish: "Hänen ei sovi mennä nyt." "It does not suit her to go now."
> [Of-her not suit to-go now.]

> [Not of-me is-liked this the wine.]
> Russian: "U menya novyi kostyum." "I have a new suit." [At me new suit.]
> Turkish: "Evin bahçesi var." "The house has a garden." [House-of garden-its there-is.]
> Arabic: "lahu bnun fî l-jāmifati" "He has a son in the university."
> [For-him son at the-university.]
> Persian: "be ma xoš gozašt" "We enjoyed ourselves." [To us happy passed.]
> Hindi: "us kām ke lie use sau rupae mile" "He got 100 rupees for that work."
> [That work-for to-him 100 rupees accrued.]

Japanese:
"Zō wa hana ga nagai." "Elephants have long trunks."
[Elephant ${ }_{\text {(topic) }}$ trunk ${ }_{\text {(subject) }}$ is-long.]
The number of these examples (which could be widely extended) illustrate how common this structure is. For many languages, it is the normal one for material possession, so that the equivalents of "have", "need", "lack", "suit", and "feel" in their basic senses are only expressed in this way. For Chinese, the word "yŏu" is used in both senses of "have" and "there is", and in Malay/Indonesian, "ada" has the same two meanings. For mental possessions the subject-verb-object structure is the more common, but as the examples show, indirect recipient is not infrequent.

An attempt to fit indirect recipient into the subject-verb-object pattern invites the questions: what is the subject? and what is the verb? Is the subject the recipient, and if so, why has it a preposition in front? If it is the possession, why does it come after the recipient? Following the analysis at the start of this chapter, we might answer: the subject is that which engages in the action of the verb. However, the above indirect recipient examples show that the action is not deliberate, but something which happens to the recipient; it therefore cannot be said that the subject is engaged in an action. There is no simple way in which the subject-verb-object pattern can be applied to these sentences. In the above English, French, and Welsh examples, the verb is given a dummy subject ("it") in order to conform formally to subject-verb-object while not doing so in its meaning.

Despite the difference in structure, there are common features between the indirect recipient and subject-verb-object patterns of possession sentences. Firstly, as we have noted, the subject is not engaged in the action of the verb, but linked to the possession in a manner that the verb expresses. Secondly, the action of the verb does not pass over onto the object; instead, the verb expresses a relationship with the object. The difference lies in that for some concepts some languages have verbs such as "have", "need", "lack", "gain", or "lose" which express possession, while others do not. Those possession concepts for which verbs do not exist are both material and mental. As will be shown, they are more common for general than for specific possession relationships.

## Existence and Non-Existence

Every language possesses a means to say that something or someone exists. The purpose is to introduce that thing or person into a dialogue or narrative where previously he, she, or it was not present. Once introduced, statements can be made or questions asked about the new object ${ }^{7}$. If correctly phrased, the introductory sentence says enough about the new object to enable the hearer to

[^4]understand what or who the speaker is talking about. Without it, subsequent sentences on the object may not be meaningful. The introductory sentence therefore generally relates the new object to some context known to the hearer:
"There is a cat in my garden." "It is chasing the birds." "The birds have escaped."
If the introductory sentence is omitted, and we start with the sentence "The cat is chasing the birds in my garden", it invites the question: "What cat?". The introductory sentence is needed to place the cat in context, but it assumes that the hearer knows that the speaker possesses a garden. If the hearer did not know that, he/she could reasonably ask: "What garden?", and the speaker should have commenced:
"There is a garden attached to my house." "There is a cat in it." and so on.
We call this introductory sentence an existential sentence. The commonest way in which languages construct it is to employ a dedicated existential verb (in brackets):

French: "Il y a beaucoup d'eau." "There is plenty of water." (y a)
German: "Es gibt fünf Bücher auf dem Tisch." "There are five books on the table." (gibt)
Spanish: "Hay un gato en el tejado." "There is a cat on the roof." (hay)
Italian: "C'è qualcuno alla porta." "There's someone at the door." (c'è)
Russian: "Pri gostinitse est' pochta?" "Is there a post-office in the hotel?" (est') [In hotel is-there post-office?]

Turkish: "Köşede bir kahve var." "There is a café on the corner." (var) [Corner-at a café there-is.]

Arabic: "Oammata waqtun fāṣilun bayna l-wuṣūli wa-l-Riqlā̧i" ( $\theta a m m a t a)$
"There is a time separating arrival and departure."
[There time separating between the-arrival and the-departure.]
Malay: "Di seberang sungai ada rumah." "Across the river there is a house." (ada)
[Across river there-is house.]
Chinese:"Jìngzi pángbiān yŏu yī pén huār." "There is a pot of flowers besides the mirror." (yŏu) [Mirror besides there-is one pot flower.]

Japanese (imasu):
"Kono machi ni wa nihonjin ga takusan imasu."
"In this town there are many Japanese."
[This town-in ${ }_{\text {(topic) }}$ Japanese-people ${ }_{\text {(subject) }}$ many there-are.]
Languages also construct an existential sentence by altering the standard word order. They rely on the fact that in a non-existential sentence, the subject represents something or someone which is known to the hearer. By placing in subject position words which relate to known information but are not usually the subject, the sentence indicates that the rest of the sentence is introducing a new object:

Arabic: "bihi ṣabiyyun ṣa $\gamma \overline{\mathrm{I}} \mathrm{r} u n "$ "There is a small boy in it." [In-it boy small.]
Hindi: "Mez par pustak hai." "There is a book on the table." [Table-on book is.]
Russian:"Na stole vaza." "There is a vase on the table." [On table vase.]
Chinese:"Bīngxiāng lĭbian dōu shì shuĭguŏ." "Inside the fridge there was nothing but fruit." [Ice-box inside all be fruit.]

Inuit: "Qiqirtap qulaani nuiaqarpuq." "There are clouds above the island."

## [Island-of above-its-at cloud-thereis-it.]

Alternatively, the new object is placed in subject position and relates grammatically to the verb as if it were the subject, but is marked as indefinite by an article or in some other way. In this way, the sentence indicates that the "subject" is in fact a newly introduced object:

English: "A garden is attached to my house." "A cat is in it." "It is chasing the birds."
Welsh: "Y mae llyfr ar y bwrdd." "There is a book on the table. [Is book on the table.]
Irish: "Tá scoil nua ar bharra an choic." "There is a new school on top of the hill." [Is school new on top of-the hill.]

Finnish: "Ruokaa on pöydällä." "There is some food on the table." [Food $_{\text {(partitive) }}$ is table-on.]
Arabic: "Pasbābun fadīdatun Paddat Rilā l-Rirja?i"
"There are numerous reasons which led to the postponement."
[Reasons numerous (indefinite) led to the-postponement.]
Finally, a sentence can be marked as existential by placing the verb in subject position:
Italian: "Arrivarono due uomini." "[There] arrived two men."
"È sorto un problema." "[There] has arisen a problem."
Russian: "Ukroshcheny nekotorye opasnye bolezni."
"[There have been] curbed certain dangerous diseases."
These examples show that in an existential sentence, the subject and verb fulfil a different purpose to those of a subject-verb-object sentence. In subject-verb-object, the subject is known to the hearer and the verb and object supply new information about it. In an existential sentence, there is no true subject, and the sentence cannot therefore supply new information on it; the verb states that an object (which may or may not be in subject position) exists and relates it to a context (which in Chapter 13 we will call the circumstance). In the English, French, German, and some Italian examples, the verb is given a dummy subject ("there" or "it") in order to conform formally to subject-verb-object while not doing so in its meaning.

On this argument, existential sentences include those which introduce atmospheric conditions, which traditionally have been categorised as "impersonal":

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English: "It was gloomy in the hall."
Italian: "Piove." "It is raining." [Rains.]
Chinese: "Xià yǔ le." "It is raining." [Fall rain now.]
```

These could equally well be expressed by the existential sentences "There was gloom in the hall" and "There is rain falling".

The existential construction performs a second useful purpose, that of negation. All existential sentences can take a negative form, meaning that its object does not exist, either generally or in the context which the sentence states. Many languages employ a different verb (given in brackets) for a negative existential sentence than that for the positive existential sentence discussed above:

English: "There is no cat in my garden."
Russian: "Tam net lyudei." "There are no people there." (net)
[There there-are-not people ${ }_{\text {(genitive). }}$ ]
Arabic: "laysa man yuwaqqifu lī šahādatī"
"There is no-one who will sign for me my certificate."
[Is-not he-who signs for-me certificate-my.]

Chinese:"Méi yŏu huŏchē." "There are no trains." [Not there-are train.] (méi yŏu)

A negative existential evidently performs a different purpose in a dialogue or narrative from a positive existential. A positive existential introduces and identifies an object for subsequent discussion. A negative existential denies that it is available for subsequent discussion. It also does not fit into the subject-verb-object pattern. If the existence of a subject is denied, it is not possible to provide further information on it. This is further discussed in Chapter 3 (Negatives).

## Focus

Exclamations, recipient-possession, and existential are three sentence constructions which do not fit readily into the subject-verb-object pattern. Focussing is a form of sentence which conforms to subject-verb-object, but which subject-verb-object does not adequately express in some languages.

A sentence has a focus when the speaker emphasises a particular element in the sentence (the subject, object, or any other element) as the new information that he/she is communicating. It is assumed that all the other information is known to the speaker. In speech, this can be done by stressing the relevant words, which in text can be italicised. "The meeting will start at 7.30 " assumes that the hearer knows that a meeting will takes place on a certain day, but not that it will start at 7.30 . That sentence conforms to the subject-verb-object pattern. However, an alternative construction is termed clefting: "It is at 7.30 that the meeting starts". In that case, subject-verb-object is less obvious: what is the subject? Is it "it", which has no real meaning? Or, is it "that the meeting starts", which is not the subject of the verb "is"? The sentence conforms to subject-verb-object only by an artifice.

Similarly, the subject can be the focus: "Henry is our favoured candidate" or "It is Henry who is our favoured candidate." This assumes that it is known that there is a favoured candidate, but not the particular person.

Another way of indicating focus is illustrated by: "He gained her cooperation by treating her politely." By placing "by treating her politely" at the end of the sentence, the speaker assumes that the hearer knows that co-operation was obtained, and focuses on how that was done. If the speaker had said "By treating her politely, he gained her co-operation", her polite treatment is assumed to be known and the gaining of her co-operation is the new information communicated.

These means of indicating focus are employed in other languages. Examples of clefting:
French: "C'est ton frère qui le dit." "It's your brother who says so."
[It's your brother who it says.]
Irish: "Is inné a tháinig sé." "It was yesterday that he came." [Is yesterday that came he.]
"Is sinn-ne a raghaidh isteach ar dtúis." "[It] is we who shall go in first."
Turkish: "Iki senedir bu evde oturuyor." "It is two years that he has lived in this house."
[Two year-is this house-in he-lives.]
Inuit: "Aqaguuna Hansip pulaarniaraatigut." "Is is tomorrow that Hansi will visit us?"
[Tomorrow-that Hansi ${ }_{\text {(agent) }}$ visit-will-participle-he-us?]
The following examples place the focus at the end of the sentence, where it would not otherwise be:
German:"Zu diesen Zeiten unterrichten die Kinder die Studenten."
"It is the students who teach the children at these times."
[At these times teach the children the students.]
Spanish: "Esta carta la escribió mi secretaria." "It was my secretary who wrote this letter."
[This letter wrote it my secretary.]
"Las cartas mi secretaria no las escribe, sino que las corrige."
"My secretary does not write letters, but corrects them."
[Letters my secretary does not them write, but them corrects.]

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Greek: "T\omegá\rho\alpha \mu\alpha0\alphaív\varepsilonı \piıóvo \eta E\lambda\varepsilońv\eta.""Now it is Helen who is learning the piano." [Now learns piano the Helen.]
Russian:"V Zheneve sostoyalsya festival'." "A festival took place in Geneva." [In Geneva took-place festival.]
"Ya vklyuchil radio i uslyshal znakomuyu balladu. Pela Alla Pugachëva." "I switched on the radio and heard a well-known ballad. It was being sung by Alla Pugacheva."
[I switched-on radio and heard well-known ballad. Sung Alla Pugacheva.]
Inuit: "Piniartup puisi pisaraa." "The hunter caught the seal."
(unstressed)
[Hunter \({ }_{\text {(agent) }}\) seal catch-he-it.]
"Piniartup pisaraa puisi." "It was a seal which the hunter caught."
[Hunter \({ }_{(\text {agent })}\) catch-he-it seal.]
"Puisi pisaraa piniartup." "It was the hunter who caught the seal." [Seal catch-he-it hunter \({ }_{(\text {agent })}\).]
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The following place the focus at the start of the sentence, where it would not otherwise be:
English: " 7.30 is when the meeting will start."
"Henry is the candidate whom we favour".
Welsh: "Ei fag a gollodd y dyn ar y trên ddoe."
"It was his bag that the man lost on the train yesterday."
[His bag lost the man on the train yesterday.]
Greek: " $\Sigma \tau$ ov $\pi \alpha \tau \varepsilon ́ \rho \alpha$ 兀ov $\theta \varepsilon ́ \lambda \varepsilon ı ~ v \alpha ~ \gamma \rho \alpha ́ \psi \varepsilon ı ~ o ~ M ı \chi \alpha ́ \lambda \eta \zeta . " ~$
"It is to his father that Michael wants to write."
[To father-his he-wants that he-writes (subjunctive) the Michael.]

Arabic: "Piḍā hiya ravibat fì đālika""if [it is] she (f) $[w h o]$ desires that"
"kanāt sanfāPu hiya hājisahu l-jadīda" "It was San'a that was his new concern." [Was San'a ${ }_{(f)}$ it concern-his the-new.]

Swahili: "Hicho ndicho kitu nilichokitafuta." "This is indeed the thing I was looking for."
[This is-that thing I-was-that-it-looked-for.]

An equally common method is to retain the normal word order and stress, but to indicate with a particle (in brackets) the element in focus:

Finnish: "Viime sunnuntainahan Kalle syntyi." "It was last Sunday that Kalle was born." (-han) [Last Sunday-on (focus) Kalle was-born.]

Malay: "Dialah memberitahu saya." "It was he who informed me." [ $\mathrm{He}_{\text {(focus) }}$ informed me.] (-lah)

Hindi: "Banāras ke log hindī hī bolte haĩ." "It is Hindi that the people of Banaras speak." (hī) [Banaras-of people Hindi (focus) speak.]

Chinese:"Shì wŏ dă pò zhèi gè bēizi de." "I was the one who broke this cup."
(shì ..... de)
[(focus) I hit break this unit cup (focus).]
Japanese expressly separates the rest of the sentence from the focus by the topic particle "wa":

> "Morita-san ga kita no wa Tōkyō kara da." "It was from Tokyo that Mr Morita came."
> [Morita-Mr ${ }_{\text {(subject) }}$ coming ${ }_{\text {(topic) }}$ Tokyo-from is.]
"Nihon de oishii no wa kudamono da." "What is delicious in Japan is fruit."
[Japan-in delicious being ${ }_{\text {(topic) }}$ fruit is.]

These examples show that in focussing, the subject-verb-object structure is followed, but there is a significant change in how it is applied. We recall that the purpose of subject-verb-object is to express some new information (an action or state) about a subject which is assumed to be known. In focussing, the purpose of the focus is to express some new information about all the rest of the sentence, which is assumed to be known. Since the focus can be any part of the sentence, the rest of the sentence can be any other part of it. As we have seen, the focus can be the subject, verb, object, or an adverbial element. In expressing this, the purposes of subject, verb, and object are substantially altered. One way of doing so is to construct a sentence with a dummy subject ("it") in order to isolate the focus.

Three points can be made in passing:

- Focussing can equally be applied to possession sentences: "It is a Ford car that he owns now"; "A Ford is the car that he owns now."
- Focussing does not apply to existential sentences, since the item introduced (the object) is by its nature new information, and the remainder (the circumstance) is by its nature existing information.
- Focussing is often used to express selective, additional, or exclusive information:
"It is Henry, not Edward, who is our favoured candidate."
"It is your brother as well as your sister who says so."
"It was only his bag that the man lost on the train."
(selective)
(additional)
(exclusive)

These examples do not affect the general observations on focussing. The same sentence structures are employed. The focus is the new information in a sentence, of which the rest is assumed by the speaker to be known to the hearer.

## Topic and Comment

It seems from the above that there are at least five different sentence constructions which we have to consider. They all conform to the subject-verb-object pattern, but in ways which interpret the elements subject, verb, and object differently and inconsistently. They also have different rules of word order. In some, there is not a real subject but a meaningless dummy, "it" or "there" or its equivalent, which grammarians call an "impersonal" subject or sentence. It is reasonable to ask what the expression "impersonal" means. It does not mean that the subject is not a person. The "it" or "there" is present simply to conform to the subject-verb-object or subject-predicate model.

These variations and inconsistencies can be resolved if we reflect further on how a sentence fits into a dialogue or narrative in real conversation. We recall that in the basic subject-predicate format, the predicate supplies new information on a known subject. The identity of that subject has been provided by a previous sentence, either immediately or in the medium or distant past, where it was new information. That previous sentence included known information, which itself had been new information in a sentence previous to it, and so on.

As an example, we can consider a sequence of sentences in a piece of text, whose only merit it that it has some sort of logical connection:
"I (known) read ${ }_{(\text {new })}$ in the newspaper ${ }_{(\text {known }}$ that a new school ${ }_{(\text {new })}$ was about to be opened ${ }_{(\text {new }}$ in our neighbourhood (known), and that there would be an opening (known) ${ }_{\text {ceremony (new). After }}$ making enquiries (new), I received an invitation (new) to this ceremony (known). I (known) attended $_{\text {(new) }}$ it with my wife ${ }_{(k n o w n)}$. The new school's (known) ${ }^{\text {head }}$ teacher ${ }_{\text {(known) }}$ made a speech $_{\text {(new) }}$. The speech (known) ${ }^{\text {lasted }} 15$ minutes $_{\text {(new), }}$, after ${ }_{\text {(new) }}$ which we had refreshments ${ }_{(n e w)}$. The refreshments ${ }_{(\text {known })}$ included some which we had prepared ${ }_{(n e w)}$. It was 4 o'clock $_{\text {(new) }}$ before we left ${ }_{(\text {known) }}$. It was a fine ${ }_{(\text {new })}$ day."

The items marked "new" are those which were not known to the hearer (or reader) at the time that they were uttered. It will be seen that they include both nouns and verbs. The sentences are so constructed that when these words have been uttered, their identity is clear and subsequent sentences can treat them as known information.

The items marked "known" are of four sorts:

- Those identified in a previous sentence: "school", "ceremony", "speech", and "refreshments".
- Those identified by a sentence previous to the text, however remote, which can be described as prior knowledge common to the speaker and the hearer: "newspaper", "neighbourhood", "wife" (assuming that the hearer knows that the speaker is married).
- Those whose identity can be readily inferred without any need to identify them: "head teacher", "left", "day".
- The pronouns "I", "it", and "we" referring to a person or thing known to the speaker and the hearer.

The text also includes words which do not represent either known or new information, but explain how the meaningful words fit into their sentence: "was", "about", "making", "received", "made", "lasted", "had", "included". We call these words auxiliary, and will have more to say about them in Chapter 4 (Auxiliary Words).

Finally, there are words which connect the other words and sentences in various ways. They are also discussed in Chapters 2 and 4.

This short text contains most of the sentence types which we have been discussing. Apart from subject-verb-object, "there would be" is existential, "I received" and "we had" are receptive (a form of possession), and "it was four o'clock" is a focus. Moreover, later chapters will show that subject-verbobject itself encompasses a range of sentence types, whose details are not relevant here.

Although this example may seem trivial, it would be quite easy to alter it so that its meaning was not clear, by omitting one or other word or sentence, or by changing the sequence of sentences. For example, omission of the sentence starting "the new school's head teacher..." would mean that in the following sentence, it was not clear what speech was referred to. Moreover, not all references to a "new" word result in that word being subsequently "known". If the words in the first sentence had been "a newspaper", they would have been insufficient to identify it, and a subsequent sentence could not have referred to it.

Any properly constructed prose text can be subjected to analysis along the above lines. Every sentence (other then an existential sentence) contains information which is known and which the sentence is about, called the topic, and presents new information about it, called the comment. The comment supplies information which forms the topic of subsequent sentences. If the prose text is well constructed, the comment will be sufficient for the identity of the subsequent topic to be clear. In this way, each narrative consists of a dynamic sequencing of sentences, each containing known and new information, and designed to convey information of greater or less complexity. This is true for the sentence types discussed above:

- In subject-verb-object, the subject is the topic, the verb is the comment, and the predicate includes the verb, the object, and other elements. The subject includes any words qualifying it, as we shall see. As well as new information, the predicate may include information which is already known, which the comment links to the subject.
- An exclamation consists entirely of a topic, but brings that topic to the attention of the hearer.
- In a possession sentence, the recipient is the topic and the possession statement is the comment. Attached to the possession may be further information which is either new or known.
- In a sentence with a focus, the focus is the comment and the rest of the sentence is the topic. In fact, a better description of the focus construction is focus-topic.
- When focussing is applied to the subject of a sentence, the subject is the comment and the predicate is the topic, the reverse of the usual arrangement: "It is Henry who is our favoured candidate"; "Henry is the candidate whom we favour".

An existential sentence such as "There would be an opening ceremony" also contains both known and new information, but its purpose is not to talk about known information ("opening"), but rather to introduce new information ("ceremony") into the narrative. The known information is a background or circumstance which gives an identity to the new information. All other sentences are topic-comment.

It is possible for a sentence to contain a comment and very little topic, if its context is evident to both speaker and hearer:

## Japanese:

"Iku yo." "I'm coming." [Coming!]
It is not possible for a meaningful topic-comment sentence to contain no comment. Such a sentence is a tautology.

In subject-verb-object, the formation of a passive sentence from an active one is not simply a grammatical transformation of words to make the object into the subject. It arises because the object of the sentence is known and the speaker wishes to make it the topic, while the subject and verb are new information and therefore constitute the comment. As already mentioned, there are many ways to construct the passive. The common factor of these and the previous examples is that the object is marked as topic by being put at the start of the sentence:

> German:"Der Laden wird um 8 Uhr geöffnet" "The shop opens at 8 o'clock."  [The shop becomes at 8 o'clock open.]

Spanish: "La reacción la provocó una alergia o una enfermidad."
"The reaction was produced by an allergy or illness."
[The reaction produced-it an allergy or an illness.]
Russian:"Vash bagazh otpravyat v gostinitsu." "Your luggage will be taken to the hotel." [Your luggage they-take to hotel.]

Malay: "Surat itu ditulisnya dalam bahasa Inggris."
"That letter was written by him in English."
[Letter that written-by-him in language English.]
Swahili: "Kikombe kimevunjwa na mtoto." "The cup has been broken by the child." [Cup has-been-broken by child.]

Japanese:
"Sensei wa Jon ni shitsumon o sareta." "The teacher was asked a question by John." [Teacher ${ }_{\text {(topic) }}$ John-by question ${ }_{\text {(object) }}$ was-put.]

We may summarise the four principal topic-comment constructions available in English with a single example:

|  | topic | comment |
| :--- | :--- | :--- |
| "My secretary wrote the letter." <br> (active) | my secretary | wrote the letter |
| "The letter was written by my secretary." <br> (passive) | the letter | was written by my <br> secretary |
| "It was my secretary who wrote the letter." who wrote the letter <br> (focus-topic) | my secretary |  |
| "My secretary was the one who wrote <br> the letter." (focus-topic) | who wrote the letter | my secretary |

The most common means of marking the topic, and so distinguishing it from the comment, is to locate it at the start of the sentence. We saw in the previous section that many languages which do this also place an element in focus by locating it at the end of the sentence. Here are some further examples of a topic at the start of a sentence which is not the subject of the verb:

# Italian: "Di Camilla Cederna leggevo tutto." "I read everything by Camilla Cederna." 

[Of Camilla Cederna I-read everything.]
Malay: "Sopir itu namanya Pak Ali." "The name of that driver is Mr Ali."
[Driver-that ${ }_{\text {(topic) }}$, name-his Mr Ali.]
Chinese:"Nèi běn zhēntàn xiăoshuō wŏmen mài wán le."
"We have sold out of that detective novel."
[That unit detective novel ${ }_{\text {(topic) }}$ we sell finish now.]
In Arabic, the topic is placed first, after the verb in an unstressed sentence and before the verb in a focus-topic sentence:

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"lam yatawāfar lī hāðāni l-šarṭ̄n\̄"
"What were not available to me were these two conditions."
[Not available to-me these the-two-conditions.]
"hāðāni l-šarṭāni lam yatawāfarā l\vec{\imath"}
"As for these two conditions, they were not available to me."
[These the-two-conditions, not available to-me.]
"al-ḥujratu llatī ya&malu fìhā jawwuhā xāniqun"
"The air of the room in which he works is suffocating."
[The-room the-one-which he-works in-it, air-its suffocating.]
"?awlāduka, hal fakkarta fì muataqbalihim"
"Have you thought about the future of your children?"
[Children-your, query you-have-thought about future-their?]
```

It will be seen that topic-comment constructions can allow a degree of looseness in the connection between the topic and the comment, so that it may be inferred rather than explicit. In contrast, a conventional subject-verb-object sentence is more precise. The purpose of the verb is to state the action or state that the subject is engaged in. If the verb is correctly chosen, there is usually little room for doubt on the meaning.

The above examples are of sentences whose basic structure is subject-verb-object. The subject-verbobject and subject-predicate constructions are only one realisation of the structures of topic and comment. There are languages which explicitly mark the topic whether or not it is the subject. In Japanese, the topic is marked by the particle "wa", and can be of varying length:

> "Watashi wa eigo ga wakaru." "I understand English." [I (topic) ${ }_{(n g l i s h ~ i s ~ u n d e r s t a n d a b l e .] ~}^{\text {( }}$
> "Amerika kara wa Sumisu-san ga kita." "Mr Smith came from America."
> [America-from ${ }_{\text {(topic) }}$ Sumisu-Mr ${ }_{\text {(subject) }}$ came.]
> "Morita-san ga kita no wa Tōkyō kara da." "It was from Tokyo that Mr Morita came."
> [Morita- $\mathrm{Mr}_{\text {(subject) }}$ coming (topic) Tokyo-from is.]

In Tagalog, the topic is marked with "ang" ("the"). It can be the subject, object, beneficiary, or other sentence element, and can be placed in any position. Only the topic can be definite; the other elements are not marked as definite even if they are:
"Magaalis ang tindero ng bigas sa sako para sa babae."
"The storekeeper will take some rice out of a sack for the woman."
[Will-take the storekeeper some rice from sack for-to woman."
"Aalisin ng tindero ang bigas sa sako para sa babae."
"The rice will be taken out of a sack for the woman by the storekeeper."
[Will-be-taken a storekeeper the rice from sack for-to woman.]
"Ipagaalis ng tindero ng bigas sa sako ang babae."
"For the woman, some rice will be taken by the storekeeper out of a sack."
[Will-be-taken-for-her a storekeeper some rice from sack the woman.] ${ }^{8}$

[^5]The object of verbs of communication and perception can also be constructed as a topic (Chapter 8, the Communication and Perception Functions).

A few remarks may be appropriate here on the linguistics of topic-comment analysis. While the topiccomment split of a statement in a particular discourse is intuitively clear, analysis is complicated by the fact that the comment can be placed at either the start or the end of a sentence:
"I'm going off to work now."
"Work is where I'm going off to now."
"It's work that I'm going off to now."
Such sentences are sometimes interpreted by commentators as having "work" as the topic. This is not so; they mean "I'm going off somewhere now, and it's to work": work is the comment. If "work" is the topic, the sentence should be "[As for] work, I'm going off to it now". For example, the German
"Dich wollten wir sehen"
has been interpreted" as "It's you we want to see", when it fact it means "You are wanted to be seen by us." Similarly, the Latin:

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"Fuimus Trōes, fuit Īlium."
"Trojans is what we were; Troy is what was (but no longer is)."
[We-were Trojans; it-was Troy.]
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(a quotation from the Aeneid) has been analysed ${ }^{10}$ as "topicalisation" of "fuimus" and "fuit", when in fact those elements are in focus.

## Topic and Enquiry

We have so far been considering a sequence of sentences within a narrative spoken or written by one person. Another form of sentence sequence is a dialogue between two or more persons. Where this consists only of an exchange of statements, the same principles of sentence construction and interpretation apply as in a narrative. If person A makes a statement which is comprehensible to person B, its topic must be known to person B. The comment of the statement refers to new elements and should provide sufficient information to identify them. These new elements can then be the topic of A's reply, and so on throughout the dialogue.

However, dialogue contains a further type of sentence not previously mentioned, the question. In a question, person A asks for information concerning a topic. Since there is no point in asking a question about a subject which is not known to the other party, person B, the topic contains only known information, as it does in a narrative. The part of the question which is not known is that part which Person A is enquiring about. We call that part the enquiry. Questions therefore consist of two parts, the topic and the enquiry. The reply that Person B makes, if he/she answers the question, includes as its topic the topic of the question and as its comment the response to the enquiry. As with other statements, the answer can be standard subject-verb-object or the comment can be in focus.

We can again choose a relatively trivial example:
"What (enquiry) are you doing this summer $_{\text {(topic) }}$ ?" "We ${ }_{\text {(topic) }}$ are going on holiday (comment)."
"Where (enquiry) are you going $_{\text {(topic) }}$ ?" "To Bodrum (comment)."
"Where ${ }_{\text {(enquiry) }}$ is that ${ }_{\text {(topic) }}$ ?" "It's (topic) resort $_{\text {(comment) }}$ on the West coast of Turkey (comment)."
In the first sentence, "your activities this summer" establishes a topic, on which a request for information starts the conversation. In the subsequent questions and answers, pronouns ("you", "we", "that", and "it") refer to items which have been identified in the comment of the previous sentence, and are the topics of their own sentences.

[^6]The construction of a question from a statement is not simply a grammatical transformation of the sequence of subject, verb, and object. In a statement, there is a topic (often, the subject) and a comment (often, the verb, object, etc) which provides information on the topic. In a question, all the words except for the enquiry are the topic, including the subject, verb, object, and any other element apart from that which is being enquired into. This may be illustrated further by the following pairs of sentences:

$$
\begin{aligned}
& \text { "What }{ }_{(\text {enquiry })} \text { are you doing (topic)?" "I'm } \text { (topic) } \text { answering the telephone (comment)." } \\
& \text { "What }{ }_{\text {(enquiry) }} \text { are you eating (topic)?" "I'm eating (topic) } \text { an }^{\text {apple }}{ }_{\text {(comment)." }}
\end{aligned}
$$

In the first pair, the enquirer assumes that the respondent is doing something and asks what it is. In the second, the enquirer observes that the respondent is eating and enquires what is being consumed. The replies could be recast in focus form: "What I'm doing is answering the telephone"; "What I'm eating is an apple."

The task of a question is therefore to specify a topic and some information which is required concerning it. In doing so, an assumption is made that the topic exists and is understood by the hearer; if that is not so, the question cannot be answered, as in:

```
"What (enquiry) are you eating (topic) ?" "I'm not eating."
"What \({ }_{\text {(enquiry) }}\) is hydrogen peroxide (topic)?" "I don't know."
```

To express a question and distinguish it from a statement, the enquiry must be marked. That is simple where it is a particular enquiry word such as "what?", "where?", "when", or "why". Some languages place this word at the start of the sentence, as in English:

```
Arabic: "måa man ?unāqišu 1-mawḍū‘a l-Rāna"
    "Who do I discuss the subject with now?" [With whom I-discuss the-subject now?]
    "'alāma tubąӨiru Ramwālaka" "What are you squandering your money on?"
    [On-what you-are-squandering money-your?]
```

Other languages leave it in the same position in the sentence that they expect the comment to be in the answer:

Hindi: "vah kiskā makān hai?" "Whose house is that?" [That whose house is?]
Malay: "Anda membaca apa?" "What are you reading?" [You read what?]
Chinese:"Nǐ jīntiān shàng shénme kè?""What classes do you have today?"
[You today attend what class?]

Japanese:
"Kinō no pātī ni wa dare ga kimashita ka." "Who came to yesterday's party?"
[Yesterday-of party-to (topic) who (subject) ${ }^{\text {came query?] }}$
For questions of the "yes/no" type, without a particular enquiry word, languages mark the verb as the enquiry. This may be done by altering its position to the start of the sentence, as in English, or by a means of a query particle ("query"):

Arabic:"hal tarā ?anna ðālika ?amrun jayyidun" "Do you think that is a good thing?" [Query you-think that that matter good?]

Turkish: "Geliyor mu?" "Is he coming?" [He-is-coming query?]
Persian: "aya in ketab ast?" "Is it this book?" [Query this book is?]
Hindi: "kyā laṛkiyā̃ yahā̃ hai^" "Are the girls there?" [Query girls there are?]

Chinese:"Qichē jiāle yóu ma?" "Have you filled your car with petrol?"

Japanese:
"Yoshiko wa daigaku e iku ka." "Is Yoshiko going to college?"
[Yoshiko (topic) college-to go query?]
A particular category of "yes"/"no" question is an existential question, of the type:
Russian: "Pri gostinitse est' pochta?" "Is there a post-office in the hotel?" [In hotel is-there post-office?]

Where a query particle is not used, a yes/no question can be marked by intonation, and in writing by "?", as in Italian:
"La conosce?" "Do you know her?" [Her you-know?]
"C'è una mela nella macchina?" "Is there an apple in the car?" [There's an apple in the car?]
It will be seen that, in general, the structure of a question is determined by the expected structure of the answer. A fuller understanding of the functional grammar of questions involves distinguishing between definite and indefinite questions. This will be discussed in a Chapter 3. (Questions).

## Topic and Hypothesis

To complete our summary of sentence types, a further category must be mentioned which does not provide either new information or an enquiry. They are sentences which suppose or hypothesise a statement whose reality is not known. Because a hypothesis refers to a topic which expresses known information, we can call the sentences topic-hypothesis. Hypotheses are discussed in Chapter 3. (Hypotheses; Conditionals). Hypotheses include wishes, which are discussed more fully in Chapter 8. (The Volition and Imperative Functions).

A hypothesis is not a statement of fact but expresses an event which might happen but has not. Languages may therefore use a different form of the verb, called the subjunctive, in contrast to factual statements whose form of verb is the indicative.

A wish is expressed in languages in three ways:

- As a direct imperative by the speaker to a person present: "Eat your lunch!" "Speak your lines more clearly!"
- As a desire expressed by the speaker or another: "I/she wants you to eat your lunch/speak your lines more clearly."

In each case, the topic is the known information: "your lunch/your lines".
Hypotheses arise in eight different types of sentence. The verb expressing the hypothesis is here marked (h). Some languages use a subjunctive for all these instances, others for only some of them. There are also languages which do not possess a subjunctive form, and leave the hearer to infer a hypothesis from the structure of the sentence. The topic of each sentence depends on its context in the narrative of which it is a part; the probable topic is marked $(\mathrm{t})$ :

- As a wish or preference for something which is not known to exist: "I ${ }_{(\mathrm{t})}$ would prefer a house which has (h) some land attached."
- As a purpose which has not been realised: "She is studying so that she ${ }_{(\mathrm{t})}$ can win ${ }_{(\mathrm{h})}$ a prize."
- As a person or object whose existence is denied: "I know no-one who can help ${ }_{(\mathrm{h})}$ you ${ }_{(\mathrm{t})}$."
- As a person or object which cannot be identified: "Whoever you ${ }_{(t)}$ are $_{(\mathrm{h})}$, you can't go in!"
- As a communication of something uncertain: "I think that he ${ }_{(\mathrm{t})}$ has $_{(\mathrm{h})}$ gone."
- As an event which has not occurred: "I'll sell it provided $I_{(t)}$ can get ${ }_{(h)}$ a good price."
- As a condition whose occurrence is unknown: "If $I_{(t)}$ knew $_{(h)}$, I would tell you."


A hypothesis can also be reported, in which case the reported speech may use the subjunctive:
"She told him that he ${ }_{(\mathrm{t})}$ should eat $_{(\mathrm{h})}$ his lunch/speak $_{(\mathrm{h})}$ his lines more clearly."

## Conclusion

In this chapter, we have attempted to define the linguistic concepts of existential sentence, topic, comment, enquiry, and hypothesis, and to relate these to the different sorts of sentence: statement, question, and hypothesis. In Chapter 3., we shall add a negative statement and explore questions and hypotheses in greater detail.

We have tried to show that a topic and comment are different from a subject, verb, or object, but related to them. The terms topic, comment, etc have been precisely defined within the structure of a dialogue or narrative, while subject, verb, and object have not. Subject and object are instances of the linguistic concept of noun, which we have also not defined precisely. The reason for this lack of clarity is that the purpose of subject, verb, and object differ according to the functional nature of the sentence in which they are used. Before giving them a clear meaning, we must therefore explore the varieties of sentence function, which is the purpose of Chapters 6. to 12 .

The varieties of sentence function are summarised in Chapter 15., and this will enable us to attempt a definition of subject, verb, object, adjective, and noun, in Chapters 16 and 17.

For the present, we shall use the following empirical definitions:

- A verb is the word which describes the action or state of a sentence, and is the word connecting a subject to the rest of a sentence.
- A noun is a concept word which is not a verb.
- A subject is a noun whose action or state is described by a verb.
- An object is a noun towards which a verb directs its action.
- An adjective is a word which describes the state or condition of a noun.

As we shall see in Chapter 4., some expressions which describe a state or condition are not adjectives as the term is commonly understood, such as "beautiful" or "large". We shall therefore cover both these expressions and adjectives with the term "attribute", although this usage differs from the conventional one.

## 2. Identity and Quantity

## Summary

Most nouns denote a class of persons or objects. Most sentences refer to a particular instance of that class, by assigning the noun an identity. Since the topic of a sentence, by its nature, comprises only information which is known, the nouns in it must be identified at the time that the sentence is uttered. An identified noun is termed "definite". Certain definite nouns denote a single individual ("individual noun") and do not need to be identified further.

A noun may be definite because it is understood as identified in an earlier sentence, or because the sentence identifies it by connecting it to definite information. The word or expression which contains that definite information, and which is sufficient to identify a noun, is called a restrictive qualifier. Languages also permit a non-restrictive qualifier, which provides new information on the noun but has no purpose in identifying it. Languages are divided between those which place restrictive qualifiers before the noun (left-branching) and those which place them after the noun (right-branching). Right-branching languages require a means of distinguishing between a restrictive qualifier and a predicate, while left-branching languages do not.

The purpose of a comment is to supply new information and to connect it with the topic. The new information may have identities which are not known, and are termed "indefinite". In that case, the sentence identifies the indefinite information so it is definite in a subsequent sentence. Alternatively, the new information may be already definite, in which case the sentence selects particular definite information from among a range of possible definite information, and connects it to the topic.

The identity of a definite noun is permanent. Unless it is individual, subsequent references to it have to be marked as definite in order to distinguish it from other nouns. This is done by an identity marker, a restrictive qualifier, or a rule of word order. Alternatively, an indefinite noun may be marked as indefinite and so distinguished from a definite noun.

A definite noun can be represented by a definite pronoun, and an indefinite noun by an indefinite pronoun. Pronouns may be subject to restrictive qualifiers, and in that construction are equivalent respectively to definite and indefinite nouns.

In addition to a noun, a verb or attribute may also be definite or indefinite, in the sense that it refers to a particular action or state and represents known or new information. A verb is definite when it is part of the topic, for example when the sentence is focus-topic, and otherwise is usually indefinite.

The purpose of marking a noun as indefinite is to introduce it to the narrative. A sentence which contains an indefinite noun, verb, or attribute may therefore be reformulated as an existential sentence with the indefinite word in object position.

A word whose identity can be or is ascertained, whether definite or indefinite, is termed "specific". In addition, a word may refer to a class of persons, objects, actions, or states without identifying them further, and such a word is termed "general". A general word which refers to a class which is precisely delimited from other classes describes a known general entity and is termed "generic". A general word which refers to a class whose limits are not known is termed "nonspecific". A nonspecific word may be one whose identity is not important, or one whose limits are initially not known but are established by reference to a generic word. A nonspecific word cannot be the topic of a sentence.

A specific sentence is one which does not contain a generic entity. A general sentence is one which contains at least one generic entity, and may not contain an indefinite entity. Nonspecific entities may occur in both general and specific sentences. The relation between generic and nonspecific entities in a general sentence parallels that between definite and
indefinite entities in a specific sentence, so that by this means both the topic-comment and existential structures can be realised.

Some languages do not mark a noun or verb as general; others do so by various means. Languages mostly distinguish generic from nonspecific nouns by placing them in topic position. Some languages also distinguish generic from nonspecific nouns, and/or nonspecific from indefinite nouns, by so marking them.

A quantity applied to a noun, verb, or attribute is a number which requires reference to a unit, which may be a discrete object, a proportion, or measure. A quantified entity is definite if the quantity is definite and indefinite if the quantity is indefinite. A quantity is definite if the entities which comprise it can be distinguished from other entities. A quantity is indefinite if the entities which comprise it cannot be so distinguished. A generic quantity is a totality. A nonspecific quantity is one whose value is not significant.

## Terms Defined or Introduced

Identity, definite, indefinite, article, individual, restrictive qualifier, non-restrictive qualifier, leftbranching, right-branching, specific, general, generic, nonspecific, quantity, unit.

## Definite and Indefinite Noun

As we saw in Chapter 1., the topic of a sentence contains information which is known to the speaker and assumed by the speaker to be known to the hearer. The identities of all the elements in the topic are therefore known. The comment contains new information which the sentence is communicating. The sentence "John is reading a newspaper" contains the new information that a particular newspaper exists and that John is reading it. The sentence identifies the newspaper, so that a subsequent reference to "the newspaper" can be assumed to mean the one that John is reading. Before the sentence was uttered, the words "the newspaper" would refer to a different one.

Alternatively, if the sentence is "John is reading the newspaper", the newspaper is already identified. The new information in the comment is that John has chosen to read the newspaper rather than anything else, such as going for a walk or reading a book. The newspaper may have been the one that was delivered or purchased that morning. Any subsequent reference to "the newspaper" could mean the one purchased that morning and which John is now reading, on the assumption that they are the same. If they are not the same, further information would be needed to distinguish them.

The great majority of nouns are of the type "newspaper" rather than the type "John". "John" is an individual supposedly known to both speaker and hearer. If more than one "John" could be meant, then the speaker has to distinguish between them; otherwise, no further identification is needed. "Newspaper" refers to an indefinitely large class of entities; the purpose of identification is to limit the reference to a single newspaper upon which further information can be supplied.

The identity of a noun is therefore essential to its meaning in a sentence. A noun is either identified or not, and once identified its identity cannot subsequently be altered. A noun which has been identified is said to be definite and one not identified is said to be indefinite. It might be clearer to use the terms "identified" and "unidentified", but these are the traditional terms. As we have seen, the purpose of a sentence containing an indefinite noun is, in general, to provide sufficient information to make that noun definite in a subsequent sentence. "John bought a newspaper on the news stand" can be followed by a sentence containing "the newspaper" as its identity has been established.

It should be noted that the sentence in the first paragraph could be formulated: "There is a newspaper which John bought on the news stand". An indefinite noun can always be expressed in existential form, while a definite noun cannot: *"There is the newspaper which John bought on the news stand".

A identification sentence such as "Birmingham is a city in England" might seem not to fit into the above analysis, since any subsequent reference would be to "Birmingham", not to "the city in England". However, it can be seen that it does fit in when it is understood to mean "There is a city in England; it is Birmingham." This is discussed further in Chapter 6. (The Identification Function).

In "John is reading the newspaper", the definite noun "the newspaper" receives its identity from an earlier sentence which has been exchanged between the speaker and hearer, in either the present dialogue or narrative or an earlier one: "John bought a newspaper", "A newspaper was delivered", etc. Alternatively, a noun can become definite in the present sentence, by attaching to it another noun or expression which is sufficient to identify it: "John is reading the newspaper which he bought this morning"; "John is reading today's newspaper". This is termed a "restrictive qualifier", discussed below.

When a noun has been identified, it has to be marked as definite in all subsequent references so that it is clear to the hearer what is being referred to. If a noun is not identified at the time of utterance, it has to be marked as indefinite in order to distinguish it from identified nouns. There are at least six ways in which that definite or indefinite marking can be done:

- there is a definite or indefinite article;
- the noun is individual;
- the language assumes that the subject or topic is definite;
- a direct object of a verb is marked as definite or indefinite, by means other than an article;
- a restrictive qualifier links the noun to a definite entity;
- the sentence is existential, so indicating that the noun is indefinite.

Existential sentences are discussed in Chapter 1. The other methods are discussed below.

## Definite and Indefinite Article

The noun can be marked with a definite article, as in English, French, Spanish, Italian, German, Welsh, Arabic, Malay, etc. The English definite article is "the":

French: "Il avait le chapeau sur la tête." "He had his hat on his head."
[He had the hat on the head.]
Italian: "Il suo libro è sulla tavola." "Her book is on the table."
[The her book is on-the table].
Welsh: "Y mae'r awyren yn y cae." "The aeroplane is in the field."
[Is the aeroplane in the field.]
Arabic: "al-mas?alatu basīṭatun" "The question is simple." [The-question simple.]
Malay: "Kedua perdana menteri itu bersalaam."
"The two Prime Ministers greeted each other."
[Two Prime Minister the greet-each-other.]
Many but not all languages with a definite article also mark an indefinite noun with an indefinite article. The English indefinite article is "a" or "some". Other languages, including Turkish, Persian, and Hindi, possess an indefinite article but not a definite article; the absence of an indefinite article in these languages is usually not sufficient to mark a noun as definite:

Turkish: "Biz tramvayı görür görmez, Orhan koşmağa başladı."
"As soon as we saw the tram, Orhan began to run."
[We tram saw not-saw, Orhan to-run began.]
In Serbian and some other Slavonic languages which do not have an article, an adjective is marked as definite or indefinite, and in this way the noun that it qualifies is made definite or indefinite:

> Serbian: "Ovo je mladi čovek o kojem sam ti pričala."
> "This is the young man about whom I spoke to you."
> [This is young (definite) man about whom I-am to-you spoken.]
> "Imate li slobodan sto?" "Do you have a free table?"
> [You-have query free (indefinite) table?]

## Individual Noun

A noun of which there is assumed to be only one occurrence is definite by its nature and should not need to be marked as such. One example is the names of persons or places. The traditional term for this is a "proper noun", but this seems unsatisfactory and we suggest that the term individual noun is clearer. In many languages with a definite article, it is also used to mark individual nouns:

French: "La Reine Victoria"; "La France"; "Le docteur Ribot". [The Queen Victoria; the France; the Doctor Ribot.]

Greek: "o Aú $\quad$ ovøтo $\varsigma$ " [The August]. " $\eta$ A $\gamma \gamma \lambda i ́ \alpha "$ [The England].
German: "Die kluge Else". "Clever Else". [The clever Else].
In Malay, a non-individual noun which refers in fact to only one individual does not need an article:
"Perdana menteri sudah pulang." "The Prime Minister has returned home."
[Minister Prime has come-home.]

## Definite Topic or Subject

If a language does not have a definite article, it is assumed that the subject contains only definite nouns. An indefinite entity is marked through the existential construction:

Chinese:"Lăoshī zŏu jìn le jiàoshì." "The teacher came into the classroom."
[Teacher went in (aorist) classroom.] $^{\text {a }}$
"Yŏu yī gè xuésheng zhànle qilái." "A student stood up."
[There-is one unit student stand ${ }_{(\text {aorist) }}$ did up-come.]
Japanese:
"Mukashi hitori no o-ji-san ga sunde imashita. O-ji-san wa totemo binbō deshita."
"Once upon a time there lived an old man. He was very poor."
[Once one old-man ${ }_{\text {(subject) }}$ living there-was. Old-man ${ }_{\text {(topic) }}$ very poor was.]
As mentioned in Chapter 1., languages which have an indefinite article may construct a sentence with an indefinite noun in subject position. Such a sentence is equivalent to an existential construction:
"A delivery van called today, and left a parcel."
"There was delivery van which called today; it left a parcel."

## Definite and Indefinite Object

Languages which do not have a definite article may mark the object as definite or indefinite by a case or suffix:

$$
\begin{aligned}
& \text { Turkish: "Öküzü ald."" "He bought the ox." [Ox (accusative } \text { he-bought.] } \\
& \text { "Bir öküz aldı." "He bought an ox." [An ox (absolute) } \text { he-bought.] } \\
& \text { Persian: "ketabra be man dad""He gave the book to me." [Book-the to me he-gave.] } \\
& \text { "ketabi be man dad""He gave a book to me." [Book-a to me he-gave.] }
\end{aligned}
$$

An object may also be marked as definite by placing it before the verb and as indefinite by placing it after the verb. The Chinese definite object is also marked with the particle "bă":

Finnish: "Kuka kirjan on pöydälle unohtanut." "Who has left the book on the table." [Who book (accusative) has table-on left?]
"Kuka on unohtanut pöydälle kirjan?"" "Who has left a book on the table?" [Who has left table-on book (accusative) ?]

Chinese:"Tā bă shū fàng hăo le." "She placed the books in good order." [She the book put good ${ }_{\text {(aorist). }}$ ]
"Wŏ qù măi shū." "I am going to buy a book." [I go buy book.]
Similarly, a period of time adverbial in Chinese is indefinite after the verb, and definite before the verb:
"Wŏ xuéguo sì gè yuè de Zhōngwén." "I studied Chinese for four months."
[I study (perfective) four unit month-of Chinese.]
"Wŏ bàn nián méi qù kàn diànyǐng le." "I have not been to see a film for the last six months." [I half year not go see film ${ }_{\text {(aorist). }}$ ]

Alternatively, a pronoun pointer to the object is placed before the verb if it is definite, and omitted if it is indefinite:

Swahili: "Umekileta kitabu?" "Have you bought the book?" [You-have-it-buy book?]
Hungarian has a definite article "a"/"az" and an indefinite article "egy". In addition, each verb has one of two different forms, depending on whether its object is definite or indefinite:
"Hallgatta az operát." "She listened ${ }_{(\text {definite })}[$ to] the opera."
"Hallgatott egy operát." "She listened (indefinite) $[$ to] an opera."
Inuit indicates a definite object by a pronoun pointer attached to the verb, and an indefinite object by a case suffix ("-nik" = "with") attached to the object:
"Atuakkat atuarpai." "He read the books." [Books read-he-them.]
"Atuakkanik atuarpuq." "He read some books." [Books-with read-he.]

## Restrictive Qualifier

A noun can also be marked as definite by adding sufficient further information about it to identify it. It can then be treated as definite in the narrative or dialogue. Information added to a noun is called a qualifier, and the noun is said to be qualified. An example is a simple relative clause:
"the book which I read yesterday"
"a book which I read yesterday"
"the book, which I read yesterday"
"a book, which I read yesterday"
In the first two phrases, the qualifier "which I read yesterday" identifies the book. It does that by linking the noun "book" to a pronoun ("I") and to an adverbial ("yesterday"), both of which are definite. In the first phrase, a number of books have been identified in previous sentences and the qualifier distinguishes between them. In the second phrase, the qualifier identifies the book for the first time. In both cases, any subsequent reference to "the book" is definite. The qualifier is called a restrictive qualifier.

In the second two phrases, the qualifier "which I read yesterday" does not identify the book but provides further information about it. It is called a non-restrictive qualifier. A non-restrictive qualifier is a stylistic device which enables the speaker to string a number of sentences together. Instead of "I have returned the book. I read it yesterday", he/she can say "I have returned the book, which I read yesterday." The comma is represented in English speech by a brief pause.

A qualifier therefore has two purposes, to make a noun definite and to provide a further information on it. The same arises with other types of qualifier, for example an adjective:

> "the red book"
> "a red book".

In these phrases, the qualifier "red" is restrictive and identifies the book if it is assumed that there are a number of books, each one with a different colour. If there is more than one book with the same colour, "red" is non-restrictive and the expression does not identify it.

We noted above (Definite and Indefinite Article) that Serbian distinguished between definite and indefinite adjectives. A definite adjective is restrictive and an indefinite adjective is non-restrictive:
"Umorni putnik se sinoć vratio kući." "The tired traveller returned home last night." [Tired ${ }_{\text {(definite) }}$ traveller himself last-night returned home.]
"Umoran, putnik se sinoć vratio kući." "Tired, the traveller returned home last night."
[Tired ${ }_{\text {(indefinite) }}$, traveller himself last-night returned home.]
A further type of qualifier links the noun with another noun or pronoun which is definite. If that link is sufficient to identify the noun, the qualifier is restrictive. Examples are:
"the trees in our road"; "my car"; "the king of France"; "the company accounts".
Assuming that these links are unique (for example that I have one car), and exist (that there is a king of France), these qualifiers identify their nouns and are therefore definite. The functions of different links depend on the different functions of nouns and are summarised in Chapter 12.

Finally, a demonstrative pronoun can express a physical link relative to the speaker, the hearer, or a third party, assumed to be definite:

```
"that mountain"; "this desk"; "those buildings".
```

In languages which do not have either a definite and indefinite article, a restrictive qualifier is an essential means of identifying a noun. As the following examples show, if there is a definite article but not an indefinite one, the qualifier to the definite noun is restrictive; if there is an indefinite article but not a definite one, the qualifier to the indefinite noun is non-restrictive. If there is no article, a qualifier is usually restrictive.

In addition, a distinction exists between those languages which have a relative pronoun (such as "who", "which", or "that") and those which do not. If there is no relative pronoun, a relative clause has to be distinguished from the predicate clause which contains the verb and object relating to the noun. This has an effect on word order, as it is usually achieved by placing the relative clause and other qualifiers in front of the noun, and the predicate verb and object after the noun. Such languages usually do not have a definite article, and relative clauses in them are usually restrictive.

For example, Turkish, Chinese, and Japanese do not have a definite article or (in literary Turkish) a relative pronoun. Relative clauses are restrictive, and placed in front of the noun:

Turkish: "evi büyük olan bir arkadaşım" "a friend of mine whose house is big"
[house-his big being a friend-my]
"şimdi konuşan adam" "the man who is now speaking" [now speaking man]
Chinese: "mài bàozhĭ de shāngdiàn" "a shop that sells newspapers" [sell newspaper of shop]
"nĭ yào fù de qián" "the money you will have to pay" [you must pay of money]
Japanese:
"Michiko ga iku gakkō wa Tōkyō ni arimasu."
"The school where Michiko is going is in Tokyo."
[Michiko ${ }_{\text {(subject) }}$ go school ${ }_{\text {(topic) }}$ Tokyo-in is.]
"Tomu ga futtobōru no kippu o ageta onna no ko"
"the girl to whom Tom gave a football ticket"
[Tom ${ }_{\text {(subject) }}$ football-of ticket ${ }_{\text {(object) }}$ gave girl].
In Chinese, relative clauses like other qualifiers are linked to the following noun by the particle "de", here translated "of".

German and Hindi have a relative pronoun. Relative clauses to definite nouns are placed before the noun and other relative clauses after the noun:

$$
\left.\begin{array}{l}
\text { German: "der am Wegrand stehende Baum" [the by-the wayside standing tree] } \\
\text { (restrictive) } \\
\text { "ein Baum, der am Wegrand steht" [a tree, which by-the wayside stands] } \\
\text { (restrictive) } \\
\text { "der Baum, der am Wegrand steht" [the tree, which by-the wayside stands] } \\
\text { (non-restrictive) }
\end{array} \quad \begin{array}{lll}
\text { Hindi: "jis ādmī se mai~ bāt kar rahā thā, vah kal bhārat jāegā" } & \text { (restrictive) } \\
& \text { "The man I was talking to is going to India tomorrow." }
\end{array}\right]
$$

These and other languages in which restrictive qualifiers precede the noun are called left-branching languages. In contrast, in Spanish, Italian, and other Romance languages, restrictive qualifiers follow the noun, and these are termed right-branching languages. Shorter non-restrictive qualifiers in rightbranching languages, such as adjectives, precede the noun, while longer non-restrictive qualifiers follow it. In addition, right-branching languages have a relative pronoun to enable a relative clause to be distinguished from the predicate verb and object.

$$
\begin{array}{ll}
\text { Spanish: "Tuvo que parar para cambiar sus ruedas deterioradas." } & \text { (restrictive) } \\
\text { [He had to stop to change his tyres worn.] } & \\
\text { "Tuvo que parar para cambiar sus deterioradas ruedas." } & \text { (non-restrictive) } \\
\text { [He had to stop to change his worn tyres.] } &
\end{array}
$$

The first sentence conveys that only those tyres which were worn were changed. The second sentence allows us to understand that all the tyres were changed.

|  | "un elefante cojo""a lame elephant" [an elephant lame] | "el imponente Everest" "the imposing mount Everest" |
| ---: | :--- | :--- |$\quad$| (restrictive) |
| :--- |
| (non-restrictive) |

The right-branching character of Romance languages also appears in the formation of technical expressions from two nouns linked together. The word which is first in English is a restrictive qualifier of the other word, and therefore appears second in Italian:

| "dish washer" | "lavastoviglie"" | [wash-dishes] |
| :--- | :--- | :--- |
| "coat hanger" | "attaccapanni" | [hang-clothes] |
| "record player" | "giradischi"" | [turn-records] |
| "hair dryer" | "asciugacapelli"" | [dry-hair] |
| "standard-bearer""portabandiera" | [carry-standard] |  |

In Hungarian, adjectives and shorter restrictive qualifiers precede the noun, while relative clauses (restrictive and non-restrictive) follow the noun. Hungarian is therefore classed as left-branching:

$$
\begin{aligned}
& \text { "gyönyörű gesztenyefa""beautiful chestnut tree" } \\
& \text { "alvó kutya" "sleeping dog" ("alszik" = "sleep") } \\
& \text { "selyembe öltözött nő" "women dressed in silk" [silk-into dressed woman] } \\
& \text { "mai újság" "today's newspaper" [today (attribute) }{ }^{\text {newspaper] }} \quad \text { ("ma" = "today") } \\
& \text { "a haz előtti kert" "the garden in front of the house" [the house in-front-of (attribute) }{ }^{\text {garden] }} \\
& \text { "kalapos hölgy" "lady with a hat" [hat (possessing) lady] ("kalap" = "hat) }
\end{aligned}
$$

> "a könyv, amit küldtél nekem""the book that you sent [to] me"

Arabic, Persian, and Malay are right-branching languages in which all qualifiers follow the noun. In Arabic, a qualifier to a definite noun is assumed to be restrictive and therefore definite. The qualifier takes a definite article, or, if a relative clause, the relative pronoun "allaði" ("the one which") (or its variants):

```
"al-£aqabatu al-kaPūdu" "the insurmountable obstacle"
    [the-obstacle the-insurmountable]
"satḥu l-manzili" "[the] roof of the house"
"al-hujratu llatī bi-jānibi l-bābi l-raR̄̄siyyi"
"the room which is next to the main door"
[the-room the-one-which next-to the-door the-main]
```

A qualifier to an Arabic indefinite noun is assumed to be non-restrictive and therefore indefinite. The qualifier does not take an article and the relative clause does not take a relative pronoun:

```
"qiș̣atun țawīlatun"" a long story" [story long]
"qiș़̣atun Rabṭāluhā ma@rūfüna" "a story with well-known heroes"
    [story heroes-its well-known]
"barqiyyatu tahniPatin""[a] telegram [of] congratulations"
"ḥaqībatun kabīratun Puxașṣiṣuhā li-naqli l-kutubi"
"a large bag which I use exclusively for carrying books"
[large bag I-use-it for-carrying the-books]
```

Persian and Malay/Indonesian do not have a definite article. In Persian, a definite noun qualified by a restrictive relative clause is marked by the suffix " -1 ". If the definite noun is not so marked, the relative clause is non-restrictive:

Persian: "mardi ke anja bud ketabra beman dad"
(definite)
"The man who was there gave me the book."
[Man-the who there was book ${ }_{\text {(object) }}$ to-me gave.]
"mo?allef ke nevisandaye xubist in sabkra exteyar karde ast" (non-restrictive)
"The author, who is a good writer, has chosen this style."
[Author who writer good-is this style choice ${ }_{\text {(object) }}$ made is.]
In Malay/Indonesian, the equivalent to "one" can be used to show that a noun and its attached relative clause are indefinite:

Malay: "Orang yang duduk dekat jendela itu bekerja dengan saya." (definite)
"The person who is sitting near the window works with me."
[Person who sit near window-that works with me.]
"sebuah grup vokal yang di dalamnya Rima juga ikut" (indefinite)
"a vocal group in which Rima also participates"
[one group vocal which in-it Rima also participate].
In addition to left and right-branching languages there is a third group, of which English is an example, in which restrictive qualifiers both precede and follow the noun. Such languages also have a relative pronoun. However, in English a preceding qualifier qualifies an entire nominal expression, while a following qualifier does not. The phrase "the collected books, articles, and papers of Mr Smith" indicates that his books, articles, and papers have all been collected. From the phrase "Mr Smith's books, articles and papers which have been collected", it is not completely clear that the books and articles have been collected, as well as the papers. This example implies that English is essentially leftbranching, and it may be that all languages in fact fall into one or the other category.

The distinction between left and right-branching languages, which is defined here for restrictive qualifiers, is one of the rules of word order in a language (Chapter 4.).

Chapter 5. (Gerund) describes the grammatical device of linking together two predicate sentences, which also fulfils the purpose performed in right-branching languages by a non-restrictive qualifier.

## Pronoun

Any definite or individual noun can be represented in a dialogue or narrative by a pronoun such as " I ", "you", "he", "she", "it", or "they". A pronoun representing someone or something which is definite is a definite pronoun. If a noun can be identified by its position (physical or otherwise) relative to a definite noun, it may be represented by a demonstrative pronoun such as "this" or "that" which is also definite.

Languages also possess an indefinite pronoun, such as "someone" or "something" for a unit or "some" for an indefinite quantity. The purpose of an indefinite pronoun is to refer to a person or thing which has not yet been identified. A reference to that person or thing is not possible unless sufficient information is supplied to identify him, her, or it. An example is "Someone telephoned today about your complaint. I have taken his telephone number for you to return the call.".

A definite pronoun can refer either to a previously identified noun or to an entity identified by an attached definite qualifier, which can take any of the forms described previously, for example:
"what John is reading"; "the red one"; "those in our road"; "mine".
An indefinite pronoun can also be qualified, and in that case the qualification is usually restrictive:
"someone who works here"; "something blue"; "one of our books".
A similar construction occurs in other languages with a definite and indefinite article:

```
German:"Endlich fand ich, was ich suchte." (definite)
    "At last I found, what I was looking for."
    [At-last found I, what I sought.]
    "Du hattest eine Vorahnung von etwas entsetzliches, was dich betreffen müsse."
    "You have a presentiment of something terrible, which must (subjunctive) affect you."
                                (indefinite)
```

Languages which do not have a definite or indefinite article usually possess a definite and indefinite pronoun which can be qualified, or have an equivalent construction whereby a restrictive qualifier identifies a definite entity, and an non-restrictive qualifier provides information on an indefinite entity:
(right-branching languages)

| Finnish: | "Minkä sanoin, on totta." "What I said, is the truth." | (definite) |
| :---: | :---: | :---: |
|  | "Sinulla on aina joitakin esteitä." | (indefinite) |
|  | "There is always something that prevents you." |  |
|  | [At-you is always something to-prevent.] |  |
| Russian: | "to, chto sluchilos' potom, bylo neinteresno" | (definite) |
|  | "What happened after that was not interesting." |  |
|  | "v sadu ya uvidela chto-to tëmnoe" | (indefinite) |
|  | "I saw something dark in the garden." |  |
|  | [In garden I saw something dark.] |  |
| Malay: | "Yang sudah dipakai tidak bisa dikembalikan." | (definite) |
|  | "The used ones can't be returned." |  |
|  | [Which have been-used not can be-returned.] |  |
|  | "Ada sesuatu yang kurang baik." | (indefinite) |
|  | "There's something which isn't good." |  |

(left-branching languages)

In Turkish, the definite pronoun is the suffix "-ki" ("the-one"):
"Bu kalem benimki değil." "This pen is not mine." [This pen mine-the-one is-not.]
(definite)

Hindi: "jo kahtā hū̃̃, vah sac hai" "What I say is the truth." (definite)
[What saying I-am, that truth is.]
"kuch aur log āte ho~ge"
(indefinite)
"Some more people will be coming."
[Some more people coming will-be.]
Chinese:"Zhè shì wŏ zuótiān măi de."
(definite)
"This is what I bought yesterday." [This be I yesterday buy of.]
"Wŏ kàndào yíge yŏuqù de dōngxi." (indefinite)
"I saw something interesting."
[I notice one-unit interesting of thing.]
Japanese:
"Watashi wa kyonen katta no o tsukatta." (definite)
"I used the one I bought last year."
[ $I_{\text {(topic) }}$ last-year bought one (object) used.]
"Watashi wa kuroi no ga hoshii." "I want a black one." (indefinite)
[ $\mathrm{I}_{\text {(topic) }}$ black one ${ }_{\text {(subject) }}$ is-wanted.]

## Definite and Indefinite Verbs

Running through the above analysis is the idea that a noun or pronoun is either definite or indefinite. If definite, its identity is known either from a previous sentence, recent or remote, or from an attached qualifier, and it represents known information. If indefinite, its identity has not been established although the range of nouns to which it refers may have been restricted, and it represents unknown information. If the sentence supplies sufficient information to establish the identity of an indefinite noun, it becomes definite in a subsequent sentence.

The same concept is also true of verbs which describe an action (a dynamic verb). The distinction usually depends on whether the verb is part of the topic or part of the comment. The sentence "She walked down the road" can be intended to provide further information on "she", in answer to the question "What did she do?". "She" is the topic and the rest of the sentence is the comment. It can be rephrased as "She took a walk down the road", in which the function of the verb is expressed by a noun. We see that the noun and therefore the verb "walk" are indefinite. After the sentence has been uttered, her walk has become definite and can be talked about: "Her walk down the road was tiring."

Alternatively, "She walked down the road" can be intended to provide further information on "her walk", in answer to the question "Where did she walk?" In that case, it cannot be rephrased as "She took a walk down the road", but as "Her walk was down the road". The topic is "she walked", and the walk is already identified when the sentence is uttered. The noun and therefore the verb "walk" are definite. The comment is "down the road", meaning that it was not in some other location such as "along the path" or "in the garden".

Similarly, a verb is part of the topic and therefore definite in a focus construction. The sentence "It was at 10.30 that she walked down the road" answers the question "When did the walk take place?". "She walked down the road" is the topic and therefore all the elements in it are definite. The comment is "at 10.30 ", meaning "at 10.30 rather than at any other time".

A further example is "She saw her friend in the distance". This can be rephrased as: "She had sight of her friend in the distance", in answer to the question "What happened to her?" However, the sentence "It was her friend that she saw in the distance" answers the question "Whom did she see?". In the first sentence, "see" is indefinite, and in the second, "see" is definite.

It is possible to apply the same definite/indefinite analysis to verbs which express states (a stative verb), including an attributive verb. In most languages, attributes can be represented as nouns. If the noun is indefinite, the attribute is indefinite, and if it is definite, the attribute is definite. The term "attribute" includes "adjective", for reasons explained in Chapter 6. (Attributive Sentence and Verb). The sentence "The sky is blue" means "The sky has a shade of blueness", and "blue" is indefinite. We can subsequently talk of the definite "blueness of the sky", in the sense that it can be distinguished from other shades of blue. "The lecture was $11 / 2$ hours long" means "The lecture had a length of $11 / 2$ hours", where "long" is indefinite. We can subsequently refer to the definite "length of the lecture".

Similarly, "He was very happy to see her" is equivalent to "He felt a great happiness in seeing her"; "happy" is indefinite. A subsequent sentence could refer to "the happiness that he felt"; in which "happy" is definite.

An example of a stative verb is "exist". The sentence "Black holes exist in our galaxy" is equivalent to "Black holes have an existence in our galaxy"; "exist" is indefinite. However, the above sentence could be rephrased "It is in our galaxy that black holes exist", in which "exist" is definite.

In Chapter 1. (Existence and Non-Existence), examples were given of an existential sentence which introduced a verbal action as a new object. By the nature of an existential sentence, the verb is indefinite. Here are two more from Italian:
"Fu sentita una esplosione." "[There] was heard an explosion."
"È stata dichiarata una tregua." "[There] has been declared a truce."
Arabic has few adverbs, and expresses the adverbial function by a verbal noun which repeats the action of the verb:
"yaṣifu waṣfan daqīqan" "He describes accurately." [He-describes description accurate.]
"ibtasamat lahu btisāmatan kabīratan" "She gave him a big smile."
[She-smiled at-him smiling big.]
Verbs which possess identity are concept words, that is verbs which express an idea in the world. Auxiliary verbs, that is verbs which only express the grammatical relation between words, do not have an identity. Examples are "is" and "has" in "Paris is the capital of France" and "We have four children". This distinction is discussed further in Chapter 4.

Dynamic and stative verbs are discussed further in Chapter 5. (Aspect). Attributive sentences are discussed further in Chapter 6.

## Specific and General Concepts

Most concept words are a single instance of a class of persons, objects, actions, or states. "The student wrote an essay" refers to a particular student among a class of entities called "student", a particular action of writing, and a particular essay among a class of entities called "essay". "The student drank some coffee" refers to a particular act of drinking and to some particular coffee among a class of substances called "coffee". "Our house is 7 metres high" refers to a particular house among a class of entities called "house" and a particular height among a class of conditions called "high". We have seen in this chapter how identify distinguishes a particular entity within a class. An entity which can be but has not yet been identified is called "indefinite", and one which has been identified and can be subsequently referred to is called "definite". For these examples, we may subsequently refer to "the essay the student wrote", "the coffee that he drank", and "the height of our house". For the dynamic verbs, we may refer to "her writing of the essay" and "her drinking of the coffee".

We can use the term specific for a noun, verb, or attribute which can be identified, whether definite or indefinite, such as "the student", "our house, "an essay", "the coffee", "the height of 7 metres",
"wrote", and "drank". Specific nouns evidently include words which are definite by their nature, such as the pronouns "he"/"she"/"it", and an individual such as "Mrs Smith" or "London". For a substance such as coffee, a unit is stated or inferred. "Her coffee was sugared" means "Her cup of coffee was sugared". "Her coffee was Kenyan" means "The type of her coffee was Kenyan". This construction is discussed later in this chapter, under Quantity.

Languages can also make statements about a class of persons, objects, actions, or states, without identifying the members of the class. "Students write essays" refers to students as a class, a class of writings, and essays as a class, without distinguishing between the members of those classes. "Students drink coffee" refers to coffee as class. "Apples are sweeter than pears" refers to apples and pears as a class, and to a condition called "sweet" without specifying its extent. A word which refers to a class of entities in this way is called general. A general noun is a class of persons or objects, a general verb is a class of occurrences, and a general attribute is a class of qualities or states, whose specific members are not identified.

The sentences we have just quoted make general statements about a class of entities. They have a general subject, a general verb, and a general predicate. In addition, a sentence may make a general statement about a specific entity, and have a specific subject and a general verb. "Mr Brown drives to work on Tuesdays" means that, in general, Mr Brown drives to work on a Tuesday, without specifying his action on each specific Tuesday. "Drives" and "Tuesdays" are therefore general. "Mr Brown drove to work on Tuesday" refers to Mr Brown's action on a particular Tuesday, and "drove" and "Tuesday" are specific.

Another example is "This news is very surprising". This conveys that the news caused surprise, but only in general. It is possible that to some persons it did not cause surprise. "The suddenness of this news surprised my colleagues" conveys a specific effect. "Surprising" is one of a class of words called "general participle", discussed in Chapter 5. (General Participle). Similarly, in "The house was visible from a distance", "visible" is general; it does not convey that the house could be seen by a particular person. As these example shows, a general verb or general participle may often have no object:
"He gardens on Saturdays." "Can you hear?"

The distinction between a specific and a general noun can often be expressed through a restrictive qualifier. "ice-cream" in "We like ice-cream" is general. In "We like the ice-cream you have just bought", it is specific.

A sentence with a general comment may select one general class from a range of possible general classes. "Sheila dislikes garlic" may mean that Sheila dislikes garlic, but not necessarily onions; "Sheila catches the 8.12 train every day" means that Sheila catches the 8.12 train, not the 8.45.

English does not employ a consistent method to distinguish specific and general nouns. In the above examples, the plural without an article indicates generality. The same sentences could also be expressed "A student writes essays"; "An apple is sweeter than a pear". Ambiguity is always possible: "I read the books in my library" may refer to the books in general, or all of the books, or some of the books.

Many languages with a definite article use that to indicate a general noun:

> French: "La vie est courte." "[The] Life is short."
> "J'aime les pommes et les poires." "I like [the] apples and [the] pears."
> German:"Er liebt die Oper." "He loves [the] opera."
> "Das Singen macht ihm Freude." "[The] Singing gives him pleasure."

$$
\begin{aligned}
& \text { "Z } \varepsilon \imath \mu \varepsilon \tau \eta \nu \varepsilon \lambda \pi i ́ \delta \alpha \text {." "She lives in hope." [She-lives in the hope.] }
\end{aligned}
$$

Hungarian:
"Ilyen az élet." "Such is life." [Such the life.]
"Szeretem a banánt." "I like bananas." [I-like the bananas.]

> Arabic: "al-zawāju mas々ūliyyatun""Marriage is a responsibility."
> [The-marriage responsibility.]
> "māקidatun mina l-nuhāsi l-mahfūri" "a table of engraved brass"
> [table of the-brass the-engraved]

In many languages, the principal means of distinguishing general and specific sentences is to use different forms of the verb. In English the general form is the simple present or "habitual" past:
"Mr Brown drives to work" (general). "Mr Brown is driving to work" (specific).
"Mr Brown used to drive to work" (general). "Mr Brown drove to work" (specific).
In Spanish, "be" is expressed by "ser" if the state or identification is permanent and by "estar" if is transitory. The permanent state or identification is usually general, the impermanent one usually specific:

> "El cobre es ideal para los cables." "[The] Copper is ideal for [the] cables." ("ser")
> "Estaba rojo de vergüenza." "He was red with shame."

Russian employs different forms of adjective for a verbal attribute which expresses a permanent characteristic, which is general, and a temporary state which is specific:

$$
\begin{array}{ll}
\text { "Reka burnaya." "[The] river [is a] turbulent [one]." } & \text { (general) } \\
\text { "Segodnya reka spokoina." "Today [the] river [is] calm." } & \text { (specific) }
\end{array}
$$

The specific form of the first adjective would be "burna" and the general form of the second adjective would be "spokoinaya".

Similarly, Inuit can distinguish between a specific and a general attribute:
"Quinarpuq." "He was amusing." (on a specific occasion) [Amuse-he.]
"Quinartuuvuq." "He is amusing." (in general) [Amusing-is-he.]
Welsh possesses different forms of the verb for the general past and specific past:
"Cerddai ef dros y mynydd yn yr haf." "He used to walk over the mountains in summer."
[Walked (general) he over the mountain in the summer.]
"Euthum i am dro ar hyd y traeth." "I went for a walk along the beach."
[Went ${ }_{\text {(specific) }}$ I for walk along the beach.]
Turkish possesses a general form of the verb, called "aorist" in grammars. Other verbal forms are usually specific. The following is reported to be a sign at traffic hazards:
"Başka memleketlerde kazara ölürler; biz kazara yaşıyoruz."
"In other countries they die by accident; we live by accident."
[Other countries-in by-accident die-they ${ }_{\text {(general) }}$; we by-accident living-are-we ${ }_{\text {(specific) }}$.]
The Hindi verb has two forms, a general form ending in "ta"" or its variants (called "imperfective" in standard grammars), and a specific form ending in "ā" or its variants:

$$
\begin{aligned}
& \text { "mai~ bharāt me~ hindī boltā hū̃" "I speak Hindi in India." } \\
& \text { [I India-in Hindi speaking (general) } \mathrm{am} \text {.] } \\
& \text { "vah mujhse hindī me }{ }^{\sim} \text { bolī"" "They spoke to me in Hindi." } \\
& \text { [They to-me Hindi-in spoke }{ }_{\text {(specific). }} \text {.] } \\
& \text { "darvāzā nau baje band hotā thā" "The door used to be closed at nine o'clock." } \\
& \text { [Door nine o'clock closed was }{ }_{\text {(general). }}{ }^{\text {. }} \text {. } \\
& \text { "kal darvāzā nau baje band huā thā" "Yesterday the door was closed at nine o'clock." } \\
& \text { [Yesterday door nine o'clock closed was }{ }_{\text {(specific). }}{ }^{\text {.] }}
\end{aligned}
$$

Chinese possesses a range of aspect markers for verbs, described in Chapter 5. (Aspect). In sentences with general verbs, these are absent:

$$
\begin{aligned}
& \text { "Mă chī căo." "Horses eat grass." } \\
& \text { "Wŏ chīle liăng wăn fàn." "I have eaten two bowls of rice." } \\
& \text { (general) } \\
& \text { (specific) } \\
& \text { (aorist) }
\end{aligned} \text { two bowl rice.] } \quad 4
$$

Measure words (see below, Quantity) are used in Chinese for specific nouns:

| "yī zhī chuán" [one unit ship] "a ship" | "chuánzhī" "ships" |
| :---: | :---: |
| book] "a book" | "shūběn" "books" |

Chinese can mark a specific verb with an expression such as "yīxià" (one-time):
"Jiějie bă fángjiān shōushí le yīxià." "My elder sister tidied up her room."
[Elder-sister the room tidied ${ }_{\text {(aorist) }}$ one-time.]
The Swahili verb possesses a general form, with the prefix "hu-":
"Ulevi huondoa akili." "Drunkenness takes away (general) sense."
"Kila mwaka baba yangu hulima shamba la mpunga."
"Every year my father cultivates a field of rice.
[Every year father my cultivates (general) field of rice.]
Other languages surveyed do not possess a general form for the verb, for example French "Il se levais de bon matin" means both "He was rising early" and "He used to rise early". Adverbials such as "toujours" ("always") or other sentences in the narrative indicate whether the sentence is general or not.

The above examples illustrate the inconsistent terminology which is often used for the general verb construction in authoritative standard grammars. The Turkish "aorist" is used to refer to the general Turkish verb ${ }^{11}$. "Imperfective" is used for the general verb in Hindi ${ }^{12}$. In fact, "aorist" and "imperfective" are terms borrowed from aspects of the definite/indefinite verb (Chapter 5.). The Chinese example:
"Yī gè rén bù néng bù jiăng lĭ" "A person must be reasonable"
[One unit person not able not talk reason] ${ }^{13}$
is given as an example of an indefinite topic. It should be clear from the analysis in Chapter 1. that a topic cannot be indefinite. In this example, the topic (or subject) "yī gè rén" ("a person") is in fact general.

## Generic and Nonspecific Concepts

We should now fit general sentences into the principles of sentence structure already laid out for specific sentences. Every sentence contains known information, which is the topic of the sentence, and new information which it is conveying, which is the comment. In a specific statement, the known information refers to an identified entity and is termed definite, and the new information, if indefinite, receives an identity from the sentence, and can be definite in a subsequent sentence.
"Students write essays" does not provide information on any particular student or essay, but on students and essays as a class or group. In what sense, therefore, does it lie within our topic-comment structure? Let us start with the topic, "students". It provides information on a class of entities which is known to both speaker and hearer because it is clearly delimited from other classes such as "children" or "lecturers". It also refers to all students. The comment describes a class of entities, "essays", which students write. However, it does not refer to all essays, since there may be essays which are not written

[^7]by students, for example those by schoolchildren. The sentence delimits those essays which students write, so that they may be referred to later as "students' essays".

This suggests a comparison between a specific and a general sentence. A specific sentence refers to a definite noun and assigns an identity to an indefinite noun. A general sentence distinguishes between a general noun which describes a delimited class and one which does not describe a delimited class. We propose the term generic for a general entity whose limits are known to the speaker and hearer, and nonspecific for a general entity whose limits are not established. A general sentence refers to a generic noun and assigns limits to a nonspecific entity so that it can be generic. In this way, general sentences fit into the topic-comment structure.

The comparison with specific sentences also applies to the existential construction described in Chapter 1. Just as a specific existential sentence introduces a specific entity, a general existential sentence introduces a general entity. The above sentence can be rephrased "There are essays which students write". It cannot be rephrased *"There are students who write essays", because that implies that there are students who do not.

The distinction between generic and nonspecific classes may seem of limited value. In fact, failure to observe it can cause a serious lack of clarity. A suitable illustration is to compare:
"On Fridays, meetings take place"; and
"Meetings take place on Fridays".
Assuming that the topics of these two sentences are generic, the first one means that each Friday, a meeting occurs, but may occur on other days; "Fridays" is generic and "meetings" is nonspecific. The second one means that meetings occur on Fridays, but there may be Fridays when they do not occur; "meetings" is generic and "Fridays" is nonspecific.

The above examples are of general sentences, in which the topic and therefore the comment are general. It follows from our argument that a general topic is generic. In addition, we have noted that a sentence can have a specific topic and a general comment, for example "She likes Dickens' novels" or "She takes the 8.12 train every day". The general comment can be generic, as in those examples, or nonspecific, as in "She eats an egg for breakfast" or "She goes to work by bicycle". A nonspecific comment may be something whose identity is unimportant, for example:
"Henry is baby-sitting;" "Sheila is flat-hunting;" "She is looking for a pen".
The identity of the baby, the flat, or the pen, are not important to the meaning of these sentences, and are neither definite nor indefinite. They are general, but do not refer to a known class of entities and are therefore nonspecific. The last example again illustrates an important difference of meaning which English usage does not convey:
"She is looking for a pen (indefinite) " refers to particular pen which is lost;
"She is looking for a pen (nonspecific)" refers to any pen able to fulfil her requirements.
In an identification sentence, a comment which is grammatically indefinite is in fact nonspecific. An example is "She is an architect". If "an architect" in this sentence were indefinite, it would mean "a particular architect who has not yet been identified". In fact, it means "a member of the class of persons called "architect", and so is nonspecific.

Some languages have a more consistent usage. In French, generic nouns take the definite article, and nonspecific nouns take the partitive article as though they were indefinite:
"Les oiseaux ont des ailles." "[The] Birds have [some] wings."
"Les hommes sont des animaux." "[The] Men are [some] animals."
In Italian, Spanish, German, Greek, and Hungarian, generic nouns take the definite article and nonspecific nouns (unlike in French) take no article:

Italian: "Il vino fa male alla salute." "Wine is bad for your health."
[The wine makes bad to-the health.]
"Temo la vecchiaia." "I fear old age." [I-fear the old age.]
"Vendono fiori." "They sell flowers."
"Bevo té." "I'm a tea-drinker." [I-drink tea.]
Spanish: "Las ordenadores hacen imposibles los problemas dificiles."
"Computers make difficult problems impossible."
[The computers make impossible the problems difficult.]
"Odio las novelas di ciencia ficciòn." "I hate science fiction novels."
[I-hate the novels of science fiction.]
"Los lagartos comen moscas." "[The] Lizards eat flies."
"Escribo novelas di ciencia ficciòn." "I write science fiction novels."
[I-write novels of science fiction.]

> German:"Der Kampf um die Freiheit der Rede geht weiter."
> "The struggle for [the] freedom of speech continues."
> "Der Kampf um Freiheit geht weiter." "The struggle for freedom continues."

"A $\gamma \alpha \pi \alpha ́ \varepsilon ı ~ \tau \alpha \beta ı \lambda i \alpha \alpha . " ~ " S h e ~ l o v e s ~[t h e] ~ b o o k s . " ~$

Hungarian:
"A bálna a legnagyobb emlősállat." "Whales are the largest mammals."
[The whale the largest mammal.]
"Minden este János levest főz." "Janos makes soup every night."
[Every evening Janos soup cooks.]
In Spanish, since a nonspecific noun which is a subject cannot be a topic, it usually occurs after its verb:
"Caían bombas por todas partes." "Bombs were falling everywhere."
[Were-falling bombs everywhere.]
In Russian, the genitive case is used to indicate an indefinite quantity. It can also be used to mark a noun as nonspecific in a stative sentence:
"U menya est' rabota." "I have some work to do."
[With me there-is of-work (genitive).]
In Russian identification statements, an identity which is represented as permanent is nominative (an unmodified noun) and an impermanent (nonspecific) identity may be in the instrumental case:
"Po professii on byl botanik." "By profession, he was [a] botanist (nominative)."
"Vo vremya voiny ya byl ofitserom." "During [the] war, I was [an] officer (instrumental)."
The Russian suffixes "-to" and "-nibud"" is used to distinguish between between, respectively, indefinite specific and nonspecific nouns:
"On izuchaet kakoi-to yazyk." "He is studying some ${ }_{\text {(specific) }}$ language."
"On pridumaet kakoe-nibud' neotlozhnoe delo."
"He is bound to think up some urgent business or other."
[He will-think-up some ${ }_{\text {(nonspecific) }}$ urgent business.]
In Finnish, the partitive case, which is used to indicate a number, can mark a noun as nonspecific in an existential sentence:
"Purkissa on leipää." "There is bread in the tin." [Tin-in is bread ${ }_{\text {(partitive). }}$ ]
"Kadulla on autoja." "There are cars in the street." [Street-in is cars (partitive).]

Some languages assume that an unmarked noun in object position is nonspecific. To make the noun specific, whether definite or indefinite, it must be marked. In Spanish and other Iberian languages, a human direct object is preceded by "a" ("to") if it is specific, not if it is nonspecific:
"Vi a tres ingleses que llevaban pantalones a cuadros." (specific)
"I saw three Englishmen wearing check trousers."
[I saw to three Englishman who wore trousers with check.]
"Vi tres ingleses en la playa." "I saw three Englishmen on the beach." (nonspecific)
The same is true of Hindi, with the postposition "ko" ("to"):

$$
\begin{array}{rlr}
\text { "aurat bacce ko bulā rahī hai" "A woman is calling a child." } & \text { (specific) } \\
\text { [Woman child-to calling is.] } & \text { (nonspecific) } \\
\text { "aurat baccā bulā rahī hai" "A woman is calling a child." } & \text { [Woman child calling is.] } &
\end{array}
$$

In the first Spanish sentence, the wearing of check trousers identifies the Englishmen, and in the first Hindi sentence a particular child is being called. In the second Spanish and Hindi sentences, the identities of the Englishmen and the child are not significant. In Hungarian, an object in focus position is indefinite if it has the article "egy" ("a"/"an") and nonspecific if it has no article:

| "Apám egy újságot vesz." "My father is buying a newspaper." | (specific) |  |
| :---: | :---: | :--- |
| [Father-my a newspaper (accusative) buys.] | "Apám újságot vesz." "My father is buying a newspaper." | (nonspecific) |
| [Father-my newspaper ${ }_{\text {(accusative) }}$ buys.] |  |  |

In the first sentence, a particular, but unidentified, newspaper is being bought; in the second, the identity of the newspaper is not significant. Similarly, in Persian an unmarked noun in object position is nonspecific. It becomes specific through being marked with "-i" (indefinite) or (as noted earlier) with "-ra" (definite):
"kar mikonam" "I am working." [Work I-do.]
"kari mikonam" "I am doing some work." [Work-a I-do.]
"dombale aparteman migardam" "I'm apartment-hunting." [After apartment I-walk.]
"dombale apartemani migardam" "I'm looking for an apartment."
[After apartment-a I-walk.]
In Turkish, a nonspecific noun is not marked by an article, but by case: accusative for specific and absolute for nonspecific:

$$
\begin{aligned}
& \text { "Her gun bir gazeteyi okuyorum." "Every day I read a newspaper." (specific) } \\
& \text { [Ever day a newspaper (accusative) } \\
& \text { I-read.] } \\
& \text { "Her gun bir gazete okuyorum." "Every day I read a newspaper." } \text { (nonspecific) } \\
& {\left[\text { Ever day a newspaper }{ }_{\text {(absolute) }}\right. \text { I-read.] }}
\end{aligned}
$$

The first sentence refers to a particular, but unidentified, newspaper; in the second, the identity of the newspaper is not important.

Some Inuit verbs, principally possessive in meaning, are available in both a discrete and a suffixed form. The object of the discrete form is specific and of the suffixed form is nonspecific. The specific object is marked with "-mik" ("with") if it is indefinite, and unmarked if it definite:
"Tuttu takuaa." "He saw the caribou." [Caribou see-he-them.]
"Tuttumik takuvuq." "He saw some caribou." [Caribou-with see-he.]
"Tuttusivuq." "He saw caribou." [Caribou-see-he.]
In Maori, a specific object is marked with " i " and an article, while a nonspecific object is unmarked:
"Kei te tope ngā kaimahi i ngā rākau." "The workers are felling the trees."

$$
\text { [Are felling the workers }{ }_{(\text {object })} \text { the trees.] }
$$

"Kei te tope rākau ngā kaimahi." "The workers are tree-felling."
[Are felling trees the workers.]

## Specific and General Sentences

A few further remarks are appropriate on the distinct between general and specific sentences. We noted earlier that a definite topic can have a specific or a general comment:
"Mr Brown drove to work on Tuesday"; "Mr Brown drives to work on Tuesdays".
In this general sentence, "Tuesdays" can be generic (all Tuesdays) or nonspecific (some unspecified Tuesdays). If we wished to convey that they were nonspecific, we would say:

> "Mr Brown drives to work on a Tuesday".

This use of an indefinite article does not refer to an indefinite Tuesday, that is a particular Tuesday which has not been identified, but to a nonspecific Tuesday, that is an unspecified member of a class of days called Tuesday. Similar sentences in which a nonspecific entity is marked with an indefinite article are:
"Holiday-makers like a seaside resort;" "Commuters to Bristol take a motorway;"
"He helps in a lab on Saturdays;"
However, the same sentence constructions could include a definite entity in the comment as well as in the topic:
"Holiday-makers like Blackpool;" Blackpool is liked by holiday-makers".
"Commuters to Bristol take the M4;" "The M4 is taken by commuters to Bristol".
"Saturdays is when he helps in the lab;" "He helps in the lab on Saturdays".
On this examples, we can define a general sentence as one which may contain generic, nonspecific, and definite entities. It cannot contain indefinite entities.

Let us now consider some examples in which both the topic and comment are specific:
"Mr Brown drove to work on a Tuesday." "Mrs Smith had eggs for her breakfast."
These sentences convey no information on the work that Mr Brown went to or the eggs which Mrs Smith ate. If we wished to do that, we would mark those words as specific:
"Mr Brown drove to a job of work on a Tuesday."
"Mrs Smith had some eggs for her breakfast."
The first instances are of unspecified members of a class of activity called "work" and a class of entities called "eggs"; they are nonspecific. The second instances are of particular jobs of work and particular eggs; they are indefinite. We may define a specific sentence as a one which may contain definite, indefinite, and nonspecific entities. It does not contain generic entities. These rules can be summarised in a table:

| Allowed entities | Definite | Indefinite | Generic | Nonspecific |
| :--- | :--- | :--- | :--- | :--- |
| Specific sentence | Yes | Yes | No | Yes |
| General sentence | Yes | No | Yes | Yes |

## General Pronoun

An alternative method of indicating that a noun is generic is the "whatever" construction. This refers to an instance of a noun, verb, or attribute, but indicates that its identity is unknown. Such a construction is expressed in English by an interrogative pronoun and the suffix "-ever". An nonspecific general noun can be expressed by the pronoun "any":
"Whoever it is, I cannot see him."
"Whatever has happened, we will support you."
"She can have any book she wants".
Interrogative pronouns are often used for general nouns, because both questions and general expressions indicate uncertainty:

Italian attaches the suffix "-unque":
"Datemi qualunque libro." "Give me any book whatever." [Give-me whatever book.]
Russian attaches the words "by ni" ("should not"):
"Kto by eto ni skazal, on oshibsya." "Whoever said that was mistaken."
[Who should that not said, he mistook-himself.]
The Arabic word for "any" is "Rayyu":
"Payyu bābin min Rabwābi 1-famali" "any sort of work at all"
[any sort from among sorts the-work]
Persian attaches the word "har" ("every"):
"har ke mixahad beyayad zud beyayad" "Whoever wants to come must be quick." [Every who wants he-come ${ }_{\text {(subjunctive) }}$ quick he-come (subjunctive).]

Indonesian attaches the word "saja" ("only"):
"Taruh barang itu di mana saja." "Put those things anywhere."
[Put thing those in where only.]
"Ambil berapa saja." "Take any amount you like." [Take how-many only.]
Japanese attaches the word "demo" ("even"):
"Ano toshokan wa dare demo hairemasu."
"Anyone can enter the library." [That library (topic) who even enter.]
"Itsu demo kamaimasen yo." "Any time will be fine." [When even not-mind!]"
Hindi attaches the indefinite pronoun "kuch" ("some") to the relative:
"jo kuch karnā cāhie, use āp kījie" "Please do whatever has to be done."
[What some doing is-necessary, that you please-do.]

## Quantity

If a noun, verb, or attribute can be identified and distinguished from another noun, verb, or attribute of the same description, it can be counted or measured. This is done by giving it a quantity. A quantity has to count something. In the case of a discrete object, that is the object. In the case of something that is not a discrete object, it is necessary to state what is being counted. That is the unit. The following are different sorts of quantity and unit:
"15 apples"; "three kilos of apples"; "three litres of water"; "three pieces of paper";
"one ream of paper", "two loaves of bread", "five bales of cloth", "six metres of rope";
"seven head of cattle"; "five blows of the axe"; "three columns of the newspaper".

The unit may refer to a general category of something without counting or measuring the item itself:
"three breeds of dog"; "two weights of paper"; "six shades of blue"; "five kinds of happiness".
Verbs and attributes can be counted even when they are not expressed as nouns:
"He called for help five times."
"These two products are different from each other in five different ways."
"The road is ten kilometres long."
A quantity may not only be a count of something but may also be a proportion of a single entity:
"He had read two-thirds of the book."
"They walked one-half of the distance."
"The room was three-quarters full."
"He had one-quarter finished the painting."
"John was half starved."
Many languages recognise that all quantities measure a unit, by expressing a "measure word" even for discrete objects. By this means, the nature of what is being counted is always made clear:

| Chinese:"sān gè xuésheng" | "three students" | [three unit student] |
| :---: | :---: | :---: |
| "sān gè miànbāo" | "three loaves of bread" | [three unit bread] |
| "yī zhāng zhĭ" | "a piece of paper" | [one sheaf paper] |
| "yī tiáo hé" | "a river" | [one unit river] |
| "yī lì mı̌" | "a grain of rice" | [one grain rice] |
| "yī chăng zúqiú" | "a soccer match" | [one event soccer] |
| "yī bēi kāfēi" | "a cup of coffee" | [one cup coffee] |
| "yī gōngjīn píngguŏ" | "a kilo of apples" | [one kilo apple] |
| "yī qún rén" | "a crowd of people" | [one crowd people] |
| "yī zhŏng sīxiăng" | "a kind of thinking" | [one kind idea] |
| Turkish: "sekiz tane mendil" | "eight handkerchiefs" | [eight unit handkerchiefs] |
| Malay: "tiga buah meja" | "three tables" | [three unit tables] |

Japanese:
"Maitsuki hon o sansatsu katte imasu."
"I'm buying three books per month."
[Each-month book ${ }_{\text {(object) }}$ three-unit buying is.]
Russian expresses the fact that a quantity must refer to a unit by requiring (in certain circumstances) that a quantified noun is in the genitive case ("of"):
"shest' dollarov" "six dollars" [six of-dollars]
"desyat' gostinits" "ten hotels" [ten of-hotels].
Similarly, Finnish uses the partitive case ("part of") after quantities:
"neljä maata" "four countries" [four country (partitive)]
"puoli tuntia" "half an hour" [half hour ${ }_{\text {(partitive) }}$ ]
"kilo omenoita" "a kilo of apples" [kilo apples (partitive)]
"joukko ihmisiä" "a crowd of people" [crowd people ${ }_{\text {(partitive) }}$ ].
When a definite entity is counted or measured, it does not follow that the quantity itself is definite. We recall that a definite entity is one which can be identified from other entities. This is so of:
"my five sisters"; "the six books which you borrowed; "the first half hour",
because the sisters, books, and half-hour can be distinguished from other sisters, etc. However:
"five of my sisters"; "six of the books which you borrowed"; "half of the hour"
are not distinguished from others of the sisters, books, or half-hours and are therefore indefinite. If the entity which is being counted or measured is indefinite, then the quantity is also indefinite:
"five sisters"; "six books"; "half an hour".
Languages generally possess a word which expresses an indefinite quantity, usually called a "partitive article". In English, this is "some" or "part of":
"some of my sisters"; "some of the books which you borrowed"; "part of the hour";
"some sisters"; "some books"; "some time".
Since none of these expressions identify what is being counted or measured, they are all indefinite. Languages also possess a word which expresses the totality of something. If that which is totalised is definite, then the expression is definite, since there is no doubt as to the quantity selected:
"all of my sisters"; "all the books which you borrowed"; "the whole hour".
Totality may also express a generic class, which as we have seen is definite because is it distinguished from other generic entities:
"all sisters"; "all books"; "all time".
However, the totality of an indefinite entity is indefinite if it cannot be distinguished from other entities:
"a whole library"; "a whole hour".
The Spanish plural of the indefinite article "uno/una" indicates an indefinite number:
"Le dieron unas monedas." "They gave him a few coins." [To-him they-gave some coins.]
"Tomamos unas cervezas." "We had a few beers ." [We-had some beers.]
In Russian, just as the genitive case is used after some numbers, it means an indefinite quantity if no number is stated:
"Vam mozhno nalit' chayu" "Can I give you some tea?"
[For-you possible pour of-tea ${ }_{\text {(genitive) }}$ ?]
"mnogo sakharu" "much sugar" [much of-sugar ${ }_{\text {(genitive) }}$ ].
"mnogo druzei" "many friends" [many of-friends (genitive)].
Similarly, in Finnish the partitive case without a number indicates an indefinite quantity:
"Ostan jäätelöä." "I'll buy some ice-cream." [Buy-I ice-cream ${ }_{\text {(partitive). }}$ ].
"Sellaisia virheitä esiintyy usein." "Such mistakes (partitive) occur often."
Chinese:"yī xiē shū" "some books" [one some book]
"yī xiē shuî" "some water" [one some water].
We have seen that the quantity "all" can indicate a generic quantity. The quantity "however much"/"however many" is nonspecific, and is independent of whether the item counted is definite or indefinite:

Definite noun
"however many of the houses in the road"
"however much of the sixteen kilometres"

## Indefinite noun

"however many houses"
"however far"

In English, a distinction exists between nouns which can be counted and those which cannot. The uncountable nouns are supposed to be more "abstract" than the countable ones. It will be seen from this chapter that the true distinction is between specific entities, which can be counted, and general entities which cannot. Nouns which are commonly considered "abstract", that is not material, are in fact the expression of a verb or attribute in noun form, which may be specific or general. Are "love" and "hatred" uncountable? No, because it is possible to speak of someone's loves and hatreds for particular objects. Is "excitement" uncountable? No, because a person can experience several excitements. Is "economy" uncountable? No, because it is possible to speak of the economies of the UK, France, Germany, etc. Is "water" uncountable? No, because different waters come from different natural springs, or can be measured: "three litres of water".

Generic general concepts such "humankind" and "retailing" refer to all of their class. Other general concepts such as "bread" or "furniture" can be generic or nonspecific:
"Bread is either white or wholemeal." "The family breaks bread together on Sundays."
A generic concept cannot be counted because by its nature it is unique. An nonspecific concept cannot be counted because it has yet to be separated from any other entity.

The following are examples of Spanish words with a singular and plural, whose equivalents in English are uncountable. The English nouns are considered to be substances or abstract nouns. The list shows that the designation of the English noun as uncountable is an arbitrary feature of the language:
singular
$\begin{array}{ll}\text { "bondad" } & \text { "goodness" } \\ \text { "información" } & \text { "information" } \\ \text { "pan" } & \text { "bread" } \\ \text { "progreso" } & \text { "progress" } \\ \text { "tristeza" } & \text { "sadness" } \\ \text { "trueno" } & \text { "thunder" }\end{array}$
plural

| "bondades" | "good acts" |
| :--- | :--- |
| "informaciones" "news items" |  |
| "panes" | "loaves of bread" |
| "progresos" | "advances" |
| "tristezas" | "sorrows" |
| "truenos" | "thunderclaps" |

*"Goodnesses", *"informations", *"breads", etc are not permissible in English.

## 3. Sentences Containing an Indefinable Element

## Summary

We have so far been concerned with sentences (statements) whose purpose is to assign identity or existence to one or more entities. In this chapter, we are concerned with classes of sentence which do not assign identity or existence: a negative sentence, a selection, a question, a hypothesis, and a conditional. Such sentences refer only to an entity which is definite or generic and to an entity whose existence or identity, whether specific or general, has not been established. We may call an entity whose existence or identity has not been established an indefinable.

Negative sentences are of two sorts: those which deny that a connection exists between the topic and an entity which has been identified, and those which deny that sufficient information exists to establish or identify an entity in connection with the topic. These are called respectively definite and indefinite negatives.

Selection is of two sorts: in which the choice is between definite entities, and in which the choice is whether one or another entity exists. These are called respectively definite and indefinite selection, and give rise respectively to a definite and indefinite negative for the nonselected entity. In definite selection, the entities subject to selection are marked as definite or generic; in indefinite selection, they are marked as indefinite or indefinable.

A comparison is a selection which selects one quantity rather than another. A superlative is a comparison between an entity and more than one entity, with reference to the number of entities compared.

Questions are of two sorts: those which ask whether a connection exists between the topic and an entity which has been identified, and those which ask whether an entity exists which has a connection with the topic. These are called respectively definite and indefinite questions. The answer to a definite question is either a statement or a definite negative. The answer to an indefinite question is either an existential statement or an indefinite negative. The majority of question-word questions are definite. The majority of "yes"/"no" questions are indefinite.

Languages express definite negatives or definite questions by marking the verb or some other definite entity as subject to negation or to question.

Languages express indefinite negatives and indefinite questions either by constructing the verb as existential, and/or by marking the indefinable entities as indefinable.

A hypothesis is a sentence whose occurrence is uncertain. Examples are a command, wish, preference, supposition, or purpose. The verb of a sentence which expresses a fact or expected fact is indicative, while the verb of a hypothesis is subjunctive.

Preferences are of two sorts: those whose object is definite, and those whose object is indefinite or negative. These are called respectively a definite and indefinite preference. A definite preference is a fact and expressed by the indicative. An indefinite preference is a hypothesis and is expressed by the subjunctive.

Conditional statements are of three sorts: real conditions, for which the condition verb is indefinite; hypothetical and unreal conditions, for which the condition verb is indefinable. A hypothetical condition is one whose occurrence is unknown. An unreal condition is a hypothetical condition which refers to the past and therefore cannot have occurred. Hypothetical and unreal conditions employ a subjunctive or conditional form of the verb.

Other sentence types which include or may include an indefinable element are a dependency, a proposal, a supposition, a modal, a negative warranty, a negative communication, a negative perception, a preventive, and a cessative. These are discussed in later chapters.

## Terms Defined or Introduced

Statement, indefinable, definite negative, indefinite negative, definite selection, indefinite selection, comparison, definite question, indefinite question, response, hypothesis, indicative, subjunctive, condition.

## Indefinables

We have so far been concerned with sentences containing nouns, actions, and states which are believed to exist, and which are either definite, indefinite, or general. The purpose of these sentences is to provide precision, to introduce any new items and to identify any indefinite items. We may call such a sentence a statement. There is however a class of sentences which relate to entities whose existence or identity is not certain. These are certain categories of negative sentence, selection, question, hypothesis, and condition, and are the subject of this chapter.

Entities whose existence or identity is not established by a sentence are called indefinable. In English, indefinables may be unmarked. Alternatively, an indefinable noun may be marked with "any", and an indefinable verb with the adverbial "at all" or "in any way":

| negative: | "He has not earned any money ${ }_{(\mathrm{i})}$." "She has not spoken ${ }_{(\mathrm{i})}$ about it at all." "She is not at all upset ${ }_{(\mathrm{i})}$." |
| :---: | :---: |
| selection: | "They live in a house rather than a bungalow $(\mathrm{i})$." "She laughs rather than smiles (i)." |
| question: | "Do they have any money ${ }_{(\mathrm{i})}$ ?" "Do you speak German ${ }_{(\mathrm{i})}$ at all?" "Are you at all uncertain (i) ?" |
| hypothesis: | "I would prefer a job which has flexible hours ${ }_{(i)}$." <br> "Let them eat ${ }_{(i)}$ cake." <br> "She is practicing hard so that her game will improve ${ }_{(\mathrm{i})}$." <br> "It is reported that they are Quakers ${ }_{(i)}$." |
| condition: | "If you have any ideas ${ }_{(i)}$, please tell us." <br> "If you have seen ${ }_{(i)}$ him at all, you will remember him." <br> "If the play is at all interesting ${ }_{(i)}$, we will put it on." |

In these sentences, the existence or identity of the words marked ${ }_{(i)}$ is not clear. In the case of the negative, the negated item does not exist, or if it exists, its identity is not known. In the case of the selection, the non-selected item is not known to exist. In the case of the question, the questioner is not clear on its existence. In the case of the condition, the occurrence of the condition is unclear.

Indefinable pronouns are "anything" and "anyone":
negative: "He has not seen anyone."
selection: "She wants a new kitchen more than anything."
question: "Have you thought of anything?"
condition: "If anyone speaks to you, please telephone me at once."
Because indefinable entities only occur in negatives, selections, questions, hypotheses, and conditions, it is possible to use the same markers for indefinables as for nonspecific entities, for example in English the word "any". "I will accept any candidate that you propose" implies that "candidate" exists but is not identified; it is general. "I will not accept any candidate that you propose" implies that "candidate" does not exist; it is indefinable.

Quantities can also be indefinable, and again only occur in a negative sentence, question, and conditional statement. An indefinable quantity is one which is not known to exist:
negative: "He has not started any of the lessons."
selection: "The fashion is for two cuff buttons rather than any other number."

```
question: "Has he started any of the lessons?"
condition: "If he has not started any of the lessons, he will not come to the class."
```

The following sections explain the purpose of indefinable entities in each of these classes of sentence.

## Negatives

A negative statement is a statement that something is not true. It fits into the general principles of sentence structure laid out in Chapters 1. and 2., and therefore contains a subject or topic which is definite or generic and which relates the statement to previous sentences. Unlike a non-negative sentence which provides new information on the subject in a predicate or comment, a negative sentence states that certain information does not apply to the subject or topic. For example, consider the following specific sentences:

```
"Mr Smith is not Prime Minister."
"Mr Smith is not angry at your remark."
"Mr Smith did not catch the 8.12 train to London."
```

These state that no connection exists between a definite subject ("Mr Smith") and some entity which is known to exist and is also definite: the "Prime Minister", "your remark", or "the 8.12 train". Similar sentences can be constructed which deny a connection between a generic subject and a definite object:
"Polar bears do not live in the Tropics."
Since the principal entities of this type of sentence are definite or generic, we can all it a definite negative. An extension to such a sentence is to suggest a possible alternative object, for example:
"Mr Smith is not Prime Minister, but Leader of the Opposition."
"Polar bears do not live in the Tropics, but in the Arctic."
The last sentence can be validly reformulated as:
"There are no polar bears other than those which do not live in the Tropics", or
"There are no Tropics other than those where polar bears do not live",
which show that both "polar bears" and "Tropics" are generic or definite entities.
Another purpose of a negative sentence is to state that no connection exists between its subject or topic and an indefinite entity:

> "Mr Smith is not a teacher."
> "Mr Smith does not go to work by train."
> "Mr Smith did not eat breakfast."
> "Polar bears do not eat grass."
> "British politicians do not take bribes."

These sentences are similar to a definite negative, in that they deny that a connection exist between a definite or generic subject or topic (Mr Smith, polar bears, politicians) and some entities (a particular office of teacher, a particular train, breakfast, grass, bribes). However, they do not establish that these entities exist or assign an identity to them. The entities may exist and be identifiable, or they may not. Moreover, they have not been previously assigned an identity, as they would then be definite or generic. In the terms of this chapter, they are indefinable. This type of negative sentence is called an indefinite negative.

It follows that an indefinite or nonspecific entity cannot occur in a negative sentence. A negative sentence cannot establish that something or someone exists, and cannot identify or delimit something or someone for future reference, because it does not supply the information to do so. The most that a negative sentence can achieve is, by excluding one definite or generic option, imply that another option is more likely to be true. It can therefore only contain definite, generic, and indefinable concepts.

An extension to an indefinite negative is a non-negative indefinite object:
"Mr Smith is not a teacher, but a plumber."
"Polar bears do not eat grass, but catch seals."
Languages generally handle definite negation in the same way. Since the sentence states that there is no connection between the subject and the object, the verb is marked as negative, by means either of a negative adverbial ("not") or of a negative modification of the verb. To avoid confusion with indefinite negation, the object is marked as definite by one of the means available in the language:

French: "Je ne trouve pas mon sac." "I can't find my bag." [I not find not my bag.]
"Je n'ai plus du vin de cette année." "I have no more of this year's wine."
[I not have more of-the wine of this year.]
German:"Wir fahren morgen nicht ans Meer." "We're not driving to the sea tomorrow." [We drive tomorrow not to-the sea.]

Welsh: "Nid wyf i yn byw yn y wlad." "I do not live in the country."
[Not am-I in living in the country.]
Greek: "Н цоибıки́ $\delta \varepsilon v$ акочүóт $\alpha v \pi$ тоди́ к $\alpha \lambda \alpha ́$." "The music could not be heard very well." [The music not was-heard very well.]

Hungarian:
"Nem mentem Amerikába meglátogatni a barátomat."
"I didn't go to America to visit my friend."
[Not I-went America-to to-visit friend-my.]
Turkish: "Karakol evimizden uzak değildir." "The Police Station is not far from our house." [Police-station house-our-from far is-not.]

Arabic: "lam Paltaqi bihi min qablu" "I have not met him before." [Not I-met with-him before.]
"barā¢imuhu laysat munfatihatan baidu""Its buds are not yet open."
[Buds-its are-not open yet.]

Hindi: "āj laṛkā yahā̃ nahĩ hai" "Today the boy isn’t here." [Today boy here not is.]
Indonesian:
"Mereka tidak menolong kami." "They didn't help us." [They not help us.]
Chinese possesses a particular adverbial "bù" to indicate definite negation and a different adverbial "méi" to indicate indefinite negation (illustrated further below):
"Tā bā diăn yĭqián zuò bù wán zuòyè."
[He won't be able to finish his homework by 8 o'clock."
[He eight o'clock before do not finish homework.]
A sentence with indefinite negation has to convey that the indefinable object and other entities do not exist or are not identified, by distinguishing them from the definite entities. Languages achieve this in one of two ways:
(i) The definite and generic entities are marked. The language possesses a means of marking an entity as indefinable. The sentence is marked as negative by marking the verb or some other entity as negative.
(ii) The definite and generic entities are marked. The verb is marked for indefinite negation by a form of the negative existential "there is not....". It is inferred that all non-definite and nongeneric entities are indefinable.

Languages with indefinable markers include (among many others) English, French, Italian, German, Welsh, Greek, Persian, and Hindi. English has a range of optional indefinable markers which correspond to each of the markers of indefiniteness:

```
indefinite indefinable
"a", "some", "whoever", "whatever" "no", "any"
"someone", "something", "some time", "no-one", "nothing", "never",
"somewhere", "whenever", "wherever". "nowhere", "anyone","anything",
    "ever", "anywhere".
```

If an indefinable marker contains a negative, no other entity in the English sentence is marked as negative, including the verb. The following sentences are equivalent:
"Fine words butter no parsnips."
"No fine words butter parsnips."
"Fine words do not butter parsnips."
"There are no fine words which butter parsnips."
"There is no buttering of parsnips by fine words."
"There are no parsnips buttered by fine words."
French marks an indefinable entity with "de" without a definite article, or by "aucun":
"Il n'a pas de montre." "He has no watch." [He not has any watch.]
"Il ne prend aucun soin." "He takes no care." [He not takes any care.]
French and other Romance languages, unlike English, generally mark all indefinable entities in a negative sentence as negative:

French: "Il ne lui a jamais plus écrit." "He never wrote to her again."
[He not to-her never more wrote.]
Italian: "Non vedo nessuno." "I don't see anybody." [Not I-see no-one.] "Piero non scrive mai lettere." "Peter never writes letters."
[Peter not writes never letters.]
Grammars sometimes describe this construction as "redundant negative". The above analysis should show that it such a negative is not redundant, as it marks the affected item as indefinable.

German uses the negative indefinable marker "kein" ("no") or a negative indefinable pronoun such as "nichts" ("nothing") or "niemand" ("no one"). The sequence "*nicht ein" ("not a") is not permitted:
"Ich sehe da keinen Unterschied." "I don't see any difference." [I see there no difference.]
"Ich sehe da nichts Unterschiedliches." "I don't see anything different."
[I see there nothing different.]
"Sie will niemand Armen heiraten." "She doesn't want to marry anyone poor."
[She wants no-one poor to-marry.]
Welsh possesses negative indefinable pronouns "neb" ("no one") and "dim" ("nothing"). It can also use "dim" to mark a noun as indefinable. A negative existential form of the verb is used:
"Nid oes dim yn y ddesg." "There's nothing in the desk." [Not there-is nothing in the desk.] "Nid oes dim car gennyf i." "I haven't a car." [Not there-is no car with me.]

Greek possesses a range of non-negative indefinable markers similar to English "any":

"No one came to see me when I was unwell."
[Not came anyone that me see ${ }_{\text {(subjunctive) }}$ when I-was unwell.]

[Any his book not was-worth.]
In Hungarian, indefinable entities are not marked with either the definite ("a"/"az") or indefinite ("egy") articles. There is also a negative existential "nincs" ("there is not"):
"Ezen a nyáron nem veszek új ruhát." "I am not buying any new clothes this summer."
[This the summer not I-buy new clothes.]
"Nem találkoztam senkivel az úton." "I didn’t meet anybody on the trip."
[Not I-met no-one-with the trip-on.]
"Nincs semmi a szekrényben." "There is nothing in the cupboard."
[There-is-not nothing the cupboard-in.]
In Arabic, the most common marker of an indefinite negative is "la"" ("no"):
"lā 乌ilma lahu bi-Rasbābi hāðihi l-muṣādarāti"
"He has no knowledge of the reasons for these confiscations."
[No knowledge for-him at reasons these the-confiscations.]
"wa-hāðā l-naw§u mina l-ḥašā2iši lā yanmū fī 1-manāṭiqi l-ḥārrati"
"And this type of grass does not grow in hot regions."
[And this the-type of the-grass no is-growing in the-regions the-hot.]
An Arabic indefinable entity can also be marked with "?ayyu" ("any"):
"lam yuktašaf hattā l-२āna Rayyu ¢ilājin" "No treatment has up to now been discovered."
[Not was-discovered up-to now any treatment.]
In Persian, an indefinable marker is "hic" ("any"). Alternatively, the indefinable entity receives the indefinite marker "-i" ("a"):
"kari nadaram" "I have no special work." [Work-a I-have-not.]
"hic bacce nadarad" "He has no children." [Any children not-he-has.]
Hindi uses the indefinite articles and pronouns "koї" ("someone") and "kuch" ("something") as indefinables in a negative sentence:
"gã̃v me~ koī tālāb nahĩ hai" "There's no water tank in the village."
[Village-in any water-tank not is.]
"tālāb me~ kuch pānī nahī̃ hai" "There's no water in the tank." [Tank-in any water not is.]
"ve aurte aksar hindī nahī̃ boltī"" "Those women usually don't speak Hindi."
[Those women usually Hindi not speak.]
Indonesian/Malay has a range of indefinables formed from the enquiry words "apa" ("what?"), "siapa" ("who?"), and "mana" ("where?"):
"Mereka tidak memberi informasi apa pun." "They didn't give any information at all." [They not give information any at-all.]
"Saya tidak bertemu dengan siapa-siapa." "I didn't meet anyone." [I not meet with anyone.]

An alternative indefinable marker is an indefinable qualifier to a noun. As we observe later in this chapter (Hypotheses), the subjunctive is a form of the verb in some languages which indicates that its occurrence is unknown. By this means, a relative clause which contains a subjunctive verb can mark a noun or pronoun as indefinable:

French: "Il y a peu de gens qui le sachent." "There are few people who know it."
[There are few people who it know (subjunctive).]
German:"Wir kennen niemanden, der jetzt in der Lage wäre, diese Aufgabe zu übernehmen."
"We know no one who is now in a position to take over this assignment."
[We know no-one, who now in the position would-be (subjunctive), this assignment to take-over.]

Italian: "Non ha chi lo possa aiutare." "He has nobody who can help him."
[Not he-has who him can ${ }_{\text {(subjunctive) }}$ help.]
"Chiunque tu sia, non puoi entrare." "Whoever you are (subjunctive), you cannot go in."
Hungarian:
"Nincs kivel kártyázzak." "I have nobody to play cards with."
[There-is-not who-with I-play-cards ${ }_{\text {(subjunctive) }}$.]
Languages which do not generally mark nouns as indefinable, and use the negative existential for indefinite negation, include Turkish, Indonesian, Chinese, Japanese, and Swahili. Some of these languages do not have indefinable pronouns.

Turkish indefinite negation uses the verb "yok" ("there-is-not"):
"Vaktimiz yoktu." "We had no time." [Time-our there-was-not.]
Chinese uses the adverbial "méi" to indicate indefinite negation, attached to "yŏu" ("there-is") or another verb:
"Méi yŏu huǒchē." "There are no trains." [Not there-are train.]
"Wŏ méi qùguo Běijīng." "I have never been to Beijing." [I there-is-not going-have Beijing.]
Japanese uses the verbs "nai" (inanimate) and "inai" (animate) for indefinite negation, both meaning "there-is-not":
"Wada-san no uchi ni wa kūrā ga nai." "There is no air-conditioner at Mr Wada's."
[Wada-Mr-of house-in ${ }_{\text {(topic) }}$ air-conditioner ${ }_{\text {(subject) }}$ there-is-not.]
"Watashi ni wa kazoku ga inai." "I have no family." [I-to (topic) family $_{\text {(subject) }}$ there-is-not.]
For indefinite negation, Swahili uses a verb "na" which means "be with", in the sense "have":
"Hakuwa na bahati." "He had no luck." [He-was-not with luck.]
"Hakuna ajuaye." "Nobody knows." [There-is-not he-who-knows.]
In negative sentences, Finnish and Russian use a case for the object to indicate that the verb does not apply to it. For Finnish, it is partitive, and for Russian, it is genitive. These are the same cases that are used for nonspecific nouns and for the quantity of a noun (Chapter 2.), in this instance with the meaning "none of it". However, the same case applies for both definite and indefinite negation. If the sentence is not to be ambiguous, another means has therefore to be used to mark the object as definite or indefinable.

In Finnish, both definite and indefinite negation is expressed by a negative verb "ei" ("not"), and its variations:
"Minä en osta taloa." "I shall not buy a/the house." [I not buy house (partitive)].
"Maasaa ei ole hallitusta." "The country has no government."
[Country-in not is government ${ }_{\text {(partitive) }}$ ].
In Russian, the adverbial "ne" ("not") is used for definite negation and negative existential verb "net" ("there-is-not") for indefinite negation:
"Ya ne chitayu pis'ma." "I am not reading a/the letter." [I not read letter ${ }_{\text {(genitive). }}$.]
"Ya ne videla nikogo iz moikh druzei." "I saw none of my friends." [I not saw none ${ }_{\text {(genitive) }}$ of my friends.]
"Tam net lyudei." "There are no people there." [There there-are-not people (genitive).]
"U menya net deneg." "I have no money." [With me not money (genitive).]
Russian also possesses an indefinable marker "nikakoi" and indefinable suffix "-libo":
"On ne kupil nikakogo masla." "He didn't buy any butter."
[He not bought any butter ${ }_{\text {(genitive). }}$.]
"I proiskhodit eto bez kakoi-libo volokity."
"And this happens without any red tape at all."
[And goes-on this without any (indefinable) red tape.]
In Arabic, the word "min" ("of") is used to express a quantity of something. The same word can be used in conjunction with a definite negative to indicate an indefinable entity and hence an indefinite negative:
"laysa hunāka min Raflāmin ?insāniyyatin ðakiyyatin"
"There are not any clever humanistic films." [Is-not there of films humanistic clever.]
"wa-lam Rajid min ḥilatin"" "And I found no ruse." [And not I-found of ruse.]

## Selection and Comparison

Because every entity in a statement exists, it is being selected implicitly or expressly from a list of possible alternatives. In the sentences we have considered up to now, the selection has been implicit. In a selection statement, it is expressed. In English, this is by a grammatical word such as "rather than", "instead of", or "otherwise", or by a negative. Selection can apply to a noun, verb, attribute, or other entity, and to an entity which is individual, specific, or general.

There are two sorts of selection, depending on whether the entity which is selected is definite/generic or indefinite/nonspecific. If the selected entity is definite or generic, the sentence is expressing a preference between that entity and another entity which is also definite or generic. This can be called definite selection:
"John will give the talk instead of Mary".
"He caught the early train, not the late one."
"I prefer oranges to apples."
"I type rather than write letters."
(individual noun)
(definite noun)
(generic noun)
(generic verb)

A definite selection implies a definite negative for the non-selected item:
"Mary will not give the talk." "He did not catch the early train." etc.
If the selected entity is indefinite or nonspecific, the sentence is stating that that entity exists while another entity does not. This can be called indefinite selection:
"She wrote a book, instead of an article." (indefinite noun)
"There was a profit last year, not a loss." (existential)
"Have you butter, rather than margarine?" (indefinite question)
"If you came tomorrow rather than today, we could see you." (indefinite hypothesis)
A indefinite selection implies a indefinite negative of the non-selected entity:
"She did not write an article." "There was not a loss last year." etc.
Languages generally use a similar format to express selection, with equivalents of the grammatical words used in English:

Chinese:"Yŭqí zài jiā li dāizhe, bùrú chū qù zŏuzŏu."
"I would rather go out for a walk than stay at home."
[Rather-than at home-in staying, better-to out go take-walk.]
"Kuài zŏu ba, fõuzé nĭ huì chídào de." "Be quick, or you'll be late."
[Quick go (imperative), otherwise you probably late-arrive.]

## Japanese:

"Watashi wa ryokōsuru yori uchi ni itai desu."
"I'd rather stay at home than go on a trip."
[ $\mathrm{I}_{\text {(topic) }}$ travel instead-of indoors-in staying want.]
"Basu de iku yori hoka shikata ga arimasen."
"There is no other way than to go by bus."
[Bus-by going than other way (subject) there-is-not.]
Comparison is a form of selection which chooses, not one entity rather than another, but one quantity rather than another. It therefore applies only to entities which can be measured or compared in some way, and if the quantities are known the difference can be stated:

$$
\begin{array}{ll}
\text { "Joe obeys } 25 \% \text { more rules than Sam obeys." } & \text { (noun) } \\
\text { "Sam takes one week longer to write an essay than Joe does." (verb) } \\
\text { "Sam is } 5 \mathrm{~cm} \text { taller than Joe." } & \text { (attribute) }
\end{array}
$$

We can call this a definite comparison, since it can be expressed in the form of a definite noun: "Sam's height is 5 cm more than Joe's."

However, for many comparisons it is known simply that a difference exists, not what it is. This is an indefinite comparison:
"Joe obeys more rules than Sam obeys."
(noun)
"Sam takes longer to write an essay than Joe does." (verb)
"Sam is taller than Joe." (attribute)

An indefinite comparison requires an indefinite noun: "There is a height difference between Sam and Joe."

A superlative is a comparison between an entity and more than one entity, according to a measure. The entities against which the comparison is made may be specific or general:
"Joe writes an essay in the shortest time of all the students."
"Of Joe, Sam, and Fred, Sam is the tallest student."
"The giraffe is the tallest of the living vertebrates."
In these examples, the entities against which the comparison is made are definite or generic. We can therefore speak of a definite superlative. However, an alternative construction leaves the class against which the comparison is made undefined. The sentence states vaguely that the quantity compared is greater or less than anything. This is an indefinite superlative:
"Joe obeys most rules."
"Joe writes an essay in the shortest time."
"Sam is the tallest student."
Languages adopt two structures to express comparison. In Finnish, as in English, a comparison marker is placed against the quantity being compared:

> "Suomessa on monta suurempaa kaupinkia kuin Salo."
> "In Finland there are many bigger towns than Salo."
> [Finland-in are many bigger towns than Salo.]
> "Asun kaupingin vanhimmassa osassa." "I live in the oldest part of the town."
> [I-live town-of oldest part-in.]

German distinguishes comparative and definite and indefinite superlatives:
"Eisen ist härter als Bronze." "Iron is harder than bronze." (comparative)
"Eisen ist das härteste der Metallen." "Iron is the hardest of the metals."
(definite superlative)
"Eisen ist am härtesten." "Iron is hardest." (indefinite superlative)

Arabic modifies the adjective to form a comparative and superlative. A definite superlative is compared with a generic noun and an indefinite superlative with an nonspecific noun:
"takūnu Raүlā mina l-muntajāti l-Ruxrā" "It will be more expensive than the other products." [It-will-be more-expensive that the-products the-other.] (comparative)
"Rafḍalu l-tajhīzāti l-ṭibbiyyati" "the best of medical equipments"
[best the-equipments the-medical] (definite superlative)
"Taqṣā ḥurriyyatin mumkinatin" "the greatest possible freedom" [greatest freedom possible] (indefinite superlative)

In Italian, a definite superlative is marked with an indicative relative clause and an indefinite superlative with a subjunctive relative clause. As explained below, a subjunctive verb is one whose occurrence is not established and which is therefore indefinable:

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"Venezia è la città più splendida che c'è in Italia.", (definite superlative)
"Venice is the most splendid city there is in Italy."
[Venice is the city most splendid that there is (indicative) in Italy.]
"Venezia è la città più splendida che ci sia." (indefinite superlative)
"Venice is the most splendid city there is."
[Venice is the city most splendid that there is (subjunctive).]
```

Irish assumes that all superlatives are definite and constructs them as an identification between the entity compared and the quantity:
"Is é Diarmaid an fear is láirdre acu go léir." "Diarmaid is the strongest man of them all."
[Is he Diarmaid the man is strongest at-them all.]
In other languages, a comparison marker, such as "than" or "besides", is placed against the entity being compared, not the quantity. The structure is accordingly the same as for other selections:

Hindi: "āp usse bare hair" "You are bigger than he." [You he-than big are.]
"kalkattā pahle bhārat kā sabse baṛā śahr thā"
"Calcutta used to be the biggest city in India."
[Calcutta-before India-of all-than big city was.]
Chinese:"Wŏ bàba bĭ wŏ māma shōu." "My father is thinner than my mother."
[My father compare my mother thin.]
"Wŏ gēge bĭ wŏ dà liăng suì." "My elder brother is two years older than I am." [My elder-brother compare me big two years.]

Japanese:
"Ishida-san no hō ga watashi yori wakai desu." "Mr Ishida is younger than I am."
[Ishida-Mr-of besides (subject) me-than young is.]
"Kuruma de iku hō ga basu de iku yori yasui desu."
"Going by car is cheaper than going by bus."
[Car-by going besides (subject) bus-by going than cheap is.]
Swahili: "Macungwa haya ni mazuri kushinda yale mengine."
"These oranges are better then those others."
[Oranges-these are good to-conquer those others.]
"Ali ni mrefu kuliko watoto wote." "Ali is the tallest of the children."

## Questions

In Chapter 1. (Topic and Enquiry), we saw that a question consists of a topic and an enquiry. The topic is what the question refers to, and the enquiry is the new information about it that the questioner wants to know. For the question to be meaningful, the topic has to be known to both parties and therefore definite. The reply, if it addresses the question, supplies that unknown information as a comment to the topic. We can call the comment the response to the enquiry. In an actual dialogue, the topic is often understood between both parties and is omitted:
"Where do you live?" "In London."
In reality, the reply to a question does not always address it precisely. This may arise because the respondent does not accept that the topic exists, or does not heed the question accurately:
"When did you give up smoking?" "I have never smoked."
"How many cars do you own?" "I take the bus."
Nevertheless, the grammar of questions is based on an expectation of the correct reply, and we use the term "response" in that sense.

Questions can be specific or general. In a general question, the topic, being definite, is generic:
"What is a rhododendron?" "When do solar eclipses take place?"
"Which days is Mandy off work?"
The response can be nonspecific or generic: "a genus of flowering shrub"; "when the moon passes in front of the sun"; "Thursdays and Fridays".

In all languages, questions are of two principal sorts:
(i) Questions which enquire whether an action or state has occurred, is occurring, or will occur, the answer to which is "yes" or "no". Since the action or state of a sentence is expressed by its verb, the enquiry is the verb:
"Are you going to London today?" "Yes"/"No".
"Do you think this is a good idea?" "Yes"/"No".
"Did Tolstoy write 'War and Peace'?" "Yes"/"No".
In English and many other languages, the verb of a "yes"/"no" question is placed at the start:
French: "Est-ce que vous partez?" "Are you going away?" [Query you go away?]
"Cet homme parle-t-il anglais?" "Does that man speak English?"
[That man speaks-he English?]
German:"Will er es annehmen?" "Is he going to accept it?" [Wants he it accept?]
In other languages, a "yes"/"no" question is indicated by a particle, here translated as "query", which marks the verb as an enquiry:

Arabic: "hal tarā Ranna ðālika Ramrun jayyidun" "Do you think that is a good thing?" [Query you-think that that matter good?]

Turkish: "Bibanız istasyona gitti mi?" "Has your father gone to the station?" [Father-your station-to gone-has query?]

Persian: "aya in ketab ast?" "Is it this book?" [Query this book is?]

Hindi: "kyā laṛkiyã̃ yahā̃ haĩ""Are the girls there?" [Query girls there are?]

Chinese:"Qìchē jiāle yóu ma?" "Have you filled your car with petrol?"
[Car added-have petrol query?]
Japanese:
"Yoshiko wa daigaku e iku ka." "Is Yoshiko going to college?" [Yoshiko (topic) college-to go query?]

Finnish and Russian both place the verb at the start and employ a query particle:
Finnish: "Saapuiko Pekka Turkuun aamulla?" "Did Pekka arrive at Turku in the morning?"
[Arrived-query Pekka at-Turku in-morning?]
Russian:"Byl li on v teatre?" "Was he at the theatre?" [Was query he at theatre?]
A third method of marking a "yes"/"no" is by a change of intonation alone, indicated in writing by a question mark:

Hungarian:
"Le tetszik szállni az autóbuszról?" "Are you getting off the bus?"
[Off like to-get the bus-from?]
Malay: "Sri sudah pulang?" "Has Sri gone home?" [Sri has gone-home?]
(ii) Questions whose enquiry takes the form of a word such as "what", "which", "who", "when", "where", "why", "how", or "whose". These are conventionally called "wh"-questions, and select a response from a range of possible entities rather than the two of "yes" or "no". Some "wh"-questions place the enquiry word at the start:

English: "Who was the author of 'War and Peace'?".
French: "À quelle heure partira son ami?" "When will his friend leave?"
[At what hour will-leave his friend?]
Spanish: "De qué estás hablando?" "What are you talking about?"
[Of what are-you talking?]
Russian: "Ch'yu ruchku vy vzyali?" "Whose pen did you take?"
[Whose pen (object) you took?]
Hungarian:
"Hova akarsz menni ma este?" "Where do you want to go tonight?"
[To-where you-want to-go today evening?]

Arabic: "mafa man Runāqišu 1-mawḍū‘a l-Rāna"
"Who do I discuss the subject with now?" [With whom I-discuss the-subject now?]
"'alāma tubaîiru Ramwālaka" "What are you squandering your money on?"
[On-what you-are-squandering money-your?]
Persian: "koja mixahid beravid" "Where do you want to go?"
[Where you-want that-you-go?]
Other languages leave the "wh" word in the position in the sentence where they expect the response to be:

Hindi: "vah kiskā makān hai?" "Whose house is that?" [That whose house is?]
Malay: "Anda membaca apa?" "What are you reading?" [You read what?]

Chinese:"Nĩ jīntiān shàng shénme kè?" "What classes do you have today?"
[You today attend what class?]
Japanese:
"Kinō no pātī ni wa dare ga kimashita ka." "Who came to yesterday's party?"
[Yesterday-of party-to (topic) who (subject) came query?]
For both of these types of question, it is possible to distinguish between two types: a definite question and an indefinite question. In a definite question, the respondent is invited to select from a range of possible responses, all of which are believed to exist:
"Are you married to Joan?" "Did you fly or drive to Scotland?"
The majority of "wh" questions are definite. "Who was the author of 'War and Peace'?" selects from a range of possible Russian authors. "When did you leave for work?" selects from a range of possible times. The negative of a definite question implies that it is sensible to state all the range of possible responses, and is therefore not often asked:
"Did you not fly to Scotland?" "No, I drove/took the train/hitched a lift,..."
"Who was not the author of 'War and Peace"? "Chekhov, Turgenev, Pushkin, ..."
Since the enquiry and response of a definite question are known to exist, they are either definite or indefinite:
"Who was the author of 'War and Peace"? "A Russian novelist."
"When did you leave for work?" "Some time before 8.00."
Since a definite question assumes that the response exists, the answer may be that it does not:
"Did you fly or drive to Scotland?" "I didn't go to Scotland."
"When did you leave for work?" "I didn't leave for work."
"Are you married to Joan?" "I'm divorced from her."
In Irish, the topic of a definite question is phrased as a restrictive qualifier to the enquiry:
"Cathain a ithis do dhinnèar?" "When do you have dinner?" [When that you-eat for dinner?]
"Conas a d'éirigh leat." "How did you manage?" [How that it-arose with-you?]
In another form of definite question, the enquiry is an entity in focus. Because the topic is the rest of the sentence including the verb, the verb is definite and the response (if not "yes" or "no") is focustopic. For example, in "Is it red or white wine that you prefer?", the topic is "that you prefer?" and the response is a particular range of options: "red or white wine". In Finnish and Russian, the enquiry is put in focus position at the start of the question, and is marked by the query particle ("ko"/"kö" in Finnish and "li" in Russian):

> Finnish: "Pekkako saapui Turkuun aamulla?"
> "Was it Pekka who arrived at Turku in the morning?"
> [Pekka-query arrived at-Turku in-morning?]
> Russian: "Khorosho li ona igraet na pianino?" "Does she play the piano well?"
> [Well query she plays on piano?]
> "Chasto li on igraet v futbol?" "Does he play football often."
> [Often query he plays in football?]

In Turkish, the query particle "mi" can put any element in focus and so make it the enquiry:

> "Bakan Ingiltereye gitti mi?" "Has the Minister gone to England?" "Bakan Ingiltereye mi gitti?" "Is it to England that the Minister has gone?"

> "Bakan mi Ingiltereye gitti?" "Is it the minister who has gome to England?" [Minister query England-to gone-has?]

In an indefinite question, the respondent is invited to say that the response does or does not exist. By extension, if the response exists, the reply might identify it. The majority of "yes/"no" questions are indefinite:
"Have you any butter?" "Yes"/"No"/"It's in the fridge."
"Are you going to the theatre?" "Yes"/"No"/"We're off to see 'The Rivals'."
However, a "wh" question may be indefinite if its enquiry is not known to exist:

| "What book are you reading?"""None"/""War and Peace'." | (indefinite) |
| :--- | :--- |
| "Which book are you reading?"""War and Peace'." | (definite) |
| "Where did you go yesterday?" "Nowhere." | (indefinite) |
| "Where did you go yesterday, London or Manchester?""Manchester." | (definite) |

Since the enquiry of an indefinite question is not know to exist, it is indefinable, and the response is either definite or indefinable. The question is therefore existential : "Is there....?". (Chapter 1, Existence and Non-Existence). The examples are equivalent to:
"Is there butter in your fridge?" "Is there a play you are going to see?"
"Is there a book you are reading?" "Is there a location you went to yesterday?"
The negative of an indefinite question implies that the enquirer is expecting that the enquiry does not exist:
"Have you not any butter?" "Are you not going to the theatre?"
"Are you not reading a book?" "Didn't you go anywhere yesterday?"
If only the verb is indefinable, an indefinite question is expressed by marking it as an enquiry or by constructing the question as existential:

Italian: "Cosa fai di bello?" "Are you doing anything interesting?"
[Something do-you of interest?"]
German:"Führen Sie Kühlschränke?" Do you stock [any] refrigerators?"
Russian:"Pri gostinitse est' pochta?" "Is there a post-office in the hotel?" [In hotel is-there post-office?]

Welsh: "Oes caws 'da chi?" "Have you got any cheese?" [Is-there cheese with you?]
Arabic: "hal min Ramalin fī taylībi l-xayri @alā 1-šarri"
"Is there any hope for the triumph of good over evil?"
[Query of hope in triumph the-hope over the-evil?]
Persian: "nan darid" "Have you any bread?" [Bread you-have?]
Chinese:"Nǐ yŏu wèntí ma?" "Do you have any questions?" [You have questions query?]
Indefinite questions often include both the verb and another element in the enquiry. In that case, the language may mark that element as indefinable in some way, for example "any" in English:

French: "Avez-vous du beurre?""Have you any butter?"
Italian: "Vuoi ancora degli altri panini?" "Do you want more sandwiches?" [You-want still any more sandwiches?]

$$
\begin{aligned}
\text { Greek: " } \Delta \varepsilon v \eta ́ \rho \theta \varepsilon \kappa \alpha v \varepsilon i ́ \zeta ~ v \alpha ~ & \mu \varepsilon \zeta \eta \tau \alpha ́ \varepsilon ı ; " \\
& \text { "Didn’t anyone come asking for me?" } \\
& \text { [Not came anyone that me asked-for }{ }_{\text {(subjunctive) }} \text { ?] }
\end{aligned}
$$

Russian:"Vy nashli kakoe-nibud' plat'e vashego razmera?" "Did you find a dress your size?" [You found any dress your size ${ }_{\text {(genitive) }}$ ?]

Welsh: "Dych chi'n nabod unrhywun allai helpu?" "Do you know anyone who could help?" [Are you in know anyone could help?]

Irish: "An bhfuil aon airgead agat?" "Have you any money?"
[Is-there any money at-you?]
Persian: "hic kodam az anhara didid" "Did you see any of them?" [Any of them you-saw?]
Chinese:"Wŏ néng wèi nĭ zuò diánr shéngme shì ma?" "Can I do anything for you?"
[I can for you do unit anything query?]

## Hypotheses

A statement expresses what the speaker believes to be a fact. The verb that it contains refers to an action or event which is believed to exist. However, there are other verbs which convey an action or state which is not known to be a fact, but a hypothesis or supposition, and which does not become a fact when the sentence is uttered. The conventional grammatical term for a verb expressing a hypothesis or supposition is subjunctive, while one expressing a fact is indicative. Examples of a hypothesis are a command or wish, an indefinite preference, supposition, purpose, or hypothetical condition.

Since the action or state of a subjunctive verb is not known to exist, it is indefinable, and if it is represented by a noun, that noun is indefinable.

Certain languages such as the Romance languages (Italian, Spanish, French, etc) mark all subjunctive verbs; others only mark subjunctives in certain constructions. The following are examples. Hypothetical conditions are described in the following section.

Imperatives are subjunctive because they express a desire, not a fact:
Italian: "Mi scriva presto." "Write to me soon." [To-me write ${ }_{\text {(subjunctive) }}$ soon.]
Greek: "A̧ $\mu \lambda \lambda \alpha ́ \varepsilon \iota ~ o ́ \sigma o ~ \theta \varepsilon ́ \lambda \varepsilon \varepsilon . " ~ " L e t ~ h i m ~ s p e a k ~ a s ~ m u c h ~ a s ~ h e ~ w a n t s . " ~$
[Let he-speak (subjunctive) as-much he-wants.]
Swahili: "Chakula kipate moto." "Let the food get hot." [Food it-get (subjunctive) heat.]
Wishes and commands are subjunctive for the same reason:
Italian: "Vuole che veniate voi tutti." "He wants you all to come."
[He wants that come ${ }_{\text {(subjunctive) }}$ you all.]
"Il capitano comanda che tu venga subito."
"The captain orders you to come at once."
[The captain orders that you come (subjunctive) ${ }^{\text {at-once.] }}$
Hungarian:
"Azt írták, hogy jöjjek haza." "They wrote that I should come home." [That they-wrote, that I-come ${ }_{\text {(subjunctive) }}$ home.]

Persian: "xaheš mikonam darxaste mara qabul konid"
"I ask you to agree to accept my request."
[Request I-make request-of me ${ }_{\text {(object) }}$ accept you-make ${ }_{\text {(subjunctive). }}$.]

$$
\begin{aligned}
& \text { Swahili: "Mwambie mtoto asome." "Tell the child to read." } \\
& {\left[\text { Him-tell (subjunctive) child he-read }{ }_{\text {(subjunctive) }}\right. \text {.] }} \\
& \text { "Mama amekataa nisiende." "Mother has refused to let me go." } \\
& {[\text { Mother has-refused I-not-go (subjunctive). }] }
\end{aligned}
$$

Preferences can be divided between those which refer to a definite or generic object and those which refer to an object which is indefinite or nonspecific. If the object is definite or generic, the preference is a fact and its verb is indicative. If the object is indefinite or nonspecific, any preference concerning it is a hypothesis; its verb is therefore subjunctive. These can be called respectively a definite preference and indefinite preference:

Italian: "Cerco la giacca che va con questa gonna."
"I'm looking for the jacket that goes (indicative) with this skirt."
"Cerco una giacca che vada bene con questa gonna."
"I'm looking for a jacket which goes (subjunctive) well with this skirt."
Spanish: "Prefiero ese coche que tiene cuatro puertas."
"I prefer that car which has (indicative) $f$ four doors."
"Prefiero un coche que tenga cuatro puertas."
"I prefer a car which has (subjunctive) four doors."
Perceptions and communications are subjunctive if what is perceived or communicated is not certain, and indicative if it is perceived or communicated as a fact. The subjunctive applies if the verb of perception or communication is negative or interrogative, since it has not or not yet happened:

Italian: "Credo che sia già partito." "I think that he's ${ }_{\text {(subjunctive) }}$ already gone."
"Credo che partirà alle nove." "I think that he will go (indicative) at nine."
"Dissero che il re fosse morto." "They said that the king was (subjunctive) ${ }^{\text {dead." }}$
"Dissero che il re morí ieri sera alle undici."
"They said that the king died (indicative) last night at eleven."
"Non so se sia già partito." "I don't know whether he's already left."
[Not I-know whether he's (subjunctive) already left.]
"Non dico che non sia intelligente." "I don't say that he's not clever."
[Not I-say that not he's ${ }_{\text {(subjunctive) }}$ clever.]
"Avrebbe voluto sapere dove tu fossi stato?"
"Would he have wanted to know where you had (subjunctive) ${ }^{\text {been?" }}$
Persian: "tasavvor mikonam ta hala raside bašad" "I think he will have arrived by now."
[Supposition I-make by now arrived he-is ${ }_{\text {(subjunctive). }}$ ]
Gerunds of purpose are subjunctive since they represent a wish rather than a fact (Chapter 5., Gerund). Negative gerunds are subjunctive because they have not happened:

Italian: "Studia molto affinché possa vincere il premio."
"He's studying a great deal so as to win the prize."
[He-studies much so-that he-can ${ }_{\text {(subjunctive) }}$ win the prize.]
"Aprite la porta senza che lui se ne accorga." "Open the door without his noticing."
[Open the door without that he himself of-it notices ${ }_{\text {(subjunctive).] }}$
German:"Sie ging vorbei, ohne daß sie mich auch nur einmal angeschaut hätte."
"She passed by without even once looking at me."
[She passed by, without that she me even once looked-at had ${ }_{\text {(subjunctive). }}$.]
Hungarian:
"Felhasználtam az alkalmat arra, hogy elszökjek."
"I used the opportunity to get away."
[I-used the opportunity onto-that, that I away-get ${ }_{\text {(subjunctive). }}$ ]

Persian: "inra panhan kard ta kasi peida nakonad" "He hid this so that no-one would find it." [This ${ }_{\text {(object) }}$ hiding he-made so-that anyone finding not-he-makes ${ }_{\text {(subjunctive). }}$.]

Swahili: "Walisikia sauti wasimwone mtu." "The heard a voice without seeing anyone."
[They-heard voice they-not-him-see (subjunctive) person.]
Concessive clauses are subjunctive if they represent a future event:
Spanish:"Vendieron la finca, a pesar de que el abuelo se oponía."
"They sold the estate, despite the fact that grandfather opposed ${ }_{\text {(indicative) }}$ it."
"Venderán la finca, a pesar de que el abuelo se oponga."
"They'll sell the estate, despite the fact that grandfather will oppose ${ }_{(\text {subjunctive })}$ it."
A dependency is subjunctive since by its nature it has not yet arisen:
French: "Je viendrai au cas que je soit libre demain."
"I shall come in case I am (subjunctive) $f$ free tomorrow."
Italian: "Glielo venderò purché mi paghi bene."
"I'll sell it to him so long as he pays me well."
[To-him-it I'll-sell provided-that me he-pays (subjunctive) well.]
"Aspettate finché io torni." "Wait till I come back (subjunctive)."
"Voglion partire prima che lei venga."
"They want to leave before she comes ${ }_{\text {(subjunctive)." }}$
Persian: "ta inra naxanid namifahmid" "You will not understand this until you read it." [Until this ${ }_{\text {(object) }}$ not-you-read ${ }_{\text {(subjunctive) }}$ not-you-understand.]

## Conditions

A conditional sentence is one which only occurs if another event (the condition) occurs. The likelihood of its occurrence depends on the likelihood that the condition will be fulfilled. We can call the sentence which is dependent on the condition the conditional. (An alternative terminology, not used here, is to call the condition the protasis and the conditional the apodosis.)

Languages distinguish three types of conditional sentence, depending on the likelihood that the condition will be fulfilled and the conditional will occur. They are called real, hypothetical, and unreal, and they correspond to different identities for the conditional verb. We can consider the following examples:
(i) "If you write, we shall reply." "If you come today, we shall be here."
"We shall reply" states the action which will occur if the condition "if you write" is fulfilled. "We shall be here" states the state which will exist if the condition "if you come today" is fulfilled. They identify the action "reply" and the state "is here". Using the terminology of Chapter 2., they are indefinite verbs. The conditions are real conditions.

Alternative ways to express a real condition are:
"Provided you write, we shall reply." "Even if you write, we shall reply."
The first of these sentences is the same as "if you write....", except that the condition is a sufficient one for the conditional to follow. The second sentence implies that the conditional will follow whether or not the condition is fulfilled. In both cases, the conditional verb is indefinite.

A real condition can only be specific and refer to the present or future. It cannot refer to the past or be general, because in those aspects it is known whether the condition is fulfilled, and "if" then means "when":
"If you wrote, we replied." "If you came, we were here."
(ii) "If you wrote, we would reply." "If you came today, we would be here."

These sentences again state an action and a state which will occur if the respective conditions are fulfilled. The difference from a real condition is that the speaker does not know whether they will occur or not. The conditions "if you wrote" and "if you came today" are therefore a hypothetical condition, and expressed in the subjunctive in those languages which have a subjunctive form of the verb. "Wrote" and "came" are subjunctive in English. In the terminology of this chapter, they are indefinable.

For the conditionals "we would reply" and "we would be here", some languages possess a special form of verb called the "conditional". Some languages use different forms of verb for the conditional and the subjunctive, and in others it is the same. Since the speaker does not know whether a conditional will occur or not, it is indefinable.
(iii) "If you had written, we would have replied."
"If you had come today, we would have been there."
These sentences express an unreal condition. They state that the conditional events described did not take place because the condition was not fulfilled. Both the condition and the conditional are therefore indefinable.

The difference from a hypothetical condition is that the sentences refer to the past. The hypothetical conditions were not fulfilled and the conditionals therefore cannot have occurred. To express unreal conditions, languages generally use the same forms of verb as for hypothetical conditions, but in a past tense.

The "even if" construction can apply to an unreal condition but only in a negative form, because it states that the conditional did not occur in any event: "Even if you had written, we would not have replied."

The following illustrate the application of these principles in various languages. Spanish and German possess forms for the subjunctive and conditional:

| Spanish: (real) (hypothetical) (unreal) | "Si han llegado, me quedaré." "If they've ${ }_{\text {(indicative) }}$ arrived , I'll stay ${ }_{\text {(indicative). }}$." "Si viniera, me quedaría." "If he were to come ${ }_{(\text {subjunctive) }}$, I'd stay (conditional)." "Si hubiéramos tenido más dinero, habríamos comprado la casa." <br> "If we had (subjunctive) ${ }^{\text {had more money, we'd have }}$ $\qquad$ bought the house." |
| :---: | :---: |
| German: (real) | "Sie konnte immer ihre Tochter anrufen, wenn sie sich nicht gut fühlte." "She could always ring up ${ }_{\text {(indicative) }}$ her daughter if she didn't feel (indicative) well." |
| (hypothetical) | "Sie wäre stolz, falls sie den Preis gewinnen könnte." |
|  | "She would be ${ }_{\text {(subjunctive) }}$ proud if she could (conditional) win the prize." |
| (unreal) | "Wir wären weggegangen, wenn wir daß gewußt hätten." |
|  | "We would have ${ }_{\text {(subjunctive) }}$ gone away if we had known ${ }_{\text {(subjunctive) }}$ that." |

Welsh uses two words for "if": "os" (real) and "pe" (hypothetical and unreal). "Pe" takes a tense which is variously describes as conditional or subjunctive. Unreal conditions are in the past conditional:

| (real) | "Os bydd y trên yn hwyr, byddwn ni'n colli'r gêm." <br> "If the train is late, we'll miss the game." |
| :--- | :--- |
| (hypothetical)[If will-be the train in late, will-we in lose the game.] <br> "Pe baen ni'n methu, fe fydden ni’n trio eto." <br> "If we failed (conditional), we would try again." |  |
| (unreal) $\quad$[If would-we in fail, would-we try again.] |  |
| "Pe bai gennyf ddigon o arian, fe deithiwn o amgylch y byd." |  |
| "If I had enough money, I would travel round the world." |  |

[If it-were with-me enough of money, I-would-travel round the world.]
Irish similarly has two words for "if": "má" (real) and dá (hypothetical and unreal). The distinction between hypothetical and unreal is not determined by grammar:

| (real) | "Má thagann sé, beidh fáilte roimhe." "If he comes, he will be welcome." |
| :--- | :--- |
| [If comes he, will-be welcome before-him.] |  |
| (hypothetical/ | "Dá bhfeicfinn é, do labharfainn leis." |
| unreal) | "If I saw (conditional) him, I would speak (conditional) to him."/ |
|  | "If I had seen him, I would have spoken to him." |

The Greek unreal condition is in the remote past (pluperfect):

| (real) |  |
| :---: | :---: |
|  | "I will not leave unless I speak to him." |
|  | [Not it-will-happen that I-leave ${ }_{\text {(subjunctive) }}$ if not to-him I-speak ${ }_{\text {(subjunctive) }}$.] |
| (hypothetical) |  |
|  | "If ever he meets a friend, he immediately invites him to his house." |
|  | [Whenever he meets (subjunctive) friend-his, him he-invites (indicative) to-the house.] |
| (unreal) |  |
|  | "If you had bought a lottery ticket, you might have won." |
|  | [If you-had bought lottery, it-is-possible that you had ${ }_{\text {(subjunctive) }}$ Won.] |

Russian possesses one form for the conditional and subjunctive:

| (real) | "Esli on budet svoboden, on vam pomozhet." |
| :---: | :---: |
|  | "If he is free, he will help you." |
|  | [If he will-be ${ }_{\text {(indicative) }}$ free, he you will-help ${ }_{\text {(indicative) }}$.] |
| (hypothetical) | "Esli by ya znala, ya by vam skazala." |
|  | "If I knew, I should tell you." |
|  | [If (conditional) I knew, I (conditional) to-you told.] |
| (unreal) | "Esli by vy vyekhali ran'she, vy by ne opozdali." |
|  | "If you had left earlier, you wouldn't have been late." |
|  | [If ${ }_{\text {(conditional) }}$ you left earlier, you (conditional) $n$ not were-late.] |
| Turkish: (real) | "Hülâsa edersek şuraya varıyoruz." |
|  | "If we summarise (aorist), we arrive ${ }_{\text {(indicative) }}$ at this point" |
|  | [Summary if-we-make, here-at we-arrive.] |
| (hypothetical) | "Sen olsan ne yaparsın?" |
|  | "If it were ${ }_{\text {(conditional) }}$ you, what would you do (conditional) ${ }^{\text {? }}$ ? |
|  | [You if-you-would-be, what you-would-do?] |
| (unreal) | "Bilseydim buraya kadar gelmezdim." |
|  | "If I had known (subjunctive), I should not have come (indicative) here." [If-I-had-known, here-to so-far I-did-not-come.] |

Arabic also uses three words for "if": "Pin" or "Piðā" (real) and "law" (hypothetical and unreal). Real and hypothetical conditions mainly use the imperfective; unreal conditions use the perfective. Written Arabic does not possess a conditional or a specifically subjunctive form of the verb:

| (real) | "?in huwa taßaxxara ¢ani 1-sadādi fa-sa-yūqi¢u 1-banku 1-hajza ¢alā |
| :---: | :---: |
|  | Pamwālihi" |
|  | "If he delays in paying, the bank will sequestrate his assets." |
|  | [If he delays in the-paying then will-sequestrate the bank the-reserves on wealth-his.] |
|  | "?iðā kunta xārija dā?irata 1-sintrāli fa-ṭlub il-raqma 16" |
|  | "If you are outside the exchange area, dial 16." |
|  | [If you-are outside area the-exchange then dial the-number 16.] |
| (hypothetical) | "law falimat bi-l-Ramri yumkinu Pan taṭluba minhu ?an yuṭalliqahā" |

"If she were to find out about the matter, she could ask him to divorce her." [If she-finds-out about the-matter possible that she-asks of-him that he-divorce-her.]
(unreal) "law Ramkana waḑ̣u makātiba €alā l-judrāni la-fafalū đālika" "If it were possible to put desks on the walls, they would do it." [If was-possible putting desks on the-walls they-did that.]

Persian and Hindi possess a subjunctive but not a conditional:

| Persian: (real) |  | "agar mariz bašad naxadad amad" |
| :---: | :---: | :---: |
|  |  | "If he is (subjunctive) ${ }^{\text {ill, he will not come }}$ (indicative)." |
|  |  | [If ill he-were, he-will-not come.] |
|  | (hypothetical) | "agar mitavanestam miamadam" |
|  | (unreal) | "If I could ${ }_{\text {(indicative) }}$ I would come ${ }_{\text {(indicative). }}$." |
|  |  | "agar arzan bud xaride budam" |
|  |  | "If it had been (indicative) $^{\text {cheap, I would have bought }}{ }_{\text {(indicative) }}$ it." |
| Hindi: | (real) |  |
|  |  | "If you like ${ }_{\text {(subjunctive), }}$ I'll speak ${ }_{\text {(indicative) }}$ Hindi to you." |
|  | (hypothetical) | "agar mehnat karoge to saphal koge" |
|  |  | "If you work (indicative) ${ }^{\text {y }}$ you'll succeed ${ }_{\text {(indicative) }}$." |
|  | (unreal) | "agar maĩ bhārat gayā hotā to maĩ ne zyādā hindī zarūr sīkhī hotī" |
|  |  | "Had (indicative) ${ }^{\text {I gone to India, I should certainly have learned (indicative) }}$ more Hindi." |
|  |  | [If I India going had-been, then me-by more Hindi certainly learning had been.] |

In Indonesian, the different types of condition are indicated by different words for "if" ("kalau", "bila", "sekiranya"):

| (real) | "Kalau wang di dalam benk sudah cukup, bolehlah kita beli." <br> "If we now have enough money in the bank, we can buy it." <br> [If money in bank now enough, can we buy.] |
| :--- | :--- |
| (hypothetical)"Bila ada kesempatan, singgah di rumah saya." <br> "If you have a chance, drop in at my place." |  |
| (unreal) $\quad$[If have chance, drop-in at house me.] <br> "Sekiranya musyafir itu kembali ia tetap tidak akan memperoleh air <br> minum." |  |
| "If that traveller returned, he still wouldn't be given water to drink." |  |
| [If traveller-that return, he still not get water to-drink.] |  |

In Chinese, the different conditions are indicated by different words for "if" ("yàoshi", "rúgoŭ", "jiărú"). Real conditional verbs are also marked with "jiù" ("then"). Hypothetical and unreal conditional verbs are marked with "hui"" ("can"):

```
Chinese:(real) "Yàoshì xiàyŭ, wŏmen jiù bú qù."
    "If it rains, we won't go." [If descend rain, we then not go.]
    (hypothetical) "Rúgoŭ nĭ nŭlì xuéxí, nĭ huì qŭdé hăo chéngjī."
        "If you study hard, you'll get good marks."
        [If you diligent study, you can obtain good mark.]
        "Jiărú wŏ hĕn yŏuqián, wŏ huì qù lü` xíng."
        "If I were rich, I would travel." [If I very have much, I can go travel.]
```

In Japanese, the condition sentence is marked with ("-ba"). The conditional sentence is not especially marked. For unreal conditions, the conditional verb is expressed in the past:

Japanese:

| (real/ | "Kono kusuri o nomeba yoku narimasu." |
| :--- | :--- |
| hypothetical) | "If you take this medicine, you'll get well." <br> [This medicine <br> (object) if-take, well become.] |

```
(unreal) "Motto yasukereba kaimashita."
    "I would have bought it if it had been much cheaper."
    [More if-cheap, bought.]
```


## Conclusion

We have now completed our review of the different purposes of a sentence in a dialogue or narrative, generally called a discourse. Consideration of the function of a sentence within a dialogue or narrative can be termed discourse analysis, and we have seen in Chapters 1. and 3. that for this purpose, sentences can be broadly divided into seven discourse types: existential sentence, statement, definite negative, indefinite negative, definite question, indefinite question, and hypothesis.

In Chapters 2. and 3., we have tried to show that all concept words in a sentence (such as nouns, verbs, and adjectives) are either definite, indefinite, or indefinable. This is so whether the concepts words are specific or general, since general words behave as definite if they are generic and as indefinite if they are nonspecific. The categorisation of a word in a sentence as definite, indefinite, or indefinable can be called its identity, and our terminology can be summarised as:

|  | Identified | Not identified | Existence not <br> established |
| :--- | :---: | :---: | :---: |
| Specific | Definite | Indefinite | Indefinable |
| General | Generic | Nonspecific |  |

Each discourse sentence type is made up of words of different identities. An existential sentence or statement comprises only definite and indefinite words, a definite negative or definite question includes only definite words, and an indefinite negative, indefinite question or hypothesis sentence contains only definite and indefinable words. This mixture of identities in a sentence can be called its discourse structure. One way of looking at a sentence is therefore through its discourse structure, and this is what we shall attempt in Chapter 13.

Realisation of the discourse structure of a language is one of the purpose of its grammar, which we shall summarise in Chapter 4. Grammatical rules are also employed in linking sentences within a discourse, for example in time or space, or by condition or causality. In Chapter 5., we shall refer to an important feature of discourse analysis not so far considered, namely the sequencing in time of sentences in a narrative, or their aspect. Chapter 14. brings together discourse structure, sentence linking, identity, and aspect into a single system.

## 4. Grammar and Syntax

## Summary

Sentences are constructed from concept words, which refer to a person, thing, action, or state, and grammatical words, which support concept words to convey their meaning. Concept words may combine with grammatical words to form inflections. The grammar of each language consists of rules for grammatical words and rules of word order.

The function of each concept word in a sentence determines the grammatical words and rules of word order that it requires to convey its meaning. These grammatical rules and rules of word order are the syntax of the concept word.

An auxiliary word is a grammatical word which substitutes for a concept word, either a verb, noun, or attribute. It either replaces a concept word, or is attached to a concept word in order to extend its function in the sentence. A pronoun is an auxiliary noun.

An article is a grammatical word which expresses the identity of an attached noun.
A link is a grammatical word which connects a noun to another word (called a "head word") to realise the syntax of the head word.

A converse link is a grammatical word which connects a noun to a head word to realise the syntax of the connected word. A converse link and its noun together express a state or condition. Together with adjectives, such expressions are called "attributes", and a converse link is an auxiliary attribute.

Both links and converse links generally occur either before the noun (preposition) or after the noun (postposition), according to the rules of the language. They are often the same words and follow the same grammatical rules as locatives (Chapter 6., The Locative Function), while having a different meaning.

A relative clause is a sentence which qualifies a noun. In principle, it can take any acceptable sentence construction, and can be linked in any way to the qualified noun. It has to be distinguished from a sentence as predicate. In left-branching languages, this arises because the relative clause precedes the noun, while the predicate follows it. In right-branching languages, a relative pronoun within the relative clause may link it to the qualified noun.

Rules of word order differ between languages, but are consistent within each language since comprehension depends on their consistent use. Languages are divided between those in which the verb precedes the object (VO), and those in which the object precedes the verb $(\mathrm{OV})$. Although there is some consistency between right-branching languages and VO and between left-branching languages and OV, it is suggested that these rules arise from different causes. The VO/OV distinction is due to different conventions for focussing on the object.

Rules of word order are also needed to distinguish between the object and verb of an existential sentence, and (where focus is not marked by a particle) to identify an element in focus.

Languages can also be divided between those in which, in an unstressed sentence, the verb precedes the subject (VS), and those in which the subject precedes the verb (SV). However, if a sentence in a VS language contains an element in focus, it generally appears in front of the verb. This suggests that VS languages are by their nature existential, and can be contrasted with SV languages which are by their nature topic-comment.

## Terms Defined or Introduced

Grammar, syntax, concept word, auxiliary word, inflection, pronoun, link, converse link, attribute, locative, directive, relative clause, relative pronoun, VO, OV, SV, VS.

## Grammar and Syntax

In previous chapters, we have discussed how the unit of meaning of a language is a sentence, and how the meaning of a sentence requires it to be placed within a discourse. A sentence consists of a subject, verb, object, and other elements. Unless it is an existential sentence, it is linked to a previous sentence or sentences by a topic, the remainder being a comment, focus, enquiry, or hypothesis. These elements are built up of words, comprising nouns, verbs, and attributes, which each possess an identity. An identity of a noun, verb, or attribute may be determined, altered, or enhanced by its qualification. In Chapter 5., we shall also note how the relation of one sentence to another in discourse also requires an understanding of its aspect.

The meaning of a sentence therefore requires an understanding of the purpose of each word in it. This is expressed by one of two ways: by an attached marking word, or by a convention of word order in a sentence. These naturally vary between languages. For each language, the marking words and word order conventions are its grammar.

If we first consider marking words, examples which we have already come across are "the", "some", "not", "est-ce que", and "would". The words of a language therefore divide into two:

- Concept words, which express an idea (a person, thing, action, or state) in the world that the language is describing.
- Marking words, which we call grammatical words. These do not express a concept but support concept words to convey their meaning in the sentence.

In most languages, grammatical words can combine with concept words, in a process called inflection. Examples in English are a plural "train/trains", present participle "come/coming", and past participle "write/wrote". In a few languages, such as Chinese, there is no inflection; these are called isolating languages. In the course of this analysis of language, we shall come across six principal sorts of grammatical word: auxiliary words, articles, links, relative pronouns, selection markers, and conjunctions. The first four of these are described in more detail below. Conjunctions are the subject of Chapter 5. Selection markers are expressions such as "rather than", "not", or "more than", which are discussed in Chapters 13. and 14.

In addition, the grammar of each language possesses rules of word order which assign to a concept word its purpose in the discourse structure of the sentence, so that it is immediately recognisable: subject, verb, object, attribute, topic, comment, focus, or enquiry. There is no agreed model for doing this, so that different languages may have markedly different word orders. These different conventions are also discussed below.

In Chapters 6. to 12., we shall describe how sentences express the action or state of a sentence, and that this purpose of a sentence is distinct from its purpose in discourse. The action or state of a sentence is called its function. For example, the following four sentence express respectively the functions of movement, role, constituent, and ownership:
"William climbed up the tree"; "James was elected Chairman of the Society";
"My car has a new catalytic converter"; "Sheila has inherited an estate in Scotland".
We shall discuss in all 37 functions. For each of them, additional elements or words are needed to make the function meaningful. "William climbed"; "James was elected"; My car has a new"; "Sheila has inherited" are not useful sentences without additional information. We call that information the syntax of the function. We can equally use syntax to describe the elements needed to construct a function word as a qualifier: "the tree William climbed"; "the Society of which James is Chairman"; "my car's catalytic converter"; "Sheila's estate in Scotland".

This use of syntax is different from that conventionally employed, where it usually just means the rules of word order. It is, however, a useful term in the functional analysis of language. We can of course also refer to the syntax of the discourse elements of a sentence, but these are much simpler than those of functional elements, since a sentence generally only has one discourse element of each type. As the above examples illustrate, syntax is expressed by grammatical words and rules of word order.

## Auxiliary Words

An auxiliary word is a grammatical word which substitutes for a concept word. By combining with a concept word, it can create a different concept word of related meaning. Auxiliary words arise because no language possesses a full range of concept words for all the possible functions of each concept. Languages therefore use them to extend their vocabulary.

Additionally, an auxiliary word can represent a concept word so that it is not necessary to repeat it.
Auxiliary words can substitute for verbs, attributes, or nouns.

- An auxiliary verb supports the action or state of a subject. The action or state is conveyed by an associated concept noun or attribute. English examples of auxiliary verbs are "is", "becomes", "falls", "gets", "has", "does", "makes", "gives", "puts", or "receives". Equivalents occur in many languages:

English: "They fell in love." "We put them to flight." "She got very cold."
Irish: "Táid ag baint fhéir." "They are [at] mowing [of] hay."
Turkish: "Bu iki eseri mukayese ediyor." "He is comparing these two works."
[These two works (object) comparison he-is-making.]
"Öksürük oldu." "He's caught a cough." [Cough he-became.]
Hindi: "mai~ nau baje darvāzā band kartā hū"" "I close the door at nine o'clock."
[I nine o'clock door closed making am.]
"laṛke ne pūrā pannā paṛh diyā""The boy read out the entire page."
[Boy-by entire page reading gave.]
Japanese:
"Watashi wa chūkoguko o benkyō shite iru." "I am studying Chinese."
[ $\mathrm{I}_{\text {(topic) }}$ Chinese $_{\text {(object) }}$ study doing there-is.]
"Yamada wa teigaku ni natta." "Yamada got suspended from school." [Yamada (topic) suspension-in became.]

An auxiliary verb is also used to relate the action or state of a verb to its subject and/or to the rest of the narrative or dialogue, in which case the concept is conveyed by an attached verb. The different purposes illustrated below are each discussed in the relevant chapter of this functional grammar. The auxiliary verb is in brackets:

| discourse: | "He would come if he could." <br> "She did arrive after lunch." <br> "They did not answer the question." | (would) (did) $\qquad$ |
| :---: | :---: | :---: |
| modality: | "She can speak Finnish." <br> "We must arrive on time." | $\begin{aligned} & \text { (can) } \\ & \text { (must) } \end{aligned}$ |
| aspect/tense/viewpoint | "They were preparing to go out." <br> "We have eaten lunch." <br> "She will have gone out." | (were) <br> (have) <br> (will have) |
| causation: | "The noise made us jump." | (made) |
| inchoation: | "The printer started to print." <br> "They went on walking." <br> "We stopped talking." | (started) <br> (went on) <br> (stopped) |
| manner (Arabic): | "la-qad Pasa?ta fahmi " <br> "You have misunderstood me." | "Pasa?a" <br> ("do badly") |


| [You-have-erred understanding-my.] |  |
| :--- | :--- |
| "Rajzala lahu l-Cațā?a" | "Rajzala" |
| "He gave generously to him." | ("do generously") |
| [He-did-generously for-him the-giving.] |  |

The functions of these auxiliary verbs may also be performed by verb inflections, or by words attached to verbs ("particles"):

Russian: "Byl li on v teatre?" "Was he at the theatre?" [Was query he at theatre?]
Chinese:"Wŏ zái yínháng kāi le yī gè zhànghù." "I have opened an account at the bank."
[I at bank open (aorist) ${ }^{\text {one unit account.] }}$

- An auxiliary attribute supports the qualification of a noun. The qualification is conveyed by an associated concept noun or verb. English examples are the first words in the following expressions:
"in progress"; "at rest"; "in motion"; "in line"; "at ease"; "at risk".

These expressions have the same functions as adjectives, although some may only be used in predicates:
"The work is in progress"; "The work in progress is being reported"; "The train is in motion"; "We are at ease"; "The persons at risk should be warned".

In order to cover the functions of both adjectives and expressions of the above form which are equivalent to adjectives, we use the term attribute. The words "in", "at", etc which create an attribute from a noun are therefore an auxiliary attribute.

- A pronoun expresses a noun which has been previously identified. English examples are "he", "she", or "that". They avoid the need to re-state the noun, and occur in all languages. They may be qualified by a restrictive qualifier. Their use is discussed in Chapter 2. (Pronoun).

In many languages, pronouns which are the subject and/or object of the verb combine with verbs:

Italian: "Ce li trovarai." "You'll find them there." [There them find-will-you.]
Swahili: "Umekileta kitabu?" "Have you brought the book?" [You-have-it-bring book?]
In some languages, pronouns also combine with nouns or locatives. Such languages are traditionally termed "agglutinative":

Turkish: "tebrik ve teşekkürlerimi sunarım" "I offer my congratulations and thanks."
[Congratulation and thanks-my (accusative) offer-I.]
Hungarian:
"a ház előtt" "in front of the house" [the house in-front-of]
"előttem" "in front of me" [in-front-of-me]
"a füzetemből" "out of my notebook" [the notebook-my-from]

## Articles

Articles express the identity of an attached noun, whether definite, indefinite, generic, nonspecific, or indefinable (Chapters 2. and 3.). In grammars, they are also called "determiners". Examples are "the", "a", "some", "any", or "no".

Articles are usually separate words. In Romanian, they combine with the noun:

| "munte" | "mountain" | "munți" | "mountains" |
| :---: | :---: | :---: | :---: |
| "muntele" | "the mountain" | "munții" | "the mountains" |
| "muntelui" | "of the mountain" | "munților" | "of the mountains" |

## Links

Where the syntax of a word is not adequately expressed by word order, languages employ a link. A link is a word (or an equivalent inflection) which connects two concept words, in order to realise the syntax of one of them. One of these concept words is then subject to the syntax of another concept word, or is the verb of the sentence, and is called the head word. The word which is not the head word is invariably a noun or pronoun, and is the linked noun.

In the majority of constructions, the link between the head word and the linked noun expresses the syntax of the head word. In the following examples, the head word, link, and linked noun are in brackets:

| "He gave the information to her." | (gave) | (to) | (her) |
| :---: | :---: | :---: | :---: |
| "She wrote the article for him." | (wrote) | (for) | (him) |
| "The car was driven by me." | (driven) | (by) | (me) |
| "the king of France" | (king) | (of) | (France) |
| "good at judo" | (good) | (at) | (judo) |
| Chinese:"bàba de lĭngdài" "father's tie" [father of tie] | ("lı̆ngdài") | ("de") | ("bàba") |
| "wūzi li de jiājü" "furniture in the room" [room in of furniture] | ("jiājù") | ("de") | ("wūzi li") |
| Japanese: |  |  |  |
| "Maeda-san wa kinō kuruma o katta." | ("katta") | ("wa") | ("Maeda") |
| "Mr Maeda bought a car yesterday." | ("katta") | ("o") | ("kuruma") |
| [Maeda-Mr ${ }_{\text {(topic) }}$ yesterday car ${ }_{\text {(object) }}$ bought.] |  |  |  |

A link often has an alternative construction based on word order alone. English examples (the version with a link word is in brackets) are "guard duty" ("duty as guard"); "people power" ("power of the people"), "garage door" ("door of the garage").

In the less common construction, the link expresses the syntax of the linked noun: "an object at rest", "a building at risk", "a patient in pain", or "a man of honour". Such expressions generally mean "a head word subject to the state or condition of the linked noun", and are often equivalent to an adjective: "a resting object", "an honourable man". We may call this construction a converse link. For that reason, we cover an adjective and a converse link under the general term attribute, meaning a word or linked noun expressing the state or condition of a noun. Contrary to the usual terminology, an attribute can be a qualifier or predicate:
"The object was at rest"; "The building was at risk": "The patient was in pain".
Converse links are more commonly found in adverbial expressions, as an alternative to an adverb formed from an adjective: "in haste" ("hastily"); "at leisure" ("leisurely"). Arabic, which lacks means to form adverbs, constructs many adverbial expressions in this manner: "bi-făfiliyyatin" ("effectively" [with effectiveness]); "bi-basāṭatin" ("simply" [with simplicity]); "bi-1-kāmili" ("completely" [with completeness]). Adverbs and converse links qualifying verbs are covered under the general term adverbial.

In most languages, as illustrated above, many of the words used for links are the same as those used to express a physical relationship in space or time. Words used for a physical relationship are not links, but concept words. They can be stative: "in the room"; "up the tree"; "beside the river"; "on the table", or dynamic: "into the room"; "up the tree"; "beside the river"; "onto the table". In order to distinguish them from a link, we can call them a locative for a stative physical relationship and
directive for a dynamic one. Conventionally, link words, converse links, and locatives/directives are called prepositions if they precede the noun, or postpositions if the follow the noun.

Locatives and directives differ from links in that they can be a noun, verb, attribute, or adverbial, and can be expressed without an object. They are discussed further in Chapter 6 (The Locative Function):
"The outside is painted white." (noun)
"Mr Smith is outside." "Mr Smith is outside the door." (attribute)
"He worked outside." (adverbial)
"The moat surrounds the castle." "The box contains the shoes." (verb)
Returning now to links, they are expressed by languages in three different ways:
(i) By a link word, as in the above examples.
(ii) By a single-word attribute (adjective) which expresses a noun in linked form. This occurs in English, but is more common in languages which do not permit nouns to be connected without a link (the "garage door" construction). The examples give the corresponding expression linking two nouns:

English: "The royal palace." "The palace of the Queen."
"Human life." "The life of man."
"Canine defence league." "League for the defence of dogs."
The Russian examples give in brackets the noun from which the linking adjective is derived, and an alternative adjective derived from the noun which is not a link:

| "neftyanaya skvazhina"" | "oil well" | $($ neft' = oil) |  |
| :--- | :--- | :--- | :--- |
| "pochtovyi yashchik" | "post box" | (pochta = post) | (pochtovyi = postal) |
| "mirovoi sud'ya" | "Justice of the Peace" | (mir = peace) | (mirnyi = peaceful) |
| "krovonocnyi sosud" | "blood vessel" | (krov' = blood) | (krovavyi = bloody) |
| "narodnaya volya" | "people's will" | (narod = people) |  |

Italian examples:

| "stazione ferroviaria" | "railway station" | (ferrovia $=$ railway) |
| :--- | :--- | :--- |
| "tasso bancario" | "bank rate" | (banco $=$ bank) |
| "cartello stradale" | "road sign" | (strada $=$ road) |
| "partecipazione statale" | "participation by the state" | (stato $=$ state) |
| "politica energetica" | "energy policy" | (energia $=$ energy; |
|  |  | energico $=$ energetic) |

Serbian examples:

| "očev kaput" | "father's coat" | $($ otac $=$ father $)$ |
| :--- | :--- | :--- |
| "mamina maza" | "mother's pet" | (mama $=$ mother) |
| "Marinina prijateljica" | "Marina's friend |  |

(iii) By an inflection of the linked noun, called a case. English only inflects nouns and pronouns for the genitive ("of"):

```
"the house of our son" "my son's house"
"the son of us" "our son"
```

Russian inflects all nouns which are not the subject of a sentence:

| "kniga" | "a/the book" |
| :---: | :---: |
| "chitaite knigu" | "read the book (object)." |
| "soderzhanie moei knigi" | "the contents of my book" <br> [contents my ${ }_{\text {(genitive })}$ book $_{\text {(genitive) }}$ ] |

$$
\begin{array}{ll}
\text { "Sad polon tsvetov." } & \begin{array}{l}
\text { "The garden is full of flowers"" } \\
\text { [Garden full flowers (genitive). }]
\end{array} \\
\text { "Deti begayut po sadu." } & \begin{array}{l}
\text { "The children are running about in the garden." } \\
\text { [Children running in garden } \\
\text { (dative). }
\end{array}
\end{array}
$$

## Relative Pronoun

As we summarised in Chapter 2. (Restrictive Qualifier), a noun or pronoun can be qualified by a sentence, called a relative clause. The qualified noun is linked to a verb or a noun in the relative clause, in a way which distinguishes the relative clause from a predicate. The following compare a relative clause with a predicate sentence of the same meaning:
"the report which arrived yesterday";
"The report arrived yesterday."
"the report which I wrote yesterday";
"The report was written by me yesterday."
Alternative versions of the second relative construction are: "the report I wrote yesterday" (English) and *"the report which I wrote it yesterday" (Malay/Indonesian, Arabic, and other languages).

If the qualified noun is the subject or direct object of the verb of the relative clause, no link word may be needed. In other circumstances, the verb or noun of the relative clause may be connected to the qualified noun by a link word, which is expressed through the relative pronoun. Additional linking relative pronouns may also be used, for example "whose" ("of whom"):
"the subject on which I wrote the report"/"the subject that I wrote the report on";
"the man whose name I have assumed";
"the train in which she was travelling"/"the train she was travelling in";
"the man by whose actions the crisis was caused".
An alternative construction of the last sentence, used by many languages, would be: *"the man who the actions by him caused the crisis".

It will be seen that in principle, a relative clause can possess any acceptable sentence construction and the qualified noun can be linked to it in any way. A relative clause is a very flexible means of qualifying a noun.

There are at least four ways in which a relative clause can be distinguished from a predicate:
(i) The relative clause has no object where an object would be expected. This might be the object of a verb or a preposition.
(ii) A pronoun, called a relative pronoun, expresses the link with the relative clause and is identified with the qualified noun. Examples are "who", "which", and "that".
(iii) The verb of the relative clause is formulated as a participle (a verbal adjective):

Turkish: "üyesi bulunduğum bir cemiyet" "a society of which I am a member"
[member-its being-my a society]
"kongresi yarın başlıyacak olan cemiyet"
"the society whose congress will start tomorrow"
[congress-its tomorrow about-to-start being society]
"içinden çıktığımız ev" "the house from the inside of which we emerged"
[inside-its-from emerged-having-we house].
Inuit: "pana savissaa ipissuq" "a sword whose blade is sharp"
[sword blade-its sharp-being]
"angut isirvigisara" "the man to whom I went in" [man enter-beingat-my]

```
"aappariit irnirat sanasuq""a couple whose son is a builder"
    [couple son-their builder]
```

(iv) The relative clause fails on some other way to conform to expectations of a predicate. In Tagalog, every sentence contains only one definite noun, which may be marked with "ang" ("the"). If this marker is absent, the expression is a relative clause:
"Iyon ang babaeng magluluto ng isda." "That's the woman who will cook some fish."
[That the woman-who will-cook some fish.]
"Iyon ang isdang iluluto ng babae." "That's the fish that the woman will cook."
[That the fish-which will-be cooked a woman.] ${ }^{14}$
In Maori, in an unstressed sentence the verb precedes its subject. If the verb follows the subject, it is a relative clause:
"E waiata ana ngā kōtiro." "The girls are singing." [Are singing the girls.]
"ngā kōtiro e waiata ana""the girls [who] are singing"
"Nā ngā kōtiro e waiata ana." "It is the girls [who] are singing."
No relative pronoun is used in Maori to refer to subjects or objects. The relative pronoun "ai" is used for other elements:
"Ko tēnā te wā i huihui ai ngā whanaunga katoa."
"That was the occasion when all the relatives gathered."
[It-was that the occasion did gather then the relatives all.] ${ }^{15}$
Use of a relative pronoun generally occurs in right-branching languages:
Italian: "la ragazza che è arrivata" "the girl who has arrived"
"la ragazza a cui scrivo" "the girl to whom I am writing"
"il pittore, i cui quadri sono famosi" "the painter whose pictures are famous"
Arabic: "jalasa 1-rajulu llāðī yataḥadda日u" "The man who is talking sat."
[Sat the-man the-one he-is-talking.]
Indonesian:
"Beberapa orang yang dikirimi surat belum menjawab."
"Several of the people who were sent letters have not yet replied."
[Several people who were-sent letter not-yet reply.]
Swahili: "Nimeijibu barua iliyokuja jana."
"I have answered the letter which came yesterday."
[I-have-it-answered letter it-did-which-come yesterday.]
"vitu alivyokuja navyo""the things which he came with"
[things he-did-which-come with-which]
Chapter 2. (Pronoun) also gives examples of a definite and indefinite pronoun qualified by a relative clause. The above remarks are also true of that construction:
"what John is reading"/"what I wrote the report on"
"something which is not right"/"someone for whom I work".
In some right-branching languages, the relative pronoun does not take a link word. The link word is included in the relative clause. This construction is also illustrated in the asterisked English example above:

Irish: "an tigh go rabhas ann" "the house in which I was" [the house that I-was in-it]

[^8]```
Arabic: "al-muqābalatu llatī hadạahā"" "the meeting which he attended"
    [the-meeting the-one-which he-attended-it]
    "qadrun lā ną̧īra lahu" "an amount which has no equal" [amount no equal to-it]
Persian: "mardhai ke ketabhara be anha dade budid raftand"
    "The men to whom you gave the books went."
    [Men-the who books \({ }_{\text {(object) }}\) to them given you-were went.]
Malay: "sopir yang namanya Ali" "the driver whose name is Ali"
        [driver who name-his Ali]
```

In left-branching languages, the distinction from a predicate arises because the relative clause precedes the noun while the predicate follows it. Those languages may often not possess a relative pronoun. Links, if present, may be mentioned in the relative clause, or inferred:

Chinese: "gémìng kāishĭ de difang "the place where the revolution started" [revolution started-of place]
"wŏ yào măi tāde fángzi de nàge nü"de" "the woman whose house I want to buy"
[I want buy her house of that woman-of]
Japanese:
"Nihongo o oshiete iru sensei wa Kobowashi-sensei desu."
"The teacher who is teaching Japanese is Professor Kobowashi."
[Japanese ${ }_{\text {(object) }}$ teaching-is teacher ${ }_{\text {(topic) }}$ Kobowashi-professor is.]
"Watashi ga nihongo o oshiete ageta Buraun-san wa yoku benkyō suru."
"Mr Brown, to whom I taught Japanese, studies well."
[ $\mathrm{I}_{\text {(subject) }}$ Japanese ${ }_{\text {(object) }}$ teaching gave Brown-Mr $\mathrm{H}_{\text {(topic) }}$ well studies.]
Further examples are given in Chapter 2. (Restrictive Qualifier).

## Word Order

If a hearer is clearly to understand a sentence and its purpose in a discourse, it must differentiate between the topic and comment, focus, enquiry, or hypothesis, and the subject, verb, and object. It must also distinguish the qualifier and predicate of a noun. These distinctions are expressed by means of particles, links, and rules of word order, and in practice languages employ all of these methods. So that the distinctions are immediately clear, the methods must be used consistently, and rules of word order in a language are therefore generally fairly rigid.

The rules of word order vary considerably between languages. There have been many detailed and thorough academic studies of these variances and of the correlations between them (see Dryer 2002, which covers 652 languages in 196 genera). The following remarks are concerned with a slightly different question, namely why these differences exist, starting with our original topic-comment analysis of sentence structure. Our examples are limited to the languages which are used as examples in this work. We examine four of the principal purpose of word order:
(i) To distinguish between restrictive qualifiers, which identify a noun, and predicates and nonrestrictive qualifiers, which supply new information about it.

The word order of restrictive qualifiers has already been mentioned in Chapter 2. A distinction can be made between those languages which locate qualifiers exclusively in front of the noun (left-branching):

Basque: "denda honetan erosi duzun liburua" "the book which you have bought in this shop" [shop this-in buy you-have-which book];

Chinese:"xīn lái de mìshū" "the secretary who has just come" [new come of secretary];
those which locate them exclusively after the noun (right-branching):
Welsh: "y faner ddu" "the black banner" [the banner black]
Arabic: "iḥtimālātu l-fašali l-masmūḥu bihā" "the permitted possibilities of failure" [possibilities the-failure the-permitted to it]

Persian: "sandaliye nou" "the new chair" [chair-of new]
Indonesian:
"rumah besar" "a big house" [house big]
"orang yang sudah cape" "people who [are] already tired";
and those which locate single-word qualifiers in front of the noun and relative clauses and longer qualifiers after the noun, such as English or Russian:

Russian: "podlinnyi document" "[the] original document"
"dom, v kotorom on zhivët" "[the] house in which he lives"
Hungarian:
"egy szép fa" "a beautiful tree"
"a könyv, amit küldtél nekem" "the book that you sent me"
Romance languages (French, Spanish, Italian, etc) place most qualifiers after the noun, but short non-restrictive qualifiers before the noun:
"une sauce piquante" "a piquant sauce"; "une belle maison" "a beautiful house".
Some languages place restrictive qualifiers in front of the noun and non-restrictive qualifiers after it:

German:"der am Wegrand stehende Baum" [the by-the wayside standing tree]
(restrictive)
"der Baum, der am Wegrand steht" [the tree, which by-the wayside stands]
(non-restrictive)
Hindi: "jis ādmī se maĩ bāt kar rahā thā, vah kal bhārat jāegā"
"The man I was talking to is going to India tomorrow."
[Which man-to I talking was, he tomorrow India is-going.]
(restrictive)
"mai~ ek ādmī se bāt kar rahā thā jo kal bhārat jāegā"
"I was talking to a man who is going to India tomorrow."
[I a man-to talking was who tomorrow India is-going.]
(non-restrictive)
If we examine the qualifier itself, a distinction exists between languages which place link words, locatives, and directives in front of the noun (prepositions):

| Italian: | "nel giardino" | "in the garden" |
| :---: | :---: | :---: |
| Russian: | "na stole" | "on [the] table" |
| Greek: | " $\alpha \pi$ о́ to ¢ои́pvo" | "out of the oven" |
| Welsh: | "yn y cyfarfod" | "at the meeting" |
| Arabic: | "taḥta 1-maq̧adi" | "under the seat" |
| Persian: | "be otaq" | "into [the] room" |
| Indonesian: | "dari kota" | "from [the] city" |
| Chinese: | "dào fàngguăn" | "to [a] restaurant" |
| Swahili: | "katika karatasi" | "on paper"; |

and those which place them after the noun (postpositions) (there are a few prepositions in Finnish):

| Basque: | "elizaren ondoan" |
| :--- | :--- |
|  |  |
| Finnish: | "talon eteen" |

The spirit behind the postpositional construction can be illustrated in English if a participle is used instead of a preposition:
"a cat-containing bag"; "a white coat-wearing lady".
This word order is generally sustained if the same phrase is used as a predicate. In English, we can have an "in-house discussion" or "makeshift policy"; if English used postpositions, these expressions would be "*house-in discussion" and "*shift-make policy".

In the languages we have used as examples, the correlation between the position of restrictive qualifiers and the use of prepositions or postpositions is:

| Qualifiers $\rightarrow$ | Before noun | After noun | Both before and after |
| :--- | :--- | :--- | :--- |
| Prepositions | Chinese, German | Romance languages, Welsh, Irish, <br> Arabic, Persian, Indonesian, Swahili | English, Greek, <br> Russian |
| Postpositions | Basque, Turkish, <br> Hindi, Japanese | Inuit | Finnish, Hungarian |

(ii) To distinguish between a subject, verb, and object.

Languages are often classified according to the position of the verb in relation to the subject and object. The main divisions are subject-verb-object (SVO), subject-object-verb (SOV), and verb-subject-object (VSO), although some languages such as German employ more than one sequence.

French and other Romance languages are SVO, but pronoun objects are generally placed before the noun:

French:"Je prêterai les livres à mon ami." "I shall lend the books to my friend."
"Je lui prêterai les livres." "I shall lend him the books."
[I to-him shall-lend the books.]
The following are examples of SOV languages:
Basque: "Hau Donostiako autobusa da." "This is the San Sebastian bus." [This San Sebastian-of bus-the is.]

Persian: "iran mivehaye xub darad" "Iran has good fruit." [Iran fruit-of good has.]
Turkish: "Karakol, evimizden uzak değildir." "The police-station is not far from our house." [Police-station, house-our-from far is-not.]

Hindi: "vah uccatar adhyayan ke lie āksfarḍ cale gae"
"He went to Oxford for advanced study."
[He advanced study-for Oxford went.]

Japanese:
"Maeda-san wa kinō kuruma o katta." "Mr Maeda bought a car yesterday."
[Maeda-Mr ${ }_{\text {(topic) }}$ yesterday car (object) bought.]
Inuit: "Akkamma aataaq aallaavaa." "My uncle shot the harp seal." [Uncle-my (agent) harpseal shoot-he-it.] $^{\text {( }}$

Welsh, Irish, Arabic, and Maori are VSO languages:
Welsh: "Y mae'r bachgen yn darllen llyfr yn y tŷ wrth y tân."
"The boy is reading a book in the house by the fire."
[Is the boy in reading book in the house by the fire.]
"Cerddai ef dros y mynydd yn yr haf."
"He used to walk over the mountain in summer."
[Used-to-walk he over the mountain in the summer.]
Irish: "Òlann an garsùn an bainne." "The boy drinks the milk." [Drinks the boy the milk.]
"Díolfaidh Máire an t-im sa tsráidbhaile." "Mary will sell the butter in the village."
[Will-sell Mary the butter in-the village.]
Arabic: "yaltamisu l-luyawiyyūna tafsīran" "The linguists are seeking an explanation." [Are-seeking the-linguists explanation.]

Maori: "E tuhituhi ana a Maria i te ripoata." "Maria is writing the report."
[Is-writing the Maria (object) the report.]
"Me karanga atu koe ki a ia." "You had better call to him."
[Ought call away you to the him.] ${ }^{16}$
The correlation between the location of restrictive qualifiers and the location of the verb is:

| Qualifiers $\rightarrow$ | Before noun | After noun | Both before and after |
| :--- | :--- | :--- | :--- |
| SVO | Chinese, <br> German (main clause) | Romance languages, <br> Indonesian, Swahili | English, Finnish, <br> Hungarian, Greek, <br> Russian |
| SOV | Turkish, Hindi, Japanese, <br> Basque, German <br> (subordinate clause) | Persian, Inuit |  |
| VSO |  | Welsh, Irish, Arabic, <br> Maori |  |

Past studies of word order have suggested that there exists a correlation between:

- Languages which post-qualify the noun, use prepositions, and are SVO, such as the Romance languages, Indonesian, and Swahili. These are called "right-branching" and are held to follow the principle "qualifier follows qualified".
- Languages which pre-qualify the noun, use postpositions, and are SOV, such as Turkish, Hindi, and Japanese. These are called "left-branching" and are held to follow the principle "qualifier precedes qualified".

This traditional analysis uses the terms "left-branching" and "right-branching" in a wider sense than we have suggested. Although it has some statistical validity ${ }^{17}$, it is not valid as a firm rule of language design, for the following reasons:

[^9](a) There are major languages which do not conform to it, such as Chinese (which prequalifies the noun but is SVO), Persian and Inuit (which post-qualify the noun but are SOV), and Finnish and Hungarian (which are SVO but mainly use postpositions). Further review would identify many others.
(b) There are major SVO languages (English, Greek, Russian, etc) which do not follow either of the strict "qualifier-qualified" rules.
(c) It cannot be said that a verb is qualified by its object. A verb specifies the action or state of its subject. An object is a noun or phrase which is connected to the subject by that action or state. The word or expression which qualifies a verb is an adverbial, but not an object.
(d) There is no consistency between the rules for a subject-verb-object sentence in which there is not an element in focus and one in which there is. This is discussed under (iii) below.
(e) There is no consistency between the rules for a subject-verb-object sentence and those for an existential sentence. This is discussed under (iv) below.

A few further examples illustrate the first of these points. Japanese is an SOV language which is left-branching and which uses postpositions:

Japanese:
"Sono tera wa Kyōto ni aru." "That temple is in Kyoto." [That temple ${ }_{\text {(topic) }}$ Kyoto-in there-is.]

Persian is an SOV language which is right-branching and which uses prepositions:
"SaPadi az šo?araye ma?rufe iran ast." "Sa'adi is among the famous poets of Iran." [Sa'adi among poets-of famous-of Iran is.]

Inuit is an SOV language which is right-branching and which uses postpositions:
"Angummut ippassaq naapitannut tunniuppara."
"I gave it to the man I met yesterday." [Man-to yesterday met-my-to give-I-him.]
Finnish is a SVO language which mainly uses postpositions. It locates postpositional qualifiers before the element qualified:
"Aurinko paistaa ikkunan läpi." "The sun shines through the window." [Sun shines window-through.]
"Tunnin jälkeen menen kapakkaan." "After the lesson I'm going to the pub."
[Lesson-after go-I pub-to.]
Hungarian only uses postpositions. The standard word order of the dynamic sentence is "topic-focus-verb-comment", where "focus" is the principal new element in the comment and "comment" is all other elements. "Focus" (marked ${ }_{(f)}$ in these examples) can mean an aspect particle, adverbial, negative particle, interrogative word, or (in the absence of any of these) an object:
"Az orvos megvizsgálja a beteget." "The doctor will examine the patient." [The doctor ${ }_{\text {(perfective) (f) }}$ examines the patient.]
"Nyolc óra körül vacsorázunk." "We eat dinner around eight o'clock."
[Eight hour-around ${ }_{(f)}$ we-have-dinner.]
"Ki olvas könyvet?" "Who is reading a book?" [Who (f) reads book?]
"Dénes nem olvas könyvet." "Denes is not reading a book."
[Denes not ${ }_{(\mathrm{f})}$ reads book.]
"Dénes könyvet olvas a nappaliban." "Denes is reading a book in the living room."
[Denes book (f) reads the living-room-in.]

In stative Hungarian sentences, either the topic or the comment may occur first:

$$
\begin{aligned}
& \text { "A fiúk magasak." "The boys [are] tall." } \\
& \text { "Gyulának két húga van." "Gyula has two younger sisters." } \\
& \text { [To-Gyula two younger-sister-her are.] } \\
& \text { "Drága volt a szemüveg." "The glasses were expensive." } \\
& \text { "Láza van a lányomnak." "My daughter has a fever.".] } \\
& \text { [Fever-her is the daughter-my-to.] }
\end{aligned}
$$

(iii) To place an element in focus.

Chapter 1. referred to focus as an exceptional sentence structure, in which one item is selected as the sole piece of new information, often in contrast to an alternative. We saw that it is indicated either by a particle or by a rule of word order. If word order is used, three different methods exist, which vary between languages: the focus is placed at the end of the sentence, at the start of the sentence, or just before the verb. In the following examples, the word in focus is identified with ${ }_{(\mathrm{f}}$, and unstressed sentences are included for comparison:

At the end of the sentence:
\(\left.$$
\begin{array}{ll}\text { German: "Die Studenten unterrichten zu diesen Zeiten die Kinder." } \\
\text { "The students teach the children at these times." } \\
\text { [The students teach at these times the children.] } \\
\text { "Zu diesen Zeiten unterrichten die Kinder die Studenten." } \\
\text { "It is the students who teach the children at these times." } \\
\text { [At these times teach the children the students (f).] }\end{array}
$$ \quad \begin{array}{l}SVO <br>

(unstressed)\end{array}\right]\)| (focus) |
| :--- |

Turkish and Japanese follow a strict verb-final rule. The element in focus is placed at the last position possible before the verb. These languages therefore also qualify among those placing it just before the verb.

At the start of the sentence:
$\begin{aligned} \text { Welsh: } & \text { "Collodd y dyn ei fag ar y trên ddoe." } \\ & \text { "The man lost his bag on the train yesterday." } \\ & {[\text { Lost the man his bag on the train yesterday.] }}\end{aligned}$

|  | "Y dyn a gollodd ei fag ar y trên ddoe." | SV |
| :---: | :---: | :---: |
|  | "It was the man who lost his bag on the train yesterday." | (focus) |
|  | [The man ${ }_{(f)}$ who lost his bag on the train yesterday.] |  |
|  | "Ei fag a gollodd y dyn ar y trên ddoe." | OVS |
|  | "It was his bag that the man lost on the train yesterday." [His bag (f) which lost the man on the train yesterday.] | (focus) |
| Irish: | "Is inné a tháinig sé." "It was yesterday ${ }_{(\mathrm{f})}$ that he came." <br> [Is yesterday that came he.] | OVS <br> (focus) |
|  | "Is é a tháinig inné." "It was he ${ }_{(f)}$ who came yesterday." [Is he who came yesterday.] | SVO <br> (focus) |
| Arabic: | "yukallifu 1-dawlata mabāliza ḍaxmatan" | VSO |
|  | "It costs the state huge amounts." | (unstressed) |
|  | "qad balaya l-hayPata kalāmun kaөīrun hawla l-mawḍūfi" | VOS |
|  | "Much talk about the subject reached the board." | (unstressed) |
|  | [Reached the-board much talk about the-subject.] |  |
|  | "§iḍā hiya ravibat fî ðālika" | SVO |
|  | "if [it is] she ${ }_{(f)}$ who desires that" | (focus) |
|  | "kanāt san¢ā?u hiya hājisahu 1-jadīda" | VOS |
|  | "It was San'a that was his new concern." | (focus) |
|  | [Was San ${ }_{(1)}{ }_{\text {f }}$ it concern-his the-new.] |  |
| Maori: | "I haere rātou ki te hui." "They went to the gathering." [Did go they to the gathering.] | $\begin{aligned} & \text { VSO } \\ & \text { (unstressed) } \end{aligned}$ |
|  | "Ko rātou i haere ki te hui." | SVO |
|  | "It was they (f) ${ }_{\text {who went to the gathering., }}{ }^{18}$ | (focus) |
| English: "I visited my friend on Tuesday.""It was on Tuesday (f) |  | $\begin{aligned} & \text { SVO } \\ & \text { (unstressed) } \end{aligned}$ |
|  |  | OSV <br> (focus) |
| Inuit: | "Pitaamuna arviq tuqukkaa." | SVO |
|  | "It was Pitaaq (f) who killed the whale." | (focus) |
|  | [Pitaaq-(agent)-that whale killing-he-it.] |  |
|  | "Arviquna Pitaap tuqutaa." | SVO |
|  | "It is the whale ${ }_{(\mathrm{f})}$ killed by Pitaaq." | (focus) |
|  | [Whale-that Pitaaq (agent) killed-his.] |  |
| In Welsh, Irish, Arabic, Maori, the verb starts the sentence when no element is in focus, but an element in focus is put in front of the verb. These languages therefore also qualify among those placing it just before the verb. |  |  |
| Basque and Hungarian generally places the principal new element in the comment before the verb. This may require a change in the unstressed word order if the new element is in focus: |  |  |
| Basque: | "Aste Santuan etxera joango da." | SOV |
|  | "He's going home at Easter." | (unstressed) |
|  | [Easter-at home-to will-go he-is.] |  |
|  | "Aste Santuan joango da etxera." | SVO |
|  | "Easter is when he is going home." | (focus) |
|  | [Easter at (f) will-go he-is home-to.] |  |
| Hungaria |  |  |

[^10]| "Reggel a gyerekek a kertben játszanak." | SOV |
| :--- | :--- |
| "In the morning the childern play in the yard." | (unstressed) |
| [Morning the children the yard-in ${ }_{(f)}$ play.] |  |
| "A gyerekek reggel játszanak a kertben." | SVO |
| "It is in the morning that the children play in the yard." | (focus) |
| [The children morning ${ }_{(f)}$ play the yard-in.] |  |

In Chapter 1. (Focus) includes also examples in which the element in focus is marked with a particle. The correlation between the word order of an unstressed sentence and the position of an element in focus is:

| Focus element $\downarrow$ | SVO | SOV | VSO |
| :--- | :--- | :--- | :--- |
| Before the verb | Hungarian | Basque, Turkish, <br> Japanese | Welsh, Irish, Arabic, <br> Maori |
| At sentence end | Romance languages, German, <br> Russian | Turkish, Japanese |  |
| At sentence start | English, Greek, Swahili | Inuit | Welsh, Irish, Arabic, <br> Maori |
| Identified with a <br> particle | Finnish, Indonesian, <br> Chinese | Hindi |  |

The most consistent pattern is that VSO languages generally place an element in focus before the verb. The significance of this seems to be clear. These languages are structured so that the principal element of the comment comes first, followed by the topic, followed by the rest of the comment. For a sentence without a focus, the principal element of the comment is the verb. When there is a focus, it is the element in focus.

SVO and SOV languages adopt three different policies:
(a) The element in focus is placed in an unusual position with respect to the verb, either at the end of the sentence or immediately before the verb.
(b) The sentence is clefted. The element in focus is isolated at the start of the sentence, which then becomes "focus-topic". In effect, this is the same policy as that of the VSO languages, and may be combined with policy (i).
(c) The word order is not altered, and the focus is marked with a particle.
(iv) To identify the subject of an existential sentence.

Existential sentences consist of three elements: the object whose existence is being asserted or denied ( O ); the existential verb (positive or negative) ( V ); and the factual background to the statement or circumstance (C). The following VOC languages usually also use CVO forms:

VOC: English: "There is a fly in the ointment."
French:"Il y a des plumes sur la table." "There are pens on the table."
Spanish: "Hay un gato en el tejado" "There is a cat on the roof."
German:"Es gibt Leute, die Spechen leicht lernen."
"There are people who learn languages easily."
[It gives people, who languages easily learn.]
Welsh: "Y mae llyfr ar y bwrdd." "[There] is [a] book on the table.
Irish: "Bíonn aonach sa bhaile mhór uair sa mhí." "[There] is [a] fair in the town once a month."
Arabic: "Өammata waqtun fāṣilun bayna l-wuṣūli wa-1-Riqlāfi"
"There is a time separating arrival and departure."
[There time separating between the-arrival and the-departure.]

Swahili: "Patakuwa na maji mengi hapa." "There will be much water here." [Will-be with water much there.]

CVO: Basque: "Ondoan badago parke eder bat." "Next to it there is a lovely park." [Nearby there-is park beautiful a.]

German:"In der Ecke steht ein Stuhl." "There is a chair in the corner."
[In the corner stands a chair.]
Hungarian:
"Régi könyvek vannak a szekrényben."
"There are old books in the cupboard."
[Old books there-are the cupboard-in.]
Russian: "Pri gostinitse est' pochta" "There is a post-office in the hotel."
[In hotel there-is post-office]
Malay: "Di seberang sungai ada rumah." "Across the river there is a house."
[Across river there-is house.]
Chinese:"Jìngzi pángbiān yŏu yī pén huār."
"There is a pot of flowers besides the mirror."
[Mirror besides there-is one pot flower.]
COV: Turkish: "köşede bir kahve var" "There is a café on the corner." [Corner-at a café there-is.]
Hindi: "Mez par pustak hai." "There is a book on the table." [Table-on book is.]
Japanese:
"Kono machi ni wa daigaku ga mittsu arimasu."
"There are three universities in this town."
[This town-in ${ }_{\text {(topic) }}$ universities ${ }_{(\text {subject })}$ three there-are.]
Inuit: "Nutaamik umiarsuarnut talittarviqarpuq."
"There is a new harbour for ships."
[New-with ships-for harbour-there-is.]
OVC: Finnish: "Ruokaa on pöydällä." "There is some food on the table." [Food (partitive) is table-on.]

The only evident correlation between the word order in these existential sentences and sentences with a subject, verb, and object is that in SOV languages, the existential order is background-object-verb.

## 5. Aspect, Tense, and Viewpoint

## Summary

The occurrence of a verb is the period of time over which it is operative. The occurrence of every verb is related to the occurrence of every other verb in a dialogue or narrative by its aspect. There are five aspects: general, stative, imperfective, perfective, and prospective. As described in Chapter 2., a general verb is one whose occurrence is not identified. A stative verb is one describing an unchanging state or condition.

The remaining aspects relate to a dynamic verb, which describes an action or process of change. An imperfective verb is one whose action is not completed. A perfective verb is a one which describes a completed action. An aorist verb is a perfective verb whose action does not have a continuing effect. A prospective verb is one whose action is about to occur.

Tense is a feature of a verb which describes the degree of detachment of the speaker of the sentence from its occurrence, whether past, present, or future. The speaker has a viewpoint which again is past, present, or future. Tense may be combined with a aspect but is distinct from it. An action in the present cannot be perfective. Languages generally express aspect, but not all languages express tense.

Verbs related by aspect include those in sentences connected by a conjunction, those in a relative clause, those represented by a gerund, and those represented by a participle. A conjunction and a gerund can express the concepts of condition, concession, cause, and purpose. A gerund is a verb whose subject is the same as that of another verb, and which is represented by a non-restrictive qualifier of the subject of that verb. The occurrence of a gerund is wider than that of the verb, and it expresses the state or condition of the subject at the time that the verb occurs.

A participle is an attribute formed from a verb, which expresses its aspect. It may be restrictive or non-restrictive. It may qualify any word in the sentence, relating it to the aspect of the verb that it represents. It may take adverbials, objects, or complements which are appropriate to its verb.

A participle is general, stative, recipient, possessive, imperfective, perfective, or prospective. A perfective participle expresses the state resulting from the action of the verb. Since a general participle refers to an activity without a specific occurrence, it is stative. General participles are of wide use, and may refer to an activity which the language expresses by means of a verbal noun or a role rather than a verb. In a possession relationship, a recipient participle describes the state of possessing and a possessive participle describes the state of being possessed.

Some languages do not possess a participle, and express its function by a relative clause. Other languages use a participle instead of a relative clause. Languages without other types of participle may nevertheless possess a general participle. Some languages with participles may use them as predicates, to express verbal aspect in conjunction with an auxiliary verb which expresses tense. Other languages do not permit participles to be predicates, and express aspect by other means.

## Terms Defined or Introduced

Occurrence, aspect, dynamic, stative, perfective, imperfective, aorist, prospective, tense, gerund, participle.

## Aspect

In Chapter 1., we described language as a sequence of sentences in a dialogue or narrative, which introduces and identifies concepts in the world, whether persons, things, actions, or states, and provides further information about them. This further information in turn introduces and identifies further
concepts, and so on. In Chapter 2., the distinction was made between an action or state which is general, that is for which no particular occurrence is identified, and a specific occurrence. This is expressed by a general and a specific verb:

$$
\begin{array}{ll}
\text { "John was at work by } 9.00 \text { each day." } & \text { (general) } \\
\text { "John was hungry that morning." } & \text { (specific) }
\end{array}
$$

Chapter 2. also made a distinction between a state or condition that the subject is in and an action, which describes an action or process which the subject undergoes. This is expressed by a stative and a dynamic verb:
"John was hungry that morning."
"John ate an apple."
(stative)
(dynamic)

It is evident that the three sentences can be connected, in that the specific occurrence takes place during the general occurrence, and the occurrence of the dynamic verb takes place during that of a stative one:
"John was at work by 9.00 each day. He was hungry that morning, so he ate an apple."
An additional distinction applies in most languages to a dynamic verb, between an action which is continuing and not completed (imperfective) and an action which is completed (perfective):
"John was eating the apple." (imperfective)
"John read the newspaper." (perfective)
If these two sentences are connected, we have:
"While John was eating his apple, he read the newspaper."
This can result in a cascade of sentences, each of which has an occurrence within that of the previous one:
"John was at work by 9.00 each day. He was hungry that morning, so he ate an apple. While eating the apple, he read the newspaper."

This relation of the occurrence of one verb to another is called aspect. Aspect is generally used in grammars to mean the relation between imperfective and perfective dynamic verbs. However, the above remarks suggest that the term can be widened to refer also to the relation between general and specific verbs, and between stative and dynamic verbs. The aspect of a sentence places its occurrence in context of the previous sentences of the narrative or dialogue. The imperfective aspect is often called conventionally the "imperfect tense".

The general form of the verb in the above example was stative: "John likes fruit". As mentioned in Chapter 2., a general form of the dynamic verb is also possible:
"John used to eat an apple every morning. / John eats an apple every morning. While eating one, he read the newspaper."

The perfective aspect of verbs can have two forms. In the above examples, the action is completed and has no subsequent effect: "John ate an apple." However, English has a perfective form (called conventionally the "perfect tense") which results in a state, during which a further action may occur:
"John has eaten the apple. He has gone back to work."
"John had eaten the apple. He went back to work."
"Having eaten the apple, John went back/has gone back to work."
The distinction between these two perfective forms exists in some languages but not in others. Where it exists, we can call the perfective form without a resulting state the aorist and that with a resulting
state the perfective. In languages without the distinction, both forms are perfective. The term "aorist" is borrowed from its use in Ancient Greek.

By its nature, the imperfective/perfective distinction applies only to dynamic verbs. An imperfective form of a stative verb does not arise:
*"Louis XIV was being king of France."
*"He was knowing who his friends are."
*"She was owning three motor cars."
Where the subject of two sentences is the same, aspect can be represented by a device called a gerund, discussed below. Aspect applies equally if the subjects are different:
"Mary was writing a letter when John came in."
"The weather having improved, Mary went out."
The sentences do not need to be consecutive, or to be connected by a conjunction such as "so that" or "while". Nevertheless, the aspect of a sentence does imply reference to the aspect of a previous or following sentence. "John was eating an apple" suggests that some event will take place while he eats it. "John has read the newspaper" suggests that some event will occur in consequence of his reading of it.

The perfective aspect can in most languages be refined further by implying that the action is only just completed:
"Mary had just written the letter when John came in."
The imperfective aspect may also be used to imply, not that action is or was going on, but that it is or was about to start. We can call this variation of the imperfective the prospective aspect. It also occurs in many languages:
"Mary was about to write the letter when John came in."
Some languages, for example in Western Europe, use the perfective participle and an auxiliary verb to express the perfective aspect. In French, if the verb is transitive, and its object is in front of it, the participle agrees with the object. If the verb is intransitive, the participle agrees with the subject:

```
"Quels livres a-t-il apportés?" "What books (masculine plural) has he brought (masculine plural)? ?"
"Les dames sont arrivées." "The ladies have arrived."
    [The ladies (feminine plural) are arrived \(_{\text {(feminine plural). }}\).]
```

The perfective participle expresses the state after action of the verb. As Chapters 6. and 7. describe, it applies to the object of a transitive verb and the subject of an intransitive verb. The origin of these sentences is therefore stative, but they have been adapted to refer to the process which gives rise to the state, which we call perfective. For a transitive sentence, the agent or instrument is also expressed.

A similar construction occurs in transitive sentences in Hindi. In a perfective sentence, the verb is a participle which agrees with the object, and the agent is marked with the ergative postposition "-ne". In an imperfective sentence, the verb is a participle which agrees with the subject, and the agent has no postposition. The imperfective aspect is expressed by the auxiliary "rahnā" ("remain"):

$$
\begin{array}{r}
\text { "usne kitāb likh } \overrightarrow{\mathrm{r}} " \text { "He wrote the book." }[\text { He-by book (feminine) } \text { wrote (feminine). }] \\
\text { "vah kitāb likh rahā thā" "He was writing the book." } \\
{\left[\mathrm{He}_{\text {(masculine) }} \text { book write remaining (masculine) } \text { was. }\right]}
\end{array}
$$

The need to express the relative occurrence of sentences is so important to clear communication that most languages possess aspect. Irish constructs aspect in a similar way to English. Aorist aspects are expressed by a verb, others by an auxiliary verb and verbal noun:
"D'fhiafraíos de cad a bhí uaidh." "I asked him what he wanted."
［I－asked of what that was from－him．］
＂Díolfad an bhó dhubh amàireach．＂＂I will sell the black cow tomorrow．＂
［I－will－sell the cow black tomorrow．］
＂Tá sé ag gearradh adhmaid．＂＂He is cutting wood．＂［Is he at cutting of－wood．］
＂Tá an leabhar caillte ag an ngarsún．＂＂The boy has lost the book．＂
［Is the book lost at the boy．］
＂Táim tar éis teacht isteach．＂＂I have just come in．＂［I－am after coming in．］
＂Táid ina luí ar an urlár．＂＂They are lying on the floor．＂［They－are in－its lying on the floor．］

Indonesian also uses auxiliary verbs，including＂sedang＂（continuing action），＂sudah＂（completed action），＂masih＂（＂still＂），and＂baru＂（＂just＂）：

```
"Ketika saya sampai di rumahnya Tom sedang makan." ("sedang")
"When I arrived at his house Tom was eating."
[When I arrive at house-his Tom was eat.]
"Ketika saya sampai di rumahnya Tom sudah bangun."
("sudah")
"When I arrived at his house Tom had already got up."
[When I arrive at house-his Tom already get-up.]
"Dia masih makan." "She is still eating." ("masih")
"Dia baru tiba." "He has just arrived." ("baru")
```

Other languages such as Russian do not use auxiliaries to express aspect，but have two forms for every dynamic verb，an imperfective and perfective：

```
"Eto sluchaetsya ochen' chasto." "It happens (imperfective) very often."
(verb = "sluchat'sya")
"Eto sluchilos' na proshloi nedele." "It happened (perfective) last week." (verb = "sluchit'sya")
"On vsegda govoril to, chto dumal." (verb = "dumat")
"He always said what he thought (imperfective)."
"Ya podumayu ob etom." "I shall-think (perfective) about it." (verb = "podumat"")
```

Russian verbs of motion provide a further distinction between general and specific verbs：

```
"On khodil tuda kazhdyi den'." "He went (genera) there every day." (verb = "khodit'")
"Kuda vy idëte?""Where are you going (imperfective)?") (verb = "idti")
"Knigi nado nosit' v portfele." "One should carry books in a briefcase."
```

                                    [Books it-is-necessary to-carry \({ }_{\text {(general) }}\) in briefcase.]
                                    (verb = "nosit"")
    ＂Ya nesu eti knigi v biblioteku．＂＂I am－taking（imperfective） these books to the library．＂
（verb＝＂nesti＂）
Every verb in Arabic possesses a perfective and imperfective form，which are conjugated differently：

> "§araftuhu hạafizan li-kalimatihi" "I knew he was someone who kept his word."
> [I-knew-him ${ }_{\text {(perfective) }}$ keeper of word-his.]
> "PaЯrifu ka日īran mina l-rijāli yubą日irūna l-Ramwāla"
> "I know many men who squander money."
> [I-know (imperfective) many of the-men squander (imperfective) the-money.]

The Arabic perfective with＂qad＂forms the aorist：

```
"qad nāqaša l-majlisu fadadan mina l-mašārīii"
"The Parliament discussed a number of plans."
[Discussed the-Parliament number of the-plans.]
```

The Hungarian verb which is not marked for aspect is imperfective．The aorist is expressed by a prefix，for example＂meg－＂：
＂Anna tegnap csinálta a házi feladatát．＂＂Anna was doing her homework yesterday．＂ ［Anna yesterday was－doing the homework－her．］
"Anna tegnap megcsinálta a házi feladatát." "Anna completed her homework yesterday." [Anna yesterday did the homework-her.]

The "meg-" formation also serves for the perfective. However, spoken Hungarian has also developed a construction with the verb "van" ("be") and the gerund, which expresses the perfective. The gerund (see below) is here translated by the English "-ing":
"A kenyér meg van sütve." "The bread is baked." [The bread ${ }_{\text {(perfective) }}$ is baking.]
"Az üzlet zárva van." "The door is closed." [The door closing is.]
Chinese verbs take a marker to indicate aspect, but not tense. Aspect markers include "le" (completed action), "guo" (completed action with a continuing result), "zài" (continuing action), and "zhe" (state resulting from an action):
"Wŏ zuótiān xiàle kè yǐhòu qù kàn diànyĭng."
"Yesterday when I'd finished class, I went to see a film."
[I yesterday finish (aorist) ${ }^{\text {l }}$ lesson after-that go see film.]
"Wŏ hēguo máotáijiŭ." "I have tried Maotai wine." ("guo") [I drink (perfective) Maotai wine.]
"Jiāoxiăng yuètuán zài yănzòu Bèiduōfên de yuèqŭ." ("zài")
"The symphony orchestra is playing Beethoven's music."
[Join-sound music-group ${ }_{\text {(imperfective) }}$ play Beethoven-of music-song.]
"Mèimei chuānzhe yī tiáo bái qúnzi." ("zhe")
"My younger sister is wearing a white skirt."
[Younger-sister wear ${ }_{\text {stative) }}$ one unit white skirt.]
Japanese expresses aspect through a verbal noun which ends in "-te", in combination with the existential verbs "iru" and "aru". As the following section will show, in combination with a dynamic verb, the "-te" form is also a gerund. It expresses the state of the topic prior to or during the action of the following sentence. For a transitive verb, this state is interpreted as continuing action, for an intransitive or passive verb it is the state resulting from an action, and for a stative verb it is the present state:

| "Sasaki-san wa sake o nonde iru." | (transitive/imperfective) |
| :---: | :---: |
| "Mr Sasaki is drinking sake." |  |
| [Sasaki-Mr ${ }_{\text {(topic) }}$ Sake $_{(\text {(object) }}$ drinking there-is.] |  |
| "Bekku-san wa mō ie ni kaette imasu." | (intransitive/perfective) |
| "Mr Beck has already returned home." |  |
| [Beck- $\mathrm{Mr}_{\text {(topic) }}$ already home-to returning there-is.] |  |
| "Watashi wa Suzuki-san o shitte imasu." "I know Miss Suzuki." |  |
| [ $I_{\text {(topic) }}$ Suzuki-Miss ${ }_{\text {(object }}$ knowing there-is.] | (stative/stative) |
| "Mado ga akete aru." "The window has been opened." | (passive/perfective) |
| [Window (subject) ${ }^{\text {opening there-is.] }}$ |  |
| "Mado ga aite iru." "The window is open." | (stative/stative) |
| [Window (subject) being-open there-is.] |  |

The last two sentences use respectively the transitive verb "akeru" ("open") and the attributive verb "aku" ("be open").

Swahili also distinguishes a full range of aspects, using the infixes "li" (past), "me" (perfective), and "ki" (simultaneous action):

| "Nilisoma." | "I did read." |
| :--- | :--- |
| "Nimesoma." | "I have read." |
| "Nilikuwa nikisoma.", | "I was reading." [I-was I-reading.] |
| "Nilikuwa nimesoma." | "I had read." [I-was I-have-read.] |

## Tense

Aspect is used in languages to express the relative occurrences of connected sentences. Tense is used to express the degree of detachment of the speaker from the event described, whether past, present, or future. An action or state in the past cannot be rectified, but its consequences may still be present; an action or state in the present involves the speaker in some way; an action or state in the future is not yet real.

Similarly, tense can be relative to a speaker in the narrative, and can therefore express that speaker's degree of detachment from what is described. If the narrative describes a speaker in the past, the tenses are relative to his/her viewpoint in the past, in contrast to a speaker whose viewpoint is in the present. For a speaker in the future, the tenses are relative to his/her viewpoint in the future. For past or future speakers, a past action may be fully completed (aorist) or still have continuing effect (perfective). Since an aorist action has no continuing effect, it is usually considered to be independent of viewpoint.

The difference between aspect and tense is that aspect expresses the occurrence of the verb in relation to another verb, which may be in another sentence or a relative clause, or (as we shall see) in a participle. Tense expresses the detachment in time of the occurrence from the speaker. For example, "they will depart shortly" is the future tense, and conveys that their departure is imminent in the opinion of the narrator. "They are about to depart" is the prospective aspect, and conveys that their departure is imminent in the context of the narrative.

The verbs of a language may therefore exhibit every combination of aspect, viewpoint, and tense. Few languages do so completely, and they normally use for the purpose at least one auxiliary verb. For many languages, aspect is a more important tool to communicate meaning than tense. Others possess more tense forms than aspects. Some languages have a present and past but no future tense; in others, the future is used to express uncertainty. The following is the combination available in English:

|  | aspect | viewpoint |  | tense (relative to the |
| :--- | :--- | :--- | :--- | :--- |
| viewpoint) |  |  |  |  |

A perfective action from a past viewpoint is sometimes called the "pluperfect tense", and a perfective action from a future viewpoint is sometimes called the "future perfect tense".

The present tense can only be imperfective, since a completed action can only occur in the past or be foreseen in the future. A present perfective or aorist therefore does not arise. The non-imperfective present "John eats fruit" is general. In Russian and other Slavonic languages, the imperfective present is present and the perfective present is future:
"Oni izuchayut russkii yazyk." "They are studying (imperfective) Russian [language]". "My vam pomozhem." "We shall help you." [We you help (perfective).] $^{\text {. }}$

French has only one imperfective verb form, the past imperfective ("was doing"). It possesses a past aorist ("did"), but in spoken language this is now replaced by the present perfective ("have done"). The other verb forms express tense, using perfective and aorist constructions. The aspect in brackets is that of the French construction:

```
"J'avais toujours fini avant midi." "I had always finished before noon."(past perfective)
"Il parlais, pendent que je chantais." "He was talking, while I sang." (past imperfective)
"Ils sont arrivés ce soir." "They arrived this evening."
[They have arrived this evening.] (present perfective)
"J'ai fini mon ouvrage." "I have finished my work." (present perfective)
"Où allez-vous?" "Where are you going?" [Where go you?]" (present aorist)
"Ils viendrons demain." "They will come tomorrow." (future aorist)
"Il aura bientôt fini." "He will soon have done." (future perfective)
```

French does not therefore possess explicit forms for the imperfective: "had been doing", "has been doing", "is doing", "will have been doing", and "will be doing", for the aorist "did" (for which spoken French uses the perfective), and for the general "used to do" (for which it uses the imperfective).

The Italian verb has the same range of aspects as French, but in addition can express a present and past imperfective:
"Sto leggendo." "I am reading."
"Stavano dormendo." "They were sleeping."
Spanish has a similar range of aspects to English for dynamic verbs:
"No he visto a tu madre esta semana."
(past perfective)
"I haven't seen your mother this week."
"Yo volvía del cine cuando vi a Niso." (past imperfective)
"I was coming back from the cinema when I saw Niso."
"Ayer anduve más de quince kilómetros." (past aorist)
"Yesterday I walked more than 15 kilometers."
"Está haciendo sus cuentas." "He’s doing his accounts." (present imperfective)
"Estarán comiendo a estas horas." (future imperfective)
"They'll probably be eating at this time."
"Si llueve se aplazará el partido." (future aorist)
"If it rains, the match will be postponed."
[If it-rains itself will-postpone the match.]
German does not have explicit imperfective verb forms. The distinction in meaning between past perfective and past aorist has also become blurred in spoken German. The verb form before the slash $(/)$ is what is meant, that after the slash is the actual form :

| "Sie hatten nicht bemerkt, daß keine Butter mehr da war." | (past perfective/ <br> past perfective) |
| :--- | :--- |
| "They hadn't noticed that there was no butter left." |  |
| [They had not noticed, that no butter more there was.] | (past imperfective/ |
| "Bertha hat die Wäsche im Hof aufgehängt." | past perfective) |
| "Bertha was hanging out the washing in the yard." | (past aorist/ |
| [Bertha has the washing in the yard out-hanged.] | past perfective) |
| "I habe beobachtet, wie Rudolf auf sie zugelaufen ist." | (present imperfective/ |
| [I observed how Rudolf ran up to her." | preserved, how Rudolf up to her ran is.] |

[She works at present on a new project.]
Arabic can express the future by the prefix "sa-" or "sawfa" to the imperfective:
"sa-yuwāṣilu l-kitābata" "He will continue ${ }_{\text {(imperfective) }}$ to write."
Additionally, "kāna" ("be") is used as an auxiliary verb in combination with the verb in either aspect. The perfective of kāna is used to construct the past perfective and imperfective:
"fī l-ṣabāḥi kāna l-maṭaru qad sakana" "In the morning the rain had calmed down."

> [In the-morning has-been the-rain calmed-down.]
> "kāna l-Rawlādu yatarākaḍūna""The children were racing around."
> [Have-been the-children are-racing-around.]

The imperfective of kāna is used to construct the future perfective and imperfective:
"rubbamā yakūna qad qaraRa mulaxxaṣan lahu" "Perhaps he will have read a summary of it." [Perhaps he-is he-read summary for-it.]
"ma‘a ḥulūli l-ṣayfí sa-yakūnu yưaddī wājibahu bi-ntizam"
"By summer he will be performing his duties regularly."
[By summer he-will-be he-is-performing duties-his regularly.]
Indonesian/Malay possesses tense markers to indicate the past and future aorist:
"Dia pernah belajar di Paris." "He once studied in Paris."
("pernah" = past aorist)
"Kami akan makan nanti." "We will eat soon."
("akan" = future aorist)

## Conjunctions

A conjunction is a word which connects two or more sentences. Some conjunctions do not indicate aspect:
"Peter took the letter from the pile, opened it, and read it."
"It will be cloudy or rainy today."
However, the majority of conjunctions compare or contrast the sentences in some way, and also imply an aspectual relationship between them. Chapter 3. (Conditions) describes the condition conjunction "if":
"If you were here, we could reach agreement."
"While" indicates an aspectual relationship:
"While he was talking, she thought of her reply."
"Although", "but", "even if", "even though" and their equivalent adverbials "despite that", "however", and "nevertheless" contrast the sentences:
"Although he was talking, she thought of her reply."
"He was talking, but she thought of her reply."
"He was talking. However, she thought of her reply."
"Even if he was talking, she could think of her reply."
"Because" indicates that one sentence arises in consequence of the other:
"Because it was a fine day, they went for a walk."
"Because the program had a bug, the system crashed."
"Because she liked Italy, she went on holiday there every year."
In these examples, the sentence not introduced by the conjunction lies within the occurrence of the sentence which is introduced by the conjunction, and accordingly conforms with the above definition of aspect. Either the sentence with the conjunction is imperfective and that without the conjunction is aorist, or the sentence with the conjunction is stative and that without the conjunction is general.

The Latin construction called "ablative absolute" enabled the sentence with the wider occurrence to be expressed as a noun and attribute in the ablative case, the meaning of the conjunction being inferred. The following are literary examples:
"Regibus exactis, consules creati sunt."

```
"Since kings had been abolished, consuls were elected."
[King abolished (ablative), consuls created were.]
"Pereunte obsequio, imperium intercidit."
"If obedience fails, government falls to pieces."
[Failing obedience \({ }_{\text {(ablative), }}\), government collapses.]
"Nil desperandum, Teucro duce."
(Horace)
"There must be no despair, since Teucer is leader."
[Nothing should-be-despaired-of, Teucer leader \({ }_{\text {(ablative). }}\).]
```

Similarly, Finnish and Japanese use the gerund form of the verb (see below) to relate the occurrences of two sentences, although the construction is not a gerund as we define it:

Finnish: "Pekan herätessä Liisa lähtee töihin." "When Pekka wakes, Liisa goes to work." [Pekka-by waking, Liisa goes to-work.]

```
Japanese:
    "Itō-sensei wa konshū byōki de, kawari ni Murata-sensei ga oshieta."
    "Professor Ito was ill this week, and Professor Murata taught for him."
    [Ito-Professor (topic)
```

Arabic can use the conjunction "wa" (and"):
"yastaṭî̧u l-zurrā¢u wa-l-ḥālatu hāðihi ?an yuqāḍū l-wizārata"
"The farmers, while the situation is such, can sue the Ministry."
[Are-able the-farmers, and the situation this, that they-sue the-Ministry.]

## Gerund

Sentences connected by a conjunction generally have different subjects. When they have the same subject, languages employ a construction in which only the subject of the verb with the narrower occurrence is stated. The verb with the wider occurrence (imperfective, stative, or general) is expressed not as a verb, but as a gerund or verbal adjective qualifying the subject. The gerund provides information on the state of the subject at the time that the sentence occurs. Because it is a concise way of expressing two sentences, it is not a restrictive qualifier (Chapter 2., Restrictive Qualifier).

A gerund in English can convey the sense of the conjunctions "while" and "because" and can combine with "although". Words such as "being" or "acting" can be implied and omitted:
"Being very suspicious, she hesitated to open the door." "She opened the door suspiciously."
"[Being] Full of regret, he apologised."
"He met his neighbour while walking the dog."
"She came running."
"When [they are] ripe, the apples should be picked before they fall."
"Although [he was] very young, he was elected to Parliament."
"[Acting] As your solicitor, I would say "Chance it"".
This use of the term "gerund" is wider than that conventionally used, since it includes words which are often classed as adverbial. However, further consideration should indicate the difference. An adverb is a word which qualifies the action of a verb: "he spoke roughly"; "she replied calmly"; these could be paraphrased "his speech was rough"; "her reply was calm." In contrast, "she opened the door suspiciously" does not mean "her opening of the door was suspicious", but "she was suspicious when she opened the door." Similarly, "full of regret, he apologised" is not the same as "he apologised regretfully".

A gerund includes an adjective qualifying the subject at the time of the action of the verb, such as "when ripe" or "although very young". It also includes the purpose in the mind of the agent when an action is performed:
"He went home to cook the dinner."
"She left the company in order to start her own business."

A perfective gerund indicates the state of the subject arising from a completed action:
"Having read all the papers, he started his report."
"Her suspicions aroused, she hesitated to open the door."
"Filled with regret, he apologised."
Russian forms imperfective gerunds from imperfective verbs, and perfective gerunds from perfective verbs:
"Chitaya, zapisyvayu neznakomye slova."

$$
\left(" \text { chitat"" }=\text { "read" }{ }_{\text {(imperfective }}\right)
$$

"When reading, I make a note of words I do not know."
[Reading, I note unfamiliar words.]
"Napisav pis'mo, on lëg spat'."
("napisat"" $=$ "write" $\left.{ }_{(\text {perfective })}\right)$
"Having written the letter, he went to bed."
[Having-written letter, he lay to-sleep.]
In Spanish, like other Romance languages, the gerund is a form of the verb ending in "-ando" or "-iendo". Its use covers all the purposes of a gerund in the above English examples, including the conjunctions "when", "while", "in order to", "because", "although" and "as if":
"Se levantó dando por terminada la entrevista."
"He got up, as he judged the interview to be at an end."
[Himself he-rose, taking as ended the interview.]
"Le conocí siendo yo bombero." "I met him while I was a fireman."
[Him I-met, being I fireman.]
"Me escribió diciéndome que fuese a verle." "He wrote telling me to come and see him."
[To-me he-wrote telling-me that I-should-come to see him.]
"Siendo estudiante, tendrás derecho a una beca."
"Since you're a student, you'll have the right to a grant."
[Being student, you will have right to a grant.]
"Llegando tarde y todo, nos ayudó mucho."
"Although he arrived late, he helped us a lot." [Arriving late, us he-helped much.]
"Me miró como riéndose." "He looked at me as though he were laughing."
[Me he-looked as laughing.]
The Greek gerund is formed by adding "-ov $\alpha \alpha /-\omega v \tau \alpha \varsigma "$ to the stem of the imperfective verb:

"While walking towards his office, Nikos met an old friend of his."
[Walking towards office-his, the Nikos met an old his friend.] (" $\pi \varepsilon \rho \pi \alpha \tau \omega \prime "=$ "walk")
Finnish forms gerunds by adding "-ssa"/"-ssä" to a form of the infinitive. The gerund takes a personal pronoun:
"Ajaessasi sinun pitää olla varovainen." "When you drive, you must be careful." [Driving-you you must be careful.]
"Ihmiset nauttivat lähtiessään lomalle." "People enjoy themselves when they go on holiday." [People enjoy, going-they holiday-on.]

Hungarian forms gerunds by adding "-va"/"-ve" to the verb:
"Mosolyogva lépett be a szobába." "She entered the room smiling."
[Smiling she-entered in the room-into.]
Turkish possesses gerunds in "-e" and "-erek" which are formed from verbs:
"Yürükler kona göçe yaylaya gittiler."
("kon-" = "camp")
"The nomads went to the plateau, camping and moving on."
[Nomads camping moving-on plateau-to went.]
"İzlerini takibede ede yürüdük." "We walked, following their tracks." ("takib" = "pursuit") [Tracks-their following walked-we.]
"Gülerek cevap verdi." "She replied laughingly."
("gül-" = "laugh")
[Laughingly answer gave-she.]
"Kapıyı açarak sokağa firladı."
("aç-" = "open")
"Opening the door, he rushed into the street."
[Door opening, street-to rushed-he.]
Every Arabic verb possesses an imperfective participle which can fulfil the purpose of gerund:
" $\gamma$ ādara l-qāhirata Ramsi mutawajjihan Rila jībūtī"
"He left Cairo yesterday heading for Djibouti."
"tahādā l-na§šu maḥmūlan £alā l-Ra§nāqi"
"The bier slowly moved off carried on their shoulders."
[Moved-off the-bier carried on the-shoulders.]
"Oumma nṣarafa wā¢idan Riyyāya bi-ziyāratī fī l-bayti"
"Then he left, promising me to visit me at home."
[Then he-left promising to-me to-visit-me at the-home.]
An Arabic gerund can also be expressed by an imperfective verb:
"jalasa 1-rajulu yatahadda日u" "The man sat talking." [Sat the-man he-was-talking.]
"šafarat bi-qalbihā yuxfiqu bi-šiddatin" "She felt her heart beating strongly."
[She-felt in heart-her it-was-beating in-strength.]
Arabic gerunds of purpose can also be expressed with a verbal noun:
"daxalat fî l-ḥilfi ta؟̌īzan li-qudratihā ¢alā muwājahati ?ayyi tahdīdan"
"It entered into the alliance in order to strengthen its ability to face any threat."
[It-entered in the alliance strengthening for ability-its on facing any threat.]
or an imperfective verb:
"kanāt muqīmatan fî l-bayti tarৎā šuৎūnahu"
"She was staying in the house to look after his affairs."
[She-was staying in the-house she-was-looking after affairs-his.]
"tawaqqafū li-yastarīhū" "They stopped in order to rest."
[They-stopped for they-rest ${ }_{\text {(subjunctive) }}$.]
Hindi forms gerunds by adding "-kar" and "-ke" to verb stems:
"ham āgre jākar tāj mahl dekhe"" "Let's go to Agra and see the Taj Mahal."

> [We Agra-to going Taj Mahal see (subjunctive).]
("jānā" = "go")
"vah backar bhāg gae" "He escaped safely." [He being-safe fled.] ("bacnā" = "be safe")
"vahî̃ baiṭhkar bāte ${ }^{\sim}$ ho ${ }^{\text {g }}{ }^{\text {in" "We'll sit there and have a talk." }}$
[There sitting talk we-will.] ("baithnnā" = "sit")
Japanese forms gerunds by adding "-te" or "de" to a verb or attribute:
"Watashi wa kōto o nuide hangā ni kaketa." "Taking off my coat, I hung it on a hanger."
[ $\mathrm{I}_{\text {(topic) }}$ coat ${ }_{(\text {object) }}$ taking-off, hanger-on hung.] ("nugu" = "take off")
"Wain o nomisugite atama ga itai." "I've drunk too much wine and have a headache."
[Wine ${ }_{(\text {object })}$ excessive-drinking, head ${ }_{(\text {subject })}$ aches.] ("nomisugiru" $=$ "drink to excess")
The Swahili verb forms its tenses by infixes. Two are "-ki-", which means simultaneous action, and "-ka-", which means subsequent action. These can have the effect of a gerund:

$$
\begin{array}{cc}
\text { "Alipita akiimba." "He went by singing." [He-passed he-singing.] } & (" i m b a "=\text { "sing") } \\
\text { "Ukitazama utaviona." "If you look, you will see them." } & \\
\text { [You-looking you-will-them-see.] } & \text { ("tazama" = "look") } \\
\text { "Nilikwenda sokoni nikarudi." "I went to the market and came back." } \\
\text { [I-went market-to I-then-return.] } & \text { ("rudi" = "return") }
\end{array}
$$

Chinese lacks an explicit gerund construction. It expresses gerunds by placing two sentences with the same subject in sequence, indicating the respective aspects:

> "Tā xià le kè huí jiā qù le." "She finished class and went home."  [She finish (aorist) class return home go (aorist).] "Dàjiā jìngle xiàlái, zuòzhe bù dòng." "Everyone quietened down and remained motionless in their seats." [Everyone quiet (aorist) come-down, sit ${ }_{\text {(stative) }}$ not move.] "Tāmen zhànzhe liáotiān." "They stood chatting." [They stand ${ }_{\text {(stative) }}$ chat.]

A similar construction exists in Persian:
"sare miz nešaste bud va qalami be dasteš bud"
"He was sitting at the table with a pen in his hand."
[At table seated he-was and pen in hand-his was.]
The Irish gerund construction connects the two sentences by "agus" ("and"):
"Fuair sé bás agus é cuíosach óg." "He died fairly young."
[Got he death and he fairly young.]
"Bhíodar ina suì i dteannta a chéile agus iad ag caint."
"They were sitting together talking."
[They-were in-its sitting along-with each other and they at talking.]
The Inuit gerund is formed from the verb with the suffix "-lug-", and takes an object pronoun:
"Iluatsiqqinnaarlugu naapippara." "I arrived just at the right moment to meet him."
[Lucky-just-being-him meet-I-him.]
"Kunuup ilagalugit aallarpuq." "Kunuuk left, accompanying them."
[Kunuuk ${ }_{\text {(agent) }}$ accompanying-them leave-he.]
"Isirluni pujurtalirsarpuq." "Entering, he would light his pipe."
[Entering-he smoke-begin-(habitual)-he.]

## Aspect of Qualifiers

Chapter 4. (Relative Pronoun) describes how a sentence in the form of a relative clause can qualify a noun. It is expressed by placing the relative clause in an attributive position, usually in front (leftbranching) or by a pronoun linked to a word in the relative clause (right-branching). The word to which the relative pronoun is linked can be a verb, noun, or attribute.

An alternative way in which a verb can qualify a noun is to express it in the form of an attribute, called a participle. Some languages, for example those in the Turkish family, use participles as an alternative to a relative clause. Other languages, for example Welsh, Malay/Indonesian, Chinese, Japanese, and Swahili, do not possess participles and employ only a relative clause. They express an attribute function by placing the verb in an attributive construction, and express aspect by an aspect particle:

Chinese:"nèi jiàn xīn măi de jiăkè" "that newly-bought jacket" [that unit new buy jacket]
"Wơ kànguo Jīngjù." "I have seen Peking opera." [I see (perfective) Beijing drama.]
Welsh: "Mae Gwenith yn darllen y papur." "Gwenith is reading the paper."
[Is Gwenith in read the paper.]
"Mae Gwenith wedi darllen y papur." "Gwenith has read the paper."
[Is Gwenith after read the paper.]
"Ond wedi dweud hynny, efallai y dylen ni ailfeddwl."

> "But having said that, perhaps we should rethink." [But after say that, perhaps should we rethink.]

Other languages possess both relative clause and participle constructions.
Since a participle is a verb in attributive form, it can fulfil any of the functions of a verb which the languages permits. It can have an object and be qualified by an adverbial. The larger the number of verbal functions given to a participle, the more complex the construction, and the more suitable a relative clause is as an alternative. Like other attributes and relative clauses, a participle can be either restrictive or non-restrictive.

Since a relative clause qualifies a noun which is the subject, object, or other noun linked to the predicate verb, its occurrence is expressed by the aspect of its verb in relation to the occurrence of the predicate verb. This is so whether the relative clause is restrictive or non-restrictive:
"John, who was hungry that morning, ate an apple."
"Having eaten the apple, John returned to work."
"The applicant whom I am planning to see today will arrive at 11.00 ."
"The applicant who made an appointment yesterday will arrive at 11.00. ."
"I borrowed the book from the library I always go to."
"I borrowed the book from the library, which is the one I always go to."
On the same argument, since the occurrence of a participle is essential to its meaning, all participles show aspect relative to the aspect of the verb. Those languages which possess participles generally distinguish up to five aspects: perfective, imperfective, stative, prospective, and general, each of which is discussed and illustrated below. The aspect of a participle is often confused in conventional grammars with tense. As shown above, the tense of a verb can only be understood in terms of its viewpoint. A participle does not have a viewpoint independent of the viewpoint of the verb of the sentence. In practice, the aspect of a participle adequately expresses its tense and is a clearer description of its purpose.

Some languages permit participles to be a predicate as well as a qualifier. As a predicate, they fulfil the function of a verb, including its aspect. Languages usually do this by combining the participle with an auxiliary verb which expresses tense. Other languages express the aspect of verbs by a different means (see above, under Aspect).

## Perfective Participle

Any process involves change. Since in a perfective sentence the change is completed, it is possible for a perfective verb to form a perfective participle, to describe the state resulting from process:
"The hall has been built." "The visitors have arrived." "The tests are completed."
The entity which has been changed differs between an active transitive verb (when it is the object of the verb) and a passive transitive or intransitive verb (when it is the subject), as is described in the next chapter. The term "perfective participle" is suggested here instead of "past participle", which is often used, since the term "past" does not distinguish between imperfective and perfective actions.

Like other attributes, a perfective participle can be restrictive or non-restrictive:
"A book misplaced is a book lost." "Goaded by his remarks, she had to interrupt."
Perfective participles are derived from the verbs whose completed actions they refer to. Expressions which would be attached to a verb may also be attached to the participle:
"The letter, written by Mary to John, arrived the next morning."
"Seated on a bench, Henry watched the birds on the lake."
As the above examples illustrate, a perfective participle fulfils a number of functions in different languages:

- It may act as a gerund when it qualifies the subject of a sentence, expressing the state that the subject is in.
- It may act as a restrictive or non-restrictive qualifier.
- It may be used with a perfective auxiliary verb to express a process, which has resulted in the state described by the participle.
- It may be used with a stative auxiliary verb to express a state, without referring to the process by which the state came to be.
- It may be used with an imperfective auxiliary verb to express a process, which is expected to result in the state described by the participle.

Where the perfective and stative auxiliary verbs in a language are the same, an ambiguity may arise between whether the verb expressed is perfective or stative. For example, in English:

$$
\text { "The shop is closed." (process) } \quad \rightarrow \quad \text { "The shop is closed." (state). }
$$

This is resolved in some instances by using an attribute which is not perfective but stative:

$$
\text { "The shop is opened." (process) } \quad \rightarrow \quad \text { "The shop is open." (state). }
$$

In German, the ambiguity is resolved through using an imperfective auxiliary ("become") for the perfective verb. However, as previously mentioned, this leaves no way of expressing the imperfective ("the shop is being opened"):

$$
\begin{array}{rll}
\text { "Der Laden wird um } 8 \text { Uhr geöffnet." "The shop opens at } 8 \text { o'clock." } & \text { (process) } \\
\text { "The shop becomes at } 8 \text { o'clock open.] } & \text { (state) } \\
\text { "Der Laden ist um } 8 \text { Uhr geöffnet." "The shop is open at } 8 \text { o'clock." } & \text { [The shop is at } 8 \text { o'clock open.] } &
\end{array}
$$

The following are examples of languages which form perfective participles from verbs:

"Die Strümpfe sind gewaschen." "The stockings are washed."
"Die Strümpfe werden gewaschen.""The stockings are being washed."
"Wir haben die Strümpfe gewaschen."
"We have washed the stockings." [We have the stockings washed.]
Finnish

$$
\begin{array}{llll}
\text { "pelastaa" } & \text { "rescue" } & \text { "pelastettu" } & \text { "rescued" } \\
\text { "surra" } & \text { "grieve" } & \text { "surrut" } & \text { "grieved" }
\end{array}
$$

"Pelastetut merimiehet olivat hyvässä kunnossa."
"The rescued sailors were in good shape." [Rescued sailors were good shape-in.]

Greek: "ү $\dot{\alpha} \varphi \omega "$ "write", " $\quad$| " $\sigma \alpha \dot{\alpha} \zeta \omega "$ |
| :--- |

"Н $\tau \mu$ но́т $\tau \alpha$ 兀оv $\mathfrak{\eta} \tau \alpha v \gamma \rho \alpha \mu \mu \varepsilon ́ v \eta ~ \sigma \tau о ~ \pi \rho о ́ \sigma \omega \pi о ~ \tau о \cup . " ~$
"His honesty was written on his face." [The honesty-his was written on-the face-his.]
Russian: "napisat"" "write" "napisan" "written"

$$
\begin{aligned}
& \text { "zakryt" "close" "zakryt" "closed" } \\
& \text { "Roman "Voina i Mir" byl napisan Tolstym." } \\
& \text { "[The] novel "War and Peace" was written by Tolstoy." } \\
& \text { "Magaziny byli zakryty." "[The] shops were closed." } \\
& \text { Persian: "kardan" "do" "karde" "done" } \\
& \text { "koštan" "kill" "košte" "killed" } \\
& \text { "šah abbas in karevansarara bana karde ast" "Shah Abbas built this caravanserai." } \\
& \text { [Shah Abbas this caravanserai }{ }_{\text {obiect }} \text { building done is.] } \\
& \text { "košte našodam" "I was not killed." [Killed not-became-I.] } \\
& \text { "larkī ne sārī pahnī hai" "The girl has put on a sari." [Girl-by sari wearing is.] }
\end{aligned}
$$

Every Arabic verb possesses a participle, and most have two, active and passive. They are mostly used as stative attributes and as the comment of a perception or communication (Chapter 8., The Perception and Communication Functions):
"al ṭabību l-mušrifu §alā l-£ilāji" "the doctor supervising the treatment"
"al-Rasiāru l-mu£lanatu mina 1-sūqi" "the prices announced by the market."
"lā šakka ?annaka bāliरun $\gamma$ āyataka" "There is no doubt you will reach your objective."
[No doubt that-you reaching objective-your.]
"rąā Pannahu kāna mąrūḍan li-l-bay§i" "He had a vision that he was offered for sale."

As mentioned above, standard Turkish employs a perfective participle in place of a perfective relative clause. The participles are therefore able to take personal pronouns as agents:

$$
\begin{array}{lll}
\text { "yapmak" "do" } & \text { "yaptığ-" } & \text { "done" } \\
\text { "hazırlanmak" "prepare" } & \text { "hazırlanmış" "prepared" }
\end{array}
$$

"dün yaptığım işler" "the jobs I did yesterday" [yesterday done-by-me jobs]
"hazırlanmıș plan" "the plan which has been prepared" [prepared plan]

## Imperfective Participle

An imperfective participle expresses the idea that the noun which it qualifies is engaged in a activity in the course of which the action of the main verb takes place. In English, it ends in "-ing":
"Students starting a new course should register at the office."
"He found his son digging the garden."
The commonest use of an imperfective participle is as a gerund, as described above. However, a gerund is non-restrictive and only qualifies the subject of a sentence. The above examples show that an imperfective participle can also be restrictive and qualify an object.

In English, an imperfective participle is also used to form an imperfect verb, which may express tense:
"She is reading in the study."
"He was sitting in the garden."
"We will be working throughout the weekend."
"They had been drinking all night."

Other languages, such as Finnish, Turkish, and Persian, possess an imperfective participle as an attribute or gerund but do not use it to form a verb.

$$
\begin{aligned}
& \text { Finnish: "Pihalla seisova auto on sininen." } \\
& \text { ("seisoa" }=\text { "stand") } \\
& \text { "The car standing in the yard is blue." [Yard-in standing car is blue.] } \\
& \text { "a band playing good music" [good music playing band] }
\end{aligned}
$$

The Turkish imperfective participle acts as an imperfective relative clause; it cannot take a personal pronoun, but can be negative:

> "bekliyen misafirler" "guests who are waiting" [waiting guests] ("beklemek = "wait") "oynamıyan çocuklar" "children who are not playing" [not-playing children]
> ("oynamak" = "play")

Persian: "xahane salamatiye šoma hastam" "I am desirous of your well-being."
[Desiring-of health-of you I-am.]
"davan davan jelou amad" "He came forward running." ("davidan" = "run")
[Running running forward he-came.]
The Romance languages also form the imperfective verb without use of a participle. As described above, these languages possess a form of the verb which is a gerund. In Italian and Spanish, the imperfective participle is a different form from the gerund, and does not occur with many verbs. In French, the imperfective participle and gerund have the same form:

French: "Je le trouvai riant comme un fou." "I found him laughing like mad."
[I him found laughing like a madman.]
Spanish: "una situación cambiante" "a changing situation" [a situation changing]
The German imperfective participle can also be used as a gerund and a qualifier, but not to form an imperfective verb. The following illustrates both functions:
"Auf einem Klappstuhl hockend, betrachtete Maria die im Schnee spielenden Kinder."
"Sitting on a folding-chair, Maria watched the children playing in the snow."
[On a folding-chair sitting, watched Maria the in-the snow playing children.]

## Stative Participle

Perfective and imperfective participles are formed from dynamic verbs. A stative verb can also form a participle, such as "being" or "as". It expresses the state of the subject (or object) at the time that the sentence occurs:
"Being very intelligent, she understood the problem at once."
"As Chairman, he called the meeting to order."
Since the state of an attribute is usually adequately expressed by the attribute itself, in most contexts the stative participle of an attribute is not necessary. They occur as auxiliaries to express gerunds. The above examples are a general gerund and the following are an imperfective gerund ("being") and a perfective gerund ("having"):
"While being interviewed, he broke down." "Having finished her talk, she sat down."
Arabic: "kā?inan man kāna l-ẓālimu" "whoever the criminal may be" [being who was the-criminal]

Although Welsh does not distinguish a particular form for the stative participle, the verb "bod" ("be") is used as a stative participle and can take a personal pronoun. In the following examples, it is translated "being", and is subject to mutation. It is also used as an auxiliary to form an imperfective participle. The negative is "nad yw" ("not being"):
"Aeth ef allan heb got, er ei bod hi'n bwrw glaw."
"He went out without a coat, although it was raining."
[Went-he out without coat, although its-being in strike rain.]
"Eisteddais i wrth y tân am fy mod i'n oer."
"I sat by the fire because I was cold."
[Sat-I by the fire for my-being in cold.]
"Yr wyf i'n gwisgo cot fawr am nad yw'r tywydd yn gynnes."
"I am wearing an overcoat because the weather is not warm."
[Am-I in coat great for not-being the weather in warm.]
Turkish requires a stative participle ("olan" = "being") in place of a stative relative clause. The same word is also used as an auxiliary:
"meşgur olan memur" "the official who is busy" [busy-being official]
In Inuit, most stative relations are expressed by a verb rather than an adjective. To construct a qualifier, a stative participle is added to the verb in the form of the suffix "-suq", here translated as "being". In the following examples, "kusanar" means "be pretty":

> "Assut illutaat kusanaqaaq." "Really your new house is beautiful." $\begin{array}{r}\text { [Very house-new-your beautiful-very-it.] } \\ \text { "ilimagisaatut kusanartigisuq" "as pretty as he had expected" } \\ \text { [expected-his-as pretty-so-being] }\end{array}$

Further examples of this construction are in Chapter 6. (Attributive Sentence and Verb).

## Possessive and Recipient Participles

A second form of stative relation is a possession (Chapter 8., The Possession Function). This consists of two elements, the recipient and the possession, connected by a possession verb. The state of being possessed is expressed by a possessive participle, and the state of possessing by a recipient participle. Examples of a recipient participle are:
"Having a strong constitution, he lived to a good age."
"Knowing his abilities, I appointed him to the position."
"Seeing the train approaching, she stood back from the platform."
A possessive participle expresses the state of possession:
"His abilities being known, he was appointed to the position."
"Seen from the platform, the train approached."
Arabic: "huwa ma¢rūfan min qibali l-nurwījiyyīna"
"He [is] known by the Norwegians."
"?anā muṭālabun bi-sidādi 23 Ralfa junayhin"
"I [am] required to pay $£ 23,000$."
Other examples of recipient and possessive participles occur with opinions (Chapter 8., The Opinion Function):
"We are confident in his leadership."
"She was suspicious of his motives."
"He was envious of her success."
"The company is hopeful of a return to profit."
"She was doubtful whether they would be enough."
"We are reliant on his skills."
"His leadership is trusted by us/trustworthy."
"His motives were suspected by her/suspicious"
"Her success was envied by him/enviable."
"The results are hoped for/hopeful for a return to profit."
"Whether they will be enough is doubted by her/doubtful."
"His skills are trustworthy."

Languages such as Turkish and Arabic without a verb "have" cannot form the recipient participle "having", and adopt a construction in which it is inferred:

Turkish: "parası olmıyan bir genç" "a youth who has no money" [money-his-not-being a youth]
"babası ölmüş olan çocuk" "the child whose father has died" [father-his died-being child]

Arabic: "ḥasanu 1-raQyi fi..." "having a good opinion of..." [good of-the-opinion on...]
"marhūbu l-jānibi" "of fearsome aspect" [feared of-the-aspect]
The Inuit recipient participle can be expressed by the suffix "-lik" and the possessive participle by the suffix "-ga":
"illu qarmalik" "a peat-walled house" [house peatwall-having]
"illugigaluara" "the house I used to have" [house-had-previously-my]

## Beneficiary Participle

A third form of stative relation is a benefit or adversity (Chapter 10.). This is an advantage, opportunity, disadvantage, or misfortune which arises to a beneficiary of an action. In general, it describes something which is potentially available to a person rather than one which is possessed. A beneficiary participle describes the state of being available:
"His abilities being ascertainable, he was interviewed for the position."
"Visible from the platform, the train approached."
"The terms are acceptable to the contractor."
"The information is available on the Internet."
"You are entitled to a parking place."
"The arrangement is suitable for me."
"The facts are comprehensible on first reading."

## Prospective Participle

An prospective participle is formed from a dynamic verb in order to convey that an action is imminent. It is also used in some languages to mean that an action should be done. It can be restrictive or nonrestrictive, and can be a gerund or can govern an object.

English does not possess a particular prospective participle, and uses the auxiliary construction "being about to". Latin did possess an prospective participle:

$$
\begin{aligned}
\text { "Morituri, te salutamus." "We who are about to die, salute you." ("mori" = "die") } \\
\text { [About-to-die, you we-salute.] }
\end{aligned}
$$

The Finnish prospective participle ends in "va"/"vä":

$$
\begin{aligned}
\text { "Minulla ei ole muuta sanottavaa." "I have nothing else to say." ("sanoa" = "say") } \\
\text { "At-me not is remaining to-be-said.] } \\
\text { "Onko teillä tarvittava pääoma?"" "Do you have the necessary capital."("tarvita" = "need") } \\
\text { [Is-query at-you to-be-needed capital?] }
\end{aligned}
$$

Turkish uses a prospective participle in place of a future relative clause. It ends in "-acak" (or its equivalent) and can take a personal pronoun:
"Gelecek olanların çoğu akrabamız." "Of those about to come, most are our relatives."
[About-to-come of-those, most relatives-our.]
("gelmek" = "come")
"konuşacakları meseleler" "the problems which they are going to discuss"
[about-to-discuss-their problems] ("konuşmak" = "discuss")
"Yiyicek bir şey alalım." "Let us buy something to eat." [About-to-eat a thing let-us-buy.]
("yemek" = "eat")

The usual term for this attribute is "future participle", but as these examples illustrate, its occurrence relates to the verb of the sentence and not to the viewpoint of the speaker. It therefore possesses aspect like other participles, and the different term "prospective participle" is more appropriate.

## General Participle

Chapter 2. described a general verb as a dynamic verb without a specific occurrence. Its subject is engaged in an activity, but the particular actions are not described:
"She sings at the opera for a living." "We eat beef on Sundays."
The object of a non-negative general verb can only be definite or general. The object of a negative general verb can also be indefinable:
"He drives his wife's car to go shopping." "She does not like courgettes."
Although the object of a general verb may appear to be indefinite, it is in fact general, as it does not refer to a specific entity. The sentence "They used to eat a peach after dinner" cannot refer to any particular peach. A general verb can often be expressed without either a general or a definite object:
"He helps in the lab on Saturdays." "Can you hear?"
A general participle is the attribute of a general verb. It describes a noun which is engaged in the activity of a verb, but without specifying any particular action. The noun may be the agent of the activity or its instrument. Because it does not relate to any particular occurrence, it is stative. Like other participles, it can take the objects and adverbials which are appropriate to the verb to which it relates, and can be restrictive or non-restrictive.

In English, a general participle is often the clearest way to express a general verb. The following are examples of corresponding sentences: a specific one with a verb and a general one with a general participle:

$$
\begin{aligned}
& \text { "He created the design." "His work on the design was creative." } \\
& \text { "She congratulated the team for the work." "She made a congratulatory speech." } \\
& \text { "They explained the results to the analysts." "They gave an explanatory presentation." } \\
& \text { "The news surprised us." } \\
& \text { "The play delighted the audience." } \\
& \text { "The atmosphere oppressed the assembly." "The atmos was delightful." } \\
& \text { "The regulation burdened the company with administration." was oppressive." } \\
& \text { "The regulation was burdensome." } \\
& \text { "The navy protected the country from attack." "The navy’s role was protective." } \\
& \text { "This policy places our investments at risk." "This is a risky policy." } \\
& \text { "Risk of deflation endangers our economic recovery." } \\
& \text { "There is a dangerous risk of deflation." } \\
& \text { "The book interested John." } \\
& \text { "His explanation satisfied her." } \\
& \text { "The holiday pleased her." } \\
& \text { "Tohn helped Henry to prepare for the exam." "The found the holiday pleasurable." } \\
& \text { "The argument convinced Parliament to vote." } \\
& \text { "The was helpful to Henry." } \\
& \text { "The lie deceived us into trusting him." "His lie was very deceptive." }
\end{aligned}
$$

The large number of examples are intended to show the range of the general participle, and the different ways in which it is formed. English uses the imperfective participle ending "-ing" as well "-ful", and "-some". Like other languages with access to Latin roots, it also employs "-ive", "-atory", and "-ous". In each case, the general participle has the same purpose; it expresses the general action of the verb from which it is derived.

German general participles are formed with the ending "-end" which is used for imperfective participles, or with "-lich":

| "eine zufriedenstellende Note" | "a satisfactory mark" ("zufriedenstellen" = "satisfy") |
| :---: | :---: |
| "erläuternd fügte er hinzu." | "he added in explanation" ("erläutern" = "explain") |
|  | [explanatorily added he to] |
| "jemandem behilflich sein" | "to help someone" ("helfen" = "help") |
|  | [to-someone helpful to-be] |
| "eine ärgerliche Tatsache" | "an annoying fact" ("ärgern" = "annoy") |

Similarly, Italain general participles are formed from verbs with the ending "-ante"/"-ente"/"iente", and from verbs and nouns with the ending "-oso":
"La mattina era sconvolgente." "The morning was upsetting." ("sconvolgere" = "upset")
"La vista era impressionante." "The view was striking." ("impressionare" = "impress")
"l'effetto era dannoso." "The effect was harmful."
("danno" = "damage")
"Il chiasso era fastidioso." "The racket was annoying."
("infastidire" = "annoy")
Greek forms general participles from verbs with the ending "-וко́ $\varsigma$ ":

```
"Е\chi&ı \pi\varepsilon\iota\sigma\tauıко́ \tauро́то.""She has [a] persuasive manner." ("\pi\varepsiloní0\omega" = "persuade")
```



```
"\pi\rhoок\lambda\eta\tauкк\etá \pi\alpha\rho\alpha\tau\etá\rho\eta\sigma\eta""[а] provocative remark") ("\pi\rhoок\alpha\lambda白"= "provoke")
```

In Chapter 2., examples were given of the general form of the Turkish verb, conventionally called "aorist". This forms a participle:

```
"su akar""water flows" "akar su""flowing water"
"bu saat çalar""this clock strikes" "bu çalar saat" "this striking clock".
```

Many Indonesian/Malay transitive verbs are formed from nouns or attributes by means of the prefix "men-" and the suffix "-kan". Where these are expressed without an object, they may be considered as general:

$$
\begin{aligned}
\text { "Kabar itu sangat menyedihkan." "The news was very saddening." } \\
\text { [News-the very saddening.]" }
\end{aligned} \text { ("sedih" = "sad") }
$$

The Finnish present participle usually uses the imperfective participle ending "va"/"vä". Languages without an imperfective participle form general participles by various adjectival endings. In Russian, the imperfective participle in "-shchii" is a literary form of restricted use:

| Finnish: | "ärsyttää" | "annoy" | "ärsyttävä" | "annoying" |
| :---: | :---: | :---: | :---: | :---: |
|  | "miellyttää | "please" | "miellyttävä" | "pleasing" |
|  | "opettaa" | "instruct" | "opettavainen" | "instructive" |
|  | "vaivata" | "trouble" | "vaivalloinen" | "troublesome" |
| Russian: | "opisyvat"" | "describe" | "opisatel'nyi" | "descriptive" |
|  | "tvorit"" | "create" | "tvorcheskii" | "creative" |
|  | "zarazhat"" | "infect" | "zaraznyi" | "infectious" |
| Welsh: | "adeiladu" | "construct" | "adeiladol" | "constructive" |
|  | "boddhau" | "satisfy" | "boddhaol" | "satisfactory" |
|  | "cuffroi | "excite" | "cyffrous" | "exciting" |

A general participle is any attribute which describes the general activity of an agent or instrument. There are activities for which a noun exists, but no verb. If a verb is needed, it is formed with an auxiliary verb and the noun:

| General Participle | Verb phrase |
| :--- | :--- |
| victorious | achieving victory over |
| historic | making history of |
| historical | preparing the history of |
| domestic | making a home for |
| scientific | applying science to |
| secretive | keeping secrets from |
| soporific | causing sleep to |
| disastrous | causing disaster to |

In other instances of a general participle, the language expresses the agent or instrument as a role (Chapter 12., Role). The activity is expressed by a verbal noun. A verb often exists but may be absent:

| General Participle | Role | Verb | Verbal Noun |  |
| :--- | :--- | :--- | :--- | :--- |
| hospitable |  |  |  |  |
| ministerial | host | minister | host | hospitality |
| scientific | scientist | minister to | ministry |  |
| medical | doctor | - | science |  |
| surgical | surgeon | treat | treatment |  |
| maternal | mother | operate | operation |  |
| heroic | hero | mother | motherhood |  |
| villainous | villain | - | heroism |  |
| rebellious | rebel | - | villainy |  |
| warlike | warrior | rebel against | rebellion |  |
| regal | king/queen | wage war against | war |  |
| presidential | president | reign | reign |  |
| tyrannical | tyrant | - | presidency | tyranny. |

In these instances, the role and the verbal noun or verb are examples of a class of verb which is directed towards an object without altering it. This category of verb, which we call "participation" is discussed in Chapter 7.

## Conclusion

In Chapters 1., 2., and 3., we showed how a sentence conveys meaning through its role in discourse, by referring to a topic which has been identified in an earlier sentence and by supplying new information or making an enquiry or hypothesis concerning that topic, which can be referred to in a later sentence.

In this chapter, we have discussed how the role of a sentence in discourse includes also the relationship in time between the occurrence of the sentence and the occurrences of other sentences. This relationship in time, or aspect, can be general, stative, imperfective, perfective, or prospective. In actual discourse, sentences related by aspect are often combined in a compound sentence, in which one verb qualifies another.

This concludes our review of the discourse structure of sentences and the grammatical tools used to realise it. We shall defer to Chapters 13. and 14. the integration of these ideas into a single system. The next chapters are concerned with the study of sentences as a means of describing an action or state, which we shall broadly call their function.

## 6. Transitive Sentences and their Stative Resultants

## Summary

A transitive sentence or verb is defined as one which alters or affects its object, called its patient. Other verbs which take a direct object but which do not alter it are defined as not transitive. Transitive sentences includes an element, called a resultant, which describes the state of the patient after action of the verb. For every transitive sentence it is possible to construct a resultant sentence which describes the resultant state of the patient.

The intending performer of the action of a transitive sentence is its agent, who may employ an instrument as an unintending performer of the action. Where the involvement of the agent is not emphasised, or the action is outside human control, the performer of the action is the instrument. The agent or instrument is the subject, and also the topic unless an element is in focus. A sentence of which the agent or instrument is the topic is called active.

The perfective participle of a transitive verb describes the state of the patient after action of the verb, and may take the same resultant as the verb.

A transitive sentence may also be constructed with the patient as topic; this is called passive. The agent and/or instrument may be stated as additional elements. To express a passive, languages alter the verb or the sentence structure in various ways from the active form. According to each language, a passive sentence may be one in which the patient is the subject or one in which the patient is the topic but not the subject.

This chapter is concerned with transitive sentences whose resultant is stative, either a state or condition expressed by an attribute or an identification expressed by a noun. An attribute may take at least three forms: a single word (adjective or participle), or a noun and a link word meaning "subject to", or a preposition or postposition (called a locative) linked to a location. The resultant sentence is an attributive or identification sentence comprising the resultant as subject, together with either a stative verb or an auxiliary stative verb ("be") and the attribute or noun.

In many languages, the agent or instrument, as subject, is unmarked. In others, the agent or instrument is marked as "ergative" and the object is unmarked. An ergative construction is a means of distinguishing an active sentence from alternative sentence constructions in which the patient is the subject.

A transitive sentence whose resultant is a locative expresses movement, and may include a directive which indicates the direction of movement. A directive may be qualified by the distance moved, and a locative may be qualified by the distance from another location. Distance is expressed by a quantity and unit.

An constituent sentence describes, measures, increases, or decreases a dimension or constituent part.

An involuntary attribute which arises through an external cause is called an effect. The external cause is the instrument of the transitive sentence whose resultant is the effect. A freedom is an action, usually deliberate, to free the patient of an effect.

An attribute which expresses a state which may arise from a cause in the future is called a dependency. A dependency may arise through an intentional or an involuntary action. If involuntary, it may have an instrument and be an effect. A dependency may be removed or relieved through the action of a different agent or instrument.

An artefact or instrument which is used for the purpose for which it is designed is called an appliance. A transitive sentence may express that function.

If the resultant of a transitive sentence is a noun, the resultant sentence assigns to the patient the identity of the resultant. If the resultant is indefinite, the sentence states that there exists an instance of the resultant which is the same as the patient.

A similarity is an identification between a characteristic of two entities.
An attribute or identification can also be a qualifier to a noun. The construction in which an identification is a qualifier is called apposition.

## Terms Defined or Introduced

Transitive, intransitive, patient, resultant, resultant sentence, agent, instrument, agential, instrumental, active, passive, attributive, creation, locative, directive, measure, constituent, effect, freedom, dependency, relief, appliance, identification.

## Background

So far in this book, we have been examining how sentences are constructed so that they fit together into a meaningful discourse. We have shown how sentences are either existential or consist of a topic and comment, or a topic and enquiry, or a hypothesis. In analysing sentences in this way, every meaningful word can be categorised as either definite, indefinite, or indefinable.

With Chapter 6., we start to examine how sentences describe an action or state, which we broadly term a function. The action or state is applied to some entity, affects another entity, and has relationships with other entities, and the sentence relates all these entities to the action or state to convey a meaning. This study is called functional analysis and the entities needed to make a meaningful sentence are called functional elements. The functional elements differ between functions, so that it is possible to categorise sentences by their functions and functional elements.

In principle, any one of the functional elements can be the topic, so that the rest are the comment, enquiry, or hypothesis. However, some elements are much more frequently selected as the topic (such as the agent, instrument, object, or recipient, as we shall see), than others. The grammar of each language provides tools to enable each element to be selected as topic. Some grammars are less flexible than others in this respect, and most languages do not readily allow certain functional elements to be the topic. However, in principle it is possible for any functional element to be the topic, and in this way the discourse structure and the functional structure of a sentence are independent of each other. As we examine functional structures, we shall show how our sample languages enable different functional elements to be the topic of sentences, and how this differs between different actions and states.

In the majority of sentences in most languages, the relationship between the topic and comment is represented by that between a subject and a verb. There is a semantic union between the subject and the verb, expressed by a grammatical agreement:
"The professor gave the lecture." "The lecture was given by the professor."
Where we consider such sentences, we shall refer to "the professor" and "the lecture" respectively as the "subject" and the remainder of the sentence, including the verb, as the "predicate". The sentences are therefore "subject-predicate" or "subject-verb-object-complement".

In a minority of sentences, the element with which the verb is in semantic union is not the topic. It is conventional to refer to such an element as the subject and to imply that there is a topic which is different from the subject. We shall call such sentences "topic-comment". The question of whether what is conventionally called the subject is properly the subject of such sentences is deferred to Chapters 16. and 17., by which time we will have a more rigorous definition of "subject" and "verb" at our disposal. The following are examples of topic-comment sentences which will appear in this and succeeding chapters:

English: "It was the professor who gave the lecture."

Italian: "La mia macchina l'a colpita un sasso." "My car has been hit by a stone." [The my car it-has hit a stone.]

Russian:"Ucheniku veselo." "The pupil feels cheerful." [To-pupil cheerful.]
Malay: "Sopir itu namanya Pak Ali." "The name of that driver is Mr Ali." [Driver-that, name-his Mr Ali.]

Hindi: "hame~ ye pustken nahĩ cāhie" "We don't need these books."
[To-us these books not necessary.]
Chinese:"Xìn tā jì chūqù le." "She has posted the letter." [Letter she post out-go now.]
Japanese:
"Kono kuruma ni wa kā sutereo ga aru." "This car has a car stereo."
[This car-in ${ }_{\text {(topic) }}$ car stereo ${ }_{\text {(subject) }}$ there-is.]
The use of "topic-comment" does not imply that "subject-predicate" sentences are not also topiccomment, simply that such "topic-comment" sentences do not conform to the subject-predicate pattern.

## Transitive Sentence and Stative Resultant

The actions and states examined in this chapter are those which can be called "transitive". In conventional terminology, it has been usual to describe as transitive any verb which takes a direct object, that is an object without a linking word:
"The author wrote the novel."
"The manager remembered the report."
"The officials obeyed the minister."
This is despite the fact that the functional grammar of each of these sentences is different. In the first case, the subject creates the object, in the second the subject engages in a mental act towards the object, and in the third the subject engages in an action which does not affect its object. In other languages their construction is different. If the sentences are expressed in Italian, the first is translated directly, in the second and third the verb takes a preposition, and the second has a reflexive form:

$$
\begin{array}{ll}
\text { "L'autore ha scritto il romanzo." } & \text { [The author has written the novel.] } \\
\text { "Il direttore s'è ricordato del rapporto." } & \text { [The manager himself is reminded of the report.] } \\
\text { "I funzionari hanno ubbidito al ministro." } & \text { [The officials have obeyed to the minister.] }
\end{array}
$$

According to the usual terminology, any verb which requires a preposition before its object is intransitive. Therefore while in both Italian and English the first sentence is transitive, the second and third verbs are held to be intransitive in Italian and transitive in English. By the standard of functional grammar, this makes no sense. A grammatical distinction, such as that between transitive and intransitive, should correspond to a real difference of meaning, not to the usage of one language or another. Moreover, the second and third examples could be extended to a wide range of languages, including French, German, and Japanese, and a large number of verbs.

There is, of course, a distinction between transitive and intransitive sentences which corresponds to a real distinction of meaning. A conventional example of an intransitive sentence is the same in English and Italian:
"The visitors have returned to London." "Gli ospiti sono tornati a Londra."
[The guests are returned to London.]
If we are to give the terms "transitive" and "intransitive" a useful meaning, we must pass over the second and third examples for the time being, and limit ourselves to the first and fourth. We can then define the words with some precision: a transitive verb or sentence is one which alters or affects its object; an intransitive verb or sentence is one which alters or affects its subject. There is nothing new in these definitions. Despite that, "transitive" continues to be applied generally to the first three
examples, although in the second and third the object is not altered or affected in any way. We shall limit "transitive" to sentences defined as above. The second example will be assigned to a different category called "possession" (Chapter 8), and the third to another class called "participation", which is considered among other intransitive sentences in Chapter 7.

This use of "transitive" reflects the origin of the term, which is that the action of the verb passes over or "transits" to the object. The term "factitive" is also sometimes used with the same meaning. To reflect the fact that the object is altered, it is called the patient of the verb.

Any process involves change. Since a transitive sentence changes its patient, it may include a word or phrase to describe its state after the process is completed, especially if the verb is perfective. If the verb is imperfective, the word or phrase indicates the expected state of the patient after the process is completed:

> "The blow broke the vase into pieces." "The blow was breaking the vase into pieces." "John pushed the window open." "Mary painted the fence green." "The was pushing the window open."
"The contractors were widening the road by two metres."
"The Committee elected Richard Chairman."
"The Committee was electing Richard Chairman."
The traditional term for "into pieces", "open", "green", "by two metres", and "Chairman" in these sentences is "complement", which is intended to convey that it "completes" the meaning. Unfortunately, this term is also used for words which "complete" sentences which are not transitive, and which do not indicate the result of a change, for example "happy" in "he looks happy", or "interesting" in "she found it very interesting". This seems another example of a grammatical term which does not properly reflect a function. We therefore suggest the term resultant for the altered state of the patient arising from the action of a transitive verb. For each of the above transitive sentences, there is a stative resultant sentence which expresses that state or condition. If it is desired to refer to the process by which the state arose, the resultant sentence in English includes a perfective participle, otherwise not:
"The vase was (broken) into pieces."
"The window was (pushed) open."
"The fence was (painted) green."
"The road was (made) two metres wider."
"Richard was the (elected) Chairman."
The perfective participle of a transitive verb describes the state of the patient after action of the verb, since it is the patient which is altered, and may take the same resultant as the verb:
"a vase broken into pieces"; "a window pushed open", etc.
In Chapter 11., it will be shown that there are transitive sentences, called "causative", which can have a dynamic resultant. However, in this chapter we are concerned only with transitive sentences with a stative resultant. As the examples show, a stative resultant may be an attribute or noun.

As mentioned in Chapter 5. (Perfective Participle), not all languages provide a perfective participle. However, all languages provide a resultant, and usually mark it by placing it immediately after the patient:

Arabic: "xāṭa l-qumāša $\theta$ awban" "He tailored the cloth [into a] garment."
Indonesian:
"Perbuatannya menjadikan ibunya sedih."
"His actions made his mother sad." [Action-his made mother-his sad.]
In Finnish, the resultant is marked with an ending "-ksi"/"-kse", called the translative case:
"Juotko lasin tyhjäksi?" "Will you empty your glass?" [Drink-you glass empty ${ }_{\text {(translative) }}$ ?]
"Lykkäämme kokouksen huomiseksi." "We shall postpone the meeting until tomorrow."
[We postpone meeting tomorrow (translative).]
"Hän veisti puikon liian lyhyeksi." "He cut the stick (to become) too short."
[He cut stick too short (translative).]
In Hungarian, it is often marked with "-ra"/"-re" (onto"):
"Magyarra fordította a könyvet." "He translated the book into Hungarian,"
[Hungarian-onto he-translated the book.]
"Fehérre festettünk minden falat." "We painted every wall white."
[White-onto we-painted every wall.]
In Chinese, a resultant (in brackets) is obligatory after a transitive verb, even when it is not in English:
"Wŏ yĭjing zuò wán le wŏde zuòyè." "I have already done my homework." [I already do finish (aorist) $m y$ homework.] (wán = finish)
"Tā xiū hăo le nèi liàng mótuōchē." "He has repaired that motorbike." (hăo = good)
[He repair good ${ }_{\text {(aorist) }}$ that unit motorbike.]
"Zhèi gè háizi nòng huài le wŏde diànnăo." "This child has damaged my computer." [This unit child damage bad (aorist) $m y$ computer.] (huài = bad)
"Jinngchá zhuā zhù le xiăotōu." "The policeman has caught the thief." (zhù = firm) [Policeman catch firm ${ }_{\text {(aorist) }}$ thief.]

## Agent and Instrument

The above examples also show that not all transitive verbs require a resultant in all languages. Sometimes, the verb adequately expresses the completed process, and sometimes it does not:
"The bullet killed the soldier."
"The bullet shot the soldier dead."
It will be seen that the subject of a transitive sentence can be two distinct elements: the agent (the intending performer of the action) or the instrument (the unintending performer). A transitive sentence with an agent as subject is agential, and can include a phrase to express the instrument. A transitive sentence without an agent, and in which the instrument is the subject, is instrumental. An agent is an animate being, and an instrument is inanimate:
"The man broke the rock in two with a hammer." (agential)
"The hammer broke the rock in two." (instrumental)

The instrumental sentence is used when the agent is not important to the meaning. It can also be used when there is no agent, for example in a natural event:
"The lava burned the villages." "The moon eclipsed the sun." "Moonlight lit up the scene."
An instrumental sentence can have a second instrument, through which it effects its action:
"The wind broke the windshield with a branch."
In some languages, a transitive sentence is reserved for an action within human control. The "subject-verb-object" format is regarded as agential, and the instrument is always marked. If no agent is present Japanese often uses an intransitive verb, reflecting the fact that an intransitive verb cannot have an agent:

$$
\begin{aligned}
& \text { "Mado ga seki ni wareta." "A stone broke my window." } \\
& \text { [Window (subject) stone-by broken-was.] } \\
& \text { "Tamago de arerugī ni naru." "Eggs cause me an allergy." }
\end{aligned}
$$

## [Egg-by allergy-to becomes.]

Russian uses an impersonal form of the verb:
"Dachu zazhglo molniei." "The dacha was struck by lightning."
[Dacha ${ }_{\text {(object) }}$ it-struck by-lightning.]
"Podval zalilo vodoi." "The cellar was flooded." [Cellar (object) it-flooded by-water.]
In other languages, the agent of a transitive sentence is marked. This is the ergative construction, and is discussed further below.

## The Passive Construction

In the previous section, we have considered transitive sentences of which the subject is the agent (the intending performer of the action) or the instrument (the unintending performer). Since a transitive sentence usually supplies new information on the agent or instrument, that is the topic:
"Mary painted the fence green." "The hammer broke the rock in two."
Such a sentence is referred to as active. This applies unless an element of the active sentence is in focus:
"It was green that Mary painted the fence." "It was the rock that the hammer broke in two."
For these sentences, the elements in focus are "green" and "the rock", which are therefore the comments, while "that Mary painted the fence" and "that the hammer broke in two" are the topics.

In an alternative construction, a transitive sentence supplies new information on the patient. The topic is therefore the patient, and the sentence is said to be passive. A passive sentence conveys that an action has been or is being performed on the patient, and its resultant is therefore the changed state of the subject. It may be less interested in by whom or by what means the action occurs, and in that case the agent or instrument may be omitted.

A passive sentence bears some resemblance to an intransitive sentence as defined at the start of this chapter, in which the subject is altered or affected, and the resultant is the altered state of the subject. There is however a distinction. A passive sentence expresses an action on its topic due to an external agency or cause, whether stated or not; an intransitive sentence expresses an action on its subject which is not due to any known external factor:

```
"The tree was felled (by the woodman)."
"The tree fell."
"Prices were raised (by the retailer)."
"Prices rose."
```

(passive)
(intransitive)
(passive)
(intransitive)

Some English verbs possess parallel forms for the passive and intransitive, while others do not:

```
"The door was opened (by the doorman)." (passive)
"The door opened." (intransitive)
```

A passive form of the verb may be used when another element is in focus:
"It was by Mary that the fence was painted green."
"It was with the hammer that the rock was broken in two."
However, in discourse terms these sentences are not passive, as their topics are "the painting green of the fence" and "the breaking of the rock in two".

Passive forms occur in all or most languages, because most languages require the ability to express the patient as topic. However, whereas an active sentence has the same single "subject-verb-object" pattern in most languages, the passive is realised by means of at least five different constructions,
described below. In three of them, the sentence is constructed so that the patient is the subject of a passive verb:

- use of a passive auxiliary verb;
- use of the reflexive;
- use of a passive form of the verb.

In two other constructions, the patient is in topic position but is not the subject of the verb; the verb remains structurally active:

- placing the patient in topic position;
- a construction without an agent.
(i) In English and some other languages with a perfective participle, the passive is formed by combining that with a passive auxiliary verb, the sense being "the subject has become/is becoming in the state of":

Italian: "Il romanzo è stato scritto dall'autore." "The novel was written by the author."
Persian: "košte našodam" "I was not killed." [Killed not-became-I.] ("koštan" = "kill")
Hindi: "patr ḍāk se bhejā gayā thā""The letter was sent by post."
[Letter post-by sent gone was.]
The Russian perfective participle construction only expresses the perfective passive, as in the examples below. For imperfective passives, the spoken language uses a reflexive or impersonal construction:
"Pis'mo podpisano ministrom." "[The] letter [is] signed by [a] minister."
"Knigi vozvrashchayutsya v biblioteku." "The books are returned to the library."
[Books return-themselves to library.]
English can distinguish between a perfective and imperfective passive by use of different auxiliaries:

> "The vase was broken into pieces." "The vase was being broken into pieces."
> "The window was pushed open." "The window was being pushed open."
> "The fence was painted green." "The fence was being painted green."
> "The road was widened by two metres."
> "The road was being widened by two metres."
> "Richard was elected Chairman." "Richard was being elected Chairman."

The first of these sentences, the perfective, is in many cases not distinguishable from the stative resultant.

German possesses an imperfective and perfective passive auxiliary, which it uses with the perfective participle to distinguish between the passive (a process) and the stative resultant. Both of the following mean in English "we were assigned to the same group". However, the German verb form cannot distinguish the imperfective "we were being assigned to the same group":

> "Wir wurden derselben Gruppe zugeteilt."
> [We became to-the-same group assigned.]
> "Wir waren derselben Gruppe zugeteilt." [We are to-the-same group assigned.]
(ii) A passive form may be expressed as the reflexive form of the active verb. As Chapter 7. will show, a reflexive is the same as an agential intransitive. Since an intransitive is a verb which alters or affects its subject, this construction may not allow a separate agent or instrument to be expressed:

Spanish: "Se discutieron varios problemas." "Various problems were discussed." [Themselves discussed various problems.]
"Su primera novela su publicó en 1982." "His first novel was published in 1982." [His first novel published itself in 1982.]

Italian: "Si raccontavono molte storie." "Many stories were told."
[Themselves told many stories.]
"Gli uomini non sposati si dicono celibi." "Unmarried men are called bachelors." [The men not married themselves call bachelors.]

Arabic: "lā tatajassamu fī ?intāji l-jadīdi" "It is not embodied in the production of the new." [Not it-embodies-itself in production of-the-new.]

In Russian and Arabic, the reflexive form of the passive does permit an agent or instrument:
Russian: "Smeta sostavlyaetsya bukhgalterom."
"The estimate is being prepared by an accountant."
[Estimate prepares-itself by-accountant.]

Arabic: "taRa $\theta \theta$ arat bi-zalzāli 12 ?uktūbar"
"They were affected by the earthquake of 12 October."
[They-affected-themselves by earthquake 12 October.]
(iii) Many languages possess a particular passive form of the verb. For example, the Greek active verb ends in " $-\omega$ " and the passive in " $-\mu \alpha$ ", using the conventional first-person singular representation:
" $\pi \rho o \delta i ́ v \omega " " b e t r a y " ~ " \pi \rho o \delta i ́ v o \mu \alpha " " b e ~ b e t r a y e d " ~$
"O E $\uparrow \alpha \dot{\lambda} \lambda \tau \eta \varsigma \pi \rho o ́ \delta \omega \sigma \varepsilon$ тous $\Sigma \pi \alpha \rho \tau \iota \alpha ́ \tau \varepsilon \varsigma . "$ "[The] Ephialtes betrayed the Spartans."
"Oı $\Sigma \pi \alpha \rho \tau \iota \alpha ́ \tau \varepsilon \varsigma ~ \pi \rho о \delta o ́ \theta \eta \kappa \alpha \nu \alpha \pi o ́ ~ \tau о v ~ E \varphi ı \alpha ́ \lambda \tau \eta$."
"The Spartans were betrayed by [the] Ephialtes."
The following Arabic verbs are passive through a vowel change from the active:
"qad £ūlija ‘āla २ayd̄̄ Raṭibbā¢a maharatin" "He was treated by skilled doctors."
[He was treated at hands of doctors skilled.]
"yudāru bi-l-yadi" "It is operated by [the] hand."
"lam yuktašaf ḥattā l-Rāna Rayyu đilājin"
"No treatment has up to now been discovered."
[Not was-discovered up-to now any treatment.]
The following illustrate active and passive forms of the same verb:
Turkish: "Köprüyü tamir ediyorlar." "They are repairing the bridge."
[Bridge ${ }_{\text {(object) }}$ repair they-are-doing.]
"Köprü tamir ediliyor." "The bridge is being repaired."
[Bridge repair is-being-done.]
Hindi: "mai~ use chāpū̃gā" "I shall print it."
[I it shall-print.] ("chāpnā" = "print")
"pustak agle hafte chap jāegī"
("chapnā" = "be printed")
"The book will be printed next week."
[Book next week printed will-become.]
"usne tarkārī jalāī""He burned the curry."
[ $\mathrm{He}_{\text {(agent) }}$ curry burned.]
"yah lakrị̀ nahī̃ jalț̄"" "This wood doesn't burn."
("jalānā" = "burn")
("jalnā" = "be burned")
[This wood not burn.]

Japanese:
"Hanako wa Ichirō o damashita." ("damasu" = "deceive")
"Hanako deceived Ichiro."
[Hanako (topic) Ichiro $_{\text {(object) }}$ deceived.]
"Ichirō wa Hanako ni damasaremashita."
"Ichiro was deceived by Hanako."
[Ichiro (topic) Hanako-by was-deceived.]
Inuit: "Inuit nanuq takuaat." "The people saw the polar bear." [People bear see-they-it.]
"Nanuq inunnit takuniqarpuq." "The bear was seen by the people."
[Bear people-by see-passive-they.]
Indonesian and Swahili possess separate forms for the passive and stative:
Indonesian:

> "Surat itu ditulisnya dalam bahasa Inggris." ("tulis" = "write") "That letter was written by him in English." [Letter that written-by-him (passive) in language English.] "Surat itu tertulis dalam bahasa Inggris." "That letter was written in English." [Letter that written (stative) in language English.]

Swahili: "Kikombe kimevunjwa na mtoto." ("vunja" = "break")
"The cup has been broken by the child."
[Cup has-been-broken ${ }_{\text {(passive) }}$ by child.]
"Kikombe kimevunjika." "The cup is broken."
[Cup is-broken ${ }_{\text {stative). }}$.]
(iv) Languages which allow a free word order can achieve the effect of a passive in a sentence which is structurally active, by putting the patient rather than the agent or instrument in topic position. Italian and Spanish, for example, mark the initial word as patient by means of an object pronoun in front of the verb. The following are alternatives sentences:

Spanish: "La reacción fue provocado por una alergia o una enfermidad."
[The reaction was produced by an allergy or an illness.]
"La reacción la provocó una alergia o una enfermidad."
[The reaction it-produced an allergy or an illness.]
Italian: "La mia macchina è stata colpita da un sasso." [The my car is been hit by a stone.]
"La mia macchina l'a colpita un sasso." [The my car it-has hit a stone.]
Inuit can freely adjust the word order:
"Piniartup puisi pisaraa." "The hunter caught the seal."
[Hunter ${ }_{(\text {agent })}$ seal catch-he-it.]
"Puisi piniartup pisaraa." "The seal was caught by the hunter."
[Seal hunter ${ }_{\text {(agent) }}$ catch-he-it.]
(v) The passive sentence is constructed as an active sentence but without an agent. This is sometimes described as "impersonal". It may arise because, as in the case of Russian, Welsh, Irish, Finnish, and Hungarian, no other passive form of the verb exists. In the absence of an agent, the hearer infers that the patient is the topic:

French: "On a attrapé le larron." "The thief has been caught" [One has caught the thief.]
German:"Bei uns darf gestöbert werden." "In this shop you may rummage about." [With us it-is-allowed rummaged to-become.]

Russian: "Vash bagazh otpravyat v gostinitsu." "Your luggage will be taken to the hotel." [Your luggage they-take to hotel.]
$\begin{array}{r}\text { "Nas kormili tri raza v den'." "We were given three meals a day." } \\ \text { [Us they-fed three meals in day.] }\end{array}$
Welsh: "Gwneir caws o laeth." "Cheese is made from milk."
[There-is-making cheese from milk.]
"Gwisgir y wisg Gymreig ganddi hi." "Welsh costume is worn by her."
[There-is-wearing the costume Welsh by her.]
Irish: "Do crúdh na ba." "The cows were milked." [Were-milked the cows.]
"Deintear bróga na leathar." "Shoes are made of leather."
[Are-made shoes of leather.] $\quad \begin{array}{r}\text { Finnish: "Ovi suljetaan avaimella." "The door is closed with a key." } \\ \text { [Door one-closes with key.] }\end{array}$

## Attributive Sentence and Verb

With the exception of the identification function, transitive sentences result in a stative condition which can be called an attribute. Before proceeding to describe the types of transitive verb in more detail, it will be useful to discuss the function and construction of attributes. An attribute is a stative condition which occurs in two contexts:

- As a qualifier to a noun, that is a word attached to a noun which provides further information on it, as described in Chapter 2. (Restrictive Qualifier).
- As a predicate to a stative sentence, which provides information on the condition of the subject. This is an attributive sentence and the predicate is expressed by an attributive verb.

In English and in many other languages, most attributes are a single word called an "adjective". However, not all attributes are adjectives, as the following examples of a noun qualifier and equivalent attributive sentence illustrate:

```
"a long speech"
"a beautiful picture"
"a Government in crisis"
"valuable suggestions"
"existing records"
"the living forest"
```

"The speech was long."
"The picture is beautiful."
"The Government is in crisis."
"Your suggestions are of value."
"The records exist."
"The forest lives."/"The forest is alive."

The first two sentences show adjectives "long" and "beautiful". The attributive sentences are achieved by means of the auxiliary attributive verb "be".

The second two sentences show an attribute formed from a noun and the word "in" or "of". These expressions have already been discussed in Chapter 4. The words "in" or "of" have the meaning "in a state of", and can be regarded as an auxiliary attribute or a converse link. Other English examples of this type of attribute are "in pain", "at risk", "in motion", "at rest", "in error", "at work", "at leisure", "at school", "in existence", or "in love". Italian examples are "di turno" ("on duty"); "in cima" ("at the top"); "in crescita" ("in growth"); "in giro" ("on tour"); "in panne" ("in breakdown").

The third two sentences show an attribute expressed as a stative verb, from which an attributive participle can be formed. Other examples are "suffer" and "rest". Locative examples, described below, are "surround" and "contain". The general pattern of an attributive sentence can be summarised as "subject-attribute". As we shall see, many attributes can themselves have an instrument, for
example "John was angry at the insult"; in those cases, the structure can be extended to "subject-attribute-instrument". Since these sentences describe the state or condition of the subject, the subject is always the topic.

The common feature of these words are that they express the resultant of an expressed or implied transitive or intransitive sentence. The state or condition represents new information and is therefore indefinite; each sentence can be expressed existentially: "There is beauty in the picture"; "There is value in your suggestions"; "There is life in the forest".

Many languages employ the auxiliary attributive verb "be":
Irish: "Tá sé ina fhear shaibhir." "He is a rich man." [Is he in-its man rich.]
Hindi: "dīvār ū cī hai""The wall is high." [Wall high is.]
In many other languages an attribute is a stative verb. Either there is no auxiliary attributive verb, or it is not available in the present tense. In those cases, a qualifier may be distinguished from a predicate by being placed before the noun, while the predicate is after the noun:

Russian: "krasivyi gorod""a beautiful city";
"Gorod krasiv." "The city is beautiful" [City beautiful.]
Turkish: "kasada vesika" "the document in the safe" [safe-in document]
"Vesika kasada." "The document is in the safe." [Document safe-in.]
Chinese:"yí ge hěn kuān de huāyuán" "a wide garden" [one unit wide of garden]
"Zhè ge fángjiān shí mĭ kuān." "This room is ten metres wide."
[This unit room ten metre wide.]

## Japanese:

"takai hon" "[an] expensive book"
"Hon wa takai." "The book is expensive." [Book (topic) expensive.]
"genkina hito" [a] healthy person
"Kono hito wa genki da." "This person is healthy." [This person ${ }_{(\text {topic }}$ healthy is.]
In Inuit, "ungasis" is a stative verb meaning "be far". The qualifier "far" is formed by attaching to the verb a suffix "-suq", here translated as "being":
"nunamut ungasissuq" "far from the land" [land-to far-being]
"Kilumiitirisut untritilittut ungasissigaaq." "It is a hundred kilometres away."
[Kilometres-as hundred-as far-so-it.]
Alternatively, if no auxiliary verb is used, the subject is marked as definite and the predicate (being new information) is not marked as definite:

$$
\begin{aligned}
& \text { Arabic: "al-ḍawPu nāṣifun""The light [is] clear." } \\
& \text { "al-mas?alatu basītatun""The question [is] simple." }
\end{aligned}
$$

If the words following the Arabic subject are marked as definite, they are a qualifier:

> "al-£aqabatu al-kaiūdu"" "the insurmountable obstacle"
> [the obstacle the-insurmountable]

In Indonesian/Malay, the words "ini" ("this") and "itu" ("the"/"that") mark the subject as definite. The words following these words are the predicate:
"Ini kereta besar." "This is a big car." [This car big.]
"Kereta ini besar." "This car is big." [Car this big.]
"Kereta besar itu baru." "The big car is new." [Car big the new.]

In Hungarian, an attributive verb may occur at the start or end of the sentence:
"Koszos a cipő." "The shoes are dirty." [Dirty the shoes.]
"Ez a ház hatalmas." "This house is huge." [This the house huge.]
Not all stative relations are attributive. The same predicate construction is employed for an identification, described below. An additional category of stative relations expresses possession, as is shown in Chapter 8.

## The Ergative Construction

As the above examples show, if no agent is expressed the same construction is used in some languages for both a dynamic perfective sentence and the stative sentence which describes its resultant:

English: "The window was pushed open."
Italian: "Il romanzo è stato scritto dall'autore." "The novel was written by the author."
Russian: "Pis'mo podpisano ministrom." "[The] letter [is] signed by [a] minister."
Finnish: "Paitaanne ei vielä ole pesty." "Your shirt has not been washed."
[Shirt-your not yet it-is washed.]
In other languages, the verb in the form of a perfective participle has both transitive and stative meanings, but they are distinguished by different auxiliary verbs:

German:"Wir wurden derselben Gruppe zugeteilt." "We were assigned to the same group."
[We became to-the-same group assigned.]
Persian: "košte našodam" "I was not killed." [Killed not-became-I.] ("koštan" = "kill")

Hindi: "patr ḍāk se bhejā gayā thā" "The letter was sent by post."
[Letter post-by sent gone was.]
It is, of course, essential to the sense of a narrative to indicate whether an action is in progress or has been completed. In most of the languages we have chosen for illustration, an action in progress can have an agent or instrument in topic position, so constructing a standard active transitive sentence:

English: "She pushed the window open."
Italian: "L'autore a scritto il romanzo."
However, some languages adopt the additional device of marking the agent, by means of a case or inflection which is called ergative. Hindi and Inuit employ an ergative, here indicated by ${ }_{\text {(agent) }}$ :

$$
\begin{aligned}
& \text { Hindi: "usne kitāb likhī" "He wrote the book." }\left[\mathrm{He}_{\text {(agent) }}\right. \text { book written.] } \\
& \text { Inuit: "Akkam-ma aataaq aallaavaa." "My uncle shot the harp-seal." } \\
& \text { [Uncle-my (agent) }
\end{aligned}
$$

The common feature of the ergative construction in both these languages and others which employ it is that it is only used for transitive agents. It does not occur with the agents of intransitive sentences. Because the ergative case distinguishes between the agent and object or patient, the object or patient is generally unmarked.

Further examination shows differences in the structure of the ergative between languages. In the Hindi example, the participle "likh $\overrightarrow{1}$ " ("written") agrees with the patient "kitāb" ("book") in that it is feminine, while the agent "usne" ("he") is masculine. Without the ergative, the sentence would be a stative description of the condition of the book. Moreover, the Hindi ergative is only used for perfective
transitive sentences. In imperfective sentences the risk of confusion between dynamic and stative does not arise, and the agent is not ergative but nominative, the case of the subjects of intransitive and stative sentences:
"sādhu mantra jap rahā thā""The sadhu was reciting incantations."
[Sadhu mantra repeating was.]
However, the Inuit ergative is used for imperfective and general sentences as well as perfective, while (unlike Hindi), it is not used if the agent is expressed by a pronoun:

> "Qimmit irniinnaq paasisarpaat." "The dogs ${ }_{\text {agent }}$ understand it at once."
> [Dogs at-once understand-habitual-they-it.]
> "Aappaluttumik qalipappara." "I painted it red." [Red-being-with paint-I-it.]

We may consider two further ergative languages, Basque and Samoan. In Basque, the basic form of the verb is a perfective participle. In the following sentence it is "egin" ("do", "done"):
"Txuleta gutxi egina nahi dut." "I want my steak rare." [Steak little done wish I-have.]
The same form of the verb is used for perfective transitive sentences, with the agent marked as ergative. In this way, Basque distinguishes the perfective from the attributive:
"Zer egin behar zuen Josuk?" "What did Josu have to do?" [What do need had Josu ${ }_{\text {(agent) }}$ ?]
The Basque ergative is not used for imperfective sentences, but unlike the other languages cited is used for "have":
"Elin oraindik txuleta jaten ari da." "Elin is still eating her steak." [Elin still steak eating is.]
"Nik badaukat zinta hau." "I've got this tape." [ $I_{\text {(agent) }}$ have tape this.]
The Samoan transitive verb has two forms which express an active transitive sentence, generally called "active" and "passive". When the "active" form is used, the agent is not marked. When the "passive" form is used, the agent is marked as ergative with the prefix "e" ("by"). In these examples, "fa'aaoga" ("use") is active and "fa'aaogaina" ("used") is passive:
"Fa'aaogā le ulo e fai a'i mea'ai." "Use the pot to cook food." (active)
[Use the pot to cook with-which food.]
"Ua fa'aaogaina e Tavita nofoa o lo'o i ai i totonu o le fale."
"David is using the chairs which are inside the house."
[Are being-used by-David chairs there-are inside the house.]
As these examples show, the Samoan ergative is used for imperfective as well as perfective. Without the agent "e Tavita", the second sentence would be a simple passive "The chairs are being used", which can be interpreted as dynamic or stative according to its context in the narrative. The ergative agent marks the sentence as dynamic.

The approach of structural grammar is to regard the ergative-absolutive construction as an alternative to the nominative-accusative one, "absolutive" being the case of the object of an ergative sentence. This of course is correct. However, both realise the same function, the "agent-patient-resultant" dynamic sentence.

In addition to indicating whether a verb is dynamic or stative, the ergative can distinguish a transitive from an intransitive sentence, where the same form of the verb is used in both (Chapter 7., The Inceptive Function):

Avar: "wacas šiša bekana" "The boy broke the bottle." [Boy (agent) ${ }^{\text {bottle broke.] }}$
"šiša bekana" "The bottle broke." [Bottle broke.] ${ }^{19}$

[^11]"bekana" ("broke") and "šiša" ("bottle") have the same form in both sentences, "šiša" being absolutive. The first sentence is marked as transitive through having an ergative topic.

## Functions of the Transitive Verb

The function of a transitive sentence is to affect or alter its patient to a state described by the resultant. So far, we have been examining the elements which are or can be common to all transitive sentences: the agent, verb, patient, resultant, and instrument.

However, this is not an adequate description of all the transitive sentences which occur. Closer examination shows that transitive sentences vary according to the resultant to which they give rise. In the rest of this chapter, we shall describe seven different types of resultant and corresponding transitive sentences. They are:

- The creation and destruction function, whose patient is created or destroyed.
- The transformation function, whose patient is altered to a new form.
- The locative function, whose patient is located and moved in space or time.
- The constituent function, which alters the constituent of its patient.
- The effect function, whose patient is in an altered state due an external cause.
- The dependency function, whose patient is at risk of an external event.
- The appliance function, whose patient is subjected to a human artefact.
- The identification function, whose patient is identified with a definite or indefinite noun.

Some of these transitive and attributive constructions are adequately described by the elements we have already covered (agent, verb, patient, resultant, and instrument). Others refer to elements additional to these:

- The locative sentence refers to a direction and distance.
- The dependency sentence refers to an external event.
- The appliance sentence includes an appliance or artefact.

Chapter 10. will cover an additional element of transitive and intransitive sentences, the beneficiary. Chapters 8., 9., and 11. will cover other types of agential sentence, the dative, adoptive, causative, and facilitative. Dative and adoptive sentences give rise to a different type of stative resultant sentence, the possession. The resultant sentence of a causative sentence is not stative, but dynamic. A facilitative is a type of dative sentence whose resultant sentence is a modal.

Each of the following transitive sentences is accompanied by its stative resultant sentence, marked with " $\rightarrow$ ".

## The Creation and Destruction Functions

Under this heading are included two categories of sentence, those which describe an act of creation and those which describe an act of destruction. Their common feature is that the transitive sentence may not need to include a separate expression for the resultant. To consider first a creative sentence:
$\begin{array}{ll}\text { "Philip built the house." } & \rightarrow \\ \text { "Anne wrote the letter." } & \rightarrow\end{array}$
If there is no need to state the constituents from the which house or letter was made, the meaning of these sentences is complete. Alternatively, the constituents can be included:

$$
\begin{array}{ll}
\text { "Philip built the house in brick." } & \rightarrow \\
\text { "Anne wrote a letter of thanks." } & \rightarrow
\end{array} \text { "The letter is of brick." }
$$

It can be seen that in reality the object of these sentences, the thing created, is not its patient. The house and the letter are not converted into anything; they are the result of the conversion and therefore the resultant. What is the patient is the constituents from which they were made. If these sentences
were expressed in the same format as other transitive verbs, they would appear more artificial or indirect:
"Philip built the bricks into a house."
"Anne composed her thanks in a letter." "The bricks are built as a house."

The characteristic of a creative sentence is therefore that the direct object is the resultant, and the patient (if expressed) is the constituents from which it is made. The resultant sentence has as its subject not the patient, as is usual, but the resultant. If no constituents are included, the verb of the resultant is the perfective participle, such as "built" or "written".

Many creative actions are the representation of an object in some medium. The object is not altered, and the patient is the medium in which the representation is made. These sentences combine the functions of creation with communication (Chapter 8., The Representation Function):
"Gainsborough painted a picture of his sitter as a country gentleman."
"She summarised the article in five lines."
"We translated the book into Greek."
Examples of a destructive sentence are:
"Brutus murdered Julius Caesar." $\rightarrow$ "Julius Caesar is dead."
"The executor broke up the estate." $\rightarrow$ "The estate is broken up."
"The fire burnt the house." $\rightarrow$ "The house is burnt."
"The family ate lunch." $\rightarrow$ "The lunch was eaten."
These sentences conform to the standard transitive pattern. The patient is affected by the verb, in that it is destroyed. If there is no need to state the results of the destruction, the resultant can be omitted. In that case, the attribute of the resultant sentence is again the perfective participle, "dead", "broken up", "burnt", or "eaten".

Equally, the sentences can have a resultant which is the attribute of the resultant sentence:
"Brutus stabbed Julius Caesar to death."

$$
\rightarrow \quad \text { "Julius Caesar is dead from stab wounds." }
$$

"The executor broke up the estate into lots."
$\rightarrow \quad$ "The estate is broken up into lots."
"Fire burnt the house to ashes." $\rightarrow$ "The house is burnt to ashes."
Both creative and destructive verbs can have an instrument:
"Anne wrote the letter on her computer."
"Brutus murdered Julius Caesar with a dagger."

## The Transformation Function

Many examples of a transitive sentence listed earlier in this chapter (Transitive Sentence and Stative Resultant) are of sentences which alter their patient in some way, without either creating something new or destroying something. We can all their action a transformation. The verb expresses the transformation action. The resultant is generally an attribute which describes the transformed state, and is expressed by a complement:

$$
\begin{aligned}
& \text { "John pushed the window open." } \rightarrow \\
& \text { "Mary painted the fence green." } \rightarrow \text { "The window was (pushed) open." } \\
& \text { "Sheila mowed the grass very short." }
\end{aligned}
$$

In many instances, the verb expresses both the transformation action and the resultant state:

```
"James chopped up the logs with an axe."
                    \(\rightarrow \quad\) "The logs were chopped."
"John preserved the fence with creosote."
"His "The fence was preserved." \(\rightarrow\) "His
"His actions saddened his mother." \(\rightarrow \quad\) "His mother was (made) sad."
"The garage serviced the car." \(\rightarrow \quad\) "The car was serviced."
```

The above examples are of an intentional transformation by an agent. A transformation may also be carried out by natural forces:

```
"Rain softened the ground." }->\mathrm{ "The ground was soft."
"The sun melted the snow." }->\quad\mathrm{ "The snow was melted."
```

or by an instrument whose action is ultimately due to an unspecified agent:
"The paintstripper melted the paint."
$\rightarrow \quad$ "The paint was melted."
"The computer calculated the result."
$\rightarrow \quad$ "The result appeared on the computer."

## The Locative Function

Every language possesses a range of words for the relation of a subject to a physical location. There are a large number of such relations:
"Mary is in the garden." "John is outside the door." "The paper is on the table." "Manchester is North of London." "Her office is along the corridor."

It is usual to place such words in a separate category, called "preposition" or "postposition" because they are pre-posed or post-posed to a noun. In fact, they are no different in function from other attributes or adverbials, except that they may connect to a physical location:

| "The outside of the house is pretty." | (noun) |
| :--- | :--- |
| "This is an outside broadcast." | (attribute) |
| "They are working outside." | (adverbial) |
| "The land outside the garden is still wild." | (qualifier) |

In Chapter 4. (Links), we saw how prepositions and postpositions are also often used to express grammatical relations unrelated to physical location. To distinguish between these functions, we refer to the grammatical relation as a link and the physical relation as a locative. A locative can also be a verb or an attribute:

$$
\begin{aligned}
& \text { "The moat surrounds the castle" }=\text { "The moat is around the castle". } \\
& \text { "The box contained a present" }=\text { "A present was in the box". } \\
& \text { "The land external to the garden is still wild" }=\text { "The land outside the garden...". } \\
& \text { "The house adjacent to the school belongs to the headmaster" } \\
&=\text { "The house besides the school...". }
\end{aligned}
$$

While languages such as English have a separate locative for each position, other languages have few locatives. In the case of Chinese, they are "zài" (at/in) and "li"" ("distant from"), which can function as locative verbs:
> "Tāmen xiànzài zài Měiguó." "They are in America now." [They now are-in America.]
> "Háizi dōu zài wàitou." "The children are all outside." [Children all are-at outside.]
> "Wŏ jiā lí dàxué hĕn yuăn." "My home is very far from the University."
> [My home is-from University very far.]

Other positions are expressed by an adverbial placed after the noun, for example "li" ("inside"), "shang" ("on top"), or "fùjìn" ("beside"):
"Tā zài huāyuán li gē căo." "She is in the garden cutting the grass."
[She is-at garden inside cut grass.]
"Wŏmen zài hăitān shang shài tàiyáng." "We were on the beach sunbathing."
[We were-at beach on-top bask sun.]
"Wǒ jiā zài Hăidé gōngyuán fùjìn." "My home is near Hyde Park."
[I home is-at Hyde Park beside.]
Japanese has two principal locatives: "ni" and "de" ("at"/"to"). Others are constructed with these and an attributive noun:
"Ima kumo no ue ni imasu." "We are above the clouds now."
[Now cloud-of above-at there-are.]
"Ie no soba ni kōen ga arimasu." "There is a park beside my house."
[House-of beside-at park (subject) there-is.]
"Ōzei no mae de hanasu no wa suki de nai." "I don't like speaking before many people." [Crowd-of before-at speak-of ${ }_{\text {(topic) }}$ liking is-not.]

The Inuit suffix "-niip" or its variants converts a postposition or noun into a locative verb ("be at"/"be in"):
"Ikaniippuq napparsimmavik." "Over there is the hospital." [Overthere-at-it hospital.]
"Nuup iqqaaniippuq." "It's near Nuuk." [Nuuk-of nearness-its-in-it.]
"Illuminiippuq." "He is in his house." [House-his-at-he.]
Other Inuit examples of locative verbs are "maaniip" ("be here"), and "min" ("be from"):
"Ullaannguaralaarli maaniippunga." "I've been here since early morning."
[Earlythismorning-since here-I.]
"Jensiminuna." "It's from Jensi." [Jensi-from-that.]
Languages also need to express the relation of a subject to a point or period in time, and it is usual to use locatives for that function. However, since the number of temporal relations is much smaller, they can often be omitted:
"The meeting is [on] Tuesday." "The work will be done [during] Wednesday."
Finnish and Hungarian possess a wide range of locative inflexions. They also employ postpositions for English prepositions:

Finnish: "Laiva on laiturissa." "The ship is at the quay." [Ship is quay-in.]
"Koira on pöydän alla." "The dog is under the table." [Dog is table-under.]
"Naantali on Turun lähellä." "Naantali is near Turku." [Naantali is Turku-near.]
Hungarian:
"Híres egyetemen dolgozunk." "We work at a famous university."
[Famous university-at we-work.]
"A kutya az ágynál fekszik." "The dog is lying near the bed."
[The dog the bed-near lies.]
"A hazzál szemben van egy gyönyörű gesztenyefa."
"There is a beautiful chestnut tree opposite the house."
[The house-with-opposite there-is a beautiful chestnut-tree.]
Locatives are a stative attribute. The sentence can be summarised as "subject-locative-location."
Languages possess a wide range of transitive verbs which express movement, that is an action to transfer its patient to another location. The resultant of such a movement verb is therefore a locative. English examples of transitive movement verbs are:
"She fetched the chair into the hall."

$$
\begin{aligned}
& \text { "She pulled the letter out of the envelope." "The chair is in the hall." } \\
& \text { "He placed the book onto the table." } \\
& \text { "He letter was outside the envelope." } \\
& \text { "He swept the dust off the floor." } \xrightarrow{\rightarrow} \\
& \text { "He took the pot off the stove." }
\end{aligned}
$$

Since the movement is towards the resultant location, it is expressed by a word indicating direction, called a directive. For each locative, there is an equivalent directive. In the above examples, the directives are "into", "out of", "onto", "off", "up", and "back". Other directives with equivalent locatives are "to"/"at", "down", "through", "far from", "near to", "apart", "forward", "over", "under", "across", "between", "among", "along", "away", and "besides". In the terminology of Chapter 7., a directive is the inceptive form of the locative.

Finnish and Hungarian possess a wide range of directive inflexions.

> Finnish: "Hän pani avaimen lukkoon." "He put the key into the lock."
> [He put key lock-into.]
> "Reino nousi penkiltä." "Reino got up from the bench."
> [Reino got-up bench-from.]

## Hungarian:

"Imre elment Olaszországba." "Imre went to Italy." [Imre went Italy-to.]
"Kitéptem egy lapot a füzetemből." "I tore a page out of my notebook."
[Out-tore-I a page the notebook-my-from.]
As the last Hungarian sentence illustrates, a movement sentence can include separate words or inflexions to describe the directive and the locative of the resultant or original location. English examples are:
"She lifted the picture up onto the hook."

$$
\rightarrow \quad \text { "The picture is on the hook." }
$$

"He put the meeting back until 10.00. ."
$\rightarrow \quad$ "The meeting occurred at 10.00 ."
In English and other languages, the directive can be an adverbial without the physical location being stated:
"She fetched the chair in." "She pulled the letter out."
"He lifted the shopping out."
"She lifted the picture up."
"He took the pot off."
"He put the meeting back."

German:"Ich warf mein Buch in den Garten hinunter."
"I threw my book down into the garden."
[I threw my book into the garden down.]
Welsh: "rhoi arwydd i fyny" "to put up a sign" [put sign up]
"rhoi'r teganau ar gadw" "to put the toys away"
Italian: "Portiamo giù questo barile." "Let's carry this barrel down."
[Let's-carry down this barrel.]
"quando lo ebbero poi portato via" "when they had taken it away"
[when it they-had then taken away]
"Non si sa mai cosa va a tirar fuori." "You never know what he is going to pull out."
"Marianna la tira su." "Marianna pulls it up." [Marianna it pulls up.]
Hungarian:
"Kati bement a szobába" "Kati went into the room." [Kati in-went the room-to.]
"A villamosra szálltam fel." "I got on the tram." [The tram-onto I-got up.]

```
    "Levette a cuccait az asztalról." "She took her things off the table."
    [Off-she-took the things-her the table-from.]
Chinese:"Tā bă pánzi qīngqīng fàngxia" "He laid the tray down gently."
                            [He the tray gently laid-down.]
    "Shū yào de huílái ma?" "Can I/you get the books back?"
    [Book get can back-come query.]
    "Tāmen lā kāi le liăng gè zhèngzài dăjià de rén."
    "They pulled apart two people who were fighting."
    [They pull apart (aorist) two unit fight who person.]
Japanese:
    "Inu ga heya no naka e haitte kita." "A dog came into the room."
                            [Dog (subject)
    "Neko ga tēburu no ue e tobiagatta." " A cat jumped onto the table."
                                    [Cat (subject)}\mp@subsup{}{}{\mathrm{ table-on-top-to jumped.]}
```

An alternative way to indicate direction is to include it in the verb, for example the English "erect" (put up), "remove" (take away), "extract" (pull out), "retrieve" (get back). These occur also in those languages which do not have explicit directive adverbials.

## The Constituent Function

A characteristic of any physical entity is that it can be measured. A measure is a quantity of distance, extent, or other characteristic and therefore has a unit (Chapter 2., Quantity; Chapter 12., The Physical Noun). It is applied to the constituents of an object:
"The list contains fifteen names."
"The houses have ten windows."
The function of a transitive sentence is to effect change in its patient. In the case of a constituent sentence, the change is to a constituent of the patient. This change can be an addition or subtraction, increase or decrease. The resultant is a measure of the constituent:
"She removed $£ 100$ from her account."

$$
\rightarrow \quad \text { "Her account was } £ 100 \text { less." }
$$

"The Secretary included Mrs Smith on the list." $\rightarrow \quad$ "The list contains fifteen names."
"The architect gave the building ten windows."

$$
\rightarrow \quad \text { "The houses have ten windows." }
$$

If instead of measuring the quantity of constituents we measure the dimensions of an object, we employ a sentence with the same construction as a constituent sentence:
"Mount Everest is 8848 metres high." "The height of Mount Everest is 8848 metres."
"The River Thames is 338 kilometres long." "The length of the Thames is 338 kilometres."
"Apples are priced at $£ 1.20$ per kilo." "The price of apples is $£ 1.20$ per kilo."
The dimension can be a locative whose measure is the distance relative to a location:
"The artefacts were one metre below ground."
"The shops are one km along the road."
"The engineers arrived one hour after he was expected."
The dimension may also be a stative verb:
"The play lasted two hours." "The duration of the play was two hours."
"The canal extends for 100 miles." "The length of the canal is 100 miles."
For a directive, the dimension is the distance moved:
"She pulled the chair one metre away from the wall."
"He drove his car one km to the shops."
"The meeting was delayed for two hours."
A transitive sentence operating on a dimension increases or decreases it, expressed by a measure and unit:
"The road was widened by 10 metres."
$\rightarrow \quad$ "The road was 10 metres wider."
"The bank raised the interest rate by $1 / 4 \%$."
"The interest rate was $1 / 4 \%$ higher."
"The move reduced his drive to work by one hour."
"She half filled the bucket with water." $\quad \rightarrow$ "He lives one hour closer to his work."
As we have already noted in the addition and subtraction of constituents, the resultant of a transitive dimension sentence either states a dimension or compares it with a previous dimension.

The analogy between a constituent and a dimension enables us to combine them into a single function, called "constituent". A constituent sentence measures a characteristic of an object in terms of units either its dimensions or its constituent parts. A single constituent sentence can refer to and measure several constituents:
"She added six apples, five oranges, and seven kilos of potatoes to the basket."
"The play consisted of three acts with two intervals, each of ten minutes."
The measurement function occurs very frequently as a restrictive qualifier:
"a three-bedroom house"; "a five-barred gate"; "a seven-pound baby".

## The Effect Function

Mental states are of two sorts, voluntary and involuntary, and this fact is expressed in language. A voluntary mental state is one which the subject takes on him/herself and which is directed towards an external object, such as "interest", "pleasure", "conviction", "regret", "resentment", and "satisfaction". As we will show in Chapter 8., a voluntary mental state is not an attribute but a possession, and is therefore not the resultant of the type of transitive verb which we are considering in this chapter. We call such voluntary states opinions.

An involuntary mental state is a spontaneous reaction by a subject to an external cause. It is a matter of observation that the statement of that cause is essential to their meaning. The same is also true of many though not all involuntary physical states. For such an involuntary mental or physical state with an external cause we are proposing the term effect. An effect is an attribute of its subject, linked to the cause of the effect.

As for other attributes, there is a transitive sentence which creates an effect in a patient. Examples are:

$$
\begin{aligned}
& \text { "Baggage burdened down the car." } \rightarrow \\
& \text { "His behaviour angered her." "The car was heavy with baggage". } \\
& \text { "The results were surprising to us." } \rightarrow
\end{aligned} \begin{aligned}
& \text { "She felt angry at his behaviour." } \\
& \text { "We were surprised at the result." }
\end{aligned}
$$

$$
\text { "Errors corrupted the text." } \quad \rightarrow \quad \text { "The text was riddled with errors." }
$$

"Dust covered the furniture." $\rightarrow \quad$ "The furniture was covered with dust."
The first of these sentences expresses the causing of the effect in the patient, and the second, the resultant sentence, expresses the state of the effect due to the cause. It will be seen that the cause is the instrument of the transitive sentence, and we can therefore use the term instrument for the cause in the attributive sentence as well.

The above transitive sentences do not involve agents. Only three concept elements appear in their construction: the subject (patient of the transitive verb), the effect itself, and the instrument.

Many but not all of these transitive instrumental sentences can also be expressed with an agent: "He burdened down the car with the baggage"; "He angered her with his behaviour"; "She excited the audience with her speech", etc. It can be readily seen that these agential sentences have the same resultant sentence as the corresponding instrumental sentence.

Effects can operate in succession, and are then expressed by more than one instrument:
"His behaviour so angered her that she felt faint."
"Software bugs caused errors which corrupted the text."
"The wind blew dust onto the furniture."
A variant of the effect sentence is one which removes an effect from the patient. Such a sentence is usually agential, and its resultant sentence is a statement that the subject is free from the effect. It can be called a freedom:

$$
\begin{aligned}
& \text { "Contractors have freed the building of asbestos." } \\
& \text { "The editor used software to get rid of the errors in the text." } \\
& \text { "The furniture was cleaned of dust with a hoover." }
\end{aligned}
$$

The effects "free", "rid", or "clean" express the negatives of the effects "polluted", "riddled", and "dirty". "Asbestos", "errors", and "dust" are instruments of the original effects, but not of the subsequent freedoms; the instruments of the freedoms are the means whereby the effects are removed, such as "software" or "hoover" in these examples. For the freedoms, we must therefore include a separate term, called a burden, which in these examples are "asbestos", "errors", and "dust".

A freedom is therefore a sort of negative effect, but differs from it in two ways:
(i) Most effects arise involuntarily, and the sentences which express them are accordingly usually instrumental. The removal of an effect (a freedom) usually requires deliberate action, and is accordingly agential.
(ii) The instrument of an effect becomes the burden of the subsequent freedom. If the freedom has an instrument, it is a separate term.

Like other transitive verbs, an effect transitive can form a general participle, which expresses the general action of the verb without reference to a specific occurrence. These general participles are very common in English, as the following versions of the above examples show. They are instrumental in their nature:

| "The baggage was burdensome". | "His behaviour was infuriating." |
| :--- | :--- |
| "The results were surprising." | "The wound is painful." |
| "The future is worrying." | "The speech was exciting." |
| "Seeing you here is felicitous." | "The outcome is disappointing." |

In English, the link word between the effect attribute and instrument is often "at" but may also be "of" or other words. In French (as in other Romance languages), it is consistently "de":

| "Je ne suis pas très heureux de ce projet." "I'm not happy about the plan." |  |
| :--- | :--- |
| "Il en avais assez de lire." | "He was bored with reading." |
| "Je suis fâché de ne pas venir." | "I am sorry that I cannot come/at not coming." |
| "Il a été surpris d'apprendre que..." | "He was surprised to hear that..." |

Hungarian and Turkish use the ablative case "from":
Hungarian:
"Reszket a hidegtől." "She is shivering from the cold."
[She shivers the cold-from."]
"Kivagyok a sok gondtól." "I am worn out with all the worry."
[Out-worn-I the much worry-from.]
Turkish: "muvaffakıyetten sarhoş""drunk from success" [success-from drunk]
"açlıktan bitkin" "exhausted from hunger" [hunger-from exhausted].
In Chinese, the word "dui" is used for the same function:
"Tā duì yŭyán kè hěn mănyì." "He is happy with the language course."
[He at language course very satisfied.]
"duì mŏushì găndào chījīng" [at something feel surprised]
"duì mŏurén shēngqì" [at someone angry]
In Japanese, the word "de" is used:
"Ōame de hashi ga kowareta." "Heavy rain destroyed the bridge."
[Heavy-rain-from bridge ${ }_{(\text {subject })}$ broken-is.]
"Shigoto de totemo tsukareta." "Because of my work I got very tired." [Work-from very tired-is.]

Indonesian/Malay forms transitive verbs from the effect attribute by the prefix "men-" and suffix "-kan":
"Pidatonya mengecewakan para pemilih." "His speech disappointed the voters."

> ("kecewa" = "disappointed")
"Kabar itu sangat menyedihkan." "The news was very saddening."
("sedih" = "sad")
"Film-film seperti itu membosankan saya." "Films like that bore me."
("bosan" = "bored")

In Greek, the effect attribute is expressed as the perfective participle of the transitive verb by the ending " $-\mu \varepsilon ́ v o \varsigma$ " or a variant. As already noted, the general participle is formed with the ending "-1ко́ऽ":

$$
\begin{aligned}
& \text { "биүкıю́" "excite" "биүкıท } \mu \varepsilon ́ v o \varsigma " " e x c i t e d " ~ " б и \gamma к ı \imath \eta \tau ı к о ́ \varsigma " " e x c i t i n g " ~
\end{aligned}
$$

$$
\begin{aligned}
& \text { " } \alpha \pi о \gamma о \eta \tau \varepsilon v ́ \omega " ~ " \alpha \pi о \gamma о \eta \tau \varepsilon v \mu \varepsilon ́ v o \varsigma " " ~ " \alpha \pi о \gamma о \eta \tau \varepsilon \cup \tau \iota к о ́ \varsigma " \\
& \text { "disappoint" "disappointed" } \\
& \text { " } \varepsilon \kappa \pi \lambda \eta ́ \tau \tau \omega " \text { "surprise" } \\
& \text { " } \varepsilon v o \chi \lambda \omega \text { ""annoy"" " } \varepsilon \text { vo } \chi \lambda \eta \mu \varepsilon ́ v o \varsigma " \text { "annoyed" " } \varepsilon v o \chi \lambda \eta \tau \iota \kappa o ́ \varsigma " " a n n o y i n g "
\end{aligned}
$$

" $\Lambda v \pi \alpha ́ \mu \alpha ı \pi о v ~ \sigma \alpha \varsigma ~ \alpha \pi о \gamma о \eta ́ \tau \varepsilon v \sigma \alpha$." "I'm sorry to disappoint you."
[I-regret that you I-disappointed.]
"E $\mu \alpha \downarrow \alpha \pi о \gamma о \eta \tau \varepsilon v \mu \varepsilon ́ v o \varsigma ~ \mu \alpha \zeta ̌ i ́ ~ \sigma o v . " ~ " I ' m ~ d i s a p p o i n t e d ~ w i t h ~ y o u . " ~$

"M $\varepsilon \varepsilon \kappa \pi \lambda \eta$ ๆ́ $\tau \varepsilon เ \varsigma!" " Y o u$ surprise me!" [Me you-surprise.]
" $\mu \alpha \alpha$ غ́к $\pi \lambda \eta \kappa \tau \eta \mu \alpha \tau i ́ \alpha "$ "a surprised look"
" $\varepsilon \kappa \pi \lambda \eta \kappa \tau \iota \kappa \eta$ о о одоүі́а"""[a] surprising admission"

## The Dependency Function

An effect is a mental or physical state which arises from some past external cause. A dependency is a state which may arise from some cause in the future. It is usually physical in nature. The corresponding transitive verb places its patient in a state of dependency on the cause, and can be agential, instrumental, or passive. The cause is not the agent or instrument of the dependency. The following examples are listed by the type of transitive verb:

```
agential
"Parliament subjected this law to the Human Rights Act."
                    "\quadThe law is subject to the human rights act."
instrumental
"Subsidence places the building at risk of collapse."
                                    "The building is at risk of collapse (from
                                    subsidence)."
"The storm endangered the boat." }->\mathrm{ "The boat is in danger of sinking
                                (from the storm)."
"Smoking is a threat to health. }->\quad\mathrm{ "Health is under threat from smoking."
```

passive
"The window was opened/closed to the elements."
$\rightarrow \quad$ "The window is open/closed to the elements."
If the transitive sentence is instrumental, a dependency is also an effect. There are also dependencies for which no transitive verb is obvious:
"I am waiting for a letter from him."
"The Society is dependent on donations."
"I'll come provided I receive an invitation."
If the subject of the dependency is a person, it may be involuntary or intentional. If it is intentional, the transitive sentence may be reflexive:
"He put himself at risk of bankruptcy with the loan."/
"The loan put him at risk of bankruptcy."
$\rightarrow \quad$ "He was at risk of bankruptcy from the loan."
A patient can also be relieved of a dependency through the action of an agent or instrument. The resultant sentence of such an action is that the patient is no longer subject to the risk:
"The army defended the town from marauders."

$$
\rightarrow \quad \text { "The town was defended from marauders." }
$$

"The shelter protected the travellers from the wind."
$\rightarrow \quad$ "The travellers were protected from the wind."
"Flying buttresses protect the cathedral walls from collapsing."

$$
\rightarrow \quad \text { "The walls did not collapse." }
$$

The cause of the dependency is still present ("marauders", "the wind"), but is neutralised though the relief action. The agent or instrument of the relief is evidently different from the agent or instrument of the original dependency.

Examples of general participles of dependency or relief transitives are "risky", "dangerous", "threatening", "protective", and "defensive".

## The Appliance Function

A great many transitive sentences describe the application of a human artefact for its intended purpose. The artefact is represented by a noun called an appliance. English has the facility of constructing the appliance as a transitive verb, with the meaning "apply the artefact to":

| "He brushed the yard clean." | (brush) |
| :--- | :--- |
| "She telephoned the message to her friend." | (telephone) |
| "We painted the fence green." | (paint) |
| "She sawed the log in half." | (saw) |
| "The judge imprisoned the convict." | (prison) |
| "She stored the china for future use." | (store) |

These sentences take the form of a simple transitive sentence with resultant. The resultant sentence need not necessarily refer to the appliance: "The yard was (brushed) clean"; "The fence was (painted) green", etc.

In a similar way to English, Italian forms an appliance verb from a noun, usually with "-are". Indonesian/Malay uses the prefix "men-" and suffix "-kan":

```
"brush" "spazzola"/"spazzolare" "sikat"/"menyikat"
"telephone" "telefono"/"telefonare" "telpon"/"menelpon"
"saw" "sega"/"segare" "gergaji"/"menggergaji"
"gaol" "prigione"/"imprigionare" "penjara"/"memenjarakan"
"store" "deposito"/"depositare" "gudang"/"menggudangkan"
"stage" "palco"/- "pentas"/"mementaskan"
"plan" "piano"/"pianificare" "rencana"/"merencanakan"
```

Alternatively, Indonesian/Malay can form an appliance with the prefix "pe-":

```
"menenangkan" "calm" "penenang" "sedative"
"merangsang" "stimulate" "perangsang" "stimulant"
```

Indonesian/Malay appliance verbs may possess separate transitive and participation forms ("balut" is "bandage"):

$$
\begin{aligned}
& \text { "Perawat membalut lukanya dengan kain."" "The nurse bandaged his wound with a cloth." } \\
& \text { [Nurse bandaged wound-his with cloth.] } \\
& \text { "Perawat membalutkan kain ke lukanya." "The nurse wrapped the cloth around his wound." } \\
& \text { [Nurse bandaged cloth around wound-his.] }
\end{aligned}
$$

Russian also forms an appliance verb from a noun:

| noun | verb |  |  |
| :--- | :--- | :--- | :--- |
| "saw" | "pila" | "saw" | "pilit"" |
| "telephone" | "telefon" | "telephone" | "telefonirovat"" |
| "stock" | "zapas" | "store" | "zapasat"" |

However, the more common means in Russian is to derive the appliance noun from a corresponding verb:

| "soap" | "mylo" | "wash" | "myt""/"myt'sya" |
| :--- | :--- | :--- | :--- |
| "drill" | "sverlo" | "drill" | "sverlit"" |
| "switch" | "vyklyuchatel"" | "switch off" | "vyklyuchat"" |
| "loader" | "pogruzchik" | "load"" | "pogruzhat"" |
| "paint" | "kraska" | "paint" | "krasit"" |
| "motor" | "dvigatel"" | "move" | "dvigat'" |
| "transmitter" | "peredatchik" | "transmit" | "peredat"" |

Similarly, English appliance nouns such as "dishwasher", "pollutant", "sedative", "indicator", and toothbrush are formed from verbs:
"The dishwasher ran for an hour."
"The pollutant leaked into the river."
"The sedative calmed him down."
"The indicator pointed the direction."
"He threw away his old toothbrush."

## The Identification Function

A number of transitive and intransitive sentences express the conversion of the patient to another form, represented by the resultant in the form of a noun:

```
"George Washington was elected President."
\begin{tabular}{rl} 
\\
"The priests mummified Rameses II." & "George Washington was President."
\end{tabular}
"The bones of the dinosaur were fossilised."
\(\rightarrow \quad\) "The bones had became fossils."
"She was trained to be an accountant."
\(\rightarrow \quad\) "She was a trained accountant."
"Birmingham grew to be a city in England."
\(\rightarrow \quad\) "Birmingham is a city in England."
"A young swan is called a cygnet." \(\rightarrow\) "A cygnet is a young swan."
"The sea east of Britain is called the North Sea."
```

$\rightarrow \quad$ "The North Sea is the sea east of Britain."
The outcome of the conversion is that the patient is identified with the resultant noun, when previously that was not the case. The resultant sentence is therefore a statement that the two nouns are now identified, which we can call an identification. Since its function is to assign an identification to the subject, the subject is the topic.

An identification can also identify two general entities:
"New Yorkers are citizens of the United States."
"A chair is an item of furniture for sitting on."
The subject of an identification must be definite, in accordance with the rules on discourse in Chapter 1. The predicate can be definite or indefinite. If it is definite, the sentence means "The subject and the predicate are the same entity", and the subject and predicate can be reversed:

> "The President was George Washington." "A young swan is a cygnet."

If it is indefinite, it means "There is a particular instance of a class of entities described by the predicate; it is the same as the subject". The subject and predicate can then not be reversed. The following are incorrect or artificial:

```
*"The fossils were bones." *"A trained accountant is she."
*"A city in England is Birmingham." *"Citizens of the United States are New Yorkers."
```

If the subject is an individual noun, it is definite by its nature. "Louis XIV was king of France" means "Louis XIV was a person; there was an office called king of France, and Louis XIV held it."

If the subject is not individual, its definiteness must be established by prior context. "The king of France was Louis XIV" means "There was a unique office called king of France; at the time that this sentence was true, the office existed; it was held by Louis XIV."

Provided that the word order of an identification sentence clearly distinguishes the subject and predicate, and the subject is definite, no verb is needed. This occurs in many languages:

Turkish: "Kızın adı Fatma." "The girl's name is Fatima." [Girl-of name-her Fatima.]

Indonesian:
"Rumah besar itu rumah Tomo." "That big house is Tomo's." [House big that house Tomo.]
"Harimau itu binantang liar." "The tiger is a wild animal." [Tiger the animal wild.]
However, many languages distinguish between identities with a definite and an indefinite predicate. In Russian identification statements, an identity which is represented as permanent is nominative (an unmodified noun) and an impermanent (nonspecific) identity may be in the instrumental case:
"Po professii on byl botanik." "By profession, he was [a] botanist (nominative)."
"Vo vremya voiny ya byl ofitserom." "During [the] war, I was [an] officer (instrumental)."

In Arabic, a definite predicate contains a repeated pronoun:

Arabic:"al-famalu li-l-rajuli šarafun""Work is for a man an honour." [The-work for the-man honour.]
"naḥnu fallāhūna" "We [are] farmers."
"hā?ulāPi hunna banāt̄̄" "These are my daughters." [These they daughters-my.]

Irish distinguishes an attribute and identification by different words for "be": "tà" for an attribute and "is" for an identification, or variants of those words:
"Tá na garsúin thall ansan sa pháirc." "The boys are over there in the field."
[Are the boys over there in-the field.]
"Is é an leabhar mór an duais." "The big book is the prize." [Is it the book big the prize.]
However, if the predicate of an Irish identification is indefinite, it precedes the subject, reversing the sequence of topic and comment:
"Is maith an múinteoir é Séamas." "James is a good teacher."
[Is good the teacher he James.]
"Is mór an cúnamh comhairle mhaith." "Good advice is a great help."
[Is great the help advice good.]
Similarly, Spanish uses different auxiliary verbs for an attribute and an identification:
"Está parado desde febrero." "He's been out of work since February."
[He-is unemployed since February.]
"París es la capital de Francia." "Paris is the capital of France."
Chinese distinguishes between identities with a non-individual subject, which use the auxiliary verb "shi" ("be"), and those with an individual subject, which do not:
"Zhè shì Wáng xiāngsheng." "This is Mr Wang." [This is Wang-Mr.]
"Wŏ Yīngguó rén." "I am an English person." [I England person.]
In addition to being a sentence, an identification may be a restrictive or non-restrictive qualifier. This is called an apposition:
"My neighbour, a teacher, is at work today."
"The Iguanodon bones were discovered as fossils in the Isle of Wight."
Rather than an identification occurring between two entities, it can occur between a characteristic of two entities. This is called a similarity:
"My wife and I are similar in our hobbies."

This sentence means: "My wife and I have the same hobbies, and in that respect we are similar." The similarity is "hobbies".

A lack of identification between two characteristics is a difference:
"My wife and I have different temperaments."
This means: "My wife and I do not have the same temperament, and in that respect we are different". The difference is "temperament".

Similarity statements are often expressed less precisely: "My love is like a red red rose." This means: "There are features in common between my love and a red rose"; the listener is left to infer what they are. If a difference or lack of identification refers to a physical entity, it can be measured: "The population density of France is 0.45 that of the UK."

## 7. Intransitive Sentences and their Stative Resultants

## Summary

An intransitive sentence or verb is defined as one which alters or affects its subject. Intransitive sentences include an element, called the resultant, which describes the state of the subject after action of the verb. It is possible to construct a resultant sentence which describes the resultant state of the subject.

This chapter is concerned with intransitive verbs whose resultant is a stative attribute or noun. If the resultant is an attribute, the resultant sentence is attributive. If the resultant is a noun, the resultant sentence is an identification between the subject and the resultant. The subject of both an intransitive sentence and its resultant sentence is the topic unless an element is in focus.

Intransitive sentences are of four sorts, agential, instrumental, inceptive, and participation. In an agential intransitive sentence, the subject is an agent who acts on him/herself. Where there exists a transitive verb of the same meaning, the agential intransitive is equivalent to the reflexive form of the transitive. For some verbs, only the agential intransitive form exists, and for other verbs, only the reflexive transitive, depending on the language. Agential intransitives may have an instrument.

In an instrumental intransitive, the subject is an instrument which acts on itself. As for an agential intransitive, there may be a particular instrumental intransitive verb or a reflexive form of the corresponding instrumental transitive verb.

In an inceptive sentence, the subject undergoes an involuntary change for which there is no agent and in general no instrument.

Some agential intransitive and inceptive verbs exist in their own right. Others correspond to a transitive verb which expresses the same process, and in that case languages construct the intransitive sentence by various changes to the transitive verb or sentence structure. Six different intransitive structures are listed.

An agential intransitive sentence may occur for a locative, a dependency, an appliance, and an identification. An inceptive sentence may occur for a creation/destruction, a locative, an effect, a dependency, a constituent, and an identification.

The perfective participle of an agential intransitive or inceptive verb describes the state of the subject after action of the verb, and may take the same resultant as the verb.

A participation sentence expresses an intentional action which is directed towards a target without altering it. In different languages, participation verbs may be connected directly or indirectly to the target, and may be expressed by a verb which is reflexive or not reflexive. Participation sentences may have an instrument.

Participation verbs do not have a resultant or express a completed process. They therefore do not have a perfective participle. They may possess a target participle, which describes the target, and a target sentence whose subject is the target of the participation sentence.

## Terms Defined or Introduced

Intransitive, reflexive, inceptive, participation, target.

## Overview

In the previous chapter, a transitive sentence was defined as one which alters or affects a noun called a patient to a form called a resultant. The action is effected by an animate agent and/or an inanimate instrument. If the agent or instrument is the topic the sentence is active, and if the patient is the topic
the sentence is passive. The outcome may be may be expressed by a resultant sentence of which the patient of the transitive verb is the subject.

An intransitive sentence also expresses a process of change, but one which only alters or affects its subject. In the traditional terminology, it does not transit or carry over its action to an object. In the terminology of the previous chapter, the subject is the patient, and there is no distinction between active and passive. The changed form of the subject after action of the verb can again be called the resultant. The construction of an intransitive sentence is therefore "subject-verb-resultant", in which the verb is intransitive. In some cases, the resultant is fully expressed by the verb: "subject-verb".

As with transitive sentences, the resultant of an intransitive verb may be an attribute or a noun, so that the resultant sentence is attributive or an identification, and has the form "subject-resultant". The resultant sentence is indicated by " $\rightarrow$ ":

$$
\begin{array}{lll}
\text { "Mary went to Cambridge." } & \rightarrow & \text { "Mary was at Cambridge.", } \\
\text { "Henry fell ill with fever." } & \rightarrow & \text { "Henry was ill with fever." } \\
\text { "Bernard became Chairman." } & \rightarrow & \text { "Bernard was Chairman." }
\end{array}
$$

Evidently, the same stative sentences could be the outcome of a transitive sentence:

```
"Her parents sent Mary to Cambridge." "The fever made Henry ill."
"They elected Bernard Chairman."
```

Since the purposes of an intransitive sentence and its resultant are to provide information concerning the subject, then (unless an element is in focus) the subject is the topic. Thus, "Mary" is the topic of "Mary went to Cambridge". In comparison, in the sentence "It was Mary who went to Cambridge", "Mary" is in focus and therefore the comment; "who went to Cambridge" is the topic. Similarly, "Mary" is the topic of "Mary was at Cambridge", and "who was at Cambridge" is the topic of "It was Mary who was at Cambridge".

In this chapter, we are only concerned with intransitive sentences and verbs whose resultant is stative. As Chapter 11. will show, there are intransitive verbs whose resultant is dynamic.

This concept of an intransitive sentence is found in all grammars, and occurs in various forms in all languages. However, it in fact covers at least four different sentence constructions, which we shall examine in more detail below:
(i) Agential intransitive or reflexive. The subject is an agent who intentionally acts on him/herself.
(ii) Instrumental intransitive or reflexive. The subject is an instrument which acts on itself as a result of some physical process.
(ii) Inceptive. The subject is not an agent and is involuntarily subject to the action of the verb.
(iii) Participation. The subject is an agent who intentionally engages in an action, often with others, towards an object without altering or affecting it.

The perfective participle of an intransitive verb describes the state or condition of the subject after action of the verb, since it is the subject which is altered, and may take the same resultant.

## The Agential Intransitive or Reflexive Sentence

The following are typical examples of an agential intransitive sentence:
"Lloyd George resigned from office."

| "Henry shaved with his electric razor." | "Lloyd George was out of office." |  |
| :--- | :--- | :--- |
|  |  | "Henry was shaved." |
| "Sheila changed into new clothes." | $\rightarrow$ | "Sheila was wearing new clothes." |
| "Mary went to Cambridge." | $\rightarrow$ | "Mary was at Cambridge." |
| "John is coming from London." | $\rightarrow$ | "John is arrived from London." |
| "The patient sat up in bed." | $\rightarrow$ | "The patient was sitting up in bed." |

```
"Bernard drove back home." \(\rightarrow \quad\) "Bernard was back home."
```

In each of these, the subject acts so as to change his or her own state or condition, which may be expressed by a resultant stative sentence. They are mostly perfective sentences. If they are imperfective ("Henry was shaving", "Sheila was changing", etc) the resultant expresses the expected state after the process is completed. The resultant sentence may also be constructed with the perfective participle:

```
"Sheila was changed into new clothes." "Mary was gone to Cambridge."
"The patient was sat up in bed."
```

Many of these intransitive verbs can be compared to a corresponding transitive verb. In the transitive verb, the subject is acting on another person. If the person on whom the transitive action is occurring is the same as the subject, the verb is reflexive and the object is represented by a reflexive pronoun. The meaning is then the same as the above intransitive sentences:
"Henry shaved himself with his electric razor."

$$
\begin{array}{lll}
\text { "Sheila changed herself into new clothes." } & \text { "Henry was shaved." } \\
\text { "The patient sat himself up in bed." } \rightarrow & \text { "Sheila was wearing new clothes." } \\
\text { "Bernard drove himself back home." } & \\
\rightarrow & \text { "Bernard was back home." }
\end{array}
$$

For some verbs in some languages, there is an alternative construction in which the intransitive verb is a variation of the transitive, although the reflexive construction may also be used:
"George raised himself from his seat."/
"George rose from his seat." $\rightarrow \quad$ "George was up."
"George laid himself on the couch"/
"George lay on the couch." $\rightarrow \quad$ "George was lying on the couch."
For other verbs ("resign", "go", "come"), the intransitive verb does not have a transitive equivalent in English. However, it is not difficult to construct a reflexive sentence with the same meaning:
"Lloyd George stood himself down from office."
"Mary took herself off to Cambridge."
"John is bringing himself from London."
In general, it appears that all agential intransitive sentences are equivalent to a reflexive transitive. It is a detail of each verb and each language as to whether a reflexive or agential intransitive is used. In English, there are reflexives for which no agential intransitive is available:
"She lifted herself up." (reflexive) *"She lifted up." (invalid intransitive).
"He installed himself in his new home." (reflexive)
*"He installed in his new home." (invalid intransitive)
An agential intransitive may have an instrument:
"Henry shaved with his father's razor." "Bernard drove home by car."
It should be noted that the reflexive referred to here is that in which the agent alters or affects him or herself. Another use of the reflexive is equally common, in which the agent provides something to him or herself. This is not the same as an agential intransitive, and is discussed in Chapter 9.:
"He made himself a cup of tea."
"She asked herself what it meant."
"He bought himself a suit."

In many languages, the majority of agential intransitive verbs (other than verbs of motion) are constructed as reflexive. In Russian, the reflexive pronoun is an enclitic "-sya" or " s "":
"On vozvrashchaet knigu v biblioteku." "He returns the book to the library."
"On vozvrashchaetsya domoi." "He returns home." [He returns-himself home.]
"Ona odela detei." "She dressed the children."
"Ona vsegda khorosho odevalas"" "She always dressed well."
[She always well dressed-herself.]
The same is true of Romance languages:
French: "Asseyez-vous donc." "Please take a seat." [Sit yourself, then.]
Spanish: "Ella se vistió." "She got dressed." [She herself dressed.]
Italian: "Dopo essersi lavata, fece colazione." "After having washed, she had breakfast."
[After being-herself washed, she-had breakfast.]
In other languages, a reflexive construction is not generally used. The intransitive is formed as a variation of the transitive. In Greek, the agential intransitive is a variation called the deponent, which is the same as the passive, and is here translated as reflexive:

"Little Helen can get dressed by herself now."
[The little-Helen now can also dress-herself by herself.]
"E $\rho \chi \varepsilon \tau \alpha \iota ~ \sigma \tau 0 ~ \sigma \pi i ́ \tau \iota ~ \mu о v . " ~ " S h e ~ c o m e s ~ t o ~ m y ~ h o u s e . " ~[S h e ~ c o m e s-h e r s e l f ~ t o-t h e ~ h o u s e ~ m y]$.
In Welsh, the reflexive is formed with the prefix "ym-":
"Estynnir croeso cynnes i bawb." "A warm welcome is extended to all."
[Is-extended welcome warm to all.]
"Roedd y gath yn ymestyn o flaen y tân." "The cat was stretched out in front of the fire."
[Was the cat in extend-itself in front the fire.]
In Arabic, the reflexive is formed with the prefix "ta-":
"hiya ta§kifu ¢alā l-dirāsati" "She was immersing herself in study."
"kullamā taqaddamnā lahiqnnā bi-1-šamsi"
"The more we advanced [ourselves], [the more] we caught up with the sun."
Indonesian/Malay uses the prefixes "di-" to form the passive (as described in the previous chapter) and "ber-" to form the intransitive:

| transitive | passive | $\underline{\text { intransitive }}$ |
| :--- | :--- | :--- |
| mencukur "shave"  <br> mandikan "bathe" dicukur "be shaved" <br> dimandi "be bathed"bercukur "shave (oneself)" <br> bermandi "take a bath" |  |  |
| "Dia sembunyikan wangnya." "He hid his money." |  |  |
| "Dia bersembunyi." "He hid himself." |  |  |

Japanese relates the intransitive to the transitive by a variety of different suffixes in "-ru" and "-su":
"tomodachi o atsumeru" "assemble one's friends" [friends (object) collect]
"tomodachi ga atsumaru" "friends (subject) gather"
"shichiji ni otōto o okosu" "rouse younger brother at seven o'clock"
[seven-o'clock-at younger-brother ${ }_{\text {(object) }}$ rouse]
"asa shichiji ni okiru" "get up at seven o'clock in the morning"
[morning seven-o'clock-at rise]
"ito o tōsu" "pass a thread (through a needle)" [thread (object) ${ }^{\text {pass }}$ ]

> "densha ga ie no mae o tōru." "The trams pass in front of the house." $\left[\right.$ Tram $_{\text {(subject) }}$ house-of front $_{\text {(object) }}$ pass.]

Since Chinese words do not alter, transitive and intransitive verbs are generally distinguished because transitive verbs have an object:
"Tā kāi chē qù shàngbān." "He drives to work." [He drive car go start-work.]
"kāi chē sòng mŏurén huí jiā" "to drive someone home" [drive car give someone back home]
Referring to the functions of a transitive sentence listed in Chapter 6., we see that some may be expressed by an agential intransitive and some may not. With exception of verbs of motion, most are reflexives:

- A person is assumed not to create or destroy him/herself. The creation function therefore does not arise.
- A person may transform him/herself:
"Jane made herself ill with worry." "Jean graduated in Latin."
- A person is assumed not to increase or decrease his or her constituents or dimensions. The constituent function therefore does not arise.
- The effect function is involuntary and is therefore not agential.
- A freedom is usually intentional and can therefore arise through a reflexive action:
"She freed herself from the entanglement."
- The dependency and relief functions can be intentional and therefore may arise through a reflexive sentence:
"He put himself at risk of bankruptcy." "She protected herself from the sun."
- The appliance function is intentional and therefore can be reflexive:
"She bandaged herself." "He brushed himself down."
- An identification can arise through a reflexive:
"Napoleon declared himself Emperor." "She set herself up as an estate agent."
As already mentioned, the locative function can arise through a verb of motion. Verbs of motion are generally expressed as agential intransitives, not as reflexives. Because there is often no close transitive equivalent, there may be no need to indicate that they are intransitive. They have locative resultant sentences like the transitive locative function (Chapter 6.):

| "She went to the cinema." | $\rightarrow$ | "She was at the cinema." |
| :--- | :--- | :--- |
| "He came downstairs." | $\rightarrow$ | "He was downstairs." |
| "We got up." | $\rightarrow$ | "We were up." |

However, we have already noticed examples of verbs of motion which can also be reflexive:
"The patient sat (himself) up in bed."

$$
\rightarrow \quad \text { "The patient was sitting up in bed." }
$$

"Bernard drove (himself) home." $\rightarrow \quad$ "Bernard was back home."
Other examples are
French: "Il s'approcha de moi." "He [himself] came up to me."
"Nous nous arrêtâmes sur le bascôté." "We [ourselves] pulled up by the roadside."
German:"Er ist sich erhoben." "He has [himself] got up."

```
    "Der Preis bewegt sich um die 50 Mark."
    "The price moved [itself] around 50 marks."
    Russian: "On podnyalsya so stula." "He rose [himself] from [his] chair."
    "Vsya tolpa dvinulas' vperëd." "The whole crowd moved [itself] forward."
    Arabic: "¢alayhim Ran yatawājadū Ramāma l-Pidārati"
    "They must present themselves to the administration."
    [On-them that they-find-themselves before the-administration.]
```

Indonesian/Malay verbs distinguishes between transitive and intransitive verbs of motion through prefixes and suffixes. "men-" and "-kan" indicate a transitive verb; "ber-" indicates an intransitive verb, and "ter-" indicates a resultant stative:
"Puan Ng membaringkan bayinya di atas katil." "Mrs Ng laid her baby on the bed." [Mrs Ng lay baby-her on bed.]
"Sammy berbaring di atas sofa." "Sammy lay on [the] sofa."
"Sophia terbaring di tepi pantai." "Sophia is lying on the beach." [Sophia lie on side beach.]
"menyandarkan sesuatu pada dinding" "[to] lean something against [the] wall"
"Dia bersandar pada meja itu." "He leant on the table." [He leant on table-the.]
"Tangga itu tersandar pada dinding." "The ladder was leaning against the wall."
[Ladder-the lean against wall.]

Verbs of motion can take directives and measures like transitive locative verbs (Chapter 6., The Locative Function):

German:"Er ging ins Tal hinab." "He went down into the valley."
[He went into-the valley down.]
Italian: "Forse era tempo di prepararsi ad andare via."
"Perhaps it was time to prepare to go away."
"Tre autocarri venivano su per la carrozzabile."
"Three vans were coming up [along] the track."
Persian: "davan davan jelou amad" "He came forward running."
[Running running forward came-he.]
"bar migardim""We shall return." [In we-shall-become.]
Chinese:"Qìchē guò qiáo lái le." "The car has come over the bridge."
[Car across bridge come (aorist).]
"Dàshĩ huí Lúndūn qù le." "The ambassador has gone back to London."
[Ambassador back London go (aorist).]
"Kèren jìn wūzi lái le." "The guests came into the room."
[Guest into room come ${ }_{\text {(arist). }}$.]

## The Instrumental Intransitive or Reflexive Sentence

In an agential intransitive sentence, an agent intentionally performs an operation on him/herself. In an instrumental intransitive sentence, an instrument effects an action on itself. Although a human agent may have ultimate responsibility for the action, no such agent is expressed, and his/her action may or may not be remote:
"The train ran from London to Carlisle." "The computer booted itself."

An instrument can also be a natural phenomenon which performs an action on itself:
"The fire burnt itself out." "The storm blew itself out."

However, the difference between this expression and a simple inceptive such as "The lightning flashed"; "The rain fell" is slight. Instrumental intransitives therefore usually express a man-made process.

Of the transitive functions listed in Chapter 6., the examples listed above are of the location, transformation and destruction functions. The other transitive functions do not arise, for the following reasons:

- The creation function requires an agent and is therefore not instrumental.
- An instrument does not in practice alter its own constituents or dimensions, so the constituent function does not arise.
- An effect and a freedom are performed on an object which is different from the instrument. They can therefore not be an instrumental reflexive.
- An instrument does not in practice place itself at risk. The dependency and a relief functions therefore do not arise.
- The appliance function requires an agent and is therefore not instrumental.
- An identification function may apply to an inanimate object: "This train is the Royal Scot". However, it is carried out by an agent and is therefore not instrumental.


## The Inceptive Sentence

An inceptive sentence is one in which the subject undergoes a change to a form described by a resultant, but in which no agent is expressed or understood. The construction is "subject-verbresultant". The following are typical examples:

| "He became angry at the news." | $\rightarrow$ | "He was angry at the news." |
| :--- | :--- | :--- |
| "She fell ill with jaundice." | $\rightarrow$ | "She was ill with jaundice." |
| "The box came apart." | $\rightarrow$ | "The box was in pieces." |
| "George grew 6 feet tall." | $\rightarrow$ | "Teorge was 6 feet tall." |
| "The door opened wide." | $\rightarrow$ | "The door was open." |
| "The fire burnt to ashes." | $\rightarrow$ | "The film was finished." |
| "The film finished." |  |  |
| "The bridge collapsed." | $\rightarrow$ | "The bridge was in pieces." |
| "The tree fell across the road." | $\rightarrow$ | "The tree was lying across the road." |
| "The bones fossilised." | $\rightarrow$ | "The bones were fossils." |
| "The kettle boiled." | $\rightarrow$ | "The water was boiled." |

The difference from an agential intransitive is that an inceptive is involuntary. While the subject may be animate or inanimate, it does not act on itself, and is therefore not reflexive.

Except in the case of an effect, illustrated in the first two sentences above, an inceptive usually does not have an instrument. "The window blew open through the wind" is usually better expressed as "the wind blew the window open". However, as we saw in the previous chapter, not all languages make this distinction.

The resultant sentence may also be constructed with the perfective participle:
"He was angered at the news." "The box was come apart." "George was grown six feet tall."
"The bridge was collapsed in pieces." "The tree was felled across the road."
By this definition, the inceptive construction is similar to a passive transitive construction without an agent (Chapter 6., The Passive Construction):
"The book was written." "The house was painted white."
The difference is that underlying the passive sentences is the assumption that an agent performed them, even if none is expressed. All of the intransitive sentences quoted above could occur without an agent, and for some, an agent is impossible:
"George grew 6 feet tall"; "The volcano erupted"; "The rain fell".

In Finnish, the resultant of an inceptive is marked by translative case (ending in "-kse" or "-ksi"), in the same way as the resultant of a transitive sentence (Chapter 6.):
"Isä on tullut vanhaksi""Father has become old." [Father is become old (translative).]
"Olot muuttuivat normaaleiksi." "The conditions became normal."
[Conditions are-become normal (translative)].
Referring to the functions of a transitive sentence listed in Chapter 6., we see that most may be expressed by an inceptive but some may not:

- Creation, destruction, and transformation can arise without an agent:
"The Queen was born in 1926."
"The plants died."
"Jane became ill."
"The Phoenix rises from its ashes."
"The water dried up."
"Jean became a Latin scholar."
- The locative function can be inceptive, and can have a directive and measure:

German: "Der Wind streift die Heide entlang." "The wind sweeps along the heath."
[The wind sweeps the heath along.]
Welsh: "Eith nghar ddim i fyny'r allt." "My car won't go up the hill."
[Will-go car not up the hill.]
"Mae prisiau wedi mynd i lawr." "Prices have gone down." [Are prices after go down.]

- Constituent measures can occur without an agent:
"The water level rose by a metre." "The apples doubled in size over the month."
- $\quad$ Since an effect expresses an involuntary condition, it can be expressed as an inceptive:
"She was glad to see them." "The furniture became covered with dust."
- A dependency which is involuntary can be an inceptive for the same reason:
"The army became in danger of encirclement." "The site became at risk of subsidence."
- The appliance function refers to the deliberate application of an artefact. It therefore cannot be inceptive.
- A conversion can occur without an agent:
"George V acceded as King in 1910." "Mary became an architect."
In discussing agential intransitives, we saw that they are generally formed by languages in one of four ways:
- as intransitive verbs their own right, or
- unchanged from the corresponding transitive verb, or
- as a reflexive construction of a corresponding transitive verb, or
- as a variation of a transitive verb.

Inceptives employ these four constructions, plus two others:
(i) Some inceptives exist in their own right and are not related to an agential verb, transitive or intransitive:
"George Washington was born in 1732."
"Queen Anne died in 1714."
"The Thames flows into the North Sea."
"We slipped on the ice."
"He has aged since we saw him last."
"Man evolved from apes."
"They fell asleep soon after."
(ii) The same verb is either transitive or inceptive. The agent of the transitive is not marked, and the distinction is understood from context:

| "He broke the package apart." | "The package broke apart." |
| :--- | :--- |
| "She opened the door wide." | "The door opened wide." |
| "He shone the torch into the room." | "The torch shone into the room." |
| "They grew vegetables in the garden." | "Vegetables grew in the garden." |
| "He burnt the logs in the grate." | "The logs burnt in the grate." |
| "She stopped the car.". | "The car stopped." |

The sentences in the second column are all true inceptives, in that no agent is expressed or understood, but the verb is unchanged from the transitive. An inceptive verb may also occur where no agent is possible: "The sun shone"; "The snow fell"; The children grew"; "The rain stopped".

Welsh: "Mae e'n tyfu tatws." "He grows potatoes." [Is he in grow potatoes.]
"Mae'r plant wedi tyfu." "The children have grown." [Are the children after grow.]
"Bydd rhaid deffro'r plant." "The children will have to be woken." [Will must wake the children.]
"Pryd dych chi'n deffro fel arfer?" "When do you usually wake up?"
[When are you awake as usual.?]
Unlike the Greek agential intransitive which is the same as the passive transitive, the Greek inceptive is the same as the active transitive. :
"Tíлот $\alpha \varepsilon v \tau \eta v \sigma \tau \alpha \mu \alpha \tau \alpha ́ \varepsilon ו . "$ "Nothing will stop her." [Nothing not her stops.]
"To родóı $\mu$ оv $\sigma \tau \alpha \mu \alpha ́ \tau \eta \sigma \varepsilon . " ~ " M y ~ w a t c h e d ~ s t o p p e d . " ~[T h e ~ w a t c h-m y ~ s t o p p e d]$.
"М $\varepsilon$ そ́́ $\tau v \eta \sigma \varepsilon$ о $\theta$ ópvßoç." "The noise woke me up." [Me woke the noise.]
"ヨv́лvๆбє $\alpha \pi$ о́то $\alpha$." "He woke up with a start."
(iii) The inceptive is the same as the reflexive, and therefore the agential intransitive, of the corresponding transitive verb. This is despite the fact that no agent is implied:

German:"Ich ärgerte mich über ihn."
"Ich freue mich über seinen Erfolg."
Spanish:"El barco se hundió."
"El líquido se extiende por la superficie."
"La puerta se abrió."
"Me caí en la calle."
"I was annoyed at him."
[I annoyed myself over him.]
"I rejoice [myself] at his success."
"The boat sunk [itself]."
"The liquid spreads [itself] over the surface."
"The door opened [itself]".
"I fell [myself] in the street."

Italian: "Il carattere del vecchio gentiluomo si era ammorbidito."
"The old gentleman's character had softened."
[The character of-the old gentleman itself was softened.]

Russian: "Ona ostanavlivaet avtobus."
"Avtobus ostnavlivaetsya."
"On zakryl za soboi dver'."
"Yashchik zakrylsya sovsem legko."
"She stops the bus"
"The bus stops [itself]."
"He shut the door behind him."
"[The] box shut [itself] quite easily."

Arabic: "yaqūlūna mā yaxṭuru bi-bālihim hasabamā ttafaqa"
"They say what comes into their minds just as it happens [itself]."
"tafattaḥat §aynāhā" "Her eyes opened." [Opened-themselves two-eyes-her.]
"bi-mujarradi Pan tatakawwana tabqā fī l-bīRati"
"As soon as they are formed, they remain in the environment."
[Immediately that they-form-themselves they-remain in the-environment.]
Similarly, the inceptive may be the same as the corresponding agential verb of motion:
"He settled in the chair." "The snow settled on the ground."
"The guests came into the hall." "The tide came up."
"He ran to post."
"The car ran quite smoothly."
(iv) The inceptive is a variation of the corresponding transitive, for example in English:
"She felled the tree across the road." "The tree has fallen across the road."
"He woke his brother."
"She raised the barrier."
"His brother awoke."
"The barrier rose."

Hungarian:
"Megszűntették a rendeletet." "They abolished the decree."
[Ended-they ${ }_{\text {(transitive) }}$ the decree.]
"Megszűnt a szegénység." "Poverty has ended." [Ended the poverty.]
"Mikor kezdék az előadást?" "When did they start the lecture?"
[When started-they the lecture (accusative)?]
"Mikor kezdődött az előadás?" "When did the lecture start?"
[When started ${ }_{\text {(inceptive) }}$ the lecture?]

Hindi: "maĩ use toṛū̃ gā""I shall break it." [I it shall-break.] ("tornā"" = "break")
"yah chaṛī āsānī se nahī̃ ṭūṭtī" "This stick doesn’t break easily."
[This stick ease-with not breaks.] ("țūṭnā" = "break")
"usne tarkārī jālāı"" "He burned the curry."
[He curry burned.]
("jalānā" = "burn")
"yah lakṛī nahī̃ jaltī" "This wood doesn't burn."
[This wood not burns.]
("jalnā" = "burn")
In Indonesian, it is more usual for the transitive verb to be formed from the inceptive, in this example with the suffix "-kan":
"Polisi memikul beban ganti rugi."
"[The] Police bore [the] burden [of] compensation."
"Hakim memikulkan beban ganti rugi pada polisi."
"[The] judge imposed [the] burden [of] compensation on [the] police."
Japanese relate transitives to inceptives with the same variety of "-ru"/"-su" suffixes as for agential intransitive verbs:

```
"enpitsu de kaita ji o kesu" "rub out letters written with a pencil"
[pencil-with written character \({ }_{\text {(object) }}\) rub-out]
"dentō ga kieru" "The electric light goes out." [Electric-light (subject) goes-out.]
"ha o nuku" "extract a tooth" [tooth \({ }_{\text {(object) }}\) take-out]
"ha ga nukeru" "a tooth falls out" [tooth (subject) fall-out]
"enjin o ugokasu" "start an engine" [engine (object) start]
"kikai ga ugoite iru" "The machinery is running."
```

[Machinery ${ }_{\text {(subject) }}$ running-is] ("ugoku" = "move")
(v) Some languages possess a grammatical construction called ergative (Chapter 6., The Ergative Construction). An agent is marked, and a word which is not an agent (the object of a
transitive and the subject of an inceptive) is not marked. In this way, a single verb can perform as either transitive or intransitive.

In Inuit, the agent of a verb with a direct object is in the ergative, and is marked with the suffix "-p", which is also used for the genitive case ("of"). The object of a verb, and subject of a verb without a direct object, are not marked. Verbs with and without a direct object also have different endings:

> "Piniartup qimmiq anuaa." "The hunter harnessed the dog."
> [Hunter ${ }_{\text {agent) }}$ dog harness-he-it.]
> "Piniartuq aallarpuq." "The hunter left." [Hunter leave-he.]
(vi) An auxiliary inceptive verb, such as "become", "fall", and "grow" in English, is applied to the expected resultant, whether an attribute or an identification:
"She grew tired." "They became doctors." "The argument fell apart on discussion."
All languages appear to have a word for "become" in order to construct inceptive sentences. It may be significant that many have their origin in an agential intransitive word, usually a verb of motion:

| English | "come" $\rightarrow$ "become". |
| :--- | :--- |
| French | "veni"" "come" $\rightarrow$ "devenir" "become", |
| German | "werden"" "turn" $\rightarrow$ "werden" "become". |
| Russian | "stanovit'sya" "stand" $\rightarrow$ "stanovit'sya" "become" |
| Finnish | "tulla"" "come" $\rightarrow$ "tulla" "become" |
| Welsh | "dod" "come" $\rightarrow$ "dod" "become" |
| Persian | "šodan"" "go" (obsolete $) \rightarrow$ "šodan" "become" |
| Hindi | "banna"" "be made" $\rightarrow$ "banna"" "become" |
| Malay | "jadi" "manage to" $\rightarrow$ "menjadi" "become". |

In Japanese, many transitive verbs are constructed with the auxiliary verb "suru" "do"/"make". These verbs form an inceptive by substituting "naru" "become". The "naru" sentence is not a passive, since no reference to an agent is intended:
"Gakkō wa Yamada o teigaku shita." "The school suspended Yamada."

$$
\left[\text { School }_{\text {(topic) }} \text { Yamada }{ }_{\text {(object) }}\right. \text { suspension made.] }
$$

"Yamada wa teigaku ni natta." "Yamada was suspended from school."
[Yamada ${ }_{\text {(topic) }}$ suspension-in became.]
Similarly, many Hindi transitive verbs are constructed with "karnā" ("do"/"make"). These verbs often form an inceptive by substituting "honā" ("be"):
"maĩ nau baje darvāzā band kartā hū"" "I close the door at nine o'clock."
[I nine o'clock door closed making am.]
"darvāzā nau baje band hotā hai" "The door closes at nine o'clock."
[Door nine o'clock closed been is.]
Where Hindi possesses an attributive verb, an inceptive is formed from it by means of "jānā" ("go"). The same auxiliary is used to construct the Hindi passive from the transitive (Chapter 6., The Passive Construction). In the following example, "bacnā" is "be safe" and "bacānā" is "save"/"rescue":

$$
\begin{aligned}
& \text { "sirf ek hī ādmī bac gayā"" "Only one man came to be saved." } \\
& \text { [Only one man safe went.] } \text { (inceptive) } \\
& \text { "sirf ek hī admī bacāyā gayā"" "Only one man was saved." } \text { (passive) }
\end{aligned}
$$

[Only one man rescued went.]

## The Participation Function

There are a large number of sentences which take a direct object in English but an indirect object, with the pre/postposition "to" or similar, in another language:

```
French: "Ils jouent aux cartes." "They are playing [at] cards."
    "Je lui ai résisté." "I resisted him." [I to-him have resisted.]
```

Italian: "I ragazzi hanno ubbidito al professore." "The boys [have] obeyed [to] the teacher."
"Giocano a scacchi" "They are playing [at] chess."

Spanish: "Esto obedece a unas normas de comportamiento."
"This obeys [to] certain norms of behaviour."
German:"Er folgte mir nach draußen." "He followed [to] me outside."
"Ich bin ihm heute auf der Brücke begegnet." "I met him today on the bridge."
[I am to-him today on the bridge met.]
"Er wohnte der Versammlung bei." "He attended [to] the meeting."
"Er kam seiner Pflicht nach." "He fulfilled [to] his duty."
"Es dient einem guten Zweck." "It serves [to] a useful purpose."
Russian: "Ego protivniki napali na etu teoriyu." "His opponents attacked [on] the theory."
"Ona igraet na pianino." "She is playing [on the] piano."

Arabic: "falayhi ?an yafiya bi-waidihi" "He has to fulfil his promise."
[On-him that he-fulfils (subjunctive) at promise-his.]
"hāðihi lā tazālu dirādatan taqūmu bihā l-dawlatu"
"This is still a study that the state is carrying out."
[This is-still study performing on-it the-state.]
Persian: "be ma taPaddi kard" "He oppressed us." [On us oppression he-made.]
"bar došmanan taxtand" "They attacked the enemy." [On enemy they-attacked.]
"be in e'teraz kard" "He protested at this." [To this protest he-made.]
Hindi: "hamne duśman par hamlā kiyā" "We attacked the enemy."
[By-us enemy-on attack made.]
"maĩ unse āj hī milū̃ā̄" "I'll meet them today."
[I them-with today only will-meet.]
"vah mujhse nahĩ laṛegā" "He won't fight me." [He me-with not will-fight.]
Japanese:
"Boku wa kinō Tanaka-san ni atta." "I met Mr Tanaka yesterday."
[ $\mathrm{I}_{\text {(topic) }}$ yesterday Tanaka-Mr-to met.]
"Ichirō wa Midori to kekkonshita." "Ichiro married Midori."
[Ichiro ${ }_{\text {(topic) }}$ Midori-with married.]
The common characteristic of these verbs is that they describe an activity towards an external object, but do not alter it. The actions of following, obeying, meeting, resisting, attacking, fulfilling, etc make no change in that which is followed, obeyed, resisted, fulfilled etc, or if they do, none is indicated by the sentence. As the above examples show, languages generally show a lack of clarity as to whether these verbs take a direct or indirect object. Moreover, even in English their direct/indirect object structure is ambiguous. Synonyms or near-synonyms of the same verbs take a preposition:
"She met her friend."
"We attended the meeting."
"They attacked the enemy."
"He obeyed the rules."
"She opposed the idea."
"We resisted the proposal."
"She tackled the problem."
"I processed the batch."
"She met with her friend."
"We came to the meeting."
"They waged war on the enemy."
"He conformed to the rules."
"She spoke against the idea."
"We fought against the proposal."
"She dealt with the problem."
"I worked on the batch."

$$
\begin{array}{ll}
\text { "We are seeking Mr Jones." "We are searching for Mr Jones." } \\
\text { "She visited her neighbour." } & \text { "She called on her neighbour." }
\end{array}
$$

In terms of conventional grammar, those of the above verbs which take a direct object are transitive while their exact equivalents in other languages are intransitive. According to the definition of transitivity in Chapter 6., these verbs are not transitive. However, they describe an action and therefore a process of change. But what is changed? It is not the object, as we have noted. Therefore, it must be the only other noun in the sentence, the subject, and the verbs are intransitive. In carrying out the action, the subject (or agent) alters his/her position or approach towards the object.

This category of intransitive verb directed to an external object needs a name, and we propose the term participation. Because the object is not altered or affected, it does not have the same purpose as the object of a transitive or transfer sentence, and should instead be called a target. Many participations involve more than one person:
"We played chess with our neighbours." "We took part in the attack."
The idea that participation verbs are intransitive is supported by the fact that in some languages some of them are reflexive, and are therefore structured as agential intransitive:

English: "They busied themselves with the list of tasks."
German:"Sie betrugen sich schlecht." "They behaved [themselves] badly." "Er kümmert sich um einen Kranken." "He is looking [himself] after a sick person."

Spanish: "oponerse a los cambios" "to resist change" [to-oppose-oneself to change]
"rebelarse contra el gobierno" "to rebel [oneself] against the government]
"Ella se ocupa de la parte técnica." "She takes care of the technical side."
[She herself occupies of the side technical.]
"Nos encontramos con muchos problemas."
"[Ourselves] we-met with a lot of problems."
Russian:"Vy dolzhny ego slushat'sya." "You must obey him."
[You must him obey-yourself.]
"Borolsya s vragom." "He fought the enemy." [He fought-himself with the enemy.]
Hungarian:
"Hetente háromszor találkoznak." "They meet three times a week."
[Each-week three-times they-find-themselves.]
Arabic: "tatanāsabu wa-qawā¢ida 1-naḥwi 1-¢arabiyyi"
"It conforms with the rules of Arabic grammar."
[It-conforms-itself with rules of-the-grammar the-Arabic.]
"qad tazawwaja min fatātin min mustawan dūna mustawāhu l-ijtimāfiyyi"
"He married a girl from a lower social class than his own."
[He-married-himself with girl from class below class-his the-social.]
"li-māðā taqạ̄s sat $\uparrow$ ani l-tawaddudi xilāla l-Raßwāmi 1-māḍiyati"
"Why had she resisted affection during recent years?"
[Why resisted-herself about the-affection during the-years the-recent?"
"yatakallamāni l-luyata nafsahā""They both speak the same language."
[They-speak-themselves ${ }_{\text {(dual) }}$ the-language the-same.]
The Arabic reflexive prefix is "ta-".
Latin and (modern) Greek use a form of verb called deponent, that is a passive form with active (or agential) meaning. It is translated here as reflexive:

Latin: "fungī munere" "to perform-oneself an office" (Cicero) [to-perform with an office] "sequī auctoritatem" "to follow-oneself authority" (Caesar)

# "adgredī navem""to attack-oneself the ship" (Caesar) <br> Greek: " $\Theta \alpha \alpha v \tau \iota \sigma \tau \alpha \theta$ ov́ $\mu \varepsilon \sigma \tau \eta \beta$ $\beta$..$"$ "We shall resist the violence." [Shall we-resist-ourselves to the violence.] <br> "E $\pi \iota \varepsilon ́ \theta \eta \kappa \alpha v ~ \sigma \tau \eta v \pi \rho \omega \tau \varepsilon v ́ o v \sigma \alpha$." "They attacked the capital." <br> [They-attacked-themselves to the capital.] <br> "О $\varepsilon \pi \imath \theta \varepsilon \omega \rho \eta \tau \eta ́ \varsigma \varepsilon \pi \iota \sigma \kappa \varepsilon ́ \varphi \theta \eta \kappa \varepsilon$ то $\sigma \chi \circ \lambda \varepsilon$ ќо $\mu \alpha \varsigma \chi \theta \varepsilon \varsigma$." <br> "The inspector visited our school yesterday." <br> [The inspector visited-himself the school-our yesterday.] 

Also included among participation verbs are various activities for which English uses an auxiliary verb, noun or adjective, and proposition:
"get round to", "put up with", "come to terms with", "not stand for", "bring oneself to", "do justice to", "make it one's business to", "take in hand", "get the better of", "get away with".

Participation functions may be expressed by an auxiliary participation verb and a noun expressing an participation activity, called a role (Chapter 12., Role):
"She visited the school as an inspector."
"He worked in Venice as British consul."
"She attended the bedside as his nurse."
Participation sentences which connect the verb directly with the target show a superficial similarity with a transitive verb. In particular, they often form a participle to describe the target: "obeyed", "followed", "attacked", "resisted", "encountered", "tackled", "attended", "defied", "fulfilled", "played", "served", "visited", "managed", "met", etc. English also forms a participle for the target when a preposition occurs between the verb and the target, although not all languages do so: "cared for", "complied with", "coped with", "worked on", "rebelled against", "referred to", etc. These participles may be used as qualifiers or predicates, and the following sentences therefore occur. The ones with * are apparently incorrect; those with? are dubious (at least to the present writer):
"Her friend was met by her."
"The meeting was attended by us."
"The enemy was attacked by us."
"The rules were obeyed by him."
"The idea was opposed by her."
"The proposal was resisted by us."
"The problem was tackled by her."
"The batch was processed by me."
"Mr Jones is being sought by us."
"Her neighbour was visited by her."
?"Her friend was met with by her."
*"The meeting was come to by us."
*"The enemy was waged war on by us."
"The rules were conformed to by him."
?"The idea was spoken against by her."
"The proposal was fought against by us."
"The problem was dealt with by her."
"The batch was worked on by me."
?"Mr Jones is being searched for by us."
"Her neighbour was called on by her."

Unlike a passive sentence, these sentences do not describe an action on something or someone, but the function of a target with respect to a participation. We suggest the term target sentence. Similarly, the term "perfective participle" is unsuitable for the function of a target since no action on it is described, and we suggest the term target participle. The terminology of a participation sentence is discussed further in Chapter 15.

Since the function of a participation agent is clearly defined, then imperfective and (often) general participles occur as with other agential verbs: "obeying", "obedient"; "attacking", "aggressive"; "resisting", "resistant", etc.

As mentioned in Chapter 5., not all languages possess a perfective participle. Those that do so usually also permit a target participle. Most such languages do not permit a target sentence if the target is not connected directly to the verb:

German: "I was followed" is "Mir wurde gefolgt" [To-me was followed], not *"Ich wurde gefolgt."

Italian: "The teacher was obeyed by the boys" is "Al professore hanno ubbidito i ragazzi" [To-the professor obeyed the boys], not *"Il professore è stato ubbidito dai ragazzi."

A target sentence can sometimes be expressed by the auxiliary verb "undergo" (or its equivalent), attached to a verbal noun expressing the participation action:
"They underwent attack." "She underwent treatment."
Indonesian/Malay possesses two suffixes which form verbs: "-i", which indicates that it does not alter its object and is a participation, and "-kan", which generally indicates that it is transitive. Both suffixes can be attached to the same base word with the prefix "men-", which causes phonetic changes. The following contrast participation and transitive sentences formed from the same base word (in brackets):

```
"Pengarah itu bersetuju untuk menemui wartawan-wartawan tersebut."
"The director agreed to meet the reporters." [Director-the agree to meet reporters-the.]
"Persidangan itu telah mempertemukan pakar-pakar perubatan."
"The conference brought together medical specialists."
[Conference-the did bring-together specialist medical.] ("temu" = "meeting")
"Pei Ling ingin menyertai kelab renang."
"Pei Ling would like to join the swimming club." [Pei Ling want join club swimming.]
"Elizabeth menyertakan sekeping gambar bersama suratnya."
"Elizabeth enclosed a photo with her letter."
[Elizabeth enclose one-unit photo with letter-her.] ("serta" = "with")
"Mandy memenuhi semua keperluan kerja itu."
"Mandy fulfilled all the requirements for the job." [Mandy fulfil all necessity job-the.]
"Ani memenuhkan cawannya dengan kopi." "Ani filled her cup with coffee."
[Ani fill cup-her with coffee.] ("penuh" = "full")
```

The base word with a preposition is often equivalent to a verb constructed with "men-...-i":
"Mereka hadir di rapat itu." [They present at meeting-the.]
"Mereka menghadiri rapat itu." [They attend meeting-the.]
It should be pointed out that a participation sentence is not the only construction in which a verb takes a direct or indirect object without altering or affecting it:
"He became bored with the lecture."
"They risked falling into the sea."
"She heard the noise of the explosion."
"We considered the complaint seriously."
None of these four sentences are an action directed towards an external target, which is the characteristic of an participation. In terms of the previous sections of this chapter, the first sentence is an effect inceptive, in which an involuntary state is caused by an external object. The second is a dependency agential intransitive, in which the subjects place themselves in danger of a future event. In the third sentence, the subject is an involuntary recipient of an object. In the fourth, the subjects engage in a voluntary mental process towards the object. The third and fourth sentences are discussed in the next chapter.

## Conclusion

Transitive and intransitive sentences have a core function in which an action occurs on an object (or patient), which for an intransitive sentence is also the subject, so that it changes to a new state or condition. Each sentence has a resultant which describes the state or condition of the object, and which can be expressed by a resultant stative sentence. The core elements of these sentences are therefore the verb and object and any agent or instrument effecting the action. In addition, the resultant state or condition may also refer to other elements: the location, measure, base, dependency, burden, appliance, or participant.

We have classified both transitive and intransitive sentences into about seven types, distinguished by the action that each performs on its object and the resultant state that the object is in. These seven types are further refined to 12 sentence types when they are considered further in Chapter 15. They are the same for both transitive and intransitive sentences, and it appears from this that the distinction between transitive, intransitive, and passive is not a function of a sentence but its role in discourse: whether the agent, instrument, or object is the topic, and whether the agent or instrument is the same as the object. As we have already mentioned, Chapters 13. and 14. attempt to analyse and classify sentences by their discourse type.

This classification of a sentence by the nature of its action or state is defined by the elements which are required to complete the sentence's meaning. We shall show in Chapters 14. and 15. that such a classification is independent of the role of the sentence in discourse and therefore of the distinction between transitive, intransitive, and passive, and indeed of the distinction between a statement and a question.

In Chapters 8. and 9. we proceed to consider a different type of sentence, one which alters the relationship between an object and another core entity, a recipient. Although such sentences have been traditionally classified as transitive or intransitive, their functional character is in fact different, and is determined by the nature of the relationship of the object with the recipient.

## 8. Transfer and Possession Sentences

## Summary

A transfer is a dynamic sentence or verb which alters the physical or mental relationship between its object and a third party. The third party is usually a person and is called a recipient. The resultant sentence of a transfer is the stative physical or mental relationship between the recipient and the object, which is called a possession

A transfer differs from a transitive or intransitive sentence in that a transfer does not directly alter its object, and includes a recipient. The resultant sentence of a transitive or intransitive is a state or condition of its object, expressed by an attribute or identification. The resultant sentence of a transfer, a possession, is a relationship between two entities, the object and an animate recipient.

Transfers take three forms: a dative sentence, in which the subject is the agent, instrument, or object, a receptive sentence in which the subject is the recipient, and an adoptive sentence in which the subject is both the agent and the recipient. This chapter is concerned with dative sentences, and receptive and adoptive sentences are considered in Chapter 9. Chapters 8. and 9. also only discuss transfers and possessions whose object is stative.

A dative sentence may have an instrument, and be agential or instrumental. If the agent or instrument is the subject, it is called active. It may be expressed with the object as subject; by analogy with a transitive sentence, this is called dative passive.

Language includes a very wide range of relations which an animate person enters into with an object, including ownership, perception, supposition, and opinion. All of these are expressed by some sort of transfer and possession. 12 different categories of transfer and possession sentence, covering these relations, are identified and described.

A possession sentence may be expressed with the recipient as subject, either of a possession verb or of a recipient participle. Alternatively, it may be in topic position but linked to the possession indirectly. This "indirect recipient" construction is widely attested. In all, seven different possession sentence constructions are listed. Alternatively, the object may be the subject, connected to the recipient by an attribute called a possessive participle. These participles may be used to construct general sentences.

A communication is the transfer of a new mental impression to a recipient, and a perception is the possession of that mental impression. A communication and perception sentence can be restructured with the object, if definite, as topic, and the communication or possession elements embedded as part of the comment. If the object of the communication or perception is indefinite, the sentence can be restructured as existential, with the communication or possession elements embedded as part of the circumstance.

A representation involves both an action of creating the representation, and its communication, and therefore combines the functions of a transitive and transfer sentences.

A mental attitude or opinion arises in general either from the object of the opinion or from an intention by the recipient. The first of these is expressed by an instrumental dative sentence with the object as instrument. The second is expressed by an adoptive sentence with the recipient as agent, as discussed in Chapter 9

## Terms Defined or Introduced

Transfer, possession, dative, receptive, exchange, provision, opinion, communication, perception, embedding, interrogation, volition, imperative, representation.

## The Transfer Function

In Chapter 6., we looked at transitive sentences, which alter their object (or patient) to a form expressed by an attribute or noun which we called the resultant. Corresponding to each transitive sentence is a resultant sentence which describes the altered state of the object. In Chapter 7., we looked at intransitive sentences whose subject is altered (voluntarily or involuntarily) to a form represented by a resultant. An intransitive sentence accordingly has a resultant sentence which describes the altered state of the subject.

The theme of this and the following chapter are sentences which do not alter their object, but change the relationship between their object and a third party. The object may be animate or inanimate, but the third party is usually animate. The changed relationship may be physical, or it may be a mental perception in the mind of the third party. In both cases, the construction is the same. The sentences are dynamic, but have an outcome which is stative, indicated with " $\rightarrow$ ":

$$
\begin{array}{ll}
\text { "Mary gave the book to John." } & \rightarrow \\
\text { "Mary showed the book to John." } \\
\text { "Mary taught John geography." } & \text { "John sees the book." } \\
\text { "Mary lent the book to John." } & \text { "John understands geography." } \\
\text { "Mary introduced Shirley to John." } \\
\text { "Mary brought John's attention to the noise." "John is acquainted with Shirley." } \\
\text { "Mary explained the details to John." }
\end{array}
$$

If the object is physical, it is affected in that its relationship with the third party is altered. If the object is mental, it is not affected at all: "Mary taught John geography" does not alter geography. The sentences therefore differ in function from transitives and intransitives, and we propose for them a different name: transfer. In the examples to the left of the " $\rightarrow$ ", the subject is the intended performer of the action, which by analogy with transitives and agential intransitives can be called the agent. The third party whose relationship with the object is changed is conventionally termed an "indirect object", but this term does not accurately describe its purpose, and we therefore term it the recipient. The structure of a transfer sentence is therefore "agent-verb-object-recipient".

The outcome of these transfers, to the right of the " $\rightarrow$ ", are stative sentences which express the changed relationship of the object with the recipient. They are called possessions, and are discussed further in the following section. In these examples, the subject of the possession sentence is the animate recipient and the object is what is possessed. Examples in this and the following chapter illustrate the wide range of possessive relationships. Since the possessions describe the state arising from the action, they can be called the resultant sentence of the transfers by analogy with the terminology of transitives and intransitives. However, a transfer sentence does not itself include an element "resultant".

Transfer sentences may also have an instrument, in which case their structure is "agent-verb-object-recipient-instrument":
"Mary sent the book to John through the post."
"Mary explained the information to John with the aid of diagrams."
Accordingly, an instrumental transfer construction is possible: "instrument-verb-object-recipient":
"The post delivered the book to John."
"The diagrams explained the information to John."
In some of the transfers cited, the object is direct and the recipient is connected to the verb by a link word ("to") or an equivalent inflexion ("dative"). This is so for the verbs "give", "show", "introduce", "lend", and "explain", although English has the alternative construction "Mary gave John the book", etc. For others verbs ("teach", "remind", "interest"), the recipient is direct in English and connected by "to" or its equivalent in other languages. In each case, the construction conforms to the transfer model.

The function of a transfer in the above examples is to provide new information on the agent or instrument, which are therefore the subject. Consistent with the terminology of transitive sentences, we may call them active. In these examples, no element is in focus:
"Mary gave the book to John." "The diagrams explained the information to John."
In the following sentences, "Mary" and "the diagrams" are in focus and therefore the comment. The remainder of the sentences are the topic:
"It was Mary who gave the book to John."
"It was the diagrams which explained the information to John."
It is usually also possible to construct a transfer sentence with the object as subject. By analogy with a transitive sentence (Chapter 6.), this sentence is termed passive. Transfers in which the subject is the agent, instrument or object are called dative. In English and some other languages, it is also possible to construct a transfer with the recipient as subject, a construction we shall call receptive. The dative passive and receptive versions of the first four sentences above are:
"The book was given to John by Mary." "John was given the book by Mary."
"The book was showed to John by Mary." "John was showed the book by Mary."
"Geography was taught to John by Mary." "John was taught geography by Mary."
"The book was lent to John by Mary." "John was lent the book by Mary."
However, even in English some dative verbs do not have a receptive form:
"The information was explained to John by Mary." *"John was explained the information by Mary."
"Shirley was introduced to John by Mary." *"John was introduced to Shirley by Mary."
An English construction using an auxiliary verb is however possible: "John had the information explained to him by Mary"; "John received an introduction to Shirley from Mary".

The English dative passive and receptive constructions employ the perfective participle of the transfer verb: "given", "showed", "taught". The other methods of forming the dative passive summarised in Chapter 6. (The Passive Construction) also apply. Japanese, Indonesian, and Swahili alter the active verb:

Japanese:
"Jon wa sensei ni shitsumon o shita."
(dative)
"John asked his teacher a question."
[John (topic) ${ }^{\text {teacher-to question }}{ }_{\text {(object) }}$ put."
"Sensei wa Jon ni shitsumon o sareta."
"The teacher was asked a question by John." (receptive)
[Teacher ${ }_{\text {(topic) }}$ John-by question ${ }_{\text {(object) }}$ was-put.]
Indonesian/Malay: ("serah" = "transfer")
"Kepala kantor menyerahi kami tugas itu."
(dative)
"The office head handed us that task."
[Head office handed us task that.]
"Tugas itu diserahkan oleh kepala kantor kepada kami." (passive)
"That task was handed by the office head to us."
[Task that was-handed by head office to us.]
"Kami diserahi kepala kantor tugas itu." (receptive)
"We were handed that task by the office head."
[We were-handed head office task that.]
Inuit adds a suffix "-ut" (or its variant "-up"), which converts a verb into a dative form. It is here translated as "to". "niqar" is the passive suffix:

```
"Nassippaa""He sends him it."[Send-he-it.] (dative)
"Nassiuppaa""He sends it to him." [Send-to-he-it.] (dative)
"Nassiunniqarpuq." "It was sent." [Send-to-(passive)-it.] (passive)
"Nassinniqarpuq." "He was sent." [Send-(passive)-he.] (receptive)
```

Inuit can also form dative sentences by attaching a suffix (underlined) to the object given:
"Atisassipparma." "You gave me clothes." [Clothes-give-you-me.]
"Ursuirniarpugut." "We are selling blubber." [Blubber-sell-we.]
"Akisugissaavuq." "He complained that it was too expensive." [Expensive-complain-he.]
"Niaqururpaanga." "He hit me on the head." [Head-hiton-he-me.]
German, like many languages, permits a passive but not a receptive version of a dative verb. The receptive is expressed by placing the recipient in the topic position, but in the dative case, a construction we can call "indirect recipient"

$$
\begin{array}{ll}
\text { "Der Geschäftsführer bot dem Arbeitslosen eine Stelle an" } & \text { (dative) } \\
\text { "The manager offered the unemployed man } \\
\text { (dative) a job."" } \\
\text { "Die Stelle wurde dem Arbeitslosen vom Geschäftsführer angebotet." } \\
\text { "The job was offered to the unemployed man by the manager." } & \text { (passive) } \\
\text { [The job was to the unemployed man (dative) by the manager offered.] } \\
\text { "Dem Arbeitlosen wurde eine Stelle vom Geschäftsführer angebotet." (receptive) } \\
\text { "The unemployed man was offered a job by the manager." } \\
\text { [To the unemployed man (dative) was a job by the manager offered." }
\end{array}
$$

Similarly in Russian:
$\begin{aligned} & \text { "Vam soobshchat ob etom." "You will be informed about that." (receptive) } \\ & {\left[\text { To-you }_{\text {(dative) }} \text { they-inform about that.] }\right.}\end{aligned}$
Romance languages employ the same construction. A passive form of the verb is used, or a reflexive construction of the active verb:

| Spanish: | "Le fue mandada una carta." "He was sent a letter." <br> [To-him was sent a letter.] <br> "Se le mandó una carta." "He was sent a letter." <br> [Itself to-him sent a letter.] | (receptive) (receptive) |
| :---: | :---: | :---: |
| Italian: | "Promisero il libro allo studente." | (dative) |
|  | "They promised the student the book." |  |
|  | [They-promised the book to the student.] |  |
|  | "Il libro fu promesso allo studente." | (passive) |
|  | "The book was promised to the student." |  |
|  | "Allo studente fu promesso/si promise il libro." | (receptive) |
|  | "The student was promised the book." |  |
|  | [To-the student was promised/itself promised the book.] |  |

Languages which employ an impersonal construction for the transitive passive also use it for the dative passive and receptive:

Welsh: "Dysgir Cymraeg gan yr athro." "Welsh is taught by the teacher." [There-is-teaching of Welsh by the teacher.] (passive)

Finnish: "On esitetty kolme ehdotusta." "Three suggestions have been put forward."
[There-are put-forward three suggestions.]
(passive)
French: "On lui a rendu l'argent." "The money has been given back to him."
[One to-him has returned the money.] (receptive)
Hungarian can place the object in topic position to achieve the passive:
"Azt a filmet akarom megnézni." "I want to watch that movie."
[That the movie (object) I-want to-watch.]
"Ugyanazt a térképet vettem meg, mint te." "I bought the same map as you,"
"Ugyanazt a térképet vettem meg, mint te." "I bought the same map as you."
[Same the map (object) bought-I $_{\text {(perfective), }}$, as you.]

## The Possession Function

At the start of the previous section, it was noted that the resultant sentence of a transfer expresses a stative relationship between the recipient and object, called a possession. We can now consider these examples further:
"John has the book."
"John sees the book."
"John understands geography."
"John has the book on loan."
"John is acquainted with Shirley."
"John hears the noise."
"John knows the details."
"John remembers the appointment."
"John is interested in Mary's work."
"The book is owned by John."
"The book is seen by John."
"Geography is understood by John."
"The book is on loan to John."
"Shirley is acquainted with John."
"The noise is heard by John."
"The details are known to John."
"The appointment is remembered by John."
"Mary's work is interesting to John."

It can be seen that possession sentences can have two forms, unlike the resultant sentence of a transitive or intransitive sentence which has the single form "subject-attribute/noun". In the first, the recipient is the subject and the verb expresses his/her possession of the object, whether material or mental: "has", "owns", "feels", "sees", "understands", "knows", "remembers", or "is interested in". These are possession verbs, and the construction is "recipient-possession-object". In the second, the object possessed is the subject (generally inanimate) and the verb expresses its ownership by the recipient: "is owned", "is felt", "is seen", "is understood", "is interesting", etc. This form of verb is similar to the perfective participle of a transitive, intransitive, or dative verb, but differs from them in that the verb from which it is derived is stative. We can call it the possessive participle. The construction is "subject-possessive participle-recipient".

In Indonesian, the relationship between the dative sentence and the resultant possession may be transparent. In this case, the dative is formed with the suffix "-kan":
"Mereka menontonkan hasil kemajuan yang terakhir."
"They display the results of the latest progress."
"[They make-viewed result progress which latest.]
"Pengunjung menonton hasil kemajuan yang terakhir."
"The visitors viewed the results of the latest progress."
[Visitor view result progress which latest.]
Language includes a very wide range of relations which an animate person enters into with an inanimate object, including ownership, perception, benefit, access, or control. All of these are covered by some sort of possession sentence. Further examples of transfer sentences and their possession resultant sentences are:

| "The tooth gives John pain." $\quad \rightarrow \quad$ "John feels a pain in his tooth." <br> "John's appearance suits him to light |  |  |
| :---: | :---: | :---: |
|  |  |  |
| clothing." | $\rightarrow$ | "Light clothing suits John." |
| "John received a share in the reward." |  |  |
|  | $\rightarrow$ | "John shared in the reward." |
| "Our contract entitles us to two weeks' holiday.' |  | "We have the right to two weeks' holiday." |
| "The argument was explained to John." |  |  |
|  | $\rightarrow$ | "The argument was clear to John." |
| "His brother lent John $£ 4000 . "$ | $\rightarrow$ | "John owes $£ 4000$ to his brother." |
| "John was assigned responsibility for this debt." | $\rightarrow$ | "John is responsible for this debt." |

$$
\begin{array}{lll}
\text { "His remarks caused John regret." } & \rightarrow & \text { "John regrets his earlier remarks." } \\
\text { "The present pleased John." } & \rightarrow & \text { "John is pleased with the present." } \\
\text { "The report satisfied John." } & \rightarrow & \text { "John is satisfied with the report." }
\end{array}
$$

These sentences express something that John "has", a possession, as opposed to something that he "is", an attribute. The distinction between these two is sometimes clear and sometimes less so, so that languages can possess alternative possessive and attributive constructions for the same idea. This ambiguity results in alternative dative and transitive constructions of which they are the resultant sentence

$$
\text { "Going out gives John a fright." } \quad \rightarrow \quad \text { "John has a fear of going out." }
$$

Also covered by the possession construction are sentences which convey that the recipient does not have, and therefore needs, an object:

> "John needs a new car." "John lacks practice in public speaking."

Sentences of this type may be the resultant of a transfer sentence in which an object is removed from the recipient:

| "The thief stole John's wallet." | $\rightarrow$ | "John is missing his wallet." |
| ---: | :--- | :--- |
| "I had my driving license withdrawn." |  | "I no longer have a driving license." |

As with other transfer sentences, the recipient of a sentence in which an item is withdrawn may be expressed by the link "to":

French: "On lui a volé son argent." "They have stolen his money".
[One to-him has stolen the money.]
Spanish:"Les robaron el coche." "They stole your car." [To-you they-stole the car.]
As we have already noted in Chapter 1., languages do not show a single pattern for possession sentences, although within each languages there is some consistency. In the range of languages under study, we can see seven constructions:
(i) The recipient is the subject of a possession verb, and the possession is its object. Examples of possession verbs in English are "have", "need", "feel", "see", "know", and "understand". It can be summarised as "recipient-verb-object".
(ii) The construction is "with/at recipient-there is-object". Instead of "have", the verb is existential and dependent on the possession. We can call this construction "indirect recipient". It occurs in English "His sincerity is evident to me" or "That colour suits you", but in many languages the recipient is expressed first: "To-me is evident his sincerity"; "To-you suits the colour".
(iii) The construction is: "recipient ${ }_{(\text {topic })}$-object-attribute". The recipient is the topic and the comment is a stative sentence about the possession which indicates its relation with the recipient. We can call this the "topic-comment" construction.
(iv) The construction is "recipient-attribute-object", where the attribute is a recipient participle, or "object-attribute-recipient", where the attribute is a possessive participle.
(v) The form of the possession verb is reflexive, in the sense "the recipient gives the possession to him/herself". The meaning of this has become extended to "have for oneself" and hence "have".
(vi) The possession is expressed as a noun, called a possession, to which the recipient and the object possessed are linked. The construction is therefore "recipient-link-possession-link-
object", where "link" is a link as in Chapter 4. (Links) or an auxiliary verb expressing that link, such as "have as".
(vii) A suffix is attached to the object possessed, the whole forming a verb meaning "have...".

All these constructions place the recipient in topic position. Except for the last two, they can usually be adapted to place the object in topic position. However, in the indirect recipient and topic-comment constructions the recipient is not the subject of the verb. The constructions are various attempts to adapt the constructions "subject-verb-object" and "subject-attribute", which are suited to a transitive sentence, to the concept of possession.

The seven possession constructions are illustrated under (a) to (g) below.
(a) As already mentioned, the recipient is the subject of the verbs "have" and "need":

French: "Il a beaucoup d'argent." "He has plenty of money."
"J'en ai peur." "I am afraid of him." [I of-him have fear.]
"Nous avons besoin de vacances." "We need a holiday."
[We have need of holiday.]
German:"Wir haben ein neues Auto." "We have a new car."
"Wir brauchen frische Luft." "We need [some] fresh air."
"Ich habe Hunger." "I'm hungry."
Czech: "Mám svůj deštník." "I have [my] umbrella."
Greek: "E $\alpha \omega$ بóvo $\tau \rho \varepsilon \iota \varsigma ~ \lambda i ́ \rho \varepsilon \varsigma . " ~ " I ~ h a v e ~ o n l y ~ t h r e e ~ p o u n d s . " ~$
Persian: "do bab xane darad" "He has two houses." [Two unit houses he-has.]
Also in this pattern are most verbs of perception:
French: "J'entendais le bruit de la circulation." "I heard the noise of the traffic."
German:"Ich verstehe, was Sie gesagt haben." "I understand what you said."
[I understand, what you said have.]
Russian:"Ya ikh khorosho znayu." "I know them well." [I them well know.]
Arabic: "yafrifu Rasbābahā YakӨara minnı"
"He knows the causes of it more than I do."
[He-knows causes-its more than-I.]
Chinese: "Dàjiā dōu kàn bù jiàn hēibăn shang de zì."
"Nobody could see the words on the blackboard."
[Everybody all look not see blackboard-on-of words.]
(b) The indirect recipient construction is a very common way of expressing "have", "need", "feel", and "concern", and the usual way of expressing "suit". It also occurs with verbs of perception:

French: "Il leur faudra cent francs." "They will need 100 francs."
[It to-them will-be-necessary 100 francs.]
"Mon bras me fait mal." "My arm hurts." [My arm to-me does harm.]
German:"Dieses Auto gehöhrt meinem Bruder." "This car belongs to my brother."
"Es fehlt mir an nötigen Gelde." "I lack necessary funds."
[It lacks to-me at necessary funds.]
"Unserem Nachbar war das nicht neu."
[To our neighbour was that not new.]
"Mir ist kalt." "I feel cold." [To-me is cold.]
"Mir ist traurig zumute." "I feel sad." [To-me is sad to-mood.]
Italian: "Mi era occorso l'aiuto dei miei studenti." "I needed my students' help."
[To-me was needed the help of-the my students.]
"A Giorgio manca il passaporto." "George lacks his passport."
[To George lacks the passport.]
"Mi duole il dito." "My finger hurts." [To-me hurts the finger.]
"La Piazza San Pietro le era sembrata un regno incantato."
"St Peter's Square had seemed to her an enchanted kingdom."
[The square St Peter to-her was seemed an enchanted kingdom.]
"A Giorgio non giova depistare la gente."
"To sidetrack the people is of no use to George."
[To George not is-useful to-sidetrack the people.]
Russian:"U menya novyi kostyum." "I have a new suit." [With me new suit.]
"Detyam nuzhen khoroshii ukhod." "Children need good care." [To-children necessary good care.]
"Eto menya vpolne ustraivaet." "That will suit me perfectly."
[That of-me fully suits.]
"Vam udobno?" "Do you feel comfortable?" [To-you comfortable?]
"Ucheniku veselo." "The pupil feels cheerful." [To-pupil cheerful.]
Finnish: "Rasialla on outo historia." "The box has a strange history."
[Box-at there-is strange history.]
"Minulta puutuu jotakin." "Something is lacking in me."
[Me-from lacks something.]
"Hänen ei sovi mennä nyt." "It does not suit her to go now." [Of-her not suit to-go now.]

## Hungarian:

"Jóska feleségének jó állása van." "Joska’s wife has a good job."
[Joska wife-his-to good job-her is.]
"Lajos bácsinak fáj a feje." "Mr Lajos has a headache." [Lajos Mr-to hurts the head-his.]

Welsh: "Y mae'r fasged gan Mair." "Mary has the basket."
[There-is the basket with Mary.]
"Y mae eisiau bwyd ar y bachgen." "The boy needs food."
[There-is need food on the boy.]
Irish: "Tá gúna nua ag Eibhlín." "Eileen has a new dress."
[Is new dress at Eileen.]
"Tá eolas an bhaile go maith aige." "He knows the town well."
[Is knowledge of-the town well at-him.]

[To-you goes this the skirt.]
" $\Delta$ v́бкодо $\mu$ оv раívєгдı." "It seems difficult to me."
[Difficult to-me it-seems-itself.]
Turkish: "Evin bahçesi var." "The house has a garden."
[House-of garden-its there-is.]
Arabic: "lahu banūna fî l-jāmifati" "He has sons in the University."
[For-him sons in the-University.]
"ma¢ī l-Rāna 71,5 frank" "I had with me 71.5 francs."
[With-me 71.5 francs.]
Persian: "in be man marbut nist" "This does not concern me."

> [This to me connected is-not.]
> "in hava be man misazad" "This climate suits me." [This climate to me suits.]
> Hindi: "mere pās ek gāṝ̄ hai" "I have a car." [Me-with a car is.]
> "hame~ ye pustke nahĩ cāhie" "We don't need these books." [To-us these books not necessary.]
> "unko uskā nām mālūm thā" "They knew his name."
> [To-them his name known was.]
> "āj kā din mujhe hameśā yād rahegā" "I shall always remember today."
> [Today-of day to-me always mind will-remain.]
> "mujhe bhūkh lagī hai" "I am hungry." [To-me hunger attached is.]
> Japanese:"Watashi ni nanika ga hitsuyō da." "I need something."
> [Me-to something (subject) $n$ necessary is.]
> "Watashi ni wa ki no ue no chīsana tori ga mieta."
> "I could see small birds on the tree."

> "Watashi ni wa uguisu no koe ga yoku kikoeru."
> "I can clearly hear the cries of a nightingale."
> [I-to (topic) ${ }^{\text {nightingale-of voice }}{ }_{(\text {subject }}$ well is-audible.]
> Swahili: "Kalamu ina mwalimu." "The teacher has the pencil." [Pencil is-with teacher.]
(c) In the topic-comment possession construction, the comment may be an existential sentence or a statement about some attribute of the possession. If the verb is existential, for example "ada" in Malay or "yŏu" in Chinese, its purpose is very similar to "have" in English, and it is often translated as that:

Arabic: "al-masraḥiyyatu l-šifriyyatu lahā xaṣā?iṣu tumayyizuhā"
"Poetic drama has distinguishing characteristics."
[The-drama the-poetic, for-it characteristics distinguishing-it.]
Malay: "Dia ada rumah baru." "He has a new house." [He there-is house new.]
Chinese:"Wŏ yŏu gè dìdi." "I have a younger brother."
[I there-is unit younger-brother.]
"Dǒngshìzhăng xīnshuĭ shífēn gāo."
"The director of the board has an extremely high salary."
[Board-director salary extremely high.]
"Wŏ méiyŏu qián yòng." "I haven't any money to spend."
[I not-there-is money use.]
"Wŏ yŏu yī fēng xìn yào xiě." "I have got a letter to write."
[I there-is one unit letter want write.]
Japanese:
"Kono kuruma ni wa kā sutereo ga aru."
"This car has a car stereo." [This car-in (topic) ${ }^{\text {car stereo }}{ }_{\text {(subject) }}$ there-is.]
"Kono kuruma wa gasorin ga takusan iru." "This car needs a lot of gas."
[This car ${ }_{\text {(topic) }}$ gas ${ }_{\text {(subject) }}$ a-lot needs.]
"Zō wa hana ga nagai." "Elephants have long trunks."
[Elephant ${ }_{\text {(topic) }}$ trunk ${ }_{\text {(subject) }}$ is-long.]
"Watashi wa samuke ga shimasu." "I feel a chill." [ $\mathrm{I}_{\text {(topic) }}$ chill ${ }_{\text {(subject) }}$ feel.]
"Watashi wa Eigo ga wakarimasu." "I understand English."
[ $I_{\text {(topic) }}$ English $_{\text {(subject) }}$ is-understandable.]
The last three Japanese examples can also be indirect recipient:
"Zō ni wa hana ga nagai." "Elephants have long trunks."

$$
\begin{aligned}
& \text { [Elephant-to } \text { (topic) }^{\text {trunk }} \text { (subject) is-long.] } \\
& \text { "Watashi ni wa samuke ga shimasu." "I feel a chill." [I-to (topici) } \\
& \text { "Waill }{ }_{\text {(subject) }} \text { feel.] } \\
& \\
& \text { [I-to (topic) } \text { English }_{\text {(subject) }} \text { is-understandable.] }
\end{aligned}
$$

(d) As already discussed in Chapter 5. (Possessive and Recipient Participles), possession relations can give rise to both a possessive and a recipient participle. The recipient participle is an attributive form of possession verb. The possessive participle is the usual passive form of the possession verb, and can express the accessibility of the object to possession. In the following examples, possession sentences without an attributive form In English are in brackets:

| recipientparticiple | possessive participle |
| :--- | :--- |
| "We are aware of your dissatisfaction." "Your dissatisfaction is known to us." |  |
| "We are sure that the train will be on time." "The punctuality of the train is certain." |  |
| ("We own a house.") | "The house is owned by us." |
| ("He needs some encouragement.") | "Encouragement is necessary to him." |
| "They are lacking support." | "Support is lacking for them." |
| "You have a right to a parking place." | "One parking place is your right." |
| ("We understand the facts.") | "The facts are understood by us." |

Some possessive participles can also be verbs:
"I have a car."
"The car belongs to me."
Another example is the distinction between the words "old" and "new" in the sentences:
"My friend is old" and "I have an old friend", or
"My car is new" and "I have a new car".
The first in each of these pair of sentences is attributive, and is a quality of the friend or car. The second is possessive, and describes the relationship between the friend or car and the recipient. In the second sentences of each pair, "old" and "new" are possessive participles.
(e) Possession sentences may be constructed as reflexive, even though possession is stative and the reflexive (Chapter 7.) is a dynamic construction:

> German:"Ich fühle mich beleidigt." "I feel insulted." [I feel myself insulted.] Italian: "Mi ricordo di averlo visto." "I remember having seen it." [Myself I-remind of having-it seen.] Russian: "Eto kasaetsya vsekh." "This concerns everyone." [This concerns-itself of-all.] Arabic: "mi日lu hāðihi l-malābasi lā tatanāsabu maCa miṣra l-hadī̈ati" $\begin{aligned} & \text { "Clothes like this do not go with modern Egypt." } \\ & \text { [Like of-these the-clothes not go-themselves with Egypt the-modern.] }\end{aligned}$

In Greek, the majority of possession verbs are constructed with "recipient-verb-object". However, a few are deponent, that is they have passive form. Deponents in (Modern) Greek and Latin have the alternative meanings of passive (something is done to one) and dative reflexive (one does something to or for oneself). In the following examples, they are translated as reflexive:
"M $\varepsilon \theta 0 \mu \alpha ́ \sigma \alpha l ; "$ "Do you remember me?" "Me (object) $y$ you-remember-yourself?"
" $\Delta \varepsilon v \tau \eta v$ вí $\chi \varepsilon \alpha v \tau \iota \lambda \eta \varphi \theta \varepsilon$ í." "He hadn’t understood her."
[Not her ${ }_{\text {(object) }}$ he-had understood-himself.]
"H E $\lambda \varepsilon ́ v \eta ~ \alpha ı \sigma \theta \alpha ́ v \theta \eta \kappa \varepsilon \tau \alpha \chi \varepsilon ́ \rho l \alpha \tau \eta \varsigma ~ v \alpha \pi \alpha \gamma \omega ́ v o v v . " ~ " H e l e n ~ f e l t ~ h e r ~ h a n d s ~ f r e e z i n g . " ~$
[The Helen felt-herself the hands-her that they froze ${ }_{\text {(subjunctive). }}$.]

$$
\begin{aligned}
& \text { "O } \Delta \eta \mu \eta ́ \tau \rho \eta s ~ \chi \rho \varepsilon \iota \alpha ́ \zeta \varepsilon \tau \alpha ı ~ \chi \rho \eta ́ \mu \alpha \tau \alpha . " " ~ " D i m i t r i s ~ n e e d s ~ m o n e y . " ~ \\
& \text { [The Dimitris needs-himself money.] }
\end{aligned}
$$

Latin also has deponent verbs of perception:
"Omnia potiora fide Iugurthae rebatur."
(Sallust)
"He thought all the best of Jugurtha's good faith."
[All preferable in-faith of-Jugurtha he-thought-himself.]
(f) The great majority of relations between an object and a person are possessive in nature. The relation may be expressed not by a verb, but by a noun called a possession which is connected both to the recipient and to the object possessed. For example, in English the auxiliary "have as" may be used:

| "Mary loaned the book to John." | $\rightarrow$ | "John has the book as a loan."/ <br> "The book is a loan to John." |
| :--- | :--- | :--- |
| "We were given Mr Smith as |  |  |
| our teacher." |  |  |$\rightarrow \quad$| "We have Mr Smith as our teacher."/ |
| :--- |

"My daughter is an accountant" could equally be expressed as "I have a daughter in accountancy".

These constructions are used because no word exists in English for "have as a loan", "have as a teacher", "have as an example", "have as a Chairman", "have as a car", "have as a present", "have as a daughter", etc.

In fact, as Chapters 12. (Possession) will show, any possession relationship can be expressed by a possession noun.
(g) Inuit expresses possession as a suffix (underlined) to the object possessed. It differs from other stative concepts in Inuit which are mostly expressed by distinct words. "-qar-" means "there is" and is used when the possession is indefinite; "-ra-" means "have as" and is used when the possession is definite:

```
"Aninngaasaatiqarpunga." "I have some money." [Money-some-have-I.]
"Ilinniartitsisuraarput." "He is our teacher." [Teacher-have-we-him.]
"Atisassaaliqivunga." "I lack clothes." [Clothes-lack-I.]
"Mattanngirpunga." "I love mattak." [Mattak love-I.]
"Niaqunnguvuq." "He has a headache." [Head-haspain-he.]
"Qilaatirpalaarpuq." "One can hear a drum" [Drum-audible-is.]
```


## The Transfer and Possession Functions

We have summarised the transfer and possession functions on the basis of many examples, and it may be helpful to review their common features. In a transfer, an agent (or instrument) transfers an object to a recipient (usually animate), so as to establish a relationship between the recipient and the object. This relationship is expressed by a stative sentence called a possession. This schematic description covers the vast range of possible relations which can occur between persons and objects and persons and other persons. The justification for summarising them under the single construction of "transfer" and "possession" is that they can all be expressed in the single form: "agent-verb-object-recipient" and "recipient-possession-object". Each possession relationship is characterised by the possession which connects the recipient and the object, and the function of the transfer sentence is to transfer that possession to the recipient.

If we examine the examples given, it seems that possessions can be classified into 12 broad categories, although these could evidently be varied by further analysis:
(i) Material object: property, gift, loan. These arise from transfers such as "give", "lend", "buy", or "sell".

There are possessions which do not necessarily or evidently arise from any transfer sentence:
(ii) Convenience/inconvenience: suitability, comfort, pain: "That dress suits you"; "I find this seat uncomfortable".
(iii) Truth/falsehood: (French) "Vous avez raison." "You are right." [You have right.]
(iv) Personal relations: family member, public/private offices, friend/acquaintance: "John is our Secretary", "My father knew Lloyd George."

Some categories of possession require further comment which is given in the rest of this chapter. These transfer and possession sentences may include further elements than those listed above:
(v) In an exchange, the possession is transferred in exchange for a compensation. It is usually a material object or a benefit.
(vi) A provision is a material object which is designed to provide a service to the recipient.
(vii) Mental attitudes such as interest, pleasure, conviction, or satisfaction are possessions, called "opinions", which are directed towards and stimulated by an external object. They may arise from a transfer verb of which the external object is the instrument.
(viii) Mental perceptions such as sight, hearing, understanding, or memory, are possessions which arise from communication transfers such as "show", "say", "teach", "explain", or "remind". The perception and communication may refer both to an external object and a statement concerning that object.
(ix) An interrogation is a transfer which communicates an enquiry concerning an object. The possession sentence is that the recipient is aware of the enquiry.
(x) A volition is possessed by someone who desires an object, action, or state which has not yet occurred. Since it expresses a lack, it can but does not necessarily arise from the withdrawal of the object from the recipient.
(xi) An imperative is a transfer which communicates a wish that the recipient should perform an action. The possession sentence is that the recipient is aware of the wish.
(xii) A representation is an image or transformation of an object.

Since the consequences of an interrogation and an imperative depend on the reaction of the recipient, these transfer functions do not have an immediate resultant sentence in the sense of other transfer sentences.

These 12 categories of possession all have a stative object. In addition, there are transfer and possession sentences with a dynamic object, called respectively a facilitative and modal sentence. These are discussed in Chapter 11.

Like other stative concepts, possessions can be negative: "He lacks a car"; "Vous avez tort"; "She is not interested in stamps"; "We do not hear the noise", etc. This lack or need of a possession may arise because the recipient has never had it, or because he/she has renounced it (a construction which is discussed in Chapter 9.), or because it has been withdrawn: "He gave up his car"; "They took away his car", etc. A withdrawal or removal is therefore a sort of transfer with negative effect.

## The Exchange Function

Some transfer sentences refer to a transfer to the recipient of a benefit in return for a compensation. This implies two transfer sentences, one describing the benefit and one the compensation. We may call this an exchange. In the benefit and compensation sentences, the elements agent and recipient are reversed:
"She sold the book to a friend for $£ 10$."
"Her friend bought the book for $£ 10$."/"Her friend owes $£ 10$ for the book."
"He rescued his companion."
"His companion thanked him for rescuing him."
"Mary won a good grade for her work at school."
"The school congratulated Mary for her work."
In German, compensation verbs take the dative case even when they do not in English:
"Sie hat mir 10 euro bezahlt." "She paid me 10 euros." [She has to-me 10 euros paid.]
"Ich danke dir für das Geschenk." "I thank [to] you for the present."
"Wir gratulieren ihm zum Geburtstag." "We congratulate [to] him on [his] birthday."
Similarly, in Chinese "congratulate" is "towards" the recipient:
"Wŏ dàibiăo dàjiā xiàng nín zhùhè." "On behalf of everybody I congratulate you."
[I represent everybody towards you congratulate.]
Exchange possessive participles include:
" $£ 10$ is owed for the book."
"The rescue was deserving of thanks."
"Mary's work was praiseworthy."
Exchange recipient participles include:
"Her friend is in debt for $£ 10$ for the book."
"His companion was grateful for the rescue."
"Mary merited praise for her work."

## The Provision Function

Some transfer verbs refer to the supply of material goods or services, expressed by a noun called a provision. The provision verb is derived from the provision noun (in brackets):

| "The consultancy manned the team with accountants." <br> "The soldiers were armed with rifles." | (man) <br> (arms) <br> "The ostler fed the horses." |
| :--- | :--- |
| (feed) |  |
| "They named their son Frederick." | (name) |
| "Tenniel illustrated 'Alice in Wonderland'." | (illustration) <br> (clothes) |
| (house) |  |

## The Opinion Function

A category of transfer sentence includes the bringing of an object to the attention of a recipient (a communication) and the resultant perception of that object by the recipient. These communication and perception functions are discussed further in a later section of this chapter:
"She pointed out the mistake to him."
"She reminded him of the appointment."
$\rightarrow \quad$ "He remembered the appointment."
"She explained the procedure to him."
$\rightarrow \quad$ "He understood the procedure."

A person can also engage in a mental process or reaction towards an object, in addition to or in consequence of his/her perception. There are large number of such mental processes or reactions, which we can call an opinion. Since they are a voluntary connection between a person and an object, they can be expressed by a possession or dative passive sentence in which the holder of the opinion is the recipient:

Possession sentence<br>"Sam enjoys visiting the cinema."<br>"Everyone likes Sarah."<br>"I believe in the principles of democracy." "We trust his leadership."<br>"She suspected him of stealing the tarts."<br>"She objected to his behaviour."<br>"He was contemptuous of their ideas."<br>"She resented not being promoted."<br>"They respected his experience."<br>"The team were proud of the final result."<br>"She pitied the destitute."<br>"The fans admired the star."<br>"We rely on her expertise."<br>"They fear what may happen."<br>"They regret their past conduct."<br>"He envied her success."<br>"They thought much about the problem."<br>"It mattered to them very much."

## Dative Passive sentence

"The cinema was enjoyed by Sam."
"Sarah is liked by everyone."
"The principles of democracy are believed in."
"His leadership is trusted by us."
"He was suspected of stealing the tarts."
"His behaviour was objectionable to her."
"Their ideas were contemptible to him."
"Her not being promoted was resented."
"His experience was respected by them."
"The destitute were pitiful to her."
"The star was admired by the fans."
"Her expertise is reliable."
"What may happen frightens them."
"Their past conduct is regrettable."
"Her success is enviable."
"The problem was much thought about by them."

Most opinions can be the result of a conscious decision by the recipient to adopt them: "Everyone took a liking to Sarah"; "She took objection to his behaviour"; "The team took pride in the final result", etc. This is a dynamic function expressed by an adoptive sentence, and is considered in greater detail in the next chapter. Some opinions can additionally be stimulated by an external argument or incident, which can be expressed by a corresponding dative verb, often instrumental. In a similar manner to an effect (Chapter 6., The Effect Function), the object of the opinion is the same as the instrument of the dative verb:
Instrumental dative
"Your proposal interests us."
"The performance pleased him."
"The contract satisfied us."
"His argument convinced the tribunal."
"Our reputation shames us."

As the following examples show, the possessive opinion can be expressed in English in at least three different ways, which vary between concepts. For some, all three are available and for others only two:

| specific verb | possessive | attributive |
| :--- | :--- | :--- |
| "She doubts it." | "She had doubts about it." | "She is doubtful of it." |
| "We fear it." | "We have fears about it." | "We are fearful of it." |
| "He despised them." | "He had contempt for them." | "He was contemptuous of <br> them." |
| "They hoped for it." | "They have hopes for it." | "They are hopeful of it." |
| "We trust him." | "We have trust in him." | "We are confident in him." |
| - | "We had pleasure in it." | "He was pleased at it." |

According to the terminology used earlier, the attributive form of an opinion is a recipient participle with the recipient as subject, and a possessive participle with the object as subject. Because it is often not evident when the recipient begins or ceases to hold an opinion, the distinctions between a specific and a general opinion, and a dynamic and stative opinion, are often not precise:

```
recipient participle
"We are confident in his leadership."
"She was suspicious of his motives."
"He was envious of her success."
"We are interested in your proposal."
"He was pleased by the performance."
"We are satisfied with the contract."
"They were convinced by his argument."
"We are ashamed of our reputation."
"The observers were impressed by
    the stadium."
"The company is hopeful of a return
    to profit."
"She was doubtful whether they would be
enough."
recipient participle
"We are confident in his leadership."
"She was suspicious of his motives."
"He was envious of her success."
"He was pleased by the performance."
"We are satisfied with the contract."
"They were convinced by his argument."
"We are ashamed of our reputation."
"The observers were impressed by the stadium."
"The company is hopeful of a return to profit."
"She was doubtful whether they would be enough."
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## possessive participle

"His leadership is trustworthy."
"His motives were suspicious (to her)."
"Her success was enviable (to him)."
"Your proposal is interesting (to us)."
"The performance was pleasant/ pleasurable (to him).
"The contract was satisfactory (to us)."
"His argument was convincing (to the tribunal)."
"Our reputation was shameful (to us)."
"The stadium was impressive (to observers)."
"The results are hopeful for a return to profit."
"Whether they will be enough is doubtful."

A further pattern which can be observed for opinions is that they can often be expressed entirely with auxiliary verbs: "give" for the dative, "have" for the possessive, and "take" for the adoptive:
dative
"It gave him pleasure."
"It gave them pride."
"It gave us a fright."
"It gave us satisfaction."
"It gives us shame."

## possessive

"He had pleasure in it."
"They had pride in it."
"We have fear of it."
"We have satisfaction in it."
"We have shame in it."

## adoptive

"He took pleasure in it."
"They took pride in it."
"We took fright at it."
"We took satisfaction in it."
"We took shame at it."

As already noted, opinions show a superficial resemblance to effect attributes which express a mental response, such as "He was angry at them", "We are happy to see you", "She was surprised at the outcome" or "I am disappointed at your behaviour" (Chapter 6., The Effect Function). The difference is that an effect is something that its subject "is", and is an involuntary and immediate response, while an opinion is something that its recipient "has" and is a voluntary and considered view. The distinction appears in the sentence giving rise to the mental state: one does not "give" anger or surprise, while one does "give" pleasure, pride, fear satisfaction, and shame. It also appears, as we shall discuss further in Chapter 9., in the adoptive construction: one does not "take" anger, surprise, or disappointment, while one does "take" satisfaction, pleasure, shame, etc.

The object of an opinion can be a sentence:
"We are satisfied that the contract is on the right terms."
"We are convinced that the contract will be fulfilled."
"We are pleased that our reputation has improved."
"We are impressed that the contract has been fulfilled."
In languages other than English, opinions show the same five different constructions that we noticed for other possession sentences. They occur with the recipient as subject:

German:"Was hat er dagegen, da $\beta$ wir früher anfangen?"
"What has he got against us starting earlier?"
[What has he against-it, that we earlier start?]
Finnish: "Pidättekö hänestä?" "Do you like her?" [Do-you-like from-her?]
Hungarian:
"Kíváncsi volt a gyerek véleményére." "He was interested in the child’s opinion."
[Curious he-was the child opinion-her-onto.]
"Büszke a gyerekeire." "She is proud of her children."
[Proud the children-her-onto.]
"Szeretném befejezni ezt a dolgozatot." "I would like to finish this [the] paper."
Russian:"Ya vozrazhayu protiv togo, chtoby vy shli tuda."
"I object to your going there." [I object against it, that you go there.]
Hindi: "maĩ kutto~ se ḍartā hū"" "I'm afraid of dogs." [I dogs-by afraid am.]
An Indonesian opinion may be a verb taking a direct object or an equivalent verb taking an indirect object. The following both mean "Mr Basri loves his wife":
"Pak Basri mencintai istrinya." [Mr Basri loves wife-his.]
"Pak Basri cinta akan istrinya." [Mr Basri loves to wife-his.]
Indirect recipient opinions occur particularly with verbs meaning "like", "please", "matter", "regret", or "shame":

French: "Ça va lui faire plaisir." "He will be pleased at that."
[That will to-him cause pleasure.]
Spanish:"Le daba vergüenza contestar." "He was too ashamed to answer."
[To-him gave shame to-answer.]
German:"Wie gefällt Ihnen diese Musik?" "How do you like this music?"
[How is-liked to-you this music?]
Italian: "Ti importa che egli lo venda?" "Does it matter to you if he sells it?"
[To-you it-matters that he it sells (subjunctive)?]
"Gli dispiaceva che essi non venissero." "He was sorry that they would not come."
[To-him was displeasing that they not came ${ }_{\text {(subjunctive). }}$ ]
"Ci sono piaciute le tue poesie." "We liked your poems."
[To-us are pleased the your poems.]
Welsh: "Y mae'n well gennyf i weithio yn yr ardd." "I prefer to work in the garden."
[It is better with me to work in the garden.]
"Y mae'n ddrwg gennyf i glywed am eich dannoedd."
"I'm sorry to hear of your toothache." [It is bad with me hearing of your toothache.]
Irish: "Bhí eagla orthu." "They were afraid." [Was fear on-them.]
"Cad ba mhaith leat i gcóir do dhinneír?" "What would you like for dinner?"
[What would-be good with-you for dinner?]
"Ní miste leis fanúint leat." "He does not mind waiting for you."
[It-is-not harm with-him waiting for you.]
"An dhóigh leat go mbeidh sé fuar um thráthnóna?"
"Do you think it will be cold this evening?"
[Is-it likely with-you that will-be it cold in evening?]
"Ba chóir go mbeadh áthas ar Chaitilín." "Kathleen ought to be delighted."
[Was right that would-be joy on Kathleen.]
Hungarian:
"Nekem nagyon tetszik a rövid szoknya." "I like short skirts very much."
[To-me very like the short skirt.]
Greek: " $\Delta \varepsilon \mu \circ v \alpha \rho \varepsilon ́ \sigma \varepsilon ı ~ \alpha v \tau o ́ ~ \tau о ~ к \rho \alpha б i ́ . " ~ " I ~ d o n ’ t ~ l i k e ~ t h i s ~ w i n e . " ~$
[Not to-me it-likes this the wine.]
Russian: "Eta p'esa mne sovsem ne ponravilas'." "I didn't like this play at all."
[This play to-me at-all not is-liked.]
"Nam bylo zhal' ego." "We felt pity for him." [To-us was pity of-him.]
"Bratu nadoyelo rabotat'." "My brother is bored with working." [To-brother boring to-work.]

Arabic:"kamā kāna yaḥlū li-R.H. Ran yuqaddima nafsahu"
"as R.H. liked to introduce himself"
[as was pleasing to R.H. that he-introduced himself]
Persian: "in ketab mara pasand amand""I liked this book."
[This book to-me pleasant came.]
Hindi: "mujhe bahut mazā āyā""I enjoyed it a lot." [To-me much enjoyment came.]
"mujhe āpkī naī film pasand ā̄"" "I liked your new film."
[To-me your new film pleasing came.]
"mujhe tumhārī bāto~ par viśvās nahī hai" "I don't trust what you say."
[To-me your words-on trust not there-is.]
"tumhe~ śarm nahĩ ātī?" "Aren't you ashamed?" [To-you shame not comes?]
"hame~ rīnā par bahut garv hai" "We are very proud of Rina."
[To-us Rina-on much pride is.]
The topic-comment construction occurs in languages which show it for other possession sentences:
Hindi: "itihās me^ merī bahut dilcaspī hai" "I'm very interested in history."
[History-in my great interest there-is.]
Japanese:
"Boku wa futtobōru ga sukida." "I like football." [ $\mathrm{I}_{\text {(topic) }}$ football (subject) is-liked.]
"Watashi wa chīzu ga kiraida." "I don’t like cheese."
[ $I_{\text {(topic) }}$ cheese ${ }_{\text {(subject) }}$ is-disliked.]
"Watashi wa jazu ni kyōmi ga aru." "I am interested in jazz."

$$
\left[I_{\text {(topic) }} \text { jazz-in interest }{ }_{\text {(subject) }}\right. \text { there-is.] }
$$

Opinions are also expressed by reflexives, and by their equivalent deponents in (modern) Greek and Latin:

Italian: "Mi vergogno di averlo fatto." "I am ashamed of having done it."
[Myself I-shame of having-it done.]
"Mi rammarico di averlo scritto." "I regret having written it."
[Myself I-regret of having-it written.]
Russian: "On interesuetsya literaturoi." "He is interested in literature."
[He interests-himself with-literature ${ }_{\text {(instrumental). }}$.]
Greek: "Фоß $\dot{\tau} \tau \alpha 1 \mu \eta ́ \tau \omega \varsigma \delta \varepsilon v \tau \eta ~ \sigma u v \alpha \nu \tau \eta \dot{\sigma} \sigma$.." "He is afraid he might not meet her."
[He-fears-himself lest not her he-meets.]
" $\Lambda v \pi \alpha ́ \mu \alpha ı \pi о v ~ \varepsilon ́ \chi \alpha \sigma \varepsilon$ o Níкоऽ $\tau \eta$ סov $\lambda \varepsilon \iota \alpha ́$ тov." "I am sorry that Nikos lost his job."

# Latin: "Aliquem suspicor." "I suspect someone." [Someone I-suspect-myself.] <br> "Aliquem vereor." "I fear someone." [Someone I-fear-myself.] <br> "Ingenium tuum admiror." (Cicero) "I admire your talents." 

[Talents your I-admire-myself.]
The reflexive construction for an opinion is taken from the adoptive construction, of which it is the stative resultant sentence (Chapter 9., The Adoptive Sentence.). Further examples are given under that heading.

## The Communication and Perception Functions

The communication and perception sentences illustrated earlier in this chapter were limited in only having a single word as object:
"She pointed out the mistake to him."
"She reminded him of the appointment."
"He saw the mistake."
"The report stated the decision."
"He gossiped about his neighbours."

In fact, the majority of communications and perceptions consist of two parts: an object which the communication or perception concerns, and information about the object which is being communicated or perceived. The subject of the communication is the agent and of the perception is the recipient:
"She reminded him that the appointment was due."
$\rightarrow \quad$ "He remembered the appointment was due."
"She had heard him described as an indifferent correspondent."
$\rightarrow \quad$ "She knew him to be an indifferent correspondent."
"He said that his neighbours had a large family."
$\rightarrow \quad$ "They understood that his neighbours had a large family."

However, when the object is definite, these sentences can often be restructured with the object in subject position:
"The appointment was due, she reminded him."
$\rightarrow \quad$ "The appointment was due, he remembered."
"He had been described to her as an indifferent correspondent."
$\rightarrow \quad$ "He was known to her as an indifferent correspondent."
"His neighbours were described as having a large family."
$\rightarrow \quad$ "His neighbours were understood to have a large family."

Italian: "Ti credevo già partita." "I thought you'd already gone."
[You I-thought already gone.]
"Vi direbbero nati negli anni sessanta." "They said you were born in the 1960's."
[You they-said born in-the years sixty.]
This construction is called embedding, since it embeds the transfer or possession element in the communication or perception. The sentence can be simply analysed as a topic-comment construction, with the object of the communication or perception as the topic and the agent, verb, and other entities as the comment.

Similarly, a communication or perception concerning a new entity can be an existential sentence:
"She pointed out that there was a mistake in the text."
$\rightarrow \quad$ "He saw there was a mistake in the text."
"The report stated that a decision had been reached."

$$
\rightarrow \quad \text { "She knew from the report that a decision had }
$$

In these examples, the object is indefinite. They can be restructured with the existential element at the start, as for other existential sentences described in Chapter 1 (Existence and Non-Existence):

> "A mistake was pointed out by her in the text." "A decision had been reached, the report stated." $\rightarrow \quad$ "A decistake was seen by him in the text."

This is a further example of embedding. The perception sentences can be reformulated:
"There was a mistake seen by him in the text."
"There was a decision known from the report to have been reached."
As with other existential sentences, all that part which is not the subject ("a mistake"; "a decision") is the circumstance.

There are a large number of ways to describe a communication, expressed by different words; "say", "tell", "assure", "show", "reply", "declare", "inform", "mention", "announce", "complain", "allege", "claim", "hint", "telephone", and "testify" is a small selection. They all have the structure "agent-communicate-object-information-(recipient)". The embedded structure can be summarised "object-communicate-agent-information-(recipient)". Following are examples from various languages:

French: "Je lui ai expliqué comment aller à Londres." "I told him the way to London."
[I to-him have explained how to get to London.]
German:"Sie hat gesagt, sie hätte es verstanden." "She said that she understood it."
[She has said, she had ${ }_{\text {(subjunctive) }}$ it understood.]
Russian: "On skazal, chto pridët." "He said that he would come."
[He said, that he-will-come.]
Arabic: "iddafat Rannahā kānat fī manzilihā" "She claimed that she was in her home." [She-claimed that-she was in home-her.]

Persian: "be u goftam ke namiayam" "I told him I was not coming."
[To him told-I that not-come-I.]
Malay: "Pergi katakan kepada Encik Ahmad ada orang hendak berjumpa dia."
"Go and tell Mr Ahmad that there is someone wanting to see him."
[Go say to Mr Ahmad there-is someone want meet him.]
Hindi: "usne mujhse kahā ki āp acchī hindī bolte hai""
"He told me that I spoke Hindi well."
[ $\mathrm{He}_{\text {(agent) }}$ me-to said that you good Hindi speaking are.]
As we have observed, a perception has the structure "recipient-perceive-object-information", which if embedded is "object-perceive-recipient-information". The examples at the start of this section are of a perception arising from an external stimulus or agency. Many perceptions arise spontaneously in the mind of the recipient, and these are described in Chapter 9. (The Receptive and Adoptive Sentences). The following are further examples:

French: "Il croit vous avoir vu." "He thinks he has seen you." [He thinks you to-have seen.]

Greek: "B $\lambda \varepsilon ́ \pi \omega$ to Гıóvvŋ v $\alpha$ бov $\chi \alpha \mu \sigma \gamma \varepsilon \lambda \alpha ́ . "$ "I see John smiling at you."
[I-see the John that to-you he-smiles (subjunctive).]
Arabic: "乌araftuhu hāfiẓan li-kalimatihi" "I knew he was someone who kept his word."
[I-knew-him keeper of word-his.]
Malay: "Polisi mengamatinya melepon sejumlah orang dari terminal." "Police observed him telephone a number [of] people from [the] terminal."

Chinese:"Wŏ xiāngxìn dìqiú shì yuán de." "I believe [the] earth is round."
The above illustrate that five separate constructions are used for the comment of a communication or perception:

- The comment follows the topic immediately, as in the above Chinese example and the second Malay example.
- The comment is a subjectless verb (infinitive), the topic being assumed as the subject, as in the above French examples and in Latin (see below).
- The comment is a verbal noun, qualified by the topic: "I see John smiling at you."
- The topic and comment are expressed as direct speech:
""The appointment is due, she reminded him."
$\rightarrow \quad$ "He recalled: ‘The appointment is due'."
- The topic and comment are a sentence expressed in indirect speech, often preceded by "that", as in the other examples.

If the sentence is posing a question or expressing a doubt whether a perception has occurred, there may also be doubt whether what is perceived has occurred or not. In that case, the perception is indefinable and may be in the subjunctive in those languages which possess that form (Chapter 3. - Hypotheses):

Italian: "Sa che Giovanni è tornato?" "Do you know that John has (indicative) come back?" "Non so se sia già partito." "I don't know whether he's (subjunctive) already left."

In standard German, all communications are treated as a supposition and accordingly a subjunctive form of the verb (if available) is used for the comment.

In Latin, the object of a communication or perception was put in the accusative case and the new information was expressed with a verbal infinitive. The following are literary examples:
"Constat leges ad salutem civium inventas esse."
(Cicero)
"It is agreed that laws were devised for the safety of citizens."
[It-is-agreed laws (object) for safety of-citizens devised to-be.]
"Pompeios desedisse terrae motu audivimus."
(Seneca)
"We have heard that Pompeii has perished in an earthquake."
[Pompeii (object) to-have-perished in-earthquake we-have-heard.]
Communication verbs can form a general participle: "informative", "declarative", "plaintive".

## The Interrogation Function

An interrogation is a communication which poses a question. It can be expressed as a dative sentence of the form:
"She asked him about his reason for applying for the job."
"She asked him why he had applied for the job."
"She asked 'Why have you applied for the job?".
"He asked about the train departure time."
"He asked the inspector when the train would depart."
"He asked 'When will the train depart?""
The communicated element of an interrogation is a question, which has an object as do other communications, in this case "his application" or "the train". However, it does not attach new information to the object, but an enquiry: "Why did you make it?" or "When will the train depart?". The question therefore conforms to the structure of direct questions (Chapter 3., Questions), with the object as the topic of the enquiry.

If the expected answer is "yes" or "no", the interrogation is preceded by "whether" or its equivalent:
"He asked whether she had been to China."
"He asked 'Have you been to China?""
Arabic: "wa-saRaltu Riðā kuntu Rastaṭîu Pan Rajlisa hunāka"
"And I asked whether I could sit there."
[And I-asked whether I-am I-can that I-sit there.]
Since the answer cannot be anticipated, an interrogation does not have a resultant sentence.

## The Volition and Imperative Functions

A volition differs from other perceptions in that it is not a fact or impression of fact, but a desire for something. That which is desired can be an action, a state, or a possession. It can relate to the desirer or a third party:
"I want you to tidy your room today."
"I want to clean my car today."
"I wish this flat was larger."
"I wish I were handsome."
"I want you to have some muffins for tea."
"I want some muffins for tea."

As with other perceptions, there is an object: "you", "I", "this flat". However, instead of new information there is a volition: "tidy your room", "clean my car", "be larger", etc. Other English volitional verbs include "desire", "prefer", "hope for", and "be impatient for" with different degrees of certainty and emphasis. The common feature is a desire for something which is not yet occurring or possessed:
"I desire a larger flat."
"I would prefer you to tidy your room."
"I hope that you will tidy your room."
"I am impatient for you to tidy your room."
A volition is a stative relation between two elements: the desirer and the desired object, state, or action. It has the characteristics of a possession sentence which are summarised above. The desirer "has" a wish, want, preference, hope, or impatience. The structure can be summarised as "recipient-verb-object-volition", where "volition" is a possession and "object" may or may not be the same as "recipient". The sentences can be expressed (sometimes clumsily) in attributive form with the desired object as subject:
"Tidying your room is desired/hoped for."
"Muffins are preferred for tea."
By its nature a volition has not occurred, but it may be divided into two categories - that not expected to occur, or which cannot occur as the opportunity has passed, and that expected to occur:

> "I wish we had some muffins for tea."
> "I want us to have some muffins for tea."

Some languages distinguish between these two volitions. The one not expected to occur is indefinable (Chapter 3., Hypotheses), and expressed in the subjunctive if that is available ("I were" and "we had" in these examples). The object is stated whether or not it is the same as the recipient.

If a volition is expected to occur, it may be expressed with the infinitive (subjectless) form of the verb: "to clean", "to have", etc, if that is available in the language. In that case, the object does not need to be stated if it is the same as the recipient.

As with perception sentences, it can be structured in English with an "embedded" clause:
"You are desired to tidy your room."
"Muffins are preferable for tea."
General volitions can be expressed by a recipient participle or a possessive participle:
"I am hopeful you will tidy your room."
"I am willing to clean my car."
"I am desirous of a larger flat." "A larger flat would be desirable."
"I prefer muffins for tea." "Muffins are preferable for tea."
A volition is not necessarily the resultant sentence of a transfer. This is the case if, as we have already noted with "need" and "lack", a volition expresses a deficiency, which may arise from the removal of what is desired, or from some other cause. If a volition expresses a spontaneous desire by its recipient, it may be the resultant sentence of a facilitative verb such as "persuade" or "encourage" (Chapter 11., The Facilitative and Modal Functions):
"His mother persuaded John to tidy his room."
$\rightarrow \quad$ "John wanted to tidy his room."
Languages employ the same range of constructions for volitions as for other possessions, for example the recipient is the subject:

German:"Ich wünschte, ich wäre zu Hause." "I wish I were (subjunctive) ${ }^{\text {at home." }}$
Italian: "Non desideriamo che Ella accetti." "We do not wish you to accept."
[Not we-wish that you accept ${ }_{\text {(subjunctive) }}$.]
Russian:"Ya khochu, chtoby vy sdelali eto srazu zhe." "I want you to do it at once."
[I-want, so-that you do it at-once.]
"Ona pozhelala emu uspekha." [She wished to-him success ${ }_{\text {(genitive). }}$.]
Greek: "To $\beta \rho \alpha ́ \delta ı ~ \theta \varepsilon ́ \lambda \varepsilon ı ~ v \alpha \beta \lambda \varepsilon ́ \pi \varepsilon \iota ~ \tau \eta \lambda \varepsilon о ́ \rho \alpha \sigma \eta . " ~$
"In the evening she wants to watch television."
[The evening she-wants that she-watches ${ }_{\text {(subjunctive) }}$ television.]
Arabic: "yurīdūna l-munāqašāti Pan tastamirra" "They want the discussions to continue." [They-want the discussions that they-continue.]

Hindi: "maĩ cāhtā hū̃ ki vah hindī sīkh le" "I want him to learn Hindi."
[I want that he Hindi learns ${ }_{\text {(subjunctive).] }}$
Indonesian:
"Ali mau menolong Bill." "Ali wants [to] help Bill."
Chinese: "Wŏ xiăng măi xiē shípĭn hé yĭnliào." "I want [to] buy some food and drink."
Swahili: "Nataka watoto waje hapa ili tupate kuanza kazi yetu."
"I want the children to come here so that we can begin our work."
[I-want children they-come ${ }_{\text {(subjunctive) }}$ here so-that we-can (subjunctive) begin work our.]

These examples show the same range of constructions as English shows for volitions which are or are not expected to occur.

The recipient is indirect:
Irish: "Cad tá uait?" "What do you want?" [What is-there from-you?]
Hindi: "us ādmī ko das aṇ̣e cāhie" "That man wants ten eggs."
[That man-to ten eggs are-wanted.]
The recipient is the topic and the object and volition are the comment:
Japanese:
"Watashi wa Yoshida-sensei ni kite hoshii." "I want Professor Yoshida to come."
[ $\mathrm{I}_{\text {(topic) }}$ Yoshida-professor-by coming is-wanted.]
"Pamu wa sutereo o hoshigatte iru." "Pam wants a stereo."
[Pam ${ }_{\text {(topic) }}$ stereo ${ }_{\text {(object) }}$ wanting-signs-of there-is.]
"Watashi wa mizu ga nomitai." "I want to drink some water."
[ $I_{\text {(topic) }}$ water ${ }_{\text {(subject) }}$ drink-desirous.]
Japanese may also embed a wish in order politely to make it less direct:
"Chotto tetsudatte hoshii no desu ga." "I want you to help me for a while." [A-while helping is-wanted so-it-is.]

The verb of volition is dative reflexive or adoptive (Chapter 9, The Adoptive Sentence):
Arabic: "tamannaytu law tursilī Rilayya šay?an" "I wished you would send me something."
[I-wished-for-myself if you-sent to-me something.]
The volition is a suffix (underlined) to a verb:
Inuit: "Aqagu niriumavaa." "He wants to eat it tomorrow." [Tomorrow eat-wants-he-it.]
A volition is very similar in function to an imperative, except that for a volition a recipient wishes an action, whereas for an imperative an agent orders it to a recipient. An imperative is therefore a dative sentence, with the structure "agent-verb-recipient-object-volition". Since the outcome is uncertain, an imperative has no resultant resultant:
"I'm telling you to tidy your room."
"I order you, tidy your room today!"
If the agent is the speaker, he/she and the verb of ordering can be omitted:
"Tidy your room!" "Let him tidy his room." "Have some muffins for tea!"
An imperative, being dynamic, has a receptive and dative passive form in English:
"He was told/ordered to tidy his room."
"Tidying of his room was ordered."
An imperative also has a possessive participle:
"Tidying of his room was compulsory/obligatory for him."
The volition of an imperative is expressed in either a subjunctive or an infinitive form, as with a possessive volition. In Chapter 3. (Hypotheses), examples are given of an imperative which uses the subjunctive. Arabic and Swahili use this format:

Arabic: "ṭalaba minhu Pan yaṭba@ahā lahu""He asked him to type it for him."
[He-asked to-him that he-type-it (subjunctive) for him.]
Swahili: "Mwambie mtoto asiogope." "Tell the child not to be afraid."
"Him-tell (subjunctive) ${ }^{\text {child he-not-fear }}{ }_{\text {(subjunctive). }}$ "
Turkish and Indonesian place the volition verb in the infinitive:
Turkish: "Çocuklara aşağıya inip kendisini sokakta beklermelerini söyledi."
"She told the children to go down and wait for her in the street."
[Children-to down go-and themselves street-in waiting-their told-she.]
Indonesian:
"Dia menyuruh saya pergi." "He ordered me [to] go."
Inuit attaches a suffix (underlined) to the volition verb:
"Arnap miiraq niqimik aalliqquaa." "The woman told the child to bring some meat." [Woman $_{\text {(agent) }}$ child meat-with fetch-tellto-she-she.]

The cognitive distinction between a volition and an imperative is often not great. The first statement ("I would like....") is often a tactful way of requesting an action ("Please go and buy...."). However, the first statement is possessive ("I have a wish that...") while the second is dative ("I ask you to....").

## The Representation Function

A representation is an image or transformation of an object made in order to represent it to a recipient. Examples are a painting, a photograph, a summary, a description, a translation, or a terminology. The object itself is not altered. Examples of representation sentences are:
"Gainsborough painted his sitter as a country gentleman."
"The Prime Minister was photographed arriving at the conference."
"She summarised the article in five lines."
"We translated the book into Greek."
"The battle was commemorated by a monument."
Since the object is not altered and the representation is made for the purpose of communication, a representation sentence is a transfer. Most representations involve an act of creation by the agent, and a representation sentence then combines the functions of a creative sentence (Chapter 6., The Creation Function) and a transfer sentence which communicates the representation to others. Many representation sentences omit a recipient. If there is a recipient, and if the recipient accepts the representation, there can be a possessive resultant sentence:
"Viewers of the painting saw him as a country gentleman."
Alternatively, the resultant sentence can reflect the act of creation:
"A version of the book was in Greek."
A representation can be agential or passive:
"We translated the book into Greek"; "The book was translated into Greek".
Since the representation is of a state that the object is in, it can be a gerund if the object is the subject (Chapter 4., Gerund):
"Arriving at the conference, the Prime Minister was photographed." (gerund)
"The Prime Minister was photographed arriving at the conference." (representation)
Spanish uses the gerund form for the representation:
"La pintó tocanda el clavicémbalo." "He painted her playing the harpsichord."
[Her he-painted playing the harpsichord.]
"Me los describió cazando leones." "He described them to me as hunting lions."
[To-me them he-described hunting lions.]
In English, the representation is marked with "as" or "to be". In Russian, the representation is in the instrumental case:
"On izobrazhën chelovekom neobychainoi sily voli."
"He was described as a man of uncommon willpower."
[He was-described man ${ }_{\text {(instrumental) }}$ of-uncommon strength of-will.]
Representation verbs can form a general participle: "descriptive", "narrative", "photographic", "symbolic", "commemorative".

## Summary

For some transfers, a sentence can be constructed in which the recipient is the topic, and receives the object without reference to an external cause. This is called a receptive sentence. The resultant sentence is that the recipient possesses the object. Receptive sentences also include those in which a recipient loses or misses an object, the resultant sentence being that the recipient lacks or needs the object.

Languages construct receptive sentences in the same ways as possession sentences. The principal constructions either have the recipient as subject, or connect the recipient to the verb by a link word (indirect recipient). In some languages, all or most actions affecting a person are indirect recipient, with or without an external cause being stated.

For some transfers, a sentence can be constructed in which an agent transfers the object to him or herself as recipient. This is called an adoptive sentence. The resultant sentence is that the agent/recipient possesses the object. Adoptive sentences correspond with most but not all transfer functions, including all opinions and volitions. An adoptive sentence cannot be instrumental.

Adoptive sentences generally have the agent as subject, and take three principal forms: a particular verb, an auxiliary verb with a noun, and a dative reflexive. They may also take a passive form with the object as subject.

Receptive and adoptive perceptions may be constructed as the object as topic, with the receptive or adoptive elements embedded in the comment. If the object is indefinite, the sentence can be restructured as existential, with the receptive or adoptive elements embedded in the circumstance.

This chapter is only concerned with reception and adoption of a stative object.

## Terms Defined or Introduced

Receptive, adoptive, dative reflexive, possession.

## Overview

In Chapters 6. and 7., we looked at the structures of a transitive and intransitive sentence and the relation between them. The action of a transitive sentence may be expressed intransitively if there is no need to mention its cause, with a construction called inceptive:

$$
\begin{array}{lll}
\text { "The radiator heated the room up." } \rightarrow & \text { "The room was hot." } & \text { (transitive) } \\
\text { "The room heated up." } & \rightarrow & \text { "The room was hot." } \\
\text { (inceptive) }
\end{array}
$$

The sentences have the same resultant sentence, marked with " $\rightarrow$ ". The same inceptive construction is used if the cause is outside human control:

$$
\text { "The sun rose." } \rightarrow \quad \text { "The sun is risen." }
$$

A sentence is also intransitive if its agent operates on him/herself, with a construction called agential intransitive or reflexive. In this case, the actions and therefore their resultant sentences differ between transitive and intransitive:
"John drove his father home." $\rightarrow \quad$ "John's father was home." (transitive)
"John drove home." $\rightarrow \quad$ "John was home." (agential intransitive)
In both the intransitive constructions, the patient or object of the transitive verb has become the subject of the intransitive verb.

If we now look at the dative sentence described in Chapter 8.:

$$
\text { "John gave the book to Mary" } \rightarrow \quad \text { "Mary has the book"/ }
$$

we find that there is no intransitive sentence of which "book" is the subject, other than the dative passive form: "The book was given to Mary." However, there is a dynamic sentence which describes the transfer action without reference to its cause:

$$
\text { "Mary received the book." } \rightarrow \quad \text { "Mary has the book"/ }
$$

We can call this sentence receptive. This term has already been used in the previous chapter for "Mary was given the book", which expresses the same concept.

There is also a dynamic sentence in which the agent of the transfer acts so that he or she gains the object:

$$
\text { "John took the book." } \rightarrow \quad \text { "John has the book"/ }
$$

This is equivalent to "John gave the book to himself". We can call this construction adoptive, and as we shall see, it has widespread application.

In these variations of a transfer, the recipient of the dative sentence is the subject of both the receptive and the adoptive sentences. This is analogous to the relation between the inceptive and agential intransitive constructions and a transitive sentence, and is a further indicator of the difference between the transitive and transfer sentence structures. Receptive and adoptive sentences are now examined in greater detail, with the restriction that we are only concerned with those with a stative resultant. Those with a dynamic resultant are considered in a Chapter 11.

## The Receptive Sentence

A receptive sentence is a dynamic sentence in which a recipient spontaneously or involuntarily receives an object, whether physically or mentally. The resultant sentence is that the recipient possesses the object. Examples are:

$$
\begin{array}{lll}
\text { "Mary received her payslip." } & \rightarrow & \text { "Mary has her wages." } \\
\text { "John learned French." } \\
\text { "We gained some new neighbours." }
\end{array}
$$

If the receptive sentence is perfective, the resultant sentence expresses the actual state. If it is imperfective, the resultant sentence is the state expected after the action is completed.

This construction also applies to a sentence in which the recipient involuntarily loses or misses an object, the resultant sentence being that he/she no longer has or does not have it:
$\begin{array}{ll}\text { "George lost his spectacles." } & \rightarrow \quad \text { "George's spectacles are not to hand." } \\ \text { "Sheila missed the ball." } & \rightarrow \quad \text { "Sheila is not holding the ball." }\end{array}$

It will be seen that in most of these examples, the recipient is the subject. A passive construction is also possible in which the object is the subject, for example:
"Her pen was found in a drawer." "The noise was heard by them."
As with other constructions, an element can be put into focus:
"It was John who learned French." "It was French which John learned."
In these sentences, "John" and "French" are the respective comments, and the remainder are the topics.
The perception of receptive verbs of perception comprises two parts: an object, and that which is perceived concerning the object, as with other verbs of perception (Chapter 8., The Communication and Perception Functions):
"We noticed the grass had been cut."/"The grass was seen to have been cut."
If the object of the perception is indefinite, the sentence can be existential:
"We noticed some grass had been cut."/"There was some grass which we saw had been cut."
As noted in the previous chapter, it is often unclear when mental impressions start and end. Some verbs of perception are therefore the same as their corresponding receptives. "She remembered the appointment" and "She felt her hands freezing" can be both a dynamic receptive and its stative resultant sentence.

Receptive sentences include those in which a possession is the resultant sentence of an inchoative verb (Chapter 11., The Inchoative Function):

```
"We began to feel cold." "We felt cold."
"We continued to have doubts" }->\mathrm{ "We still had doubts."
"We lost sight of the car." "We "Wo longer saw the car."
```

A receptive sentence therefore has the structure "recipient-verb-object" or "object-verb-recipient". This is the same as the structure of its resultant possession. We can therefore expect that the various constructions which languages use to express a possession sentence apply also to the receptive. In Chapter 8. (The Possession Function), we noted eight of these, of which six are relevant: subject-verbobject, indirect recipient, reflexive, topic-comment, recipient-attribute-object, and recipient-possessionobject. In all of them, the recipient or the object may be the topic, but for indirect recipient and topiccomment the recipient is not the subject of the verb.

As the above sentences illustrate, there are receptive verbs in different languages which conform to the subject-verb-object pattern, including in languages for which the possession is constructed as indirect recipient:

Russian: "poluchat' pis'mo" "to receive [a] letter"
"Ya zametila na stole pis'mo." "I noticed a letter on the table."
[I noticed on table letter.]
Welsh: "Cafodd y plant ganiatâd i fynd." "The children got permission to go." [Got the children permission to go.]

Irish: "Fuaireas litir óm mháthair ar maidin."
"I got [a] letter from [my] mother this morning."
We have already met the indirect recipient construction in Chapter 8., in languages without a receptive version of the transfer verb:

German:"Dem Arbeitlosen wurde eine Stelle vom Geschäftsführer angebotet."

> "The unemployed man was offered a job by the manager." [To the unemployed man was a job by the manager offered.]"
> Russian:"Vam soobshchat ob etom." "You will be informed about that." [To-you they-inform about that.]
> Spanish: "Le fue mandada una carta." "He was sent a letter."
> [To-him was sent a letter.]
> Italian: "Allo studente fu promesso il libro." "The student was promised the book."
> [To-the student was promised the book.]
> Examples in other languages are:
> English: "It occurs to me that you will need some money."
> Finnish: "Laulajalta meni ääni." "The singer lost his voice." [Singer-from went voice.]

> "It amuses me to eat some fruit after a meal." [To-me it-makes fun that I-eat fruit after the meal.] "Mov клદ́чque то аvтокívıто." "My car has been stolen." [To-me they've-stolen the car.]
> Irish: "Do bhuail Seán umam." "I met John" [Struck John about me.] "Tá an leabhar caillte ag an ngarsún." "The boy has lost the book." [Is the book lost at the boy.]
> Hindi: "us kām ke lie use sau rupae mile" "He got 100 rupees for that work."
> [That work-for to-him 100 rupees accrued.]
> "us samay mujhe rām yād āyā" "At that moment I remembered Ram."
> [That moment to-me Ram mind came.]
> "use tīn aurte acānak dikhaī d $\overline{1}$ ", "She suddenly saw three women."
> [To-her three women suddenly visible gave.]
> "mujhe ṭhaṇ̣ lag rahī hai"" "I'm getting cold." [To-me cold attaching is.]

The reflexive construction is also used to express a receptive sentence, although it is much more frequently used for the adoptive, as we shall see:

Italian: "Mi ricordo di quel giorno." "I remember that day." [Myself I remind of that day.]
"Mi ero accorto che il treno era di nuovo in moto."
"I realised that that train was again in motion." [Myself I-was realised that the train was again in motion.]

In the Japanese topic-comment construction, a material receptive sentence is constructed with the "-te" form of the verb and "morau":
"Yamakawa-san wa Hashimoto-san ni uisuki o moratta." "Mr Yamakawa received whiskey from Mr Hashimoto." [Yamakawa-Mr ${ }_{\text {(topic) }}$ Hashimoto-Mr-from whiskey ${ }_{\text {(object) }}$ received.]
"Watashi wa chichi ni kamera o katte moratta." "My father bought a camera for me."
[ $I_{\text {(topic) }}$ father-by camera (object) buying received.]
For a perception receptive, the verb "tsuku" ("attach") may be used:

$$
\begin{aligned}
& " \text { Watashi wa henna oto ni ki ga tsuita." "I noticed an odd sound." } \\
& {\left[\mathrm{I}_{\text {(topic) }} \text { odd sound-to attention }{ }_{\text {(subject) }} \text { was-attached. }\right] }
\end{aligned}
$$

Those possession constructions which employ a recipient participle use its inceptive form to express the corresponding receptive:
"We became aware of your dissatisfaction."
$\rightarrow \quad$ "We are aware of your dissatisfaction."
"We became sure that the train would be on time."
$\rightarrow \quad$ "We were sure that the train would be on time."
A noun of possession can be received by a recipient:

$$
\begin{array}{lll}
\text { "She received } £ 20 \text { as a reward." } \rightarrow & \text { "Her reward was } £ 20 . " \\
\text { "He was given flat } 102 \text { as his quarters." } & \\
\rightarrow & \text { "His quarters were flat } 102 . "
\end{array}
$$

The receptive construction can also be used to express the removal of an object from a recipient, as in these Indonesian examples:
"Mobil Tomo dicuri." "Tomo's car was stolen." [Car Tomo stolen.]
"Tomo kecurian mobil." "Tomo has suffered the loss of his car." [Tomo suffered-theft car.]
"Wang Tomo hilang." "Tomo's money is lost." [Money Tomo lost.]
"Tomo kehilangan wang." "Tomo has lost his money." [Tomo suffered-loss money.]

## The Adoptive Sentence

In a dative sentence, an agent transfers an object or provides a service to a third-party recipient. The result is that the recipient possesses the object transferred, whether material or mental. An adoptive sentence has the same outcome, but the recipient is the same as the agent; the agent transfers the object to him/herself. We may alternatively say that the agent takes or causes him/herself to possess the object. As in a dative sentence, the object may be material or mental. If the object is mental, it may be in two parts: the object, and that which is perceived concerning the object.

The following long list of English examples illustrates the range of material and mental adoptive sentences, together with their possessive resultant sentences. They are classified by the different sorts of possession described in the previous chapter:

## Material Possession and Perception

"John borrowed/took the book from the library."

| $\rightarrow$ | "John has the book." |
| :---: | :---: |
| "Mary has bought a new car." | "Mary owns a new car." |
| "We have acquired some antiques." $\rightarrow$ | "We own some antiques." |
| "John earns a large salary." $\quad \rightarrow$ | "John has a large salary." |
| "James has found his spectacles." $\rightarrow$ | "James has his spectacles available." |
| "Sheila took a share in the enterprise." |  |
| "S $\rightarrow$ | "Sheila shares in the enterprise." |
| "The Smiths settled in Blackpool." $\rightarrow$ | "The Smiths' home is in Blackpool." |
| "The students looked at the experiment." |  |
| " $\rightarrow$ | "The students saw the experiment." |
| "They listened to the birdsong." | "They heard the birdsong." |
| "Henry searched for the papers." | "Henry found the papers." |
| "We are studying Greek." | "We know Greek." |
| "George investigated the fault." | "George understands the fault." |
| "I have read your book." | "I am familiar with your book." |
| "We ascertained that the door was bolted." |  |
| Whe $\rightarrow$ | "We are sure that the door is bolted." |
| "We imagined what we might do." $\rightarrow$ | "We had ideas on what to do." |
| "The contractor accepted the terms." | "The contractor was in agreement with the terms." |
| "They decided to come tomorrow." $\rightarrow$ | "They are determined to come tomorrow." |
| "He took comfort from the news." $\rightarrow$ | "He was comfortable at the news." |
| "We expected her to succeed." $\rightarrow$ | "We waited for her to succeed." |


| Opinion |  |
| :---: | :---: |
| "We took pleasure in the play." $\rightarrow$ | "The play pleased us." |
| "She took an interest in his work." $\rightarrow$ | "His work interested her." |
| "He took satisfaction in his appearance." |  |
| "We $\rightarrow$ | "He was satisfied with his appearance." |
| "We considered our next move." | "We thought of our next move." |
| "She took pity on their distress." $\rightarrow$ | "She pitied their distress." |
| "She takes pride in her work." $\rightarrow$ | "She is proud of her work." |
| "We take the matter seriously." | "The matter is serious for us." |
| "He took a liking to skiing." $\rightarrow$ | "He likes skiing." |
| "He took objection to the proposal." |  |
| $\rightarrow$ | "He disliked the proposal." |
| "She took offence at the offer." $\rightarrow$ | "The offer offended her." |
| "They took confidence from the information." |  |
| $\rightarrow$ | "They were confident of the information." |
| "We took fright at the prospect." $\rightarrow$ | "We feared the prospect." |
| "I take hope that you will recover." $\rightarrow$ | "I hope that you will recover." |
| "He took shame at his performance." | "He was ashamed at his performance." |
| Interrogation |  |
| "I wondered why he had applied for the job." |  |
| $\rightarrow$ | - |
| Volition |  |
| "I intend to go to London today." $\rightarrow$ | "I wish to go to London today." |
| "Lisa and I have decided to marry." $\rightarrow$ | "Lisa and I wish to marry." |
| "She chose coffee rather than tea." $\rightarrow$ | "She prefers coffee to tea." |

Also covered by the adoptive construction are sentences which convey that the agent rejects or renounces ownership of the possession. The result of these is that the recipient does not possess or no longer possesses it:
"We renounce all worldly goods." $\rightarrow$ "We do not have any worldly goods."
"We have given up the cottage." $\rightarrow$ "We no longer have the cottage."
"He rejected the opportunity." $\rightarrow \quad$ "The opportunity is no longer available to him."
In the case of a material possession, benefit, or perception, both a dative and an adoptive sentence are equally likely to be the cause. "He took the pen" and "He was given the pen" both result in "He has the pen". "We studied Greek" and "We were taught Greek" both result in "We know Greek". However, possessions which are the result of a mental process such as an opinion or volition arise more usually from voluntary action by the recipient than from an external agency. "She is proud of her work" is more commonly the result of "She takes pride in her work" than any dative sentence. "I wish to go to London" is generally the result of a personal choice by the recipient. Adoptive sentences are therefore an essential construction in expressing both opinions and volitions. Conversely, a representation is by its nature intended for a third party and therefore not likely to be adopted.

By its nature, an adoptive sentence cannot be instrumental.
In all the examples given so far, the agent is the subject. Many adoptive verbs can additionally be constructed as a passive with the object as subject; others cannot:
"The experiments were looked at." "The delay was taken advantage of."
*The enterprise was taken a share in."
As with other constructions, an element can be put into focus:
"It is a new car which Mary has bought." "It was Mary who bought a new car."
In these sentences, "new car" and "Mary" are the respective comments, and the remainder are the topics.

The above English adoptive verbs are either particular verbs or an auxiliary verb followed by a noun. Often, this auxiliary verb is "take". The adoptive construction also includes the idea that the recipient allows him/herself to possess something offered, expressed in English by "accept":
"Jane accepted the gift of the book."
$\rightarrow \quad$ "Jane has the book."
"Peter accepted my reassurances." $\rightarrow \quad$ "Peter is reassured."
A common alternative construction is to apply the reflexive pronoun in the sense "to oneself". Verbs with this pronoun appear in the dictionary as reflexive verbs, but are often called in grammars "lexical reflexives" or "pronominal reflexives" to distinguish them from "true reflexives" which are agential intransitives (Chapter 7.). This notation suggests that "lexical" or "pronominal" reflexives are somehow improper. ${ }^{20}$ As our analysis shows, they are a legitimate construction which accurately expresses the adoptive. A better terminology is "dative reflexive", as structurally they are a dative verb which transfers its object to the agent. Italian provides good examples, but a parallel list could be prepared in Spanish and French:
"Lui si approfitta della generosità di suo fratello."
"He is taking advantage of his brother's generosity."
[He himself takes-advantage of the generosity of his brother.]
"S'è pentito d'aver detto tante bugie." "He repented of having told so many lies."
[Himself he-is repented of having told so many lies.]
"Se ti decidessi a prendere la patente, questo non succederebbe."
"If you made up your mind to get your driving licence, this wouldn't happen."
[If yourself you-decided to get a driving license, this not would-happen.]
"Se tutti si servissero dei mezzi pubblici, non ci serebbe tanta confusione."
"If everyone used public transport, there wouldn't be so much confusion."
[If everyone themselves served of transport public, not there would-be so-much
confusion.]

$$
\begin{aligned}
& \text { "Si vede che si vergogna." "One can see that he's ashamed." } \\
& \text { [Itself it-sees that himself he-shames.] }
\end{aligned}
$$

Other Italian dative reflexives with adoptive meaning include "accorgersi" ("realise"); "impossessarsi"/"appropriarsi" ("take possession"), "resentirsi" ("resent"); "offendersi" ("take offence"); "avvalersi" ("avail oneself"); "astenersi" ("abstain"); "meravigliarsi" ("wonder"); "annoiarsi" ("get bored"); "ricordarsi" ("remember"); "spaventarsi" ("take fright"); "divertirsi" ("enjoy oneself"); "fidarsi" ("trust"); "figurarsi" ("imagine"); "interessarsi" ("take an interest"); "dilettarsi" ("take delight"). All these are followed by "di" to indicate the object or instrument of the possession or opinion.

German:"Das kann ich mir gut vorstellen." "I can imagine that well."
[That can I to-myself well represent."]
"Ich habe es mir noch mal überlegt." "I've changed my mind."
[I have it to-myself once more considered.]
"Er hat sich eine Verletzung zugezogen." "He has incurred an injury."
[He has to-himself an injury sustained.]
"Ich habe mir vorgenommen, das nächste Woche zu tun."
"I intend to do that next week." [I have to-myself intended, that next week to do.]
Russian: "On pol'zovalsya lyuboi vozmozhnost'yu." "He used every opportunity."
[He used-himself with every opportunity ${ }_{(i)}$.]
"On zainteresovalsya filosofiei." "He became interested in philosophy."
[He interested-himself with philosophy ${ }_{(i)}$.]

[^12]> "Ya nadeyus' vskore uvidet' vas." "I hope to see you soon."
> [I hope-myself soon to-see you.]
> "Mogu sebe predstavit', chto on govoril." "I can imagine, what he said."
> [I-can to-myself imagine, what he said.]
> "Ona gordilas' svoim synom." "She was proud of her son."
> [She prided herself with her son (i).]
> "Ya sovsem ne ispugalsya." "I'm not at all frightened."
> [I at-all not frightened-myself.]
> "My voskhishchalis" ikh igroi." "We admired his acting."
> [We admired-ourselves with his acting (i).]

In these Russian examples, ${ }_{\text {(i) }}$ indicates a noun in the instrumental case. In the case of opinions, these denote the instrument of the opinion (Chapter 8., The Opinion Function). Other Russian dative reflexives with adoptive meaning are "zavol’stvovat'sya" ("take satisfaction in"); "lyubovat'sya" ("admire"); "naslazhdat'sya" ("delight in"); "obkhodit'sya" ("make do with"); "khvastat'sya" ("boast of"); "zanimat'sya" ("busy oneself with"). All these take the instrumental case to denote the possession or the instrument of the opinion.

The Welsh prefix "ym-", used to form a reflexive (Chapter 7., The Agential Intransitive Sentence), can also be a dative reflexive:
"Erbyn hyn mae teulu newydd o foch daear wedi ymgartrefu'n hapus."
"A new family of badgers has now settled in happily."
[By now is family new of badgers after itself-settle in happy.]
Hungarian reflexives are formed with the suffix "-kod-" or its variants:
"Gondolkodom, tehát vagyok." "I think[-myself], therefore I am."
Modern Greek and Latin deponent verbs, which are equivalent to a reflexive, also express adoptives. In Classical Greek and Latin grammars, the term "medio-passive" is often used for this deponent construction. The following examples are Modern Greek:

> Greek: " $\Sigma \kappa \varepsilon ́ \pi \tau о \mu \alpha ı v \alpha \pi \alpha ́ \omega ~ \sigma \tau \eta \nu$ К $\rho \eta ́ \tau \eta ~ \tau о ~ П \alpha ́ \sigma \chi \alpha$." "I'm thinking of going to Crete for Easter." [I-think-myself that I-go to-the Crete the Easter.] "N $\tau \rho \varepsilon ́ \pi о \mu \alpha ı ~ \gamma ı \alpha \tau \eta ~ \sigma v \mu \pi \varepsilon \rho \iota \varphi о \rho \alpha ́ ~ \mu о v . " ~ " I ' m ~ a s h a m e d ~ o f ~ m y ~ b e h a v i o u r . " ~$ [I-shame-myself for the behaviour my.]
> " $\Delta \varepsilon ́ \chi \tau \eta \kappa \varepsilon \tau \eta v \pi \rho o ́ \tau \alpha \sigma \eta \mu \alpha \varsigma \alpha \mu \varepsilon ́ \sigma \omega \varsigma . " ~ " H e ~ a c c e p t e d ~ o u r ~ p r o p o s a l ~ i m m e d i a t e l y . " ~$
[He-accepted-himself the proposal our immediately.]
"A $\rho v \eta ́ \theta \eta \kappa \varepsilon v ’ \alpha \pi \alpha v \tau \eta ́ \sigma \varepsilon$." "He declined to answer."
[He-declined-himself that he answers ${ }_{\text {(subjunctive). }}$
Latin: "Galba rerum adeptus est." "Galba acquired things." (Tacitus)
[Galba of-things reached-himself.]
"utor sensibus." "to use the senses" [to-use-oneself with the senses] (Lucretius)
"certis fundis frui solitum esse" "to be accustomed to enjoy certain estates"
[with certain estates to-enjoy-oneself accustomed to-be] (Cicero)
The Arabic prefix "ta-" is used to form adoptive as well as reflexive verbs:
Arabic: "taṣawwara Panna l-baḥra fī ṣiqilliyyata PakӨaru zurkatan" "He imagined that the sea in Sicily is bluer." [He-imagined-himself that the-sea in Sicily more in-blueness.] "lā Rataðakkaru Rannī Ralqaytu naẓarī 乌alayhi marratan" "I do not remember that I ever once cast a glance at him." [Not I-remember-myself that-I cast glance-my at-him once.] "yatawaqqaíu xubarā̧u $1-$ Rahhwāli" "Meteorologists expect." [Expect-themselves meteorologists.]

```
"iStaqaduhu ṣadīqan""I believed him a friend." [I believed-myself-him friend.]
"fì l-waqti llað̄̄ yatawaqqaiu l-xubarā?u...."
"at the time that experts are expecting...."
[at the-time that expect-themselves the-experts....]
```

Other Arabic adoptives are formed with the prefix "ista-" or an infixed "-ta-", translated as reflexive:

```
"istaslamtu lahu @allahu ya\gammasilūni"
"I submitted to it in the hope that it would cleanse me."
[I-submitted-myself to-it perhaps it-cleanse-me.]
"iStaraḍa l-i0nāni `alā ṣarāmati l-qawānīna"
"The two men objected to the harshness of the laws."
[Objected-themselves the-two to harshness the-laws.]
"ittafaqati l-wilāyātu 1-muttaḥidatu""The United States agreed."
```

                                    [Agreed-themselves the-States the-United.]
    "istaimala 1-sarīra maq¢adan" "He used the bed as a seat."
[He used-himself the bed a seat.]

Many Hindi adoptives are expressed by an auxiliary verb and a noun, similar to the above English expressions with "take" or "accept":
"yah bhe~ṭ svīkār kījie" "Please accept this gift." [This gift acceptance please-do.]
"usne merī bāt par dhyān nahĩ diyā" "She didn't pay heed to what I said."
[She ${ }_{\text {(agent) }}$ my words-on attention not gave.]
"ham rāmāyaṇ kā adhyayan kar rahe haĭ" "We are doing a study of the Ramayan."
"We Ramayan-of study doing are."
"tum mere kompyūṭar kā istemāl kar sakte ho" "You can use my computer."
[You my computer-of use do can.]
"mai~ āpkī talāś kar rahā thā" "I was searching for you." [I you-of search doing was.]
"ṛ̣ic ne patra likhne kā vādā kiyā" "Rishi promised to write a letter."
[Rishi-by letter writing-of promise made.]
Similarly in Persian:
"tasavvor mikonam ta hala raside bašad" "I think he will have arrived by now."
[Supposition I-make by now arrived he-is ${ }_{\text {(subjunctive). }}$.]
"tasmim gereftand ke beravand" "They decided to go."
[Decision they-took that they go (subjunctive).]
Inuit adoptives, like its dative and possession sentences, are formed by a suffix (underlined) attached to the object acquired:
"Tuttuppuq." "He caught a caribou." [Caribou-catch-he.]
"Tiiturviisurput." "They fetched the cups." [Cups-fetch-they.]
"Allursiurpuq." "He looked for a seal's breathing-hole." [Breathinghole-lookedfor-he.]
"Tupasissaatit." "You shall buy some tobacco." [Tobacco-get-will-you.]
"Aallalirsaarpuq." "He intends to leave." [Leave-intends-he.]
"Qaamagaa." "He thought it was too bright." [Bright-consider-he.]

## Conclusion

We have seen in Chapters 6. and 7. that the core of a transitive or intransitive sentence is an object, and the state or condition that the object enters into as a result of an action. The core of the sentences we have been discussing in Chapters 8. and 9. is what we have called a possession, that is the interaction between an object (or person) and a human recipient of that object. A possession can be an interaction between a human being and another human being, or a physical interaction of a human being with a material object, or a mental interaction of a human being with a material object. Any of these
interactions can be real or hypothetical, and can be the result of an action. As we shall show in Chapter 12. (Possession), possessions can be expressed by a noun (called a possession), which connects the recipient with the object.

The core elements of a possession sentence are therefore the object, recipient, and possession. Where the possession is mental, a further element is a mental impression which the recipient has of the object, whether spontaneous or considered, supposed or actual. The transfer sentences which describe the actions which gives rise to a possession may include an agent or (more rarely) an instrument, and we call those sentences dative if the agent, instrument, or object is the subject, receptive if the recipient is the subject, and adoptive if the agent is the same as the recipient.

With the exception of a representation, the situations in the world which are described by a possession are distinct from those described by a transitive or intransitive sentence. Possession, dative, receptive, and adoptive sentences are therefore distinct functionally from transitive, intransitive, and attributive ones, even though the same or similar linguistic constructions are employed. Further analysis in Chapter 15. divides possessions and their corresponding dynamic sentences into nine sentence types. Since a communication or proposal does not necessarily result in a perception or supposition, there are a further four sentence types to describe those actions.

For each of these sentence types, and therefore for each category of possession and communication, the agent, instrument, object, recipient, or possession, or a combination of agent and recipient, can be the topic. The role of the sentence in discourse is therefore not related to the nature of the possession or communication. The classification of sentences by their role in discourse, described in Chapters 13. and 14., is the same for transitive, intransitive, and transfer sentences, and for their stative resultants, while Chapter 15. distinguishes between the functional sentence types of transitive, intransitive, transfer, and possession sentences.

Chapter 10. discusses a function common to transitive, intransitive, and transfer sentences, namely that an action can be to the advantage or disadvantage of a beneficiary.

## 10. The Benefactive and Adversative Functions

## Summary

The action of a transitive, intransitive, or transfer sentence may occur to the advantage of a beneficiary. A sentence with a beneficiary is called benefactive. The outcome of a benefactive sentence is that the beneficiary has a benefit available to him/her. A purpose is benefactive since it is a benefit which is expected to result from another action.

The action of a transitive, intransitive, or transfer sentence may also occur to the disadvantage of a beneficiary. Such sentence has the same structure as a benefactive sentence, and is called adversative. The outcome of an adversative sentence is that the beneficiary experiences a drawback.

A benefactive or adversative sentence may be expressed by means of a link with the beneficiary, or by a benefactive or adversative form of the action verb, or by a specific word for the benefit or drawback. In some languages, a construction is available with the beneficiary as subject, termed a benefactive or adversative receptive, or benefactive or adversative adoptive.

## Terms Defined or Introduced

Benefactive, adversative, beneficiary, benefit, adversity, benefactive receptive, adversative receptive, benefactive adoptive, adversative adoptive.

## The Benefactive Function

Chapter 6. identified and described five elements of a transitive sentence: agent, verb, patient, resultant, and instrument. A sixth element in many transitive sentences is the person or persons to whose advantage the action occurs, whom we call a beneficiary, often marked with the preposition "for" or its equivalent:
"Henry cooked lunch for his family."
"Sheila brought the accounts to good order for the Society."
"The sun warmed Sarah's garden for her."
A sentence which includes a beneficiary is benefactive. Similarly, an intransitive or transfer sentence can act to the advantage of a beneficiary:
"The sun shone on Sarah's garden."
"We bought Simon a bicycle." "We sold Mary's car for her."
A benefactive sentence can also be existential:
"There is someone at the door to see you."
"An email for you has just come in."
Languages generally employ a preposition or postposition which expresses the benefactive concept "for", and is attached to dynamic sentences. In Chinese, the construction is:
"Jiějie tì wŏ lĭ fà." "My elder sister cut my hair for me." [Elder-sister for me cut hair.]
"Ménfáng wèi wǒ jiào le yī liàng díshì." "The porter called a taxi for me."
[Porter for me call (aorist) ${ }^{\text {one unit taxi.] }}$
In some languages the same word or link can be used for "for" and "to":
German: "Er hat uns das Leben gerettet." "He saved our lives." [He has to-us the life saved.]
"Ich verband dem Kind die Hand." "I bandaged the child's hand."
[I bandaged to-the child the hand.]

Spanish: "Te he dejado la camisa en el otro cuarto." "I've left your shirt in the other room."
[To-you I've left the shirt in the other room.]
Italian: "Stringiamo la mano al presidente." "We shake the president's hand."
[We-shake the hand to-the president.]
"Ho rifatto il letto a Paolo." "I've remade Paolo's bed for him."
[I've remade the bed to Paolo.]
Turkish: "Hizmetçiye bir palto alacağız." "We are going to buy a coat for the servant."
[Servant-to a coat we-will-buy.]
In addition to the preposition "for", a benefactive relationship can be expressed in three other ways. One is by a genitive link between the object and the beneficiary:
"Henry cooked his family's lunch" $\rightarrow \quad$ "Henry's family's lunch was cooked."
"Sheila brought the Society's accounts to good order."
"The "The Society’s accounts were in good order."
"The sun warmed Sarah's garden." $\rightarrow \quad$ "Sarah's garden was warmed up for her."
"We sold Mary's car for her." $\rightarrow \quad$ "Mary's car was sold."
"The doctor treated James' back pain."
"James' back pain was eased."
A second is by a specific word with the meaning "availability", which we can call a benefit. The word "for" can be understood to mean "for the benefit of". The relationship with the beneficiary may be expressed with the auxiliary verb "have":
"We had the opportunity to see his paintings."
"We had the good luck to arrive on time."
"He had great success as an estate agent."
"This calculation is an example for you."
A benefit can take the form of an attribute of the opportunity or advantage, with the general meaning "available":
"It was easy/simple for him to write the letter."
"It was convenient for him to write the letter."
"The bank account is accessible to John."
"The view was visible to our friends."

This may allow the indirect beneficiary to be in topic position:
Hungarian:
"Neki könnyű volt válaszolnia." "It was easy for her to answer." [To-her easy was answering-her.]

Or the benefit can be a suffix of the opportunity verb:
Inuit: "Iqqaamajuminarpuq." "It is easy to remember." [Remember-easyto-it.]
This is similar in structure to a modal (see Chapter 11.), of the form "He could write the letter". However, as will be explained, a modal refers to an event which may not occur, while a benefit is an event which has occurred or is expected to occur.

Alternatively, a benefit can be an attribute of the agent who performs the benefactive action:

> "You were very kind to answer my letter so promptly."
> "She was very generous in allowing him to borrow her car."
> "He was very polite to his friend in allowing him to stay."

In these sentences, the conduct of an agent provides a benefit towards a beneficiary. The sentences may be interpreted as:
"You showed kindness to me in your prompt answer of my letter."
"Her permission to him to borrow her car showed great generosity."
"He showed great politeness to his friend in allowing him to stay."
A third benefactive construction is a purpose. A purpose describes a benefit which is expected to result from an action. The principal difference from other benefactive expressions is that the beneficiary may or may not be stated:
"I came to see you" means: "I came to have the opportunity to see you";
"They fought for their freedom" means: "They fought to have the advantage of being free";
"She took the car to be mended" means: "She took the car for the benefit that it is mended".
The benefit in each case is the purpose itself: "see you"; "free"; "be mended". The second example shows that English "for" can be used in two differing ways: to indicate a purpose, and to indicate a beneficiary: "for freedom"; "freedom for them". In Russian, different words are used, "za" and "dlya":
"Oni borolis' za svobodu." "They fought for [their] freedom."
"Ya sdelayu dlya nego vsë, chto mogu." "I shall do all I can for him."
[I shall-do for him all, that I-can.]
In some other languages, the same word is used. It is here translated as "for"; the purpose is a verbal noun:

Arabic: "li-baḥi $\theta$ l-mawqifi" "in order to investigate the position" [for-study the-position]
"qā¢ātun li-1-Ranšiṭati l- $\theta$ aqāfiyyati" "halls for cultural activities" [halls for-the-activities the-cultural]

Turkish: "Dünyayı değiştirmek için ne lâzım."
"In order to change the world, what is necessary?"
[World ${ }_{\text {(object) }}$ changing-for what necessary?]
"Bunu yurdun iyiliği için yaptı." "He did this for the good of the country."
[This ${ }_{\text {(object) }}$ country-of goodness-its-for did-he.]
Indonesian:
"Saya harus pergi ke kantor pos untuk membeli perangko."
"I have to go to the post office to buy stamps."
[I should go to office post for buying stamp.]
"Sulit untuk kami memperoleh bukti."
"It is difficult for us to get proof." [Difficult for us getting proof].
Japanese:
"Gakusei ga shitsumon o shi ni kita." "A student came to ask questions."
[Student ${ }_{\text {(subject) }}$ question ${ }_{\text {(object) }}$ doing-for came.]
"Kanojo ni nani o katte agemashita ka." "What did you buy for her?"
[Her-for what ${ }_{\text {(object) }}$ buying gave query?]
Benefactive sentences show a similar range of structures as transfer sentences, and a benefit sentence is similar to a possession sentence, as described in Chapter 8. The difference is that a possession is an actual relationship between a recipient and an object, while a benefit is the availability of an opportunity or advantage which may become a possession in the future. This distinction is explicit in Maori:
"Mō tātou ēnei kākahu mā." "These clean clothes are for us." [For us these clothes clean.]
"Nō tātou ēnei kākahu mā." "These clean clothes are ours." [To us these clothes clean.]
It is also explicit in Inuit:

Inuit: "Tunissutissaq niviarsiamut pisiaraara." "I bought a present for the girl." [Present-(future) girl-to buy-I-it.]

It will also be seen that the words describing a benefit: "advantage", "opportunity", "access", "luck", "ease", "convenience", "kindness", "politeness", "generosity", "purpose", etc are not possessions. A possession is a concrete relationship which is either present or absent: "We lack clean clothes." A benefit is a prospective relationship which is either favourable or (as we shall note) unfavourable.

An agent can perform a benefaction for him/herself, a construction which can be called benefactive adoptive:
"She took the opportunity to see the paintings."
"He took advantage of the offer of a loan."
"He accessed his bank account."
"We took the calculation as an example."
Some benefactive adoptives employ the indirect beneficiary construction:
German:"Es ist mir gelungen, zu kommen." "I succeeded in coming."
[It is to-me succeeded, to come.]
Irish: "Éireoidh leo." "They will succeed." [It-will-succeed with-them.]
Hungarian:
"Sikerűlt neked elérned a főnököt?" "Did you manage to reach the boss?"
[Managed to-you reaching-your the boss?]
A sentence may have make something available to more than one person, and so have more then one beneficiary:
"He cooked dinner for his family to provide more free time to his mother."
Some languages possess a benefactive form of the verb, whose direct object is the beneficiary:
Indonesian:
"Dia menjahit rok." "She sewed [a] skirt."
"Dia menjahitkan anaknya rok." "She sewed her child a skirt."
[She sewed-for child-her skirt.]
"Dia membelikan adiknya buku." "He bought his brother a book."
[He bought-for brother-his book.]
Swahili: "Rafiki yangu amenisafishia motokaa." "My friend has cleaned the car for me."
[Friend-my he-has-me-cleaned-for car.]
"Numewanunulia sukari." "I have bought sugar for them." [I have bought-for-them sugar.]

Inuit: "Atuarpuq." "He read." [Read-he.]
"Atuvvappaa." "He read aloud for him." [Read-for-he-him.]
Japanese constructs a benefactive form of the verb with the auxiliaries "ageru" and "kureru", both meaning "give", attached to a gerund:
"Watashi wa Nobuo-san ni nekutai o katte ageta." "I bought a tie for Nobuo."
[ $\mathrm{I}_{\text {(topic) }}$ Nobuo-Mr-to tie ${ }_{(\text {object }}$ buying gave.]
"Haha wa watashi ni kēki o yaite kureta." "My mother baked a cake for me."
[Mother ${ }_{\text {(topic) }}$ me-to cake ${ }_{\text {(object) }}$ baking gave.]
A benefactive verb can form a receptive with the beneficiary as subject (a benefactive receptive), in the same way as for the transfer:

Indonesian:
"Dia membelikan adiknya buku." (benefactive)
"He bought his brother a book."
[He bought-for brother-his book.]
"Adiknya dibelikannya buku."
(receptive)
"His brother was bought a book by him."
[Brother-his was bought-for-him book.]
Swahili: "Numewanunulia sukari." "I have bought sugar for them." (benefactive) [I have bought-for-them sugar.]
"Wamenunuliwa sukari." "Sugar has been bought for them." (receptive) [They-have-been-bought-for sugar.]

Japanese constructs a benefactive form of the verb with the auxiliary "morau" ("receive"):
Japanese:
"Watashi wa chichi ni kamera o katte moratta." (receptive)
"My father bought a camera for me."
[ $I_{\text {(topic) }}$ father-by camera ${ }_{\text {(object) }}$ buying received.]

## The Adversative Function

In addition to acting to the advantage of someone, a transitive, intransitive, or transfer verb can act to the disadvantage of someone:
"Henry's wife has run away on him." "Mary had smoke blown on her."
Such a sentence is called adversative. The structure is the same as that of a benefactive sentence, in that the person to whose disadvantage the sentence occurs is an additional element. We may therefore use the same term "beneficiary" for that person. An adversative, and its resultant sentence, is again often expressed by a genitive link between the object and the beneficiary:
"The knife cut him on the hand." $\rightarrow$ "His hand was cut."
In he same way as a benefactive sentence, the beneficiary of an adversative sentence is expressed in some languages with the transfer link "to" or its equivalent:

Italian: "Morde la mano al professore." "He bites the teacher's hand." [He-bites the hand to-the teacher.]
"La pentola le scivolò tra le mani." "The saucepan slipped through her hands."
[The saucepan to-her slipped through the hands.]
Irish: "Dhóigh sé an fraoch orm." "He burned my heather."
[Burned-he the heather on-me.]
An adversative can again be expressed by a specific word, which we can call an adversity:
"We had the misfortune to arrive late." "He failed as an estate agent."
An adversity can take the form of an attribute of the opportunity:
"It was hard for him to write the letter."
"It was inconvenient for him to write the letter."
"This food is not edible."
Italian: "Vi stenta consegnare il compito oggi."
"You'll find it hard to hand in the assignment today."
[To-you it-is-hard to-deliver the assignment today.]
Finnish: "Hänen oli vaikea selitää sitä." "It was difficult for him to explain that."

Or a prefix or suffix of the opportunity verb:
Indonesian (prefix "ter-"):
"Suara dosen tidak terdengar dari sini." "The lecturer can't be heard from here."
[Voice lecturer not audible from here.]
"Soal kematecan lalu lintas belum terpecahkan."
"The problem of traffic congestion cannot yet be solved."
[Problem congestion traffic not-yet solvable.]
Swahili (suffix "-ika"/"-iki"):
"Njia hii haipitiki." "This road is impassable." [Road this is-not-passable.]
Alternatively, an adversity can be an attribute of the agent who performs the benefactive action:
"He was very rude in his behaviour towards his friend." ("his friend")
"Hitler was very cruel in his treatment of the Jews." ("the Jews")

In these sentences, the conduct of an agent provides an adversity towards a beneficiary (stated in brackets). The sentences may be interpreted as:
"His behaviour showed rudeness towards his friend."
"Hitler showed great cruelty towards the Jews."
A adversity is therefore not the absence of a benefit, but a disadvantage which prevents a beneficiary from accessing a potential future possession. Examples which are illustrated here are "disadvantage", "misfortune", "failure", "difficulty", "inconvenience", "rudeness", and "cruelty".

Languages can construct a sentence in which the recipient of an adversative action is the topic, an adversative receptive:

Japanese:
"Yamada-san wa okusan ni nigerareta." "Mr Yamada's wife ran away on him."
[Yamada-Mr ${ }_{\text {(topic) }}$ wife-by fled ${ }_{\text {(passive). }}$.]
"Tarō wa Haruko ni tabako o suwareta."
"Taro had a cigarette smoked by Haruko on him."
[Taro (topic) Haruko-by cigarette $_{\text {(object) }}$ smoked $_{\text {(passive). }}$.]
The beneficiary of an adversative sentence, like a benefactive, can be the same as the agent, in an adversative adoptive:

> German:"Er hat sich eine Verletzung zugezogen." "He has incurred an injury."
> [He has to-himself an injury sustained.]
> Irish: "Theip orm an obair a dhéanamh." "I failed to do the work."
> [It-failed on-me the work its doing.]

## 11. Sentences with a Dynamic Resultant Sentence

## Summary

A transitive sentence can be constructed whose resultant sentence is that an agent or instrument engages or does not engage in an action. These are termed respectively a causative and a preventive sentence. The sentence includes a causer, generally the subject, which is different from the agent or instrument.

A sentence can be constructed whose resultant sentence is that its subject or object commences, continues, or ceases an action or state. This is termed an inchoative or cessative sentence.

A transfer sentence can be constructed which transfers to or withdraws from a recipient the means, opportunity, compulsion, or desire to carry out an action. This is termed a facilitative sentence. Its resultant sentence is a possession sentence, called a modal, in which the recipient has or has not the ability, necessity, or obligation, to perform the action. Since it is not certain that the action of a modal has occurred or will occur, it is indefinable.

An adoptive sentence can also be constructed which has a modal resultant sentence. In that case, an agent transfers or withdraws from him/herself the ability, necessity, or obligation to carry out an action.

A responsibility is a modal sentence in which a recipient accepts an obligation to carry out an action or task. It can be the resultant sentence of a dative or adoptive sentence in which a third party assigns the task or action to the recipient.

## Terms Defined or Introduced

Causative, causation, preventive, prevention, causer, inchoative, inchoation, cessative, cessation, facilitative, facilitation, modal, responsibility.

## The Causative Function

In Chapter 6., a transitive sentence is defined as one which alters or affects its object, called its patient. Its operation gives rise to a resultant sentence of which the patient is the subject. In Chapter 6., the examples quoted were of stative resultants, either an attribute or an identification, here marked with " $\rightarrow$ ":

$$
\begin{aligned}
& \text { "The orator excited the audience to a frenzy." } \\
& \text { "Hitler was appointed Chancellor." } \rightarrow \quad \text { "Hitler was Chancellor." }
\end{aligned}
$$

There are in addition transitive sentences in which the action of the verb results in an action by or on the patient. The resultant sentence is therefore a dynamic sentence with the patient as subject:

$$
\begin{array}{lll}
\text { "I made him write the letter." } & \rightarrow & \text { "He wrote the letter." } \\
\text { "I had the letter written." } & \rightarrow & \text { "The letter was written." } \\
\text { "I made him obey the rules." } & \rightarrow & \text { "He obeyed the rules." }
\end{array}
$$

This type of transitive sentence is called causative. The commonest form of causative is one in which a human causer acts on a different person, the agent, to effect the action. The resultant sentence can be any variety of agential dynamic sentence: transitive, intransitive, participation, dative, or adoptive. In the following three examples, the agent of the resultant sentence is stated:

```
"I made him go to work." "He went to work."
"I made her give the speech." }\quad\mathrm{ " "She gave the speech."
"I made her read the article." }->\mathrm{ "She read the article."
```

A causative also includes an action by which another action is started or continued:

$$
\begin{array}{lll}
\text { "She started the child riding } \\
\text { the bicycle." } & \rightarrow & \text { "The child rode the bicycle." } \\
\text { "She started the dishwasher." } & \rightarrow & \text { "The dishwasher washed the dishes." } \\
\text { "She started the engine running." } & \rightarrow & \text { "The engine ran" } \\
\text { "She kept the engine running." } & \rightarrow & \text { "The engine ran." }
\end{array}
$$

In the following examples, the resultant sentence is passive, and the causative sentence does not specify the agent:
"I caused the trees to be felled." $\rightarrow \quad$ "The trees were felled."
"I had the rules obeyed." $\quad \rightarrow \quad$ "The rules were obeyed."
"I had the speech given." $\quad \rightarrow \quad$ "The speech was given."
"I had the article read." $\quad \rightarrow \quad$ "The article was read."
In addition to being a person, the causer can be an instrument which induces an agent to act:
"The noise made us jump." $\quad \rightarrow \quad$ "We jumped."
"The threat of fire caused us to flee."

$$
\rightarrow \quad \text { "We fled." }
$$

The causer can also be an instrument which causes another instrument to act:
"The wind broke the windshield with a branch."

$$
\rightarrow \quad \text { "The branch broke the windshield." }
$$

"The clouds cleared, allowing the sun to dry the ground."
$\rightarrow \quad$ "The sun dried the ground."
These are the three classes of causative sentence. The term does not include one in which an agent acts directly on an instrument to effect an action. Such a sentence conforms to the standard pattern for an agential transitive:
"The woodman caused the axe to split the log."
$\rightarrow \quad$ "The axe split the log."
"The accountant had the computer prepare the spreadsheet."
$\rightarrow \quad$ "The computer prepared the spreadsheet."
Similarly, a causative does not include one in which there is no agent or instrument for the "causer" to act on. Such a sentence conforms to the standard pattern for an instrumental transitive:

$$
\begin{gathered}
\text { "The sun made the rain dry up." } \rightarrow \\
\text { "The earthquake made the } \\
\text { building fall." }
\end{gathered} \rightarrow \quad \text { "The building fell." }
$$

In the following sentences there is again no agent or instrument for the "causer" to act on. They are transitive and inceptive sentences with the same stative resultant: "She was awake;" "The hostages were dead":

$$
\begin{array}{ll}
\text { "He woke her." } & \rightarrow \\
\text { "The terrorists killed the hostages." } \rightarrow & \text { "The hostages died." }
\end{array}
$$

Of course, the term "causative" could be extended to include all these three classes of sentence. It is sometimes used more widely, to refer to any expression resulting in an attribute or identification. ${ }^{21}$ However, to do so would not be useful, since our definitions of "transitive" and "intransitive" clearly covers them and their resultant sentences fully.

[^13]An extension of this construction expresses the prevention of an action, the resultant sentence being that the action does not take place. This is termed a preventive sentence in Chapter 15.:

$$
\begin{aligned}
& \text { "I prevented him going to work." } \rightarrow \\
& \text { "I stopped the letter being written." } \rightarrow \\
& \text { "She stopped the engine running." } \rightarrow \\
& \text { "The did not go to work." } \\
& \text { "The letter was not written." } \\
& \text { "The engine stopped." }
\end{aligned}
$$

In all these examples, the causer is the subject. A causative can also be constructed with the object as subject:
"He was made to write the letter." "The engine was run."
A causative sentence may be constructed with an element in focus:
"This is the speech which I made her give."
"It was I who prevented him from going to work."
"It was the article that I made her read."
A causative verb can be general: "I made her go to work on Tuesdays by bus." In that case, in accordance with the rules for general verbs (Chapter 2., Specific and General Concepts), the resultant sentence of the causative is also general: "She goes to work on Tuesdays by bus."

Languages generally form a causative in one of three ways. It can be unchanged from an agential intransitive verb, with a construction similar to a transitive:
"He walked the dog." $\quad \rightarrow \quad$ "The dog went for a walk."
An auxiliary verb is used:
German: "Ich ließ mein Pferd vom Hufschmied beschlagen." [I let my horse by the blacksmith be-shod.]

French: "Je fais lire ce livre à mon fils." "I make my son read this book." [I make read this book to my son.]

The verb of the resultant sentence (the resultant verb) is altered to form a causative version:
Hungarian:
"Kivasaltattam az ingemet a férjemmel." "I had my husband iron my shirt."
[Iron-caused-I the shirt-my (accusative) ${ }^{\text {the }}$ husband-my-by.]
Arabic: "Pansāhumu 1-ka日īra mina l-үarā२ibi" "It made them forget many strange things."
[It-made-forget-them many of strange-things.]
Turkish: "Mektubu müdüre imzalattım." "I got the director to sign the letter."
[Letter ${ }_{\text {(accusative) }}$ director-to sign-caused-I.]
Hindi: "maĩ apne bhāī se pustak chapvāū̃ gā" "I shall get my brother to print the book." [I my brother-by book print-cause-shall.]

Indonesian/Malay:
"Saya mencucikan pakaian pada wanita itu."
"I have my clothes washed by that woman." [I wash-make clothes by woman that.]

## Japanese:

"Tomodachi wa watashi ni chippu o harawaseta." "My friend made me leave a tip."
[Friend ${ }_{\text {(topic) }}$ me-to tip ${ }_{\text {(object) }}$ leave-caused.]

```
Swahili: "Wasimamishe watoto.""Make the children stand up."
                                    [They-stand-cause (imperative)}\mathrm{ children.]
Inuit: "Pisariaqartunik ikinngutinnit nassitsippunga."
    "I had my friend send the necessary things."
    [Necessary-being-with friend-my-by send-cause-I.]
```

In many of these examples, the agent or instrument of the resultant sentence is marked with "by" or its equivalent (Japanese "ni"), which is also used to mark the agent of a passive sentence. This implies that the resultant action is intentional. However, if the resultant action is involuntary or unintentional, its agent or instrument may be marked as a transitive object:

Japanese:
"Chichi wa watashi o aruite kaeraseta." "My father had me walk home."
[Father ${ }_{\text {(topic) }} \mathrm{me}_{\text {(object) }}$ on-foot return-caused.]

## The Inchoative Function

In the previous section, we considered sentences in which a causer effects an action by an agent:
"We had the windows cleaned." "We made them go indoors."
We now consider sentences in which there is only one agent or instrument:

| "She began to write." | $\rightarrow$ | "She was writing." |
| :--- | :--- | :--- |
| "She carried on writing." | $\rightarrow$ | "She was writing." |
| "The water began to boil." | $\rightarrow$ | "The water was boiling.", |
| "The water continues to boil." | $\rightarrow$ | "The water was boiling." |

In the first group of sentences, an agent takes an action ("begin"/"carry on") whose outcome is another action by her ("write"). In the second, a subject undergoes a change ("begin"/"continue") whose outcome is another change to it ("boil"). The outcomes can also be stative:

```
"She began to be happy." "She was happy."
"The water continued to be hot." }->\mathrm{ "The water was hot."
```

In causative sentences, a person or object acts on another person or object to initiate or continue an action or state. These examples, the person or object acts on itself, and we can use for them the different term inchoative. The relation between causative and inchoative sentence is analogous to that between a transitive and intransitive sentence described in Chapters 6 . and 7. We recall that two sorts of intransitive were identified: an agential intransitive sentence, in which an agent acts on him/herself, and an inceptive sentence, in which a subject undergoes an involuntary change:


```
inceptive: "The tree fell." "The tree was fallen."
```

This same distinction applies to our inchoative examples:

$$
\begin{array}{ll}
\text { agential: } & \text { "She began to write." } \rightarrow \\
\text { inceptive: } & \text { "The water began to boil." } \rightarrow
\end{array} \text { "She was writing." }
$$

Note that in conventional terminology, "inchoative" is a synonym for "inceptive". Since we require "inchoative" in this new sense, we are proposing a separation of the two terms:

- an inceptive sentence is one whose subject undergoes an involuntary change to a resultant action or state;
- an inchoative sentence is one whose subject or object undergoes an intentional or involuntary change to or from a resultant action or state; it may therefore be agential or inceptive.

Inchoative verbs are not limited to variants of "start" and "continue". The following also express inchoation:

> "She hastened to write." "She persisted in writing."

As with other intransitive sentences, the subject is the topic unless an element is in focus, for example:
"It was the letter which she started to write."
"It was she who started to write the letter."

Inchoatives can be general, and following the rules for a general verb they have a general resultant sentence:

| "She got used to writing." | $\rightarrow$ |
| :--- | :--- |
| "She persisted in writing." | $\rightarrow \quad$ "She wrote often." |
| "Shote often." |  |

As with causatives, an inchoative is limited to an action whose resultant sentence follows as a fact. This excludes sentences such as: "She tried to write;" "She ventured to write;" "She hesitated to write"; "She prepared to write"; "She wanted to write"; "She intended to write". The first four of these are discussed in later in this chapter (Adoptive Modals). "She wanted to write" and "She intended to write" are volitions (Chapter 8., The Volition Function; Chapter 9., The Adoptive Sentence).

As noted in Chapter 9. (The Receptive Sentence), an inchoative verb may be used with a possessive resultant sentence:

| "We began to feel cold." | $\rightarrow \quad$ "We felt cold." |
| :--- | :--- |
| "We continued to have doubts" | $\rightarrow \quad$ "We still had doubts." |

Inchoative general participles in English include "initial", "final", "continual", and "persistent".
We noted in the previous section a variety of causation in which the resultant action is stopped, called preventive:

$$
\begin{aligned}
& \text { "I prevented him going to work." } \rightarrow \\
& \text { "I stopped the letter being written." } \rightarrow \\
& \text { "The not go to work." } \\
& \text { "The dam stopped the water falling." } \\
& \text { "Thas not written." }
\end{aligned}
$$

Similarly, there is a variety of inchoation in which an agent acts so that he or she stops an action, or a subject undergoes a change so that an action by it stops:

$$
\begin{array}{lll}
\text { "She stopped writing." } & \rightarrow & \text { "She was not writing." } \\
\text { "The water stopped boiling." } & \rightarrow & \text { "The water was not boiling." }
\end{array}
$$

This type of sentence is called cessative, and can be general:

$$
\text { "She gave up writing." } \quad \rightarrow \quad \text { "She did not write any more." }
$$

Languages most commonly construct inchoative and cessative sentences by distinguishing between the inchoative or cessative verb and the verb of the resultant sentence. The verb of the resultant sentence can be called the resultant verb. In languages with an infinitive, that is used for the resultant verb. In many languages, the infinitive is connected by the directive "to": English "to", French "à"; German "zu"; Persian "be"; Japanese "ni". In Turkish and Hindi, the infinitive takes a dative case "to": Turkish postposited "-e"; Hindi oblique case "-e".

> French: "Elle a commencé à écrire." "She began to write."
> "Elle a continué à écrire." "She continued to write."

German:"Sie haben begonnen zu lachen." "They began to laugh."

Russian: "Ona nachala nakryvat' na stol." "She began to set [onto] the table."
Turkish: "Yürümeğe başladık." "We began to walk." [Walking-to we-began.]
Arabic: "sa-yuwāṣilu l-kitābata" "He will continue to write." [He-will-continue the-writing.]

Persian: "šoruß kard be neveštan" "He began to write." [Beginning he-made to write.]
Hindi: "din lambe hone lage" "The days started getting long." [Days long be-to began.]
Indonesian:
"Siti mulai menangis." "Siti began [to] cry."
"Saya sudah berhenti merokok." "I've stopped smoking."
In languages which do not use an infinitive, the agent or subject must be repeated in the resultant sentence:

Greek: "A $\rho \chi 1 \sigma \varepsilon v \alpha \gamma \varepsilon \lambda \alpha ́$." "He began to laugh." [He-began that he-laughs ${ }_{\text {(subjunctive). }}$.]

[He-continued that he lives ${ }_{\text {(subjunctive) }}$ with the parents-his.]
Arabic: "Raṣbaḥnā nanzuru li-1-Ramri""We have started looking at the matter." [We-have-started we-are-looking at the-matter.]
"?axaðat l-sur§atu tazdādu" "The speed started to increase."
[Started the-speed it-increased.]
An agential inchoative or cessative can also be reflexive, like other agential intransitives:
French: "Il s'est obstiné à venir." "He persisted in coming."
[He himself is persisted to come.]
"Il s'est arrêté à venir." "He stopped coming." [He himself is stopped to come.]
Arabic: "istamarra yaidū hattā nqaṭąat Ranfāsuhu"
"He continued running until his breath failed him."
[He-continued-himself he-ran until failed his-breath.]
An inchoative or cessative can also be formed by modifying the resultant verb or (as also English) by using the gerund of the resultant verb. In the following Japanese examples, "kaku" is "write" and "furu" is "fall":
"Sensei wa hon o kakihajimeta." "The teacher began to write a book."
[Teacher ${ }_{\text {(topic) }}$ book $_{\text {(object) }}$ write-began.]
"Kyūni ame ga furidashita." "Suddenly it began to rain."
[Suddenly rain (subject) fall-began.]
"Wakaranai koto o nōto ni kaite itta."
"I went on taking notes on things I didn't understand."
[Not-understand thing (object) note-to writing went-on.]
In these Inuit examples, the inchoatives and cessatives are underlined:
"Danmarkimili kalaallisut ilinnialirpuq."
"He began studying Greenlandic already in Denmark."
[Denmark-in-already Greenlandic study-began-he.]
"Uqarvigai siniqqittussaasut." "He said to them that they should carry on sleeping."
[Sayto-he-them sleep-continue-should-they-(participle).]
"Tassanngaannaq nirissaarpuq." "He suddenly stopped eating." [Suddenly eat-stop-he.]

## The Facilitative and Modal Functions

As we have seen above, a causative sentence operates directly on an agent or instrument, and an inchoative sentence operates directly on its subject, to bring the resultant action into effect. This accords with the general concept of transitive and intransitive verbs outlined in Chapters 6. and 7.:

$$
\begin{array}{lll}
\text { "I made him obey the rules." } & \rightarrow & \text { "He obeyed the rules." } \\
\text { "The water began to boil." } & \rightarrow & \text { "The water was boiling." }
\end{array}
$$

In Chapter 8., we defined a transfer sentence as one which does not operate directly on its object, but alters the relationship between the object and an animate third-party recipient, who becomes its possessor:

$$
\begin{array}{lll}
\text { "Mary lent the book to John." } & \rightarrow & \text { "John has the book on loan." } \\
\text { "Mary taught John geography." } & \rightarrow & \text { "John understands geography." }
\end{array}
$$

In these examples, the element transferred or possessed is stative, in the form of a material object or concept. It is also possible to apply the transfer construction to a sentence in which the element transferred or possessed is dynamic, in the form of an action which the recipient is expected to carry out:

$$
\begin{aligned}
& \text { "I helped him to write the letter." } \rightarrow \\
& \text { "I hindered him from writing the letter." } \\
& \text { "I can write the letter." } \\
& \text { "I obliged him to write the letter." } \rightarrow
\end{aligned} \begin{gathered}
\text { "He cannot write the letter." } \\
\text { "I encouraged him to write the letter." } \\
\text { "I persuaded him to write the letter." letter." } \\
\text { "I permitted him to write the letter." } \rightarrow \\
\text { "I forbade him to write the letter." } \rightarrow
\end{gathered}
$$

The first in these pairs of sentences transfers or removes from a recipient ("him") the means, compulsion, or desire to carry out an action ("write the letter"), and in this sense alters the relationship between the recipient and the action. We can call them a facilitative sentence. The second sentence of each pair expresses the result, namely the ability, obligation, or motivation that the recipient possesses to carry the action out. These resultant sentences are stative, and are conventionally called a modal sentence.

The construction of a facilitative sentence is "agent-verb-recipient-verb-object". Since the subject of the second verb is the recipient of the first, an infinitive (subjectless) form can be used for the second verb, where that is available. The construction of a modal is "recipient-modal-verb-object". Since the subject of the verb is the recipient of the modal, the infinitive form can again be used.

It is clear that there are functional differences between a facilitative sentence and a causative or inchoative sentence:

- In a causative or inchoative, the sentence is operating directly on an agent or instrument which is the performer of the resultant action. In a facilitative sentence, the recipient is the expected performer of the resultant action.
- A causative and inchoative result in the direct performance of the action. A facilitative sentence results in a state which enables or hinders the performance; it does not necessarily mean that the action is performed.
- The resultant sentence of a causative and inchoative is a dynamic sentence of which the patient is the subject. The resultant sentence of a facilitative is a modal sentence of which the recipient is the subject.

In the above English examples of a facilitative, it may not be evident that the expected performer of the action is a recipient rather than an object. This is made clearer in languages in which the recipient is in the dative case ("to") or its equivalent:

> German:"Ich habe ihr geholfen, den schweren Korb zu tragen." "I helped her to carry the heavy basket." [I have to-her helped, the heavy basket to carry.] Italian: "Il tempo gli ha impedito a venire oggi." "The weather prevented him from coming today." [The weather to-him has prevented to come today.] Russian:"Vy ne pomozhete mne naiti moi veshchi?" "Will you help me find my things?" [You not help to-me to-find my things?] "Den'gi dali emu vozmozhnost' puteshestvovat'." Persian: "be u komak kardand" "They helped him." [To him help they-made.] Hindi: "mere pitā jī mujhe sigret nahĩ pīne dete the"" "My father used not to let me smoke cigarettes." [My father to-me cigarettes not smoking-to giving was.]

Facilitative general participles in English include "helpful", "obstructive", "encouraging", "obligatory", "persuasive", "permissive" and "prohibitive".

It is also not always appreciated that modal sentences are possessive in nature. This becomes more evident when other English expressions which express ability or obligation are listed:
"It is up to you to write the letter."
"He has permission to write the letter."
"He has a duty to write the letter."
"You have some explanation to give."
The last three of these examples use a possession verb. The first three use the indirect recipient construction which was noted in Chapter 8. (The Possession Function) as typical of a possession. Examples from other languages of an indirect recipient modal are:

Italian: "Vi conviene consegnare il compito oggi."
"You'd better hand in the assignment today."
[To-you it-is-advisable to-deliver the assignment today.]
"Vi spetta consegnare il compito oggi."
"It's up to you to hand in the assignment today."
[To-you it-is-due to-deliver the assignment today.]
Russian: "Emu ne nuzhno govorit' dvazhdy." "He doesn't need to be told twice."
[To-him not need to-tell twice.]
"Vam nado budet mnogo pisat'." "You will have to do a lot of writing." [To-you necessary will-be much writing.]
"Nam nel'zya bol'she zdat'." "We mustn't wait any longer." [To-us mustn't more wait.]

Finnish: "Hänen täytyi lähteä kouluun." "She had to set off for school."
[Of-her it-ought to-set-off to-school.]
Hungarian:
"Gábornak tanulnia kell ma este." "Gábor must study this evening."
[To-Gábor studying-his must today evening.]
"Neked nem szabad tejet innod." "You are not allowed to drink milk."
[To-you not is-allowed milk drinking-your.]

Welsh: "Bydd yn rhaid i mi godi." "I shall have to get up." [Will-be in necessity to me rise.]
Irish: "Tair go luath, más féidir leat é." "Come early, if you can."
[Come early, if-is possible with-you it.]
Arabic: "§alayhi ?an yafiya bi-wa@dihi" "He has to fulfil his promise."
[On-him that he-fulfils ${ }_{\text {(subjunctive) }}$ at promise-his.]
"yajibu ¢alā l-ṣāRimi ?an yamtani§a £ani l-tadxīni"
"The fasting person must refrain from smoking."
[It-is-incumbent on the-faster that he-refrains (subjunctive) from the-smoking.]
Hindi: "usko yah nahī̃ karnā cāhie thā" "He ought not to have done this."
[Him-to this not doing needed was.]
"apkō apnī cābī lānī paregị" "You'll have to bring your own key."
[You-to own key bringing will-fall.]
Swahili: "Inanipasa kurudi sasa." "I ought to go back now." [It to-me is-right to-return now.]
"Yanibidi kusema hivi." "I must say this." [It to-me is-obliged to-say this.]
"Yafaa tuondoke sasa." "We had better go now." [It-is-good we-should-go now.]
The Japanese modal is the same as other Japanese topic-comment possession constructions (Chapter 8., The Possession Function):
"Okamoto-san wa roshiago ga dekiru." "Mr Okamoto can speak Russian."
[Okamoto-Mr ${ }_{\text {(topic) }}$ Russian ${ }_{\text {(subject) }}$ is-possible.]
"Tenada-san wa tenisu ga dekiru." "Mr Tenada can play tennis."
[Tenada-Mr ${ }_{\text {(topic) }}$ tennis ${ }_{\text {(subject) }}$ is-possible.]
The "subject-verb-object" construction of the standard English modals "can", "must", etc also occurs widely:

French: "Je peux vous comprendre." "I can understand you." [I can you understand.]
German:"Ich kann Sie verstehen." "I can understand you." [I can you understand.]
Russian:"Ya ne mogu priiti v eto vremya." "I can't come at that time."
[I not can come at that time.]
Hungarian:
"Nem tudom kinyitni az üveget." "I can't open the bottle."
[Not I-can open the bottle.]
Welsh: "Fedri di ddarllen hwn?""Can you read this?"
Hindi: "maĩ hindī bol saktā hū"" "I can speak Hindi." [I Hindi speak can.]
Malay: "Dia boleh tidur sehabis-habis lama lapan jam."
"He can sleep for eight hours at the most.
[He can sleep at-most long eight hour.]
Chinese:"Nĩ yīnggāi qù shuijiào le." "You ought [to] go [to] bed (aorist)."
"Wŏ yī tiān nénggòu păo shí yīnglĭ lù." "I can run ten miles a day."
[I one day can run ten mile road.]
"Xiàozhăng yuànyi tuìxiū." "[The] headmaster [is] willing [to] retire."
Swahili: "Aweza kwenda." "He can go." [He-is-able to-go.]

In some languages, the modal governs an object sentence, often in the subjunctive. In the following examples, the modal is a personal verb in the case of "can" and impersonal in the case of other modals. Greek and Arabic do not have an infinitive:

[He-could that he-eat (subjunctive) ten eggs for breakfast.]

[It-is-necessary that you-give-up (subjunctive) the smoking.]
"M $\pi$ орєí $v \alpha \pi \alpha ́ \mu \varepsilon \alpha v ́ \rho ı o ~ v \alpha ~ \tau o v ~ \delta o v ́ \mu \varepsilon . " ~ " W e ~ m a y ~ g o ~ t o ~ s e e ~ h i m ~ t o m o r r o w . " ~$
[It-may-be that we-go (subjunctive) tomorrow that him we-see ${ }_{\text {(subjunctive).] }}$
Arabic: "qadi staṭā¢a Ran yajida l-ḥalla l-ṣaḥīha"" "He was able to find the right solution."
[He was-able that he found ${ }_{\text {(subjunctive) }}$ the solution the-right.] "yanba $\gamma \overline{1}$ Qan nuyassirahā lahā" "We ought to make it easier for it."
[It-is-desirable that we-make-easier-it (subjunctive) for it.]

```
Persian: "mitavanam beravam" "I can go." [I-can I-go (subjunctive).]
    "bayad beravam""I must go." [It-is-necessary I-go (subjunctiv).]
    "šayad beravam""Perhaps I shall go." [Perhaps I-go (subjunctive).]
```

Some Turkish modals are constructed by a suffix to the verb:
"Ancak saat birde yatabildim." "I was able to go to bed only at one o'clock."
[Only o'clock one-at go-to-bed-could-I.]
"Gazetelere bir ilân bastırmalı idik."
"We should have had an advertisement printed in the newspapers."
[Newspapers-in an advertisement print-cause-obliged we-were.]
Similarly in Hungarian:
"Itt kaphatunk szép cipőt." "We can get nice shoes here." [Here get-can-we nice shoes.]
Also in Inuit, following the pattern for datives, possessives, and adoptives in that language; the suffix is underlined:

```
"Timmisinnaavuq." "It can fly." [Fly-can-it.]
"Aqagu avalattussaavunga." "Tomorrow I am to go to Denmark."
    [Tomorrow gotoDenmark-amto-I.]
"Imirnirusariaqarputit." "You must drink more." [Drink-more-must-you.]
```

In English, "can" and "must" have a dual sense, according to their supposed source:

- "Can" may refer to an internal ability or to an external lack of constraint. In the latter meaning, it is a synonym of "may".
- "Must" may refer to a moral obligation or to an external compulsion. In the former meaning, it is a synonym of "ought to".

Both these meanings generally occur with all the translations of "can" and "must" in various languages, with a few exceptions, for example in German "müssen" is generally an external compulsion while "sollen" is an obligation:
"Man mußte zuerst fragen." "One had to ask first." [One had-to first ask.]
"Man soll viel obst essen." "One should eat plenty of fruit." [One should much fruit eat.]
Both of these meanings can be a resultant sentence of the facilitative sentences at the start of this section. Moreover, the two modals are connected in meaning through the use of a double negative:
"He is not able not to write the letter" = "He must/ought to write the letter";
"He is not obliged not to write the letter" = "He can/may write the letter". ${ }^{22}$
Chinese:"Yī gè rén bù néng bù jiăng lǐi." "A person must be reasonable"
[One unit person not able not talk reason]
These various modal functions are distinguished further in Chapter 15. (The Ability, Necessity, and Responsibility Sentences).

In the above facilitative examples, the agent is the subject. A receptive construction is also natural, since the recipient is the subject of the expressed or implied resultant sentence:
"He was helped to write the letter." $\rightarrow \quad$ "He was able to write the letter."
"He was hindered from writing the letter."

$$
\rightarrow \quad \text { "He could not write the letter." }
$$

An element can also be in focus:
"It was I who helped him to write the letter." "It was the letter which I helped him to write."
In the above modal examples, the agent is the subject. An object of the object sentence can often be constructed as the topic, and an element can be in focus:
"The letter is what he can write." "The letter is what he ought to write."
"It is the letter which he ought to write." "It is he who ought to write the letter."
In most grammars and languages, the volition "He wants to write the letter" is described and constructed as a modal. It conforms to the above definition of a modal, since it is a possession relationship between a recipient ("he") and an action ("write the letter"). It can moreover be the resultant sentence of the facilitative "I persuaded him to write the letter". However, as we have seen in Chapter 8. (The Volition and Imperative Functions), it is a particular case of a volition sentence, with the meaning "He wants that he should write the letter". In a volition, the person desired to do something may not be the same as the desirer, as in "He wants you to write the letter". The latter example is not generally classed as a modal.

## The Adoptive Modal Function

As we have seen, a facilitative verb is dative: "I helped him to write the letter." An agent provides (or withdraws) to a recipient the means, compulsion, or desire to perform an action. We have also seen (Chapter 9., The Adoptive Sentence) that a dative verb may take a particular form in which the agent is the same as the recipient, and transfers an object or benefit to for him/herself: "We imagined what we might do"; "She took advantage of the delay". The resultant sentence of both a dative and an adoptive is the same possession construction.

Like other transfer sentences, a facilitative verb can also have an adoptive form, which again has a modal resultant sentence. In that case, an agent provides or withdraws to him/herself the means, opportunity, compulsion, or desire to perform an action. We can call this construction an adoptive modal:
"He tried to write the letter." $\rightarrow$ "He can/cannot write the letter."
"He hesitated to write the letter." $\rightarrow$ "He may not write the letter."
"He prepared to write the letter." $\rightarrow$ "He can write the letter."
"He undertook to write the letter." $\rightarrow$ "He was willing to write the letter."
"He refused to write the letter." $\rightarrow \quad$ "He was unwilling to write the letter."
As with other facilitatives, the resultant sentence is not that the action takes place, but that the agent/recipient is in a state which enables him/her to perform or hinders him/her from performing the action. The structure is "agent-verb-verb-object". In languages with an infinitive, that is usually used

[^14]to express the second verb，as the indirect object of the adoptive modal．If no infinitive is available，the subjunctive may be used：
\[

$$
\begin{aligned}
& \text { Greek: "Пробл⿱㇒日勺} \theta \eta \sigma \alpha v \alpha \tau о v \alpha \pi о \varphi v ́ \gamma \omega . " ~ " I ~ t r i e d ~ t o ~ a v o i d ~ h i m . " ~ \\
& \text { [I-tried that him I-avoid }{ }_{\text {(subjunctive). }} \text { ] }
\end{aligned}
$$
\]

## Hungarian：

＂Arra törekszik，hogy új állást kapjon．＂＂He’s trying to get a new job．＂
［Onto－that he－tries，that new job he－gets（subjunctive）．］
Arabic：＂ḥāwaltu Ran Rưalliqa bi－biḑ̣i kalimātin＂＂I tried to add a few words．＂
［I－tried that I－add（subjunctive）${ }^{\text {in }}$ few words．］
In addition，we noted in Chapter 9．that many adoptives take the form of a dative reflexive．Here are some examples of that construction：

Italian：＂S＇è preparata ad avviarsi．＂＂She got ready to set out．＂
［Herself she－is prepared to set－out．］
＂S＇è azzardata ad avviarsi．＂＂She ventured to set out．＂
［Herself she－is ventured to set－out．］
＂S＇è rifiutata ad avviarsi．＂＂She refused to set out．＂
［Herself she－is refused to set－out．］
Russian：＂Chelovek popytalsya vstat＇．＂＂The man tried to stand up．＂ ［Man tried－himself to－stand－up．］
＂Ne stesnyaites＇sprashivat＇．＂＂Don＇t hesitate to ask．＂
［Not hesitate－yourself to－ask．］
＂gotovit＇sya ekhat＇za gorod＂＂to prepare［oneself］to go to［the］country＂．
In the above examples，the agent is the subject and therefore the topic．Adoptive modals can be constructed with the object of the object sentence as topic and with an element in focus：
＂The letter is what he tried to write．＂＂It was the letter that he tried to write．＂

Adoptive modal general participles in English include＂tentative＂，＂hesitant＂，＂preparatory＂，and ＂venturesome＂．

## The Responsibility Function

A responsibility is held by a person，often to a third party，for the fulfilment of some task：
＂She is responsible to her manager for completion of the project．＂
＂She is in charge of the project．＂
＂She has care of the five children．＂
＂She is liable for the damage．＂
The responsibility can be the outcome of a sentence in which the person or body to whom it is due assigns it to the holder：
＂Her manager made her responsible for completion of the project．＂
＂Her manager put her in charge of the project．＂
＂The Court gave her care of the five children．＂
＂The aggrieved party held her liable for the damage．＂
A sentence can also be constructed in which the holder assigns the responsibility to him／herself，or allows him／herself to have the responsibility：
＂She took／accepted responsibility for completion of the project．＂
＂She took／accepted charge of the project．＂
＂She took／accepted care of the five children．＂
"She took/accepted liability for the damage."
These sentences show the characteristics of a possession construction. The holder has a relationship with his/her responsibility, expressed by the first group of sentences. The first group are therefore possessions, and "responsible" and "in charge" are recipient participles. These sentences can be the resultant sentence of the second group, which transfer the responsibility to the holder, and which are dative. Alternatively, they can be the resultant sentence of the third group, in which the holder assumes responsibility, and which are adoptive.

The sentences show that the object of the responsibility can be either a stative element ("project", "children") or a process which the object undergoes ("completion of the project"), expressed by a transitive, intransitive, or transfer verb or verbal noun. Alternative versions of the second and third possession sentence could be:
"She is responsible for her team completing the project."
"She is in charge of completing the project."
"She has care of the upbringing of the children."
It can be seen that there is an element in these possession sentences which does not occur with others, namely the person or body to whom the responsibility is held, who is the agent in the dative sentences. This agent can also occur in the adoptive responsibility sentences:
"She promised to her manager that the project would be completed."
"She undertook charge of the project on behalf of her manager."
"She took care of the five children on behalf of the Court."
"She accepted liability to the aggrieved party."
The dative and adoptive sentences include the denial or withdrawal of the responsibility:
"Her manager withdrew from her responsibility for the project."
$\rightarrow \quad$ "She was no longer responsible for the project."
"She refused to be responsible for the project."
$\rightarrow \quad$ "She was not responsible for the project."
"She declined liability for the damage."
$\rightarrow \quad$ "She was not liable for the damage."
Most languages express a responsibility by constructions similar to the above, in the form "subject-verb-object" and "recipient-attribute-object". However, for adoptive responsibilities the dative reflexive construction may be used by those languages which employ it for other adoptives (Chapter 9., The Adoptive Sentence):

Italian: "S'è assunta responsibiltà per il progetto."
"She assumed responsibility for the project."
[Herself she-is assumed responsibility for the project.]
"S'è presa cura dei cinque bambini." "She took care of the five children."
[Herself she-is taken care of the five children.]
Russian: "Zabotilas' o roditelyakh." "She took care of her parents." [She-cared-herself about parents.]

## 12. Functional Nouns

## Summary

In most languages, every concept verb and attribute can be expressed by a noun, called respectively a verbal noun or attributive noun. By this means, an action or condition can be the subject or object of a sentence. The syntax of a verbal or attributive noun is the syntax of the corresponding verb or attribute. A verbal noun is general or specific according to whether the corresponding verb is general or specific, that is not relating or relating to a particular event. An attributive noun is specific if it is precisely measured or is the cause or outcome of a particular event; otherwise, it is general.

A specific dynamic verb can be expressed by a specific noun, called an event noun, and an auxiliary verb. In those constructions, the event noun varies according to the nature of the dynamic verb. If the verb expresses physical action, motion, participation, inchoation, or communication, the event noun is verbal. If the verb is an act of creation, the event noun is the object created. If the verb sets up an effect or dependency, the event noun is attributive. If the verb applies an artefact, the event noun is the artefact

Event nouns can be used to express the reversal of an action, if that is possible.
A dynamic event noun can be used with a converse link to express a participle. A stative event noun can be used with a converse link to express an attribute.

Languages possess nouns, called a role, which describe a function performed by a person in society. Most of these nouns are agents, but a minority are recipients, patients, or objects. They are in general derived from verbs or verbal nouns, but in few cases the verb or verbal noun is derived from the role.

If a verb transfers an object (material or mental), the event noun is called a possession. The function of a possession varies according to the nature of the dative, receptive, or adoptive verb which it expresses.

A connection between an object and a definite recipient, via a possession, identifies the object and is expressed through a genitive link. A connection between a recipient and a definite object, via a possession, identifies the recipient and is expressed though a comitative link. If the recipient is general, the object is general; if the object is general, the recipient may be general or specific.

## Terms Defined or Introduced

Verbal noun, attributive noun, role, event noun, participation, communication noun, possession, genitive link, comitative link.

## Nouns Describing Verbs and Attributes

All languages possess nouns which describe the action of a process or the quality of a state. They are the process or state in noun form:
"their journey to London" expresses in noun form "They travelled to London";
"the length of the day" expresses in noun form "The day was long";
"her speech at the meeting" expresses in noun form "She spoke at the meeting".
They can be called a verbal noun and attributive noun. However, these are general terms, and as we shall see later, different types of process and state are described by different types of noun which it is useful to distinguish. Like all other nouns, verbal and attributive nouns can be general or specific:
general: "Travelling to London takes an hour."
specific: "They made three journeys to London last week."

```
general: "The days are increasing in length."
specific: "The length of the day was }81/2\mathrm{ hours."
general: "She likes speaking at these meetings."
specific: "She made a speech of welcome."
```

In conventional terminology, the term "abstract noun" is often used, but not in a precise sense. It may mean either a verbal or attributive noun as we have defined it, or any noun which is not "concrete", that is cannot be physically observed. Thus "length" may be classified as abstract, because it is attributive, or not abstract, because it can be measured. "Music" can be classified as abstract, because it cannot be measured, or not abstract, because it is not derived from a verb or attribute. A resolution of this confusion comes from analysis of the different types of transitive, intransitive, and transfer action, and the resultant states, as we attempt in the previous chapters, and more formally in Chapter 15. Different verbal and attributive nouns occur for each of those actions and states. An analysis based on such distinctions is more useful than that between "abstract" and "concrete". The primary distinction is between general and specific nouns, that is those which are not related to a particular event and those which describe a particular event.

Expressions which qualify a verb or attribute are called adverbials. For each adverbial there is an attribute of the corresponding verbal or attributive noun:
"Marry in haste and repent at leisure."
"His marriage was in haste and his repentance was at leisure."
"Sheila was extremely happy."
"Sheila's happiness was extreme."

## General Action Noun

This is a verbal noun which describes the general action of a transitive, intransitive, or transfer verb:
"Eating people is wrong." "Driving a car is tiring."
"Giving presents is the custom at Christmas."
Many languages can form general action nouns, although the same word is also often used for a specific action noun:

| Russian: | "osvobodit"" | "liberate" | "osvobozhdenie" "liberation" |  |
| :---: | :---: | :---: | :---: | :---: |
|  | "brodit"" | "ferment" | "brozhenie" | "fermentation" |
| Finnish: | "tupakoida" | "smoke" | "tupakointi" | "smoking" |
|  | "hankkia" | "obtain" | "hankinta" | "acquisition" |
| Turkish: | "sormak" | "ask" | "sorma" | "asking" |
|  | "dindirmek" | "cease" | "dindirme" | "cessation" |
| Indonesian: | "membaca" | "read" | "pembacaan" | "reading" |
|  | "cetak" | "print" | "pecetakan" | "printing" |

General action nouns enable a general action to be the subject or object of a sentence. In some languages, they are also used in conjunction with auxiliary verbs such as "make" or "give" to construct general verbs. In those cases, no equivalent verb usually exists:

Welsh: "Y mae'r bws hwn yn aros yn y stryd hon bob dydd."
"This bus stops in this street every day."
[Is bus this in stopping in the street this every day.]
Japanese:
"Boku wa yoku kuruma o unten shimasu." "I often drive a car."

$$
\left[\mathrm{I}_{\text {(topic) }} \text { often car }{ }_{\text {(object) }}\right. \text { driving make.] }
$$

## Role

A role is the animate performer of a defined function. It arises when a particular activity is engaged in systematically, so that a word is required for the participant. It may refer to the agent or (less frequently) the recipient, object or patient. A role is therefore linked to a word for its activity. It generally derives from a verb, but not always; sometimes the role is defined initially and the verb or verbal noun is derived from that. Many roles relate to participation activities (the verbal noun is in brackets):

| "The doctor is treating my illness." | (treatment) <br> (dentistry) <br> "The dentist is treating my teeth." |
| :--- | :--- |
| "The scientists researched the problem." | (research) |
| "The aggressors attacked without warning." | (aggession) |
| (rebellion) |  |
| "The rebels rose against the regime." | (war) |
| "The warriors fought the battle." | (reign) |
| "Franklin was king of France from 1643 to 1715." |  |
| from 1933 to was President of the United States | (presidency) |

The following roles relate to transitive activities:

| "The villains concocted their plan." | (villainy) |
| :--- | :--- |
| "The hero rescued Andromeda from the monster." | (heroism) |
| "The nurse coaxed him back to health." | (nursing) |
| "The haulier transported the goods to the port." | (haulage) |

The following roles relate to transfer activities as agent or recipient:

| "The host welcomed the guests." | (hospitality) |
| :--- | :--- |
| "The witness testified in Court." | (testimony) |
| "The listeners attended to the lecture." | (listening) |
| "The viewers watched the programme." | (viewing) |
| "The customers selected their purchases." | (custom) |
| "The student is learning estate management." | (study) |

The following roles relate to objects or patients:
"The patient was treated at the clinic."
"The victims of the earthquake were rescued."
(treatment)
(-)

New roles continue to appear from existing verbs or in their own right: "walker" is now a recognised role when it was not a few decades ago; "astronaut" arrived with the space programme.

Russian applies a number of different suffixes to nouns and verbs to form roles; some of these have feminine versions not listed below:

| "ryba" | "fish"(noun) | "rybak" | "fisherman" |
| :--- | :--- | :--- | :--- |
| "pech"" | "bake" | "pekar"" | "baker" |
| "tkat"" | "weav"" | "tkach" | "weaver" |
| "pet"" | "sing" | "pevets" | "singer" |
| "birzha" | "stock exchange" | "birzhevik" | "stockbroker" |
| "gitara" | "guitar" | "gitarist" | "guitarist" |
| "znat"", | "know" | "znatok" | "expert" |
| "uchit"" | "teach" | "uchitel"" | "teacher" |
| "plyasat"" | "dance" (verb) | "plyasun" | "dancer" |

Hungarian forms roles from nouns with the suffixes "-ász"/"-ész" and "-s":

| "erdő" | "forest" | "erdész" | "forester" |
| :--- | :--- | :--- | :--- |
| "szobor" | "statue" | "szobrász" | "sculptor" |
| "taxi" | "taxi" | "taxis" | "taxi-driver" |

Indonesian forms roles from verbs or verbal nouns with the prefix "pen-" or "pe-":

| "menonton" | "view" | "penonton" | "spectator" |
| :--- | :--- | :--- | :--- |
| "mendudaki" | "occupy" | "pendunduk" | "inhabitant" |
| "mencetak" | "printer" | "pencetak" | "printer" |
| "berdagang" | "trade" | "pedagang" | "trader" |
| "tenis" | "tennis" | "petenis" | "tennis player" |

Alternatively, verbal nouns for a role are formed in Indonesian from the role, by the prefix "ke-" and suffix "-an":

| "anggota" | "member" | "keangotaan | "membership" |
| :--- | :--- | :--- | :--- |
| "ibu" | "mother | "keibuan" | "motherhood" |
| "pemimpin" | "leader" | "kepemimpinan" "leadership" |  |
| "wanita" | "woman" | "kewanitaan" | "femininity" |
| "dokter" | "doctor" | "kedokteran" | "medicine" |

Roles can be general or specific according to the definitions in Chapter 2.

## Attributive Noun

An attributive noun is a noun which expresses an attribute in noun form. It enables an attribute to be the subject or object of a sentence:
"The beauty of the Sussex countryside overwhelmed them."
"The height of our house is 8 meters."
"The existence of Jane's medical records is uncertain."
"John's life was full of incident."
"He remarked on the newness of the decoration."

These are the noun forms of the attributes "beautiful", "high", "in existence", "alive", "new". In each case, they are specific, since they can be distinguished from other instances of the same attributes:
"the beauty of the Hampshire countryside"; "the height of your house"; "the existence of Sarah's medical records"; "James' life"; "the newness of the furniture".

If an attribute relates to a class of entities, then the attributive noun possesses the generality of that class:
"The beauty of the countryside is superior to that of towns."
"The height of houses is subject to planning rules."
"The existence of patients' medical records is uncertain."
An attributive noun can be general if it is distinguished from the absence of the same attribute:
"Life is full of chance incidents."
"Honesty is the best policy."
Languages generally form attributive nouns from attributes, both physical and non-physical:

| Russian: | "vesëlyi" | "gay" | "vesel'e" | "gaiety" |
| :---: | :---: | :---: | :---: | :---: |
|  | "zdorovyi" | "healthy" | "zdorov'e" | "health" |
|  | "grubokii" | "deep" | "grubina" | "depth" |
| Persian: | "xub" | "good" | "xubi" | "goodness" |
|  | "dana" | "wise" | "danai" | "wisdom" |


|  | "dorošt" | "thick" | "dorošti" | "thickness" |
| :--- | :--- | :--- | :--- | :--- |
| Indonesian: | "baik" | "good" | "kebaikan" | "goodness" |
|  | "bebas" | "free" | "kebebasan", "freedom" | "bersih" |

In the following Japanese examples, "hiroi" is "wide" and "muzukashii" is "difficult":
"Kono uchi no hirosa wa chōdo iidesu." "The size of this house is just right."
[This house-of size ${ }_{\text {(topic) }}$ just is-good.]
"Nihongo no muzukashisa ga yoku wakarimashita."
"I'm now well aware of the difficulty of Japanese." [Japanese-of difficulty (subject) well understood.]

## Event Noun

An event is a noun which describes the specific occurrence of a transitive, intransitive, dative, receptive, adoptive, benefactive, or adversative verb. It enables the specific occurrence to be the subject or object of a sentence:
"The blow broke the vase." "The walk made him feel better."
"Her look at the report was cut short."

Indonesian forms event nouns with the circumfix "pen- -an" or "pem- -an". In these examples, "menulis" is "write" and "menandatangani" is "sign":
"Penulisan buku itu memerlukan dua tahun."
"The writing of that book took two years." [Writing book-that need two year.]
"Kepala negara menyaksikan penandatanganan perjanjian."
"The heads of state witnessed the signing of the agreement."
[Head state witness signing agreement.]
Many Italian verbs form an event noun with the suffix "-mento". The corresponding verb is in brackets:

```
"il referimento a questo personaggio""the reference to that person" ("referire")
"la premessa di questo ragionamento" "the premise of that reasoning" ("ragionare")
"il cambiamento del suo aspetto" "the change in his appearance" ("cambiare")
"la perdita dell'orientamento" "the loss of one's bearings" ("orientare")
"il combattimento per il paese" "the fight for one's country" ("combattere")
```

Hungarian verbs form an event noun with the suffix "-s":
"Nem tetszett neki az éneklés." "He didn’t like the singing." ("énekel" = "sing")
[Not liked to-him the singing.]
"Lenne egy pár kérésem." "I have few requests."
("kér" = "ask for")
[There-would-be a few request-my.]
Maori forms an event noun with the suffix "-tanga" or its variants:
"Ka putu te tamaiti i te mango." "The child will kill the shark."
[Will kill the child (object) ${ }^{\text {the shark.] }}$
"te patunga o te mango e te tamaiti" "the killing of the shark by the child"
Event nouns are used by many languages in conjunction with auxiliary verbs such as "make", "do", "get", "give", or "take" to construct verbs. For example, in Welsh and Irish, they are used to construct an imperfective sentence, and in Welsh also a non-aorist perfective. For other aspects in those languages, for example aorist or conditional, a verb without an auxiliary is used:

English: "She made the journey to Cambridge in two hours."

> "The machine made a loud noise and stopped." "We committed murder today."
> "The scientists are doing research into the problem."
> Welsh: "Y mae ef yn eistedd ar y gadair yn y gegin."
> "He is sitting on the chair in the kitchen."
> [Is he in sitting on the chair in the kitchen.]
> "Yr oeddwn i yn cerdded i lawr y stryd." "I was walking down the street."
> [Was I in walking down the street.]
> "Y mae Gwenith wedi darllen y papur." "Gwenith has read the paper."
> [Is Gwenith after reading the paper.]
> Irish: "Tá sé ag gearradh adhmaid." "He is cutting wood." [Is he at cutting of-wood.]
> "Bhíomair ag obair ar na bóithre." "We were working on the roads."
> [Were-we at working on the roads.]
> Turkish: "Köprüyü tamir ediyorlar." "They are repairing the bridge." [Bridge repair they-are-making.]
> "Bu iki eseri mukayese ediyor." "He is comparing these two works."
> [These two work comparison he-is-making.]
> Persian: "be ma taPaddi kard" "He oppressed us." [On us oppression he-made.]
> "šah abbas in karvansarara bana karde ast" "Shah Abbas built this caravanserai."
> [Shah Abbas this caravanserai building did is.]
> "Nakayama-san wa tenisu o shimasu." "Mr Nakayama is playing tennis."
> [Nakayama-Mr ${ }_{\text {(topic) }}$ tennis ${ }_{\text {(object) }}$ is-doing.]
> "Watashi wa chūgokugo o benkyō shite iru." "I am studying Chinese."
> [ $I_{\text {(topic) }}$ Chinese ${ }_{\text {(object) }}$ study doing am.]

Event nouns are also used, with a preposition or converse link (Chapter 4., Links), to construct a stative or imperfective relation which is the equivalent of an attribute or participle:
"We are at liberty to go home."
"Our area is under threat from redevelopment."
"We are in search of a new candidate."
"Rome was at war with Carthage."
Arabic possesses an event noun (called a "verbal noun" in grammars) for every verb. They are used instead of a verb after many verbs and conjunctions:
"RaṭāPa julūsihi §alā maqhan" "whilst he was sitting in a coffee house" [during sitting-his in coffee-house]
"fî hāatati wujūdi xaṭarin" "in case any danger exists" [in case of-existence of-danger]
"¢adamu l-lujū?i ?ilā l-ṭabībi" "not to visit the doctor" [in-absence of-the-visit to the-doctor]
"li-Ri¢ādati l-£alāqāti baynahā wa baynahu" "to restore relations between her and him"
[for restoration of-the-relations between her and between him]
"yuhaddidu bi-jtiyāzi xaṭti waqfi l-nāri" "He threatens to cross the ceasefire line."
[He-threatens at-crossing of-line of-stand of-the fire.]
Arabic event nouns are also used in adverbial constructions:
"yaṣifu waṣfan daqīqan" "He describes accurately." [He-describes description accurate.]
"ibtasamat lahu btisāmatan kabīratan" "She gave him a big smile."
[She-smiled at-him smiling big.]
"xasira xasāratan fädiḥatan" "He lost heavily." [He-lost losing heavy.]

Event nouns derive from a transitive, intransitive, dative, receptive, or adoptive verb. However, analysis shows that the derivation differs according to the nature of the transitive, intransitive, or transfer action. For each type of action, an action sentence can be constructed in only one way from the event noun. The analysis suggests that there are six different types of action and accordingly six different types of event noun, described further in this chapter:

- The event noun expresses the action of an verb. This is the case with the majority of transitive and intransitive functions, including physical action, transport, participation, and inchoation.
- The event noun expresses the outcome of an action of creation.
- The event noun expresses the state of the patient after action of an verb. This is the case with effect and dependencies.
- The event noun is an appliance employed in the action.
- The event noun is an act of communication.
- The event noun is the possession of the recipient, transferred to him/her by a dative, receptive, or adoptive sentence.
- The event noun is the benefit or adversity experienced by a beneficiary.

Use of an event noun brings at least four advantages in sentence construction:
(i) Use of auxiliary verbs and attributes enable the event to be expressed in a transparent manner.
(ii) Because it is specific, a subsequent sentence can refer to the action, occurrence, or possession.
(iii) By suitable auxiliary verbs, a sentence can be constructed which reverses the event:
"The news alleviated our worry about his health."
"The building design reduced the risk from earthquakes."
"Mary withdrew the loan from John."
"They undid the repair of the bridge."
"Bismarck lifted his oppression of Roman Catholics."
This applies to all effects, dependencies, and possessions, but not all event nouns:
*"She undid her reading of the paper." *"He undid his cutting of the wood."
(iv) The event noun can be qualified, sometimes more clearly than an adverbial can qualify a verb:
"They made a good repair to the bridge." "She took a brisk walk."
"John took a quick look at the report."
By the nature of an event noun, a verb constructed from it is specific.

## Creation Noun

Chapter 6. (The Creation Function) describes a transitive sentence whose resultant is something created:
"Philip built the house." $\quad \rightarrow \quad$ "The house is built."
"Anne wrote the letter." $\rightarrow$ "The letter is written."
"John painted the picture." $\quad \rightarrow \quad$ "The picture is painted."
"Eleanor carved the sculpture." $\rightarrow$ "The sculpture is carved."
The specific noun which is generally used to express creation is the created object:
"Philip erected this building." "This script is Anne's letter."
"John made this painting." "This carving is by Eleanor."
In Indonesian, a creation noun is formed from the creation verb by the suffix "-an"; the transitive prefix "men-" and suffix "-kan" are removed:

| "menulis" | "write" | "tulisan" | "writing/script" |
| :--- | :--- | :--- | :--- |
| "membangunkan" | "construct" | "bangunan" | "construction" |
| "melukiskan" | "paint" | "lukisan" | "painting" |
| "mengukir" | "carve" | "ukiran" | "carving" |

## Transport Noun

Any movement action, whether transitive or intransitive, can be expressed by a specific verbal noun, which can be called a transport noun:

| "They travelled to London." | "They made a journey to London." |
| :--- | :--- |
| "He arrived at the office on time." | "His arrival at the office was on time." |
| "She pushed at the door." | "She gave a push at the door." |
| "She turned into the drive." | "She made a turn into the drive." |

Russian: "On pokryl eto rasstoyanie odnim pryzhkom."
"He covered the distance in one leap."
A transport noun may be used to express the resultant location:
"He was in advance/in arrears of his time."

## Effect Noun

Chapter 6. (The Effect Function) describes an effect as an involuntary mental or physical state arising from an external cause:
"Baggage burdened down the car." $\rightarrow \quad$ "The car was heavy with baggage".
"The insult angered him." $\quad \rightarrow \quad$ "He was angry at the insult".
The effect can generally be expressed in the form of a specific attributive noun:
"the burden on the car"; "his anger at the insult"; "our surprise at the results";
"the pain to my leg"; "our worry about the future"; "the excitement of the audience";
"her happiness at seeing you"; "our disappointment at the outcome";
"the pollution of the building".
This effect noun can be employed whenever it is necessary to refer either to the state of the effect or the action which brings it about:
"Baggage placed a burden on the car." "The insult caused him anger."
The corresponding action nouns: "burdening", "angering", "paining", "disappointing", "polluting" etc are not generally used to refer to a specific event.

## Dependency Noun

Chapter 6. (The Dependency Function) describes a dependency as a physical state which may arise from some cause in the future:

> "The storm endangered the boat." $\rightarrow$ "The boat was in danger of sinking." "Subsidence places the building at risk of collapse." "The window was opened to the elements." "The building is at risk of collapse."
$\rightarrow \quad$ "The window is open to the elements."
The dependency can generally be expressed in the form of a specific attributive noun:
"the danger to the boat"; "the risk to the building"; "the opening in the window";
"the protection of the travellers"; "the defence of the town"; "the dependence of the Society"; "the threat to health".

This dependency noun can be employed whenever it is necessary to refer either to the state of the dependency or the action which brings it about:
"The storm put the boat in danger." "Subsidence places the building at risk."
"The shelter provided the travellers with protection."
"The castle was the chief defence of the town."
"The appeal refers to the dependence of the Society on donations."
"The threat from smoking is on the increase."
As the above examples show: "at risk", "in danger", "under threat", "at liberty", a dependency noun is often used as an attribute. However, there are exceptions; "opening" and "closure" are action rather than attributive nouns.

## Appliance

Chapter 6. (The Appliance Function) describes a transitive sentence which applies an artefact for its intended purpose:

$$
\begin{array}{lll}
\text { "He brushed the yard." } & \rightarrow & \text { "The yard was brushed clean." } \\
\text { "She sawed the } \log \text { in half." } & \rightarrow & \text { "The log was sawed in half." } \\
\text { "We painted the fence green." } & \rightarrow & \text { "The fence is painted green." } \\
\text { "She stored the china on the shelf." } \rightarrow & \text { "The china was stored on the shelf." }
\end{array}
$$

The respective appliances are "brush", "saw", "paint", "store". They are by their nature specific, and can be used to construct a transitive appliance sentence:
"He used the brush on the yard." "She used the saw on the log."
"We applied the paint to the fence." "She put the china into store."
Similarly, in an agential intransitive sentence, an agent can apply an appliance for his/her own benefit:

$$
\begin{array}{ll}
\text { "She bussed to work." } & \rightarrow \\
\text { "He sponged himself down." } & \rightarrow
\end{array} \text { "He was at work by bus." }
$$

The corresponding action nouns: "brushing", "sawing", "painting", "storage", "bussing", etc are not generally used to refer to a specific event.

## Participation

Chapter 7. (The Participation Function) describes a sentence in which an agent engages in an action towards an object, without altering or affecting it:
"She met her friend." "We attended the meeting." "They attacked the enemy."
"We resisted the proposal." "I worked on the batch." "We are seeking Mr Jones."
"She visited her neighbours." "They are playing chess."
"They rebelled against the Government." "He performed the ceremony."
These participation actions can in general be expressed by a specific verbal noun, called an participation, which can often be used to construct an participation sentence:
"She had a meeting with her friend." "They launched an attack on the enemy."
"I started work on the batch." "We are making a search for Mr Jones."
"She paid a visit to her neighbours." "They had a game of chess."
"Our attendance at the meeting is compulsory."
"Their rebellion against the Government succeeded."
"His performance of the ceremony was dignified".
Specific participation nouns occur frequently in languages, and usually derive from the corresponding participation verb:

Russian: "My dogovorilis' vstretit'sya pered teatrom."
"We arranged to meet in front of [the] theatre."
"Vstrecha byla dlya nikh oboikh neozhidannoi."
"The meeting was unexpected to both of them."
[Meeting was for them both unexpected.]
"Bol'she on ne mog soprotivlyat'sya." "He couldn't resist any longer."
[More he not could to-resist.]
"On ne okazal nikakogo soprotivlenie." "He made no resistance."
[He not made any resistance.]
Indonesian:
"Mereka menyerang musuh." "They attacked [the] enemy."
"serangan terhadap musuh" "[an] attack on [the]enemy"
"Mereka saling mengunjungi." "The visit each other." [They each-other visit.]
"kunjungan" " a visit"
Participation nouns are also often used to form participles of the participation verb:

```
"The meeting is in session." "Britain and France are at peace."
"We are at work on the project." "They are in attendance."
"She was in charge of the hospital." "He was in service to the King of Prussia."
```


## Inchoative Noun

Chapter 11. (The Inchoative Function) describes a sentence whose resultant sentence is that the subject or object engages in or ceases to engage in an action, whether voluntary or involuntary:
"She started to write." "She continued to write." "The water stopped boiling."
Inchoative verbs can be expressed as specific verbal nouns, which can be used to form inchoative sentences:

> "She made a start at the writing"; "She showed persistence in writing";
> "The boiling of the water came to an end".
> Persian: "šoru? kardand be jam? šodan" "They began to assemble."
> [Beginning they-made to assembly to-become.]
> Hindi: "garmiyā~ agle mahīne me~ surū ho~ $\vec{\imath} "$
> "The hot weather will begin during next month."
> [Hot-season next month-in beginning will-become.]
> "chuttī kal khatm hū̂" "The vacation finished yesterday."
> [Vacation yesterday end became.]

## Communication Noun

Communication (Chapter 8., the Communication Function) is a function in which an agent transfers a statement, proposal, opinion, or enquiry to a recipient. We can distinguish between what is communicated and the manner or process of its communication. What is communicated - the statement, proposal, opinion, or enquiry - is a possession which is transferred to the recipient. Many communication sentences do not refer to the manner of communication, only to what is communicated:
"He described the food as tasty." "She suggested a walk in the park."
"We complained about the heat." "They asked when dinner would begin."

As we shall discuss further in Chapter 15., what is communicated can be variously analysed as a perception, supposition, opinion, or enquiry. The manner of communication can be additionally expressed:
"He wrote that the food was tasty." "She spoke to suggest a walk in the park."
"We shouted our complaint about the heat." "The rang to ask when dinner would begin."
"It was announced that the train was due."
This manner of communication can be a separate event noun: "letter"; "speech"; shout", "call", which we can call a communication noun. As with other event nouns, use of an auxiliary can convert it into a verb:

> "His letter said..."; "She made a speech..."; We gave a shout..."; "They made a call..."; "The announcement was made...".

## Possession

The majority of relations between an object and a person (called a recipient) are possessive in nature. In Chapters 8. and 9., three types of dynamic sentence (called a transfer) are analysed which result in a recipient having access to an object, either material or mental:

- dative sentence, in which an agent or instrument transfers or gives an object to a recipient;
- receptive sentence, in which a recipient receives an object (with or without reference to an agent);
- adoptive sentence, in which an agent takes an object for his/her use or benefit.

The resultant stative relationship between the recipient and the object is expressed by a possession sentence.

We have also noted that in English a dative sentence is often constructed with the auxiliary verb "give", a receptive sentence with "get", "gain", or "receive", an adoptive sentence with "take", "find", or "accept", and a possession sentence with "have" or "feel". These auxiliaries connect the recipient to a noun which we can call a possession, which in turn is linked to the possessed object, in the construction "recipient-auxiliary-possession-object". The following examples of corresponding dative, receptive and possession sentences illustrate this point:

| "John gave possession of the car to Mary." | "Mary got possession of the car." |
| :---: | :---: |
| "Mary accepted the car." | "Mary has possession of the car." |
| "Mary gave a loan of £100 to John." | "John received a loan of £ 100." |
| "John took out a loan of £100." | "John has a loan of $£ 100$ from Mary." |
| "John gave the information to Mary." | "Mary gained access to the information." |
| "Mary took advantage of the information." | "Mary has use of the information." |
| "Mary gave John a look at the report." | "John got a look at the report." |
| "John took a look at the report." | "John has sight of the report." |
| "Mary's letter gave pleasure to John." | "John got pleasure from the letter." |
| "John took pleasure from the letter." | "John has pleasure in Mary’s letter." |
| "John's remarks gave confidence to Mary." | "Mary got confidence from John's remarks." |
| "Mary took confidence from his remarks." | "Mary has confidence in John's remarks." |
| "The menu gave Mary a choice of wines." | "Mary received a choice of wines." |
| "Mary took a choice of wines." | "Mary has a choice of wines." |
| "Travel gave me an interest in wildlife." | "I gained an interest in wildlife." |
| "I found an interest in the wildlife." | "I have an interest in wildlife." |

"He delivered the goods to his customer." "The company received delivery of the goods." "The company took delivery of the goods." "The company had the goods delivered."
"The company gave John a gold watch." "John received a gold watch from the company."
"John accepted a gold watch from the company."
"John has a gold watch from the company."
This construction is often possible even when there is a dedicated verb: "own", "lend", "use", "see", "hear", etc. Some possession relationships can only be expressed by a possession noun:

$$
\begin{aligned}
& \text { "They elected Mrs Jones as our Chairman." "We gained Mrs Jones as our Chairman." } \\
& \text { "We adopted Mrs Jones as our Chairman." "We have Mrs Jones as our Chairman." } \\
& \text { "They sold us a Ford Focus as our car." "We have got a Ford Focus as our car." } \\
& \text { "We bought a Ford Focus as our car." "We have a Ford Focus as our car." }
\end{aligned}
$$

English does not have a verb for "have as a loan", "have confidence in" "have as a choice", "have as a Chairman", "have as a car" etc. Similar examples can be listed for the categories of possession in Chapter 11.:
"The course gave me facility in German." "I obtained facility in German from the course."
"I tried to acquire facility in German." "I have facility in German."
"The bank is obliging me to pay my debts." "I am being placed under an obligation to pay my debts."
"I undertake an obligation to pay my debts." "I have an obligation to pay my debts."
"My friends gave me encouragement to play tennis"
"I received encouragement to play tennis."
"I became keen to play tennis." "I am keen to play tennis."
"My job gives me responsibility for debt collection."
"I received responsibility for debt collection."
"I took responsibility for debt collection." "I have responsibility for debt collection."

Since a possession is established by a transfer, a part of an object or person is not a possession, but a constituent (Chapter 6., The Constituent Function):
"He has three sisters." "My hair is white."
The possession noun has other uses in language. If a different set of auxiliary verbs is applied to it, we can indicate an action which leads to the recipient not having access to the object. Examples are "withdraw" instead of "give", "lose" instead of "get", and "reject" instead of "take". The consequent failure to possess the object is expressed by "lack" or "need":

```
"Mary withdrew the loan
    from John". }
"John lost the loan." } 
"John rejected the loan." }
```

The possession noun can be qualified: "Mary gave John a quick look at the report." "John took a quick look at the report." This qualification may be equivalent to an adverbial: "Mary quickly gave John a look at the report." "John quickly took a look at the report." However, in other cases it is not equivalent: "Mary sharply gave John a look at the report" is not "Mary gave John a sharp look at the report." However, "John took a sharp look" is evidently equivalent to "John sharply took a look". "John got a sharp look" is meaningful while *"John sharply got a look" is not.

Qualification of a possession noun in English therefore qualifies only the adoptive function, and enables a distinction to be made between it and an adverbial which qualifies the action, whether dative, receptive, or adoptive.

All languages include possession nouns in their vocabulary, often deriving verbs from them. The list of Indonesian verbs in Chapter 9. (The Adoptive Function) shows how that language adapts a possession noun to construct an adoptive verb. Indonesian also derives possession nouns from verbs:

| verb | noun |  |  |
| :--- | :--- | :--- | :--- |
| "membalas" | "reply" | "balasan" | "response" |
| "mengecamkan" "criticise" | "kecaman" | "criticism" |  |
| "membantu" | "help" | "bantuan" | "help" |
| "menuntut" | "demand" | "tuntutan" | "demand" |
| "mengeluh" | "complain" | "keluhan" | "complaint" |
| "melarang" | "forbid" | "larangan" | "prohibition" |
| "ingin" | "wish" | "keinginan" | "wish" |
| "harus" | "must" | "keharusan" | "necessity" |

Chinese often employs the same word for both the possession noun and the verb:
"Wŏ xīwàng rúcǐ." "I hope so."
"Tā shì wŏde wéiyī xīwàng." "She is my only hope."
"kàn zhiàopiàn" "[to] look [at a] photograph"
"Ràng wŏ kàn yi kàn." "Let me have a look." [Let me look a look.]
"gàosu tāmen zhège xiāoxi" "to inform them of the news" [inform them this news]
"Xièxie nǐ gàosu wŏ zhètiáo xìnxī." "Thank you for your information."
[Thank you inform me this message.]

## Benefit and Adversity

As discussed in Chapter 10., a sentence may express the idea that an object is available to a person, but does not state that it is in his/her possession:

> "The bank account is accessible to John."
"The view was visible to our friends."
"We had the opportunity to see his paintings."
"We had the good luck to arrive on time."
"He had great success as an estate agent."
"She had the advantage of a good education."
"This calculation is an example for you."
"It was easy/simple for him to write the letter."
"It was convenient for him to write the letter."
These sentences employ a number of different constructions which are also used in the possession sentence. They connect a person in the form of a beneficiary to a word which describes the availability of the object, and which can be expressed with a specific noun: "access", "visibility", "opportunity", "luck", "success", "advantage", "ease", and "convenience". These nouns can be called a benefit. In other sentences, the benefit is conveyed to the beneficiary by an agent:
"You were very kind to answer my letter so promptly."
"She was very generous in allowing him to borrow her car."
"He was very polite to his friend in allowing him to stay."
The benefits in these sentences are: "kindness", "generosity", and "politeness". A sentence in which an agent effects an action to his/her own benefit is a benefactive adoptive:
"She took the opportunity to see the paintings."
"He took advantage of the offer of a loan."
"He accessed his bank account."
"We took the calculation as an example."
The majority of sentences which express a connection between an object and a beneficiary do so with the word "for" or its equivalent. In those cases, the benefit is implied under the meaning "for the benefit of":
"Henry cooked lunch for his family."
"Sheila brought the accounts to good order for the Society."
"We bought Simon a bicycle." "We sold Mary's car for her."
"An email for you has just come in."
Alternatively, the benefactive connection is expressed with a genitive link:
"Henry's family's lunch was cooked."
"Sarah's garden was warmed up for her."
"Your email has just come in."
"James' back pain was eased."
A benefit may also be the purpose of an action:
"I came to see you" means: "I came to have the opportunity to see you";
"They fought for their freedom" means: "They fought to have the advantage of being free";
"She took the car to be mended" means: "She took the car for the benefit that it is mended".
A sentence may also express the idea of the disadvantage or misfortune of a person, which prevents him/her having a possession:
"She had the disadvantage of a poor education."
"We had the misfortune to arrive late."
"It was hard for him to write the letter."
"It was inconvenient for him to write the letter."
This disadvantage or misfortune can be effected by an agent:
"He was very rude in his behaviour towards his friend."
"Hitler was very cruel in his treatment of the Jews."
The disadvantage or misfortune can be expressed by a specific noun, called an adversity. The adversities in the above examples are "disadvantage", "misfortune", "failure", "difficulty", "inconvenience", "rudeness", and "cruelty". The person experiencing the adversity is again called a beneficiary. In many cases, the adversity is implied under the meaning "to the disadvantage of":
"Henry's wife has run away on him."
"Mary had smoke blown on her."
"The knife cut him on the hand."
An adversative adoptive is also possible:
English: "He failed as an estate agent."
German:"Er hat sich eine Verletzung zugezogen." "He has incurred an injury."
[He has to-himself an injury sustained.]
A warranty or insurance is a benefit that may arise or an adversity that may be avoided in the future:
"He guaranteed that the project will be completed in six months."
"He guaranteed that the project would last no longer than six months."
"She insured her house against fire for $£ 1$ million."

## Genitive Link

When a connection between a recipient and an object, via a possession, has been established, it may be referred to in a subsequent sentence:
"John’s loan of $£ 100$ has been repaid."
"Mary’s confidence in John was justified."
"Mary's choice of wines was confirmed."
"John's acquaintance with Shirley has been broken off."
"John's knowledge of the details is useful."
"Our teacher Mr Smith is away today."
"Our car is being serviced."
These entities are definite because the recipient is definite. Both the recipient and the possession are needed for the construction:
(i) The recipient is necessary to identify the entity. "The loan of $£ 100$ ", "the confidence in John", "the teacher Mr Smith", "the car", while meaningful, are not referenceable without knowing the identification of the recipient "John", "Mary", "we".
(ii) The possession noun is necessary to the meaning of the entity, which is not conveyed by the recipient and the object alone: "John’s £100", "Mary’s John", "Mary’s wines", "John’s Shirley", "John's details", "our Mr Smith".

The definite entity which expresses the connection between a recipient and a possession is called a genitive link. It has the structure "recipient-possession-object", and its purpose is to identify the possession. The recipient is a restrictive qualifier of the possession (Chapter 2., Restrictive Qualifier). It does not necessarily imply ownership, but varies with the character of the possession. In fact, it expresses the sentence which, expressly or by implication, set the relationship up. This sentence (here indicated with " $\leftarrow$ ") may be dative, receptive, or adoptive:

- "My wife Joanna" $\quad$ "I married Joanna".
- "Our house in Acacia Avenue" $\leftarrow \quad$ "We bought a house in Acacia Avenue".
- "Your opinions on politics" $\leftarrow \quad$ "You adopted some opinions on politics".
- "Our accountant" $\leftarrow \quad$ "We hired an accountant".
- "Her boat's name" $\leftarrow \quad$ "She named the boat".
- "Their reward" $\leftarrow \quad$ "They received a reward".
- "My liking for ice-cream" $\leftarrow$ "I took a liking to ice-cream".
- "His ideas on taxation." $\leftarrow$ "The book gave him some ideas on taxation."

The expressions "my house"; "your book" do not include the possession noun, and are potentially ambiguous. They could mean "the house where I am living/which I rent/which I own" or "the book which you own/have borrowed/have written". Such ambiguities may or may not be important, according to the circumstance.

A general possession may be identified by a specific recipient: "His sins were scarlet but his books were read." However, a specific possession cannot have a general recipient: "the philosopher's stone" is evidently general.

A genitive link is also used to express the connection between an object or person and a constituent:
"his three sisters"; "my white hair".
Some languages reflect this distinction by employing different genitive links for a possession and a constituent, which are sometimes called an "alienable" and "inalienable" possessions, although in our terminology only an alienable possession is a possession. For example in Polynesian languages:

```
Samoan:"'o le solofanua a Eti" "Ted's horse" [the horse of Ted] (possession)
    "'o le ulu o le tama""the boy's head" [the head of the boy] (constituent)
```

The Inuit possession has a suffix "-ut-". In their culture, a kayak is a constituent, not a possession:
Inuit: "piniartup niqiutaa" "the hunter's meat" [hunter-of meat-(possession)-his]
"piniartup qajaa" "the hunter's kayak" [hunter-of kayak-his]
In Italian, a genitive link is used to express a possession, not a constituent:
"Il suo negozio è molto redditizio." "[The] his shop is very profitable."
*"Lo schermo del televisore era rotto." "The TV set's screen was broken."
[The screen of-the TV set was broken.]
The second sentence is not correct, and should be:
"Il televisore aveva lo schermo rotto." [The TV-set had the screen broken.]
Similarly, the following expresses "His eyes are green":
"Ha gli occhi verdi" [He-has the green eyes],
not *"I suoi occhi sono verdi" [The his eyes are green].
The genitive link exists in all languages, and is expressed by a link word, a case, a rule of word order, or a possessive adjective:

Hindi: "us strī kā betā"" "that woman's son" [that woman-of son]
Russian:"dom brata" "my brother's house" [house of-brother]
Indonesian:
"kantor ayah saya" "my father's office" [office father me]
Arabic: "ḥiwāru l-ṭuršāni" "dialogue of the deaf" [dialogue the-deaf]
Serbian: "očev kaput" "father's coat [paternal coat].
The genitive link, being very concise, is also used to identify an transitive or intransitive event noun by reference to the agent:

- "Jane’s essay on linguistics" $\leftarrow \quad$ "Jane wrote an essay in linguistics."
- "Robert's trip to Cambridge" $\leftarrow \quad$ "Robert made a trip to Cambridge."
- "Jane's toothache" $\leftarrow \quad$ "Jane's tooth caused her pain."
- "Peter’s game of chess" $\leftarrow \quad$ "Peter played a game of chess."

However, the majority of these constructions, unlike a possessive genitive link, are ambiguous, because the originating sentence usually contains more than one identifying noun. "Your attack" can mean "the attack on you" or "the attack by you". "My risk of bankruptcy" can mean "my risk of falling bankrupt" or "my risk of causing someone else to fall bankrupt".

A genitive link is also used between two inanimate objects. Where one object is part of the other, the expression may be unambiguous:
"the roof of the house"; "the drawer's handle".
However, these connections do not derive from a transfer but from a transitive or intransitive sentence, in this case an appliance. A possession must involve an animate recipient:
"The house was supplied with a roof." "The drawer was supplied with a handle."
In general, a transitive or intransitive sentence contains more than one identifying noun. For that reason, a genitive link between them is more likely to be ambiguous:
"the vote on the motion", not *"the motion's vote";
"the paint on the cupboard", not *"the cupboard's paint".

The first could also mean "the vote for the motion". The second could also mean "the paint in the cupboard".

## Comitative Link

A genitive link is used to identify a possession or an event noun. Languages also need to identify a recipient from the possession that she or he has, and this is done with a comitative link, expressed by the link word "with" or (for the absence of a link) the word "without", or their equivalents. "With" can be understood as meaning "having":
"the lady with the little dog"; "the man with a ginger moustache";
"the passenger without a ticket".
A comitative link is only meaningful if the possession is definite. In the above phrases, this means that there is only one little dog, or ginger moustache, or only one person without a ticket. If the possession is general, it must therefore be a defined class which refers to the recipient, whether specific or general:
"a man of property"; "the three-toed sloth".
A comitative link can also act between two inanimate nouns on the same principle, but only where the connection between them is unambiguous. Generally, this only arises when one noun is part of the other:
"the house with two garages"; "the car without a number-plate".
Hungarian is unusual in having a concise form of the comitative link, expressed by attaching the suffixes "-s" or "-ú"/"-ü" to the possession:
"családos férfi" "man with a family" [family-having man] ("család" = "family")
"erdős terület""wooded area" ("erdő" = "forest")
"kertes ház" "house with a garden" [garden-having house] ("kert" = "garden")
"jó étvágyú beteg" "patient with a good appetite" ("etvágy" $=$ "appetite")
[good appetite-having patient]
"kék szemű kisfiú" "blue-eyed boy" [blue-eyes-having boy] ("szem" = "eyes")
Inuit employs the suffix "-lik" ("provided with"):
"iniartuq unaalik" "a hunter with a harpoon" [hunter harpoon-with]
"illu qarmalik" "a peat-walled house" [house peatwall-with].

## 13. The Discourse Analysis of Sentence Structure

## Summary

The purposes that a sentence fulfils in discourse are classified into seven discourse sentence types, expressed by a notation by which the sentence is described in terms of definite, indefinite, and indefinable entities, each represented by a variable called an element.

In this notation, elements are in the form $\{x\}$, meaning all entities which fulfil the function " $x$ ". \{definite\}, \{indefinite\}, and \{indefinable\} are elements which are respectively definite, indefinite, and indefinable as defined in Chapter 2. \{select $\}$ is a definite element which a sentence selects from a class of definite entities. \{circumstance\} is a definite restrictive qualifier which a sentence uses to identify an \{indefinite\} element from a class of indefinite entities. \{not\}, \{but\}, and \{query\} are discourse elements which are used for negation and enquiry.

An existential sentence introduces a new entity into a discourse.
$\left\{\right.$ indefinite - circumstance ${ }_{1}$ - $\left(\right.$ not - circumstance $\left.\left._{2}\right)\right\}$.
A statement provides new information concerning a topic, so that the information can be subsequently referred to. It either selects a definite entity in preference to other known entities (a selection statement), or identifies an indefinite entity by a restrictive qualifier (a circumstance statement). In either case the statement connects that entity to the topic.
$\left\{\right.$ definite $_{1}$ - select - (not - definite $\left._{2}\right)$ \}
$\left\{\right.$ definite $_{1}-$ indefinite - circumstance $-\left(\right.$ not - indefinable - definite $\left._{2}\right)$.
A definite negative statement denies a connection between a topic and a known entity, possible selecting an alternative.
$\left\{\right.$ definite $_{1}-$ not - definite $_{2}$ - (but - select $)$.
An indefinite negative statement denies the existence of an entity in connection with a topic. \{definite - not - indefinable\}.

A definite question asks whether a connection exists between a topic and a known entity, in preference to other known entities.
$\left\{\right.$ definite $_{1}$ - query - select - (not - definite $\left.\left.{ }_{2}\right)\right\} \quad\{$ definite - query - select - only $\}$.
An indefinite question asks whether a known entity exists in connection with a topic.
$\left\{\right.$ definite $_{1}$ - query - indefinable - $\left(\right.$ definite $\left.\left._{2}\right)\right\}$.
A hypothesis conjectures whether an entity may or may not exist in connection with a topic. \{definite - indefinable\} \{definite - not - indefinable\} \{definite - query - indefinable\}.

## Terms Defined or Introduced

Discourse element, discourse sentence type, discourse sentence structure, selection statement, circumstance statement, circumstance.

## Introduction

This chapter proposes some general principles on which a sentence uses the tools of a language to convey meaning within discourse. The first 5 chapters have been designed to lay the foundations for such an analysis. Chapter 1. describes the purpose of a sentence in discourse, and shows that it either introduces new information or refers to known information (a topic). With regard to a topic, a sentence may connect known information or supply new information (a comment), or request information (an enquiry), or express a hypothesis. Chapter 2. shows that, if a topic is to be meaningful, it must exist and must refer to an entity or class of entities whose identity is known. If a comment contains new information, the sentence assigns an existence and identity to it.

Chapter 3. examines a negative comment, an enquiry, and a hypothesis. A negative comment or an enquiry may deny or question the connection of known information to the topic. Alternatively, a negative comment, an enquiry, or hypothesis may deny that an entity exists, or enquire whether it exists, or hypothesise whether it might exist in connection with a topic.

Chapters 4. and 5. explore some grammatical concepts which appear to be generally valid for all languages, including concept word and auxiliary, and aspect and tense.

## Background

So far in this book, we have been using the terms "noun", "verb", "attribute", "subject", "verb", and "object" in a conventional or empirical sense outlined in the Introduction. While their application is quite clear in particular sentences such as:
"I read your book today"; "She went to London by train"; "The train is late";
or others of the almost unlimited number of sentences which any language can construct, it has proved difficult to generalise such concepts to all sentences and all languages. A set of basic linguistic terms, originally conceived to interpret the syntax of Latin and Ancient Greek, have been applied with reasonable success to analyse the languages of Western Europe. However, when linguists have attempted to employ the same concepts for other languages they have encountered difficulties, and could do so only by distorting or altering their meaning. Furthermore, a close analysis of some European languages encounters problems in applying the same ideas. For example, linguists have puzzled over what is the subject of the Italian:
"Mi piace cioccolato." "I like chocolate." [To-me pleases chocolate.]
Is it "chocolate", which is in object position, or "mi", which is a pronoun in dative case? On the same argument, what is the subject of the Japanese:
"Watashi wa Eigo ga wakaru." "I understand English." $\left[I_{\text {(topic) }} \text { English }_{\text {(subject) }} \text { is-understandable. }\right]^{23}$
or the subject or verb of the Russian:
"U menya kniga." "I have a book." [With me book.]?
More examples of similar constructions are given in Chapter 8. Chapter 6. (The Ergative Construction) gives examples of languages which mark an agent with an "ergative" case, and in which the object is unmarked and the verb may show grammatical agreement with it:

> Basque: "Elinek hondo hitzegiten du euskaraz." "Elin speaks Basque well." [Elin (agent) well speaking has in-Basque.] ${ }^{24}$
> Hindi: "usne kitāb likh $\vec{\imath} "$ "He wrote the book." $\left[\mathrm{He}_{\text {(agent) }}\right.$ book written.] ${ }^{25}$
> Inuit: "Akkam-ma aataaq aallaavaa." "My uncle shot the harp-seal." [Uncle-my ${ }_{(\text {agent }}$ harpseal shot-he-it.] ${ }^{26}$

Our definition of "subject" is not sufficiently robust to state what is the subject of such ergative sentences. They do not fit readily into the subject-verb-object pattern of European languages, in which the subject is unmarked, the object is often marked, and the verb may show agreement with the subject.

If we now examine the concept of "verb", we find that in many languages an adjective or locative can act as a predicate without the auxiliary "be":

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Arabic: "al-daw?u nāṣifun" "The light [is] clear." \({ }^{27}\)
Turkish: "Vesika kasada." "The document is in the safe." [Document safe-in.] \({ }^{28}\)
Indonesian:
    "Dia amat sangat kaya." "He [is] exceedingly rich." \({ }^{29}\)
Chinese:"Zhè ge fángjiān shí mĭ kuān." "This room is ten metres wide."
                                    [This unit room ten metre wide.] \({ }^{30}\)
Japanese:
    "Hon wa takai." "The book is expensive." [Book (topic) expensive.]
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Are these adjectives verbs, or are they adjectives acting as a predicate? European languages solve this conceptual problem by categorising "be" as a verb, so bringing this type of sentence in conformity with the "subject-verb-complement" pattern. However, that solution is not available for the examples above. Taking the illustration further, a number of languages do not use "be" even for identification expressions:

Arabic: "hāPulāPi hunna banāt̄̄̄" "These are my daughters." [These they daughters-my.] ${ }^{31}$
Indonesian:
"Ini keputusan saya." "This is my decision." [This decision me.] ${ }^{32}$
Akkadian had a form of the noun for use as a predicate. The following example is formed from the noun "šarrum" ("king") and the suffix "-āta" ("thou art"):
"šarrāta" "Thou art king." [King-thou]. ${ }^{33}$
In such a sentence, is "daughters" or "decision" or "king" a verb, or is it a noun acting as a predicate? How is it to be reconciled with the concept of "verb" as generally understood?

Similarly, many European languages possess a verb "have", but others employ a different construction for this concept. In these constructions, the subject and verb may not be evident:

> Finnish: "Rasialla on outo historia." "The box has a strange history."
> [Box-at there-is strange history.]

Hungarian:
"Jóska feleségének jó állása van." "Joska’s wife has a good job."
[Joska wife-his-to good job-her is.]
Welsh: "Y mae'r fasged gan Mair." "Mary has the basket."
[There-is the basket with Mary.]
Irish: "Tá gúna nua ag Eibhlín." "Eileen has a new dress."
[Is new dress at Eileen.]
Turkish: "Evin bahçesi var." "The house has a garden." [House-of garden-its there-is.]

Arabic: "lahu banūna fī 1-jāmifati" "He has sons in the University."

[^16]Hindi: "mere pās ek gāṝ̄ hai" "I have a car." [Me-with a car is.]
Maori: "He pōtae hou tō Hine." "Hine has a new hat." [A hat new the-of Hine.] ${ }^{34}$
Turning from the concepts of "subject", "verb", etc, similar problems are encountered with the one of the central principles of European sentence structure, the idea that a verb is either transitive or intransitive. We have already noted in Chapter 6 . that a supposedly transitive verb may be categorised by whether or not it alters its object:
"Mary wrote the letter", or not: "Mary obeyed the rules"
and have proposed confining "transitive" to the former category, which is sometimes called "factitive". In Chapter 7. (The Participation Sentence), we saw that examples of the second type can take a direct object in one language and an indirect object in another:

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French:"Je lui ai résisté." "I resisted him." [I to-him have resisted.]
Italian: "I ragazzi hanno ubbidito al professore."
        "The boys [have] obeyed [to] the teacher."
Russian: "Ona igraet na pianino." "She is playing [on the] piano."
Persian: "bar došmanan taxtand" "They attacked the enemy." [On enemy they-attacked.]
Hindi: "hamne duśman par hamlā kiyä" "We attacked the enemy."
        [By-us enemy-on attack made.]
Samoan:"Sa e va'ai ia Malia i le asō?""Have you seen [to] Mary today?"35
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Moreover, the same meaning can be conveyed with either a "transitive" or "intransitive" sentence in English:

| "She met her friend." | "She met with her friend." |
| :--- | :--- |
| "We attended the meeting." | "We came to the meeting." |
| "She tackled the problem." | "She dealt with the problem." |
| "I processed the batch." | "I worked on the batch." |
| "She visited her neighbour." | "She called on her neighbour." |

These inconsistencies bring into question the concept of "object". Is an object a target towards which the verb is working, or a patient which it alters?

Our contention is that resolution of the problem does not lie with searching for a yet more recondite general definition of "subject", "verb", etc. The terms are of course meaningful, but only with respect to particular functional sentence types. As we shall discuss in Chapter 15., there are about 37 such functional sentence types. Each one is made up of a number of different functional elements, and there is a minimum complement of functional elements for the sentence to be meaningful. For each sentence type, "subject", "verb", "object", etc have a different function, not necessarily the same in another sentence type. A "transitive" sentence such as:
"Mary planted the tree"
has no more in common with another "transitive" sentence such as:
"John's arrival pleased Mary" or "Mary heard a sudden noise"

[^17]than it has with an "intransitive" sentence such as "Mary got up" or "Mary felt ill" or "Mary has fair hair". The five sentences convey different things, and their elements have different functions.

Moreover, use of the terms "subject", "verb", "object" etc, has been confused with two other considerations. One arises from the fact that, in most sentences, the subject is the topic and the verb is the leading element in the comment. Definitions have accordingly attempted to reconcile "subject" as a topic, "subject" as the agent of a transitive verb, and "subject" as the patient of an intransitive verb. This reconciliation is not possible. As we shall see, the topic-comment structure is independent of the functional elements which make a sentence up, such as agent, action, state, patient, etc.

The second cause of confusion is the fact that, in many sentences, a subject is a person, an object is a thing, and a verb is an action. Definitions have accordingly attempted to reconcile "subject" as a person with "subject" as the instigator of an action, and "object" as a thing with "object" as an entity undergoing some process. Definitions of "verb" have tried to reconcile "verb" as an action, with "verb" as an auxiliary such as "be" or "have" which connects the subject to a quality or possession. Again, we do not believe that such reconciliations can be achieved. According to the sentence type, "subject", "verb", and "object" may be a person, object, action, state, or relationship, as the analysis in Chapters 15 . and 16 . will try to show.

## Overview

Our approach to this matter lies with recognising that construction and comprehension of a sentence occurs in five steps or layers, which in this analysis we take down to layer (iii) in Chapter 15.:
(i) Discourse structure, which makes a sentence meaningful in the context of previous sentences and expected future sentences in the dialogue or narrative.
(ii) An intervening step or layer which connects the discourse analysis with sentence function.
(iii) The structure imposed by the functional character of each sentence, of which there about 37 different types.
(iv) A further intervening step which step or layer, which realises the functional structure of the languages in grammar, vocabulary, and rules of word formation.
(v) The sentence itself.

This separation is the source of the ambiguity which we observed on the elements "subject", "verb", and "object". They have three purposes: marking the topic and comment (or other information), conveying the syntactic role of the word in the sentence, and referring to a person, object, action, possession, or state. These purposes are distinct and are performed differently in different sentences.

In this chapter, we are concerned with discourse analysis. Within a discourse, a sentence can have seven possible purposes, which have different effects on its analysis and the analysis of its elements:
(a) To introduce a new topic for discussion: an existential sentence.
(c) To make a statement about a topic which is already introduced or agreed.
(d) To deny a statement about an agreed topic: a definite negative.
(b) To deny the existence of an entity: an existential (or indefinite) negative.
(e) To ask a question as to whether a statement is true: a definite question.
(f) To ask a question as to whether an entity exists: an existential (or indefinite) question.
(g) To hypothesise as whether an entity exists or a statement is true.

Some of these purposes can be mixed. A question can be posed concerning a hypothesis, a statement can be made that a hypothesis exists, and a hypothesis can be supposed or proposed. This apparently complicated structure is simplified by the fact that all the meaningful elements in a sentence - which we called in Chapter 4. concept words - have to receive an identity in order to fulfil their purpose. An identity means that an element refers to an individual person, object, action, or state. Chapters 2 . and 3. showed that there are three forms of identity:

- definite: an entity is known to exist and is identified;
- indefinite: an entity is known to exist, but is not identified;
- indefinable: an entity is not known to exist.

We now introduce a formal notation which we will use for the rest of this chapter and the four following: $\{x\}$ refers to all that class of words (called elements) which fulfils the purpose " $x$ ". This notation assumes that $\{x\}$ is a clearly defined functional class, which can appear as an element in a sentence. All those functional classes to which the notation applies are defined in the Glossary at the end of this book.
$\{x-y-z \ldots\}$ represents a sentence whose elements are $\{x\},\{y\},\{z\}$, etc. Some elements are optional, and these are in brackets: $\{x-y-(z) \ldots\}$. Some elements can be combined, that is their function can be performed by a single word, and these are separated by "\": $\{x \backslash y-z \ldots\}$.

In a sentence $\{x-y-z \ldots\}$, each of the elements $\{x\},\{y\},\{z\}$, etc perform a different function. If a function is repeated, it is only represented once. For example, in "We had bread and jam for tea", and "She hopped and skipped down the road", "bread and jam" and "hopped" and "skipped" are each one function. Some sentence types contain the same functional class in two different capacities, and these are represented $\left\{\mathrm{x}_{1}\right\},\left\{\mathrm{x}_{2}\right\}$, etc.

Applying this notation, we denote as \{definite\}, \{indefinite\}, and \{indefinable\} all those words which are respectively definite, indefinite, and indefinable, and we call them discourse elements. However, these three elements do not adequately describe an existential sentence or a statement. We observe that in any existential sentence and in any statement concerning a topic, the speaker is selecting one or more entities from a class of possible entities for which the sentence might be true. To cover these purposes we introduce two further discourse elements:
\{select\} a definite entity which is selected from a class of possible definite entities;
\{circumstance\} a definite restrictive qualifier which identifies an indefinite entity from a class of hitherto unidentified entities.

These five discourse elements are not dependent on word order. Five further discourse elements \{not\}, \{but\}, \{query\}, and \{infer\} are dependent on word order. The seven structures of sentences in discourse analysis can be summarised in terms of these ten elements. We may term these seven structures the discourse sentence types:

## existential sentence

statement
definite negative
indefinite (existential) negative
definite question
indefinite (existential) question
hypothesis

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\{indefinite - circumstance \(_{1}\)
- (not - circumstance 2 ) \(\}\).
\(\left\{\right.\) definite \(_{1}-\) select \(-\left(\right.\) not - definite \(\left.\left._{2}\right)\right\}\) or
\{definite \({ }_{1}\) - indefinite - circumstance
\(-\left(\right.\) not - indefinable - definite \(\left.\left._{2}\right)\right\}\).
\(\left\{\right.\) definite \(_{1}\) - not - definite \(_{2}\) - (but - select) \(\}\).
\{definite - not - indefinable\}.
\(\left\{\right.\) definite \(_{1}-\) query - select \(-\left(\right.\) not - definite \(\left.\left._{2}\right)\right\}\).
\(\left\{\right.\) definite \(_{1}-\) query - indefinable \(-\left(\right.\) definite \(\left.\left._{2}\right)\right\}\).
\{definite - indefinable\}.
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\{not\} denies a connection between an element and a topic. \{but\} assets that a connection exists between an element and a topic, while \{not\} applies to other elements. \{only\} assets that no \{not\} exists. \{query\} enquires whether a connection exists or does not exist between an element and a topic. \{infer\} is an inference derived from another sentence (See Chapter 14., Inference).

Except for an existential sentence, \{definite\} is in each sentence type because every sentence other than an existential sentence has to have some connection with a previous one. A sentence cannot comprise only \{definite\} elements because then it would supply no new information. A negative sentence, a negative question, and a hypothesis cannot refer to something which exists but whose identity is not known, and therefore cannot include an \{indefinite\}, only an \{indefinable\}.

This summary reflects the material presented in Chapter 1., 2., and 3. Chapter 2. showed that \{definite\} includes a defined class of entities, that is a class of entities which is clearly distinguished
from other classes, called generic. \{Indefinite\} includes a class of entities not so distinguished, called nonspecific. The distinction can be illustrated by "eggs" in:
"I like eggs."
(generic)
"I ate eggs for breakfast."
(nonspecific)

The distinction can be of semantic importance, as we see with "Fridays" in:

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"On Fridays, meetings take place." (generic)
"Meetings take place on Fridays." (nonspecific)
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When an entity is qualified by a quantity, it is \{definite\} if the quantity is \{definite\}, and \{indefinite\} if the quantity is \{indefinite\}. A quantity is \{definite\} if the entities which comprise it are identified, for example:
"my five sisters"; "the six books which you borrowed; "the whole of the cake".
A quantity is \{indefinite\} if the entities which comprise it are not identified from other entities, for example:
"five of my sisters"; "six of the books which you borrowed"; "two-thirds of the cake".
In this way, discourse analysis leads to the identification of all concept words as \{definite\}, \{indefinite\}, and \{indefinable\}. For this purpose, concept words cannot be distinguished from auxiliary words which alter the function of concept words between person, thing, action, and state, for example:
"take a look" is the same as "look";
"at rest" is the same as "resting";
"have inside" is the same as "contain";
"go for a walk" is the same as "walk";
"be in haste" is the same as "hasten".
Discourse analysis also leads to the assigning of aspect to verbs. As shown in Chapter 5., aspect relates the occurrence of one sentence to the occurrence of a previous sentence or an immediately succeeding one:
"Mary was writing a letter when John came in."
"The weather having improved, Mary went out."
"Mary had just written the letter when John came in."
"Mary was about to write the letter when John came in."
Chapter 5. also shows that tense is a subsidiary function to aspect. All languages have some aspectual functions, but many do not indicate tense at all.

We now discuss the seven types of sentences in discourse analysis, and in particular how each type is realised in assigning an identity to concept words. We shall see that discourse analysis is a firm base for the analysis of sentence structure. In Chapter 14., we discuss how discourse structure both within and between sentences is realised through grammatical rules. In Chapter 15., we summarise the 37 or so different functional sentence types, and in Chapters 16. and 17. we shall find that our investigations have given us definitions of "subject", "verb", and "object" which should stand up to more robust scrutiny.

## Existential Sentence

Sentences can be divided into those which introduce an object for discourse, and those which discuss the object as a subject whose existence and identity are already understood, or believed to be understood, between the speaker and hearer. The first type of sentence is called existential. In the second, the object of the existential sentence has become the topic of a sentence which discusses it.

The discussion on the topic can take the form of a statement (comment), a question (enquiry), or a hypothesis.

An existential sentence therefore consists of an object and some background information which provides a context to the object and its existence. This background information or context can be a state, action, or relationship. In a language with an indefinite article such as English, an indefinite object is an alternative to a special existential auxiliary ("there is"):
"A pheasant is in the garden/is walking about in the garden/has taken up residence in the garden."
"There is a pheasant in the garden/walking about in the garden/which has taken up residence in the garden."

An existential object is \{indefinite\} by its nature. We cannot say: *"There is a London which is capital of Britain".

In a subsequent statement, the object of the existential sentence can become a \{definite\} topic:
"It [the pheasant] is a cock-pheasant/is under the trees/is eating the grass/has a companion."
Alternatively, subsequent sentences can be an enquiry or a hypothesis on the \{definite\} topic:
"When did it arrive?" "It may have come from Lord X's estate."
Since the object of an existential sentence is new information, it is by its nature \{indefinite $\}$. The purpose of the background information or context is to select the object from a class of possible indefinite entities, and in so doing to justify its existence. It can be paraphrased as "in these circumstances". We could call it \{definite\}, but that would not adequately describe its purpose, and we therefore require for it the different notation \{circumstance\}. An existential sentence can be represented:
\{indefinite - circumstance $\}$.
By its nature, \{circumstance\} is definite. The previous examples are not equivalent to:
*"A pheasant is in a garden/is walking about in a garden/has taken up residence in a garden."
Such a sentence introduces both the pheasant and the garden, and lacks clear meaning since no \{circumstance\} is present.

An existential sentence may also imply that the object does not exist in some other context:
"There is a pheasant in the garden, not in the wood."
"There is a meeting in the conference room, not the lecture hall."
The context that the \{circumstance\} expresses is therefore selected by the speaker from possible alternative contexts. However, the alternative contexts are not themselves selected, but rejected. They are therefore $\{$ definite $\}$. The structure can be extended to:
$\{$ indefinite - circumstance $-($ not - definite $)\}$.
As we have seen, the \{indefinite\} object of an existential sentence has the same position in an English sentence as the \{definite\} topic of a statement. It was pointed out in Chapter 2. that any statement which contains an indefinite entity can be reformulated as existential:

[^18]The difference between these sentences is not that the balance between existing and new information is different, but that one discusses existing information while the other introduces new information. As we shall see below (Statement), a statement with an \{indefinite\} comment has the discourse structure \{definite - indefinite - circumstance\}, the difference from an existential sentence being the addition of the $\{$ definite $\}$ topic.

The object of an existential sentence can be specific or general. If general, it states that the object exists as a class:
"There is a sixpenny-piece in your pudding." (specific)
"There is gold in those hills." (general)
Like English, many languages indicate that a sentence is existential by placing the \{indefinite\} element in topic position:

Italian: "Piove." "It is raining." [Rains.]
Finnish: "Ruokaa on pöydällä." "There is some food on the table."
$\left[\right.$ Food $_{\text {(partitive) }}$ is table-on.] ${ }^{36}$
Welsh: "Y mae llyfr ar y bwrdd." "There is a book on the table. [Is book on the table.] ${ }^{37}$
Irish: "Tá scoil nua ar bharra an choic." "There is a new school on top of the hill."
[Is school new on top of-the hill.] ${ }^{38}$

Arabic: "Pasbābun §adīdatun ?addat Rilā l-Rirja?i"
"There are numerous reasons which led to the postponement."
[Reasons numerous ${ }_{\text {(indefinite) }}$ led to the-postponement.] ${ }^{39}$
Chinese: "Xià yŭ le." "It is raining." [Fall rain now.] ${ }^{40}$
Others formulate the \{circumstance\} as a locative, and place that in topic position. This reverses the order to \{circumstance - indefinite\}:

Hindi: "Mez par pustak hai." "There is a book on the table." [Table-on book is.] ${ }^{41}$
Russian:"Na stole vaza." "There is a vase on the table." [On table vase.] ${ }^{42}$
Maori: "He wāhine kei roto i tērā rūma." "There are women in that room."
[Some women at inside of that room.] ${ }^{43}$
In order to distinguish an existential sentence from a locative sentence, many languages employ a specialist existential auxiliary, often originally a locative:

French: "Il y a beaucoup d'eau." "There is plenty of water."
German: "Es gibt fünf Bücher auf dem Tisch." "There are five books on the table."
"Es wurde noch lange diskutiert." "Discussion continued for a long time.,"44

[^19]Spanish: "Hay un gato en el tejado." "There is a cat on the roof." ${ }^{45}$
Italian: "C'è qualcuno alla porta." "There's someone at the door."
Turkish: "Köşede bir kahve var." "There is a café on the corner." [Corner-at a café there-is.] ${ }^{46}$

Malay: "Di seberang sungai ada rumah." "Across the river there is a house."
[Across river there-is house.] ${ }^{47}$
Chinese:"Jìngzi pángbiān yŏu yī pén huār." "There is a pot of flowers besides the mirror."
[Mirror besides there-is one pot flower.] ${ }^{48}$
Japanese:
"Kono machi ni wa nihonjin ga takusan imasu."
"In this town there are many Japanese."
[This town-in (topic) ${ }^{\text {Japanese-people }}{ }_{\text {(subject) }}$ many there-are.] ${ }^{49}$
By its nature, an existential sentence is stative. If it introduces an action, that action is not perfective.

## Existential Negatives and Questions

A negative existential sentence denies that an entity exists:
"There is no pheasant in the garden"; "There are no emails today".
It does not introduce an object for subsequent discussion, but denies that it is available for discussion. The object whose existence is denied is therefore not indefinite but \{indefinable\}. In English, the indefinable element can be marked with "any":
"There isn't any pheasant in the garden"; "There aren't any emails for you today".
The background information of a negative existential does not provide the circumstances under which the existence is denied, but a \{definite\} background. The sentence therefore has the discourse structure:

$$
\{\text { not }- \text { indefinable - definite }\} .
$$

An existential question asks whether an entity exists:
"Is there a pheasant in the garden?" "Is there an email for you today?"
The entity whose existence is questioned is also \{indefinable\}, and the sentence contains a \{definite\} background as does the negative existential question. Its structure is therefore:

$$
\text { \{query - indefinable - definite\}. }
$$

The existential verb is part of the \{indefinable\} element and may therefore be expressed as a hypothesis:

French: "Soit qu'il y a un faisan dans le jardin?"
"Might there be a pheasant in the garden?" 50

[^20]
## Statement

Intuitively, any speaker knows that a sentence is "about" something, which we call the topic, and that a statement refers to what it is "about" and conveys new information (the comment) concerning it. The topic can be implied if its identification is fully understood. "It's raining" need contain no topic if spoken between people in the same time and place. If spoken between people in different times or places, it needs a topic:

> "It's raining in Droitwich"; "It was raining that afternoon."

We showed at the start of this chapter some of the difficulties which arise from the rigorous use of "subject", "verb", and "object". While the conventional interpretation of these terms are clear for particular statements, they are not clear for others. Discourse analysis of a sentence does not have this disadvantage. Every statement has a topic and a comment, and the boundary between them is always discernable. The complication is that discerning it requires an understanding, not only of the sentence in isolation, but of its role in a particular discourse. To illustrate this, we need to divide statements into two types:

- Those comprising elements which are already identified in the mind of the speaker and hearer.
- Those which introduce an element not previously identified.

For the first type, our example is the spoken statement "I'm going off to work now":
(i) Uttered without emphasis, the statement has the topic "I" and comment "going to work now", and means "that's what I'm doing rather than anything else".

Uttered with emphasis on a word, as indicated here by an accent, it can acquire at least three further meanings:
(ii) "Í'm going off to work now" means "It's me rather than anyone else who is going". The topic is "going to work now" and the comment is "I'.
(iii) "I'm going off to wórk now" means "I'm going to work rather than shopping" (or the cinema, etc). The topic is "I'm going now" and the comment is "work".
(iv) "I'm going off to work nów" means "I'm off to work now rather in ten minutes' time", etc. The topic is "I'm going to work" and the comment is "now".

If the order of the words is altered, further meanings can be achieved without using verbal emphasis:
(v) "Now I'm going off to work" means "What I'm doing now is going off to work". The topic is "now" and the comment is "I'm going to work".
(vi) "Work, I'm going off to it now" has the topic "work" and means "I'm going off to it now rather than not at all."
(vii) "I'm going off now to work" has the same meaning as the third example above. The topic is "I'm going now" and the comment is "work".

The first of these examples is what is generally regarded as the "basic" meaning. However, all of the others are equally plausible. Together, they cover the principal purposes that the statement could fulfil in a real discourse between two or more people. They can be represented in terms of a grid:

| topic | $\underline{\text { comment }}$ | examples |
| :--- | :--- | :--- |
| I | going off to work now | (i) |
| Going off now to work now | I'm | (ii) |
| I'm going off now | to work | (iii), (vii) |
| I'm going off to work | now | (iv) |
| Now | I'm going off to work | (v) |

A speaker more usually envisages the statements as responses to a question, which may actually have occurred or may be hypothesised in the mind of the speaker:

| (i)/(v) | What are you doing now? |
| :--- | :--- |
| (ii) | Who is going off to work now? |
| (iii)/(vi) | Where are you off to now? |
| (iv)/(vi) | When are you off to work? |

In examples (ii), (iii), and (iv), in which a single word in the statement is the comment and the rest is the topic, the comment is what we called "focus" in Chapter 1. (Focus). In written English, the more usual way of expressing focus employs clefting:
"It's I who am off to work now"; "It's to work that I'm off to now";
"It's now that I'm off to work".
The topic of this, as of all sentences, is a unique \{definite\} entity. The comment is constructed by selecting one instance from a class of possible entities, all of which are known and identified to the speaker and hearer. The statement links that selected comment to the topic. We may test this purpose of a comment by applying the phrase "rather than". If we can say "rather than", the element concerned is part of the comment. If we cannot say "rather than", it is the topic.

In example (i), the topic is "I". The statement means "I'm going off to work now rather than doing anything else (such as sitting in the garden)". There exists a class of entities which is the things I might be doing, and the statement selects "going off to work" as the one that actually occurs.

In example (ii), there exist several people who might be off to work now. The topic is "off to work now". The statement selects " l " as the person who actually engages in that action.

In example (iii), the speaker knows that I'm going off somewhere, so that "I'm going off now" is the topic. The statement means "I'm going off to work now rather than to anywhere else (such as the shops)". There exists a class of locations to which I might be going, and the statement selects "work" as the actual one.

In example (iv), the speaker knows that I'm going to work at some time, so that "I'm going off to work" is the topic. The statement means "I'm going off to work now rather than some other time (such as in half an hour)". The exists a class of times when I might be off to work, from which the statement select "now".

In example (v), the topic is "now". There exist several things that might be happening now, such as having breakfast or reading the newspaper. The statement selects "I'm going off to work" as the actual occurrence.

In example (vi), the topic is "work". There exist several things which might occur with respect to work, such as "I've just resigned from it" or "I've just been promoted". The comment with regard to it is "I'm off there now".

How do we represent the comment of these statements in the notation we have adopted? We cannot say that it is \{indefinite\}, since each element of the comment is already known to exist and is identified in the mind of the speaker and hearer. We cannot simply denote the comment as \{definite\}, since \{definite - definite\} does not accurately describe the purpose of the statement. We require a notation which indicates that the statement has selected one definite element from a class, for which we propose \{select $\}$. Each of the above statements therefore has the structure:

$$
\text { \{definite }- \text { select }\} .
$$

If the statement contains a "rather than" element, it means that there is a possible \{definite\} comment (or several possible $\{$ definite $\}$ comments) which have been rejected, and which we can denote by:

$$
\left\{\text { definite }_{1}-\text { select }-\left(\text { not }- \text { definite }_{2}\right)\right\} .
$$

We may term such a statement a selection statement. The new information that it conveys is the connection between the topic and comment, which can then be referred to in a subsequent sentence: "I'll be on time to catch the bus" or "I'll have to do some overtime".

The word "only", in the sense of "excluding all other options", applies exclusively to the definite element of comments. In the case of selection statements, this means \{select\}. "I'm going only to work now", means "I'm not going anywhere else"; "work" is the comment and "I'm going to" is the topic. "Only I am going to work now" means the no-one else is going to work; "I" is the comment and "going to work now" is the topic. The selection statement can be expanded to:

$$
\{\text { definite - select - only }\} .
$$

We now turn to the second type of statement, in which a comment is introduced which is \{indefinite\}. It is belongs to a class of entities which is known to exist but has not previously been identified from that class. The purpose of the sentence is to assign an identity to the comment:
"The professor gave a lecture."
At first sight, this statement has the structure \{definite - indefinite\}. However, it is not very informative, as it does not contain sufficient information to distinguish the lecture from any other lecture which might be given. This can be supplied by a restrictive qualifier:
"The professor gave a lecture in the medieval French curriculum", or
"The professor gave a lecture at 10.30 in Hall A".
"Lecture" can now be the topic of a subsequent sentence, which without the qualifier it could not: "The lecture lasted an hour"; "She handed out some notes", etc. The qualifier performs this by selecting one piece of background information from a class, and implies therefore that alternative background information has been rejected:
"The professor gave a lecture in the medieval French curriculum (rather than in the modern French curriculum)."
"The professor gave a lecture at 10.30 in Hall A (not a tutorial at 11.00 in her study)."
The qualifier is therefore definite, and has the same purpose \{circumstance\} as the background of an existential sentence. If we disregard the rejected information, the sentence has the structure:
$\{$ definite - indefinite - circumstance\}.
We may term such a statement a circumstance statement. The new information that it conveys is again the connection between the topic and the comment, but unlike a selection statement the comment is identified by the statement and not previously. The \{definite\} topic distinguishes a circumstance statement from an existential sentence, which only has \{indefinite - circumstance\}, for example if the above sentences are expressed existentially:
"There was a lecture which the professor gave in the medieval French curriculum";
"There was a lecture which the professor gave at 10.30 in Hall A".
We now consider the information which is potentially rejected in a circumstance statement. This can be an alternative circumstance:
"The professor gave a lecture in the medieval French curriculum, rather than in the modern French curriculum."
"The professor gave a lecture at 10.30 in Hall A, not at 11.00 in her study."
However, this alternative circumstance is not selected from a range of possible alternatives. The sentence is simply saying that the event did not occur in that connection, which is therefore not \{circumstance\} but \{definite\}. Such a sentence is therefore:
$\left\{\right.$ definite $_{1}$ - indefinite - circumstance $^{-}\left(\right.$not - definite $\left.\left._{2}\right)\right\}$.
Or, the rejected information can be an alternative indefinite comment with the same \{circumstance\}:
"The professor gave a lecture, not a tutorial, in the medieval French curriculum."
"The professor gave a lecture, not a seminar, at 10.30 in Hall A."
In that case, since the rejected information (the tutorial or seminar) is not shown to exist, it is \{indefinable\}, and the sentence is:
\{definite - indefinite - (not - indefinable) - circumstance $\}$.
Or, the rejected information can be both an alternative indefinite comment and an alternative circumstance:
"The professor gave a lecture in the medieval French curriculum, not a tutorial in the modern French curriculum."
"The professor gave a lecture at 10.30 in Hall A, not a seminar at 11.00 in her study."
The full structure is accordingly:

$$
\left\{\text { definite }_{1}-\text { indefinite }^{-} \text {circumstance }-\left(\text { not }- \text { indefinable }- \text { definite }_{2}\right)\right\} .
$$

We now revert to our earlier theme, the boundary between the topic and comment of a circumstance statement. As with a selection statement, the boundary can be discerned by considering to what question (real or hypothetical) the statements are a reply. If the question is:
"What did the professor do?",
the topic of the statement is "the professor" and the remainder is the comment. In that case, "professor" is \{definite\} and both "gave" and "lecture" are \{indefinite\}. If the question is:
"What lecture did the professor give?",
the topic of the statement is "the professor gave" and the remainder is the comment. In that case, both "professor" and "gave" are \{definite\} and "lecture" is \{indefinite\}.

We have remarked that "only", in the sense of "excluding all other options", applies exclusively to the definite element of comments. In the case of circumstance statements, this means \{circumstance\}. "The professor gave a lecture only in the medieval French curriculum" means that he/she did not give a lecture in any other curriculum, and has the structure:

$$
\{\text { definite - indefinite - circumstance }- \text { only }\} .
$$

"Only the professor gave a lecture in the medieval French curriculum" is only meaningful if there is only one lecture in that curriculum, and the professor has been identified. "The professor gave only a lecture in the medieval French curriculum" employs "only" in the different sense of "merely".

It can be argued that there are many circumstance statements where the \{circumstance\} element is omitted:
"She picked up her pen." "She went for a walk."
However, these statements generally anticipate or follow other statements which provide the \{circumstance\}:
"She picked up her pen and started to write." "She went for a walk as she did every evening." Similarly, there are statements in which the identity of the object is unimportant:

## "Henry is baby-sitting;" "Sheila is flat-hunting;" "Jane is looking for a pen".

As we argue in Chapter 2. (Generic and Nonspecific Concepts), "baby", "flat", and "pen" in these sentences are not specific indefinite words, but nonspecific. They do not refer to a particular entity, but to a class of entities whose limits are not specified. The sentences assign them to a generic class: "the babies that Henry is sitting for"; "the class of flats that Sheila is hunting for"; "the type of pens which Jane is looking for". In this way, "baby", "flat", and "pen" are general \{indefinite\}, and become general \{definite\} through the $\{$ circumstance $\}$ of the sentences.

Because of the different purposes of the comment of a selection statement and circumstance statement, it is probable that they do not overlap. If a statement contains an indefinite entity, any definite entity in the comment is not a \{select\} but a \{circumstance\}. If the statement does not contain an indefinite entity, the comment is a $\{$ select $\}$.

Chinese does not have a means of indicating that an entity is definite or indefinite. It compensates for this by the general practice of placing definite elements before the verb and indefinite elements after it:
"Māo zài năr?"" "Where are the cats?" [Cats at where?]
"Tā xǐhuan māo." "She likes cats."
Alternatively, an indefinite element before the verb is marked by "yŏu" ("there is") :
"Yŏu yī gè xuésheng zhànle qịlái." "A student stood up." [There-is one unit student stand ${ }_{\text {(aorist) }}$ did up-come.]

In addition, Chinese employs the particle "le" at the end of a sentence to indicate that unexpected new information is presented. Such unexpected information is necessarily indefinite:

$$
\begin{gathered}
\text { "Wŏ bù chōuyàn." "I don’t smoke." "Wŏ bù chōuyàn le." "I don’t smoke any more" } \\
\text { [I not smoke.] } \\
\text { "T not smoke (new).] }
\end{gathered}
$$

The second of each of these pairs of sentences implies: "There is smoking that I did do, but no longer"; "There is studying for four years which I have done."

English has the general rule that the topic appears at the start of a statement and the comment appears at the end. A similar rule applies in German, Spanish, Italian and other languages, but with greater flexibility:

> "Das Konzert findet heute abend im Rathaus statt."
> "The concert takes place this evening in the town hall."
> [The concert takes today evening in-the town hall place.]
> "Im Rathaus findet heute abend ein Konzert statt."
> "The town hall hosts a concert this evening." [In-the town hall takes today evening a concert place.] ${ }^{52}$
> "Mi secretario ha escrito una carta." "My secretary's written a letter."
> "Esta carta la escribió mi secretaria." "It was my secretary who wrote this letter." [This letter it wrote my secretary.]
> "Possiamo esserle utili." "We can be helpful to you." [We-can be-to-you helpful.]
> "Possiamo esserle utili noi." "It's we who can be helpful to you."

[^21][Can be-to-you helpful we.]
"Sua moglie è venuta a respondermi." "Your wife came to reply to me."
[Your wife is come to reply-me.]
" $\bar{E}$ venuta a respondermi sua moglie." "It was your wife who came to reply to me."
[Is come to reply-me your wife.]
In other languages such as Welsh, the comment occurs first, and the construction is similar to clefting in English:

> "Collodd y dyn ei fag ar y trên ddoe." "The man lost his bag on the train yesterday."
> [Lost the man his bag on the train yesterday.]
> "Ei fag a gollodd y dyn ar y trên ddoe."
> "It was his bag that the man lost on the train yesterday."
> [His bag which lost the man on the train yesterday.] ${ }^{54}$

In other languages such as Hungarian, the comment is placed in front of the verb:

$$
\begin{aligned}
& \text { "Én akarok beszélni Kristóffal."" "I want to talk [to] Christopher." } \\
& \text { "Én beszélni akarok Kristóffal." "I want to tálk to Christopher." } \\
& \text { [I to-talk want Christopher.] } \\
& \text { "Én Kristóffal akarok beszélni." "I want to talk to Chrístopher." } \\
& \text { [I Christopher want to-talk.] } 5 \text { " }
\end{aligned}
$$

Other languages such as Chinese do not depend on word order, but mark the focus with special words, again reminiscent of the clefting construction. "Shì means "be", but is here a focussing particle:

```
"Wŏ zuótiān lái." "I came yesterday." [I yesterday came.]
"Wŏ shì zuótiān lái de." "I came yésterday." [I (focus) yesterday came (focus).] }\mp@subsup{]}{}{56
```


## Negative Statement

A negative statement does not supply new information concerning a topic; it denies that some information regarding the topic is true. If the information might be true, but is not, then the information exists and can be identified, and the sentence is one we call a definite negative in Chapter 3. (Negatives). If the information cannot be true, then it does not exist, and the sentence is one we call an indefinite negative in that chapter.

If we take some examples of definite negatives, the topic and comment can be reversed without any change of meaning, although there is a change in their discourse function:
$\begin{array}{ll}\text { "Mr Smith is not Prime Minister." } & \text { "The Prime Minister is not Mr Smith." } \\ \text { "Mr Smith did not hear your remark.", "Your remark was not heard by Mr Smith." } \\ \text { "Mr Smith did not catch the } 8.12 \text { train." } & \text { "The } 8.12 \text { train was not caught by Mr Smith." }\end{array}$
The comment of the sentences is definite, but has not been selected from a class of possible entities. A definite negative therefore has the discourse structure:

$$
\left\{\text { definite }_{1}-\text { not }- \text { definite }_{2}\right\}
$$

in which the two \{definite \} elements are distinguished by the use of $\{$ not $\}$. The first of each of these sentences could be extended to be:
"Mr Smith is not Prime Minister, but Foreign Secretary";
"The Prime Minister is not Mr Smith, but Mr Jones".

[^22]The "not $x$, but $y$ " of these sentences is the negative way of expressing the " $x$, rather than $y$ " of a selection statement, which would be:
"Mr Smith is Foreign Secretary, not Prime Minister";
"The Prime Minister is Mr Jones, not Mr Smith".
If this \{but \} element is included, a definite negative is therefore:

$$
\left\{\text { definite }_{1}-\text { not }- \text { definite }_{2}-(\text { but }- \text { select })\right\} .
$$

According to our approach, the sentence:
"Mr Smith is not only Prime Minister, but also Foreign Secretary"
involves two separate $\{$ definite - select\} sentences: "Mr Smith is Prime Minister; Mr Smith is Foreign Secretary".

If we take some examples of indefinite negatives, the topic and comment can only be reversed as a negative existential:

$$
\begin{array}{ll}
\text { "Mr Smith is not a teacher." } & \text { "There is no teacher who is Mr Smith." } \\
\text { "Mr Smith did not go to work by train." } & \text { "There is no train which Mr Smith took to work." } \\
\text { "Mr Smith did not eat breakfast." } & \text { "There is no breakfast which Mr Smith ate." }
\end{array}
$$

Although the comments of these indefinite negatives are marked as indefinite, it is clear that they do not exist and are therefore \{indefinable\}. An indefinite negative therefore has the same discourse structure as a negative existential:
\{definite - not - indefinable\}.
Many languages use different constructions to distinguish a definite negative (first example) and indefinite negative (second example):

German:"Wir fahren morgen nicht ans Meer." "We're not driving to the sea tomorrow." [We drive tomorrow not to-the sea. $]^{57}$
"Sie will niemand Armen heiraten." "She doesn't want to marry anyone poor." [She wants no-one poor to-marry.] ${ }^{58}$

Welsh: "Nid wyf i yn byw yn y wlad." "I do not live in the country."
[Not am-I in living in the country.]
"Nid oes dim car gennyf i." "I haven't a car." [Not there-is no car with me.] ${ }^{59}$
Russian:"Ya ne chitayu pis'ma." "I am not reading a/the letter." [I not read letter ${ }_{\text {(genitive) }}$.]
"Ya ne videla nikogo iz moikh druzei." "I saw none of my friends."
[I not saw none ${ }_{\text {(genitive) }}$ of my friends.] ${ }^{60}$
Arabic: "lam Raltaqi bihi min qablu" "I have not met him before."
[Not I-met with-him before.]
"lā đilma lahu bi-?asbābi hāðihi l-muṣādarāti"
"He has no knowledge of the reasons for these confiscations."
[No knowledge for-him at reasons these the-confiscations.] ${ }^{61}$
Chinese: "Tā bā diăn yĭqián zuò bù wán zuòyè."
[He won't be able to finish his homework by 8 o'clock."

[^23][He eight o'clock before do not finish homework.] "Wŏ méi qùguo Běijīng." "I have never been to Beijing."
[I there-is-not going-have Beijing.] $]^{62}$
The nature of an indefinite negative is shown by the use of the subjunctive when the indefinable element is qualified:

German:"Wir kennen niemanden, der jetzt in der Lage wäre, diese Aufgabe zu übernehmen." "We know no one who is now in a position to take over this assignment."
[We know no-one, who now in the position would-be (subjunctive), this assignment to take-over.] ${ }^{63}$

Italian: "Non ha chi lo possa aiutare." "He has nobody who can help him."
[Not he-has who him can ${ }_{\text {(subjunctive) }}$ help.] ${ }^{64}$
Hungarian:
"Nincs kivel kártyázzak." "I have nobody to play cards with."
[There-is-not who-with I-play-cards $\left.{ }_{\text {(subjunctive) }}\right]^{65}$
Russian:"Ya ne vstrechal cheloveka, kotoryi by ne slykhal o Tolstom."
"I have never met a man who has not heard of Tolstoy."
[I not met man, who ${ }_{\text {(subjunctive) }}$ not heard of Tolstoy.] ${ }^{66}$

## Questions

A question asks whether a statement concerning a topic is true. If the statement connects two definite entities, of which one is the topic, the question is whether that connection exists. Such a question is called a definite question in the terminology of Chapter 3. (Questions). If the statement introduces a new entity and asserts that it is connected with the topic, the question is whether that new entity exists, and it is an indefinite question in that chapter.

A definite question can be posed without any change of meaning (but with a change in its discourse function) if the topic and comment are reversed:

| "Is Mr Smith Prime Minister?" | "Is the Prime Minister Mr Smith?" |
| :--- | :--- |
| "Did Mr Smith hear your remark?" | "Was your remark heard by Mr Smith?" |
| "Did Mr Smith catch the 8.12 train?" | "Was the 8.12 train caught by Mr Smith?" |

The reply to such questions (if positive) is a selection statement:
"Mr Smith is Prime Minister." "The Prime Minister is Mr Smith."
We have seen that a selection statement implies an expressed or understood "rather than" function, which can also be part of the corresponding question:
"Is Mr Smith Prime Minister, not Foreign Secretary?"
"Is the Prime Minister Mr Smith, not Mr Jones?"
A definite question has therefore the same structure as a selection statement, but with the \{query\} element included:

$$
\begin{aligned}
& \{\text { definite }- \text { query }- \text { select }\} \text {, or } \\
& \left\{\text { definite }_{1}-\text { query }- \text { select }-\left(\text { not }- \text { definite }_{2}\right)\right\} .
\end{aligned}
$$

[^24]The enquirer may not know which of the possible alternative answers is correct:
"Is Mr Smith Prime Minister or Foreign Secretary?"
"Is the Prime Minister Mr Smith or Mr Jones?"

Such a question introduces the discourse element \{or\} which is discussed further in Chapter 14. (Alternative):
$\left\{\right.$ definite - query - select $_{1}-$ or - select $\left._{2}\right\}$.
This structure of a definite question is illustrated clearly by those questions which ask for the identification of a single element in the sentence:
"Whom did you see today?" "When does the meeting start?" "Whose is that umbrella?"
"Which book have you chosen?" "How did you find that out?" "Why did you agree?"
The part of these questions which is not the question word is believed by the enquirer to be known information (the topic), and is therefore \{definite\}. The respondent is invited to select from a list of possible definite answers, which may be large or small:
"I saw John and Ted, but not James." "The umbrella belongs to Joan, not Susan."
These questions therefore again have the structure $\{$ definite - query - select \}, but cannot have the \{not\} element.

We now turn to the structure of an indefinite question. If the comment of an indefinite question is in topic position, it can only be posed in existential form:

| "Is Mr Smith a teacher?" | "Is there a teacher who is Mr Smith?" |
| :--- | :--- |
| "Did Mr Smith go to work by train?" | "Was there a train which Mr Smith took to <br> work?" |
| "Did Mr Smith eat breakfast?" | "Was there a breakfast which Mr Smith ate?" |

Although the comments of these indefinite questions are marked as indefinite, it is not clear that they exist and they are therefore \{indefinable\}. An indefinite question therefore has the same discourse structure as an existential question:
\{definite - query - indefinable\}.
An indefinite question usually asks whether an \{indefinable\} entity exists in some \{definite\} context, which may be the topic but often is not:
"Is Mr Smith a teacher at the local school?" "Did Mr Smith go to his work by train?"
This is:
$\left\{\right.$ definite $_{1}-$ query - indefinable $-\left(\right.$ definite $\left.\left._{2}\right)\right\}$.
An indefinite question may pose one or more alternatives:
"Is Mr Smith a teacher or an assistant at the local school?"
"Is Mr Smith a teacher at the local school or at the technical college?"
"Did Mr Smith go to his work by train or by bus?"
"Did Mr Smith go to his work or to the seaside by train?"
These questions use the element $\left\{\begin{aligned} \\ \}\end{aligned}\right.$ which is discussed in the next chapter:

$$
\begin{aligned}
& \left\{\text { definite }_{1}-\text { query }- \text { indefinable }_{1}-\text { or }- \text { indefinable }_{2}-\text { definite }_{2}\right\} \\
& \left\{\text { definite }_{1}-\text { query }- \text { indefinable }- \text { definite }_{2}-\text { or }- \text { definite }_{3}\right\} .
\end{aligned}
$$

The nature of an indefinite question is shown by the use of the subjunctive when the indefinable element is qualified:

French: "As-tu un seul ami qui soit fidèle?" "Have you one friend who is ${ }_{\text {(subjunctive) }}$ true?", ${ }^{67}$
Italian: "Non c'è nessuno qui che sappia suonare il pianoforte?"
"Isn't there anyone who can (subjunctive) play the piano?" ${ }^{68}$
Spanish: "¿Sabes de alguien que tenga apellido en este país?"
"Do you know anyone in this country who has a surname?"
[Know-you of anyone who has ${ }_{(\text {subjunctive })}$ surname in this country?] ${ }^{69}$
Any "yes"/"no" question, definite or indefinite, can be expressed in negative form, since by its nature it is posing a negative and a non-negative statement as alternatives: "Are you not getting off the bus?". The only difference is that the questioner is expecting a negative reply.

## Hypothesis

A hypothesis is an action, state, possession, or identification whose reality is uncertain at the time the sentence is uttered:
"We may have hit the jackpot." "We may be rich." "We have a large fortune."
"We may be on the moon." "We may be the lost tribes of Israel."
The agent or object to which the hypothesis relates is usually stated; since it is the topic, it is \{definite\}. Even if no topic is stated, it is implied; "It may be raining" implies "It may be raining now". Since the existence of a hypothesis is uncertain, it is \{indefinable\}, and the structure of a hypothesis is:

$$
\text { \{definite - indefinable }\} .
$$

The subjunctive is a construction available to some languages to indicate that an action or state is hypothetical:

[It-may-be that we-go (subjunctive) tomorrow that him we-see ${ }_{\text {(subjunctive). }}{ }^{\text {.] }}$
Persian: "šayad beravam" "Perhaps I shall go." [Perhaps I-go (subjunctiv).]
We have already noted that a hypothesis can be something whose existence is denied or questioned, whose sentence structures have the additional elements \{not\} and \{query\}:

$$
\{\text { definite }- \text { not }- \text { indefinable }\} \quad\{\text { definite }- \text { query }- \text { indefinable }\} .
$$

In addition, a hypothesis can also be something whose occurrence is dependent on another hypothesis:
French: "Je viendrai au cas que je soit libre demain."
"I shall come in case I am (subjunctive) free tomorrow." ${ }^{, 70}$
Spanish: "Si viniera, me quedaría." "If he were to come ${ }_{\text {(subjunctive) }}$, I'd stay (conditional).,""
German:"Wir wären weggegangen, wenn wir daß gewußt hätten."
"We would have (subjunctive) gone away if we had known $_{\text {(subjunctive) }}$ that.," ${ }^{, 72}$

[^25]Italian: "Glielo venderò purché mi paghi bene."
"I'll sell it to him so long as he pays me well."
[To-him-it I'll-sell provided-that me he-pays ${ }_{\text {(subjunctive) }}$ well.] ${ }^{73}$
Irish: "Dá bhfeicfinn é, do labharfainn leis."
"If I saw (conditional) him, I would speak (conditional) to him."/
"If I had seen him, I would have spoken to him." ${ }^{74}$

"If you had bought a lottery ticket, you might have won."
[If you-had bought lottery, it-is-possible that you had ${ }_{(\text {subjunctive) }}{ }^{\text {Won. }}{ }^{75}$
Russian: "Esli by ya znala, ya by vam skazala." "If I knew, I should tell you."
$\left[\text { If }_{\text {(conditional) }} \text { I knew, } I_{\text {(conditional) }} \text { should you tell. }\right]^{76}$
Persian: "ta inra naxanid namifahmid" "You will not understand this until you read it."
[Until this (object) not-you-read $_{\text {(subjunctive) }}$ not-you-understand.] ${ }^{77}$
This construction, called a conditional, is analysed further in Chapter 14. (Condition).
Chapter 15. (The Dependency Sentence) and (The Relief Sentence) describe sentence types for the incurring and relief of hypothetical risks to an object or patient.

Chapter 15. (The Supposition Sentence) and (The Communication Sentence) describe sentence types whereby a person supposes or communicates a hypothesis concerning an object.

[^26]
## 14. The Syntax of Sentence Discourse

## Summary

The previous chapter analyses sentences by their relation with previous and successive sentences within a discourse or narrative, as occurs in actual speech. Discourse structure classifies sentences into seven discourse sentence types: existential sentence, statement, definite negative statement, indefinite negative statement, definite question, indefinite question, and hypothesis. This chapter describes in greater detail how discourse structure is expressed.

The seven discourse sentence types are realised by grammar, in the form of conventions of word order, grammatical words, and inflexions of each language. These rules distinguish a topic from a comment, enquiry, or hypothesis, and identify a word as definite, indefinite, or indefinable. A word can be identified by connecting it with another identified word, in a structure called a restrictive qualifier. Such a connection is made for that sentence only.

It is also a purpose of discourse to mark a verb as dynamic or stative, and to relate its occurrence to the occurrences of other sentences in the discourse. Dynamic verbs can be imperfective, perfective, prospective, or of independent occurrence (aorist). Verbs can also be marked as occurring earlier or later than expected. These features of a verb are its aspect.

It is also a purpose of discourse to mark a word as specific or general, a feature which is independent of aspect. The \{circumstance\} of a nonspecific comment can be qualified in a way that the \{circumstance\} of a specific indefinite comment cannot.

A further purpose of discourse is to indicate that a statement or question is or is not a consequence of another statement or question, and the extent to which the consequent statement or question is probable. This feature of a sentence is called its inference. Inference can be applied to a definite or indefinite comment, but not one which is indefinable. A question or negative statement can be inferred, but not the element which is questioned or negated.

A sentence may be compounded from two or more sentences with the same topic or the same comment.
$\left\{\right.$ definite $_{1}-$ and - definite $_{2}-$ select $\}\left\{\right.$ definite $_{1}-$ and - definite ${ }_{2}-$ indefinite - circumstance $\}$
$\left\{\right.$ definite - select $_{1}-$ and - select $\left._{2}\right\} \quad\left\{\right.$ definite - indefinite $_{1}-$ and - indefinite $_{2}-$ circumstance ).
A sentence may be true for one, two or more topics or two or more comments.
\{definite ${ }_{1}-$ or - definite $_{2}-$ select $\}\left\{\text { definite }_{1}-\text { or }- \text { definite }_{2} \text { - indefinite }- \text { circumstance }\right\}^{\text {}}$
$\left\{\right.$ definite - select $_{1}-$ or - select $\left._{2}\right\}$ \{definite - indefinite $_{1}-$ or - indefinite $_{2}-$ circumstance .
The grammar for realising all these features of discourse structure are independent of those realising the function of a sentence.

## Terms Defined or Introduced

Aspect, addition, alternative, clause, inference.

## Introduction

Chapter 13. analyses sentences by their relation with previous and successive sentences within a meaningful discourse or narrative, as occurs in actual speech. Using the notation introduced in that chapter, a sentence contains information which is:

- known, so connecting with previous sentences \{definite\};
- new, but relating to entities which are known to exist \{indefinite\};
- new, and relating to entities whose existence is not established \{indefinable\}.

This discourse analysis classifies sentences into seven structures or discourse sentence types: existential sentence, statement, definite negative statement, indefinite negative statement, definite question, indefinite question, and hypothesis. For this purpose, the additional elements \{select\}, \{circumstance\}, \{not\}, \{but\}, and \{query\} are required.

To express this discourse structure in meaningful sentences, languages requires grammatical rules which identify the purpose of each word in discourse and relate the sentence to previous and successive sentences. These rules are realised through rules of word order and through grammatical words or equivalent inflexions, as presented in Chapter 4. and 5. Concept words express a concept in the world, and are different from grammatical words which express the relations between them. Rules of word order have the same effect as grammatical words, but are more limited in application. Grammatical words include auxiliaries, which fulfil the purpose of concept words but obtain their meaning by attachment to concept words with a different purpose.

In Chapter 15., sentences are analysed on a different basis, that of their functional structure. The purpose of this chapter is to show that this functional structure is independent of discourse structure and the grammar needed to realise it.

## Topic, Comment, Enquiry, and Hypothesis

Chapter 13. (Statement) summarises the principle rules of word order which languages use to identify a topic and to distinguish it from an existential object and comment. Other languages use a topic particle or, for ergative languages, a case:

```
Japanese:
    "Sumisu-san wa Amerika kara kita." "Mr Smith came from America."
                        [Smith-Mr America-from came.]
    "Amerika kara wa Sumisu-san ga kita." "Mr Smith came from America."
    [America-from (topic) Smith-Mr (subject) came.] }\mp@subsup{}{}{78
Hindi: "usne kitāb likhï""He wrote the book." [He (agent)}\mathrm{ book written.]
Inuit: "Akkam-ma aataaq aallaavaa." "My uncle shot the harp-seal."
    [Uncle-my (agent)}\mp@subsup{\mathrm{ harpseal shot-he-it.]}}{}{\prime
```

In most languages, the topic is in first or second position in the sentence, for example in comparing an active and passive:
"The student read the book"; "The book was read by the student".
As discussed in Chapters 1. and 13., the placing of an element in focus is an inversion of the usual topic-comment construction. In topic-comment, one word or phrase is the topic and the rest of the sentence is the comment. In topic-focus, one word or phrase is the comment and the rest of the sentence is the topic. Focussing is achieved in three principle ways. One is by clefting:

French: "C'est ton frère qui le dit." "It's your brother who says so."
[It's your brother who it says.] ${ }^{79}$
Irish: "Is inné a tháinig sé." "It was yesterday that he came." [Is yesterday that came he.] "Is sinn-ne a raghaidh isteach ar dtúis." "[It] is we who shall go in first." ${ }^{80}$

Turkish: "Iki senedir bu evde oturuyor." "It is two years that he has lived in this house."

$$
\text { [Two year-is this house-in he-lives.] }{ }^{81}
$$

[^27]Inuit:
"Aqaguuna Hansip pulaarniaraatigut." "Is is tomorrow that Hansi will visit us?" [Tomorrow-that Hansi ${ }_{\text {(agent) }}$ visit-will-participle-he-us?] ${ }^{82}$

The second is by placing the focus element in an unusual position:
Inuit: "Piniartup puisi pisaraa." "The hunter caught the seal."
(unstressed)
[Hunter ${ }_{\text {(agent) }}$ seal catch-he-it.]
"Piniartup pisaraa puisi." "It was a seal which the hunter caught." [Hunter ${ }_{\text {(agent) }}$ catch-he-it seal.]
"Puisi pisaraa piniartup." "It was the hunter who caught the seal." [Seal catch-he-it hunter $\left.{ }_{(\text {agent })}\right]^{83}$

The third is by a focus or topic particle:
Finnish: "Viime sunnuntainahan Kalle syntyi." "It was last Sunday that Kalle was born." [Last Sunday-on (focus) Kalle was-born.] ${ }^{84}$

Malay: "Dialah memberitahu saya." "It was he who informed me."
$\left[\mathrm{He}_{\text {(focus) }}\right.$ informed me.] ${ }^{85}$
Chinese:"Shì wŏ dă pò zhèi gè bēizi de." "I was the one who broke this cup."
$[\text { (focus) } \text { I hit break this unit cup (focus). }]^{86}$
Tagalog:"Aalisin ng tindero ang bigas sa sako para sa babae."
"The rice will be taken out of a sack for the woman by the storekeeper."
[Will-be-taken a storekeeper the rice from sack for-to woman.] ${ }^{87}$
Japanese:
"Morita-san ga kita no wa Tōkyō kara da."
"It was from Tokyo that Mr Morita came."
[Morita-Mr $\mathrm{H}_{\text {(subject) }}$ coming (topic) Tokyo-from is.] ${ }^{88}$
Negatives generally require a \{not\} word, as already noted. Questions can be marked through word order or through a \{query\} particle:

Russian: "Byl li on v teatre?" "Was he at the theatre?" [Was query he at theatre?]
Arabic: "hal tarā Ranna ðālika Ramrun jayyidun" "Do you think that is a good thing?" [Query you-think that that matter good?] ${ }^{89}$

Persian: "aya in ketab ast?" "Is it this book?" [Query this book is?] ${ }^{90}$
An \{indefinable $\}$ element can be marked with a discrete word or an inflexion:
Italian: "Glielo venderò purché mi paghi bene."
"I'll sell it to him so long as he pays me well."
[To-him-it I'll-sell provided-that me he-pays ${ }_{\text {(subjunctive) }}$ well.] ${ }^{91}$
Russian: "Esli by ya znala, ya by vam skazala." "If I knew, I should tell you."

[^28]$$
\left[\text { If }{ }_{\text {(conditional) }} \text { I knew, } \mathrm{I}_{\text {(conditional) }} \text { to-you told. }\right]^{92}
$$

## Identity

While the grammatical rules for marking topic, comment, enquiry, and hypothesis are sufficient for that purpose, they are not sufficient for identifying every word in a sentence. The topic of a sentence is definite by its nature, but the other sentence elements may comprise a mixture of definite, indefinite, and indefinable words:
(i) In "I have eaten an apple this morning" and "I have eaten the apple this morning", the topic is " I " and the comment, or new information, is "have eaten". In addition, the first sentence informs the hearer of the existence of an apple while the second sentence refers to an apple previously identified.
(ii) In "I have not eaten an apple this morning" and "I have not eaten the apple this morning", the topic is " I " and the comment, or new information, is that "have not eaten". In addition, the first sentence denies that an apple existed while the second sentence denies the eating of an apple previously identified.
(iii) In "Have you eaten an apple this morning?" and "Have you eaten the apple this morning?", the topic is "you" and the enquiry is "have eaten?". In addition, the first sentence questions whether an apple existed while the second sentence questions the eating of an apple previously identified.

Discourse structure therefore requires that each word in a comment, enquiry, or hypothesis is marked for identity. In some languages, this is done solely by inference. As shown in Chapter 2., it may also be done by a definite or indefinite article, as in the above examples, or by other grammatical means:

Hungarian:
"Hallgatta az operát." "She listened ${ }_{\text {(definite) }}[$ to] the opera."
Serbian: "Ovo je mladi čovek o kojem sam ti pričala."
"This is the young man about whom I spoke to you."
[This is young (definite) ${ }^{\text {man }}$ about whom I-am to-you spoken.] ${ }^{93}$
Turkish: "Öküzü aldı." "He bought the ox." [Ox (accusative) $h e-b o u g h t.]^{94}$
Chinese:"Tā bă shū fàng hăo le." "She placed the books in good order." [She the book put good $\left.{ }_{\text {(aorist) }}\right]^{95}$

Inuit: "Atuakkat atuarpai." "He read the books." [Books read-he-them.] ${ }^{96}$
Alternatively, a word can be marked as definite by a restrictive qualifier, that is by attachment to another definite word:
"My friends sat down to table."
"The friends whom we saw that morning sat down to table."
In the first example, "friends" becomes definite through qualification by a definite pronoun, "me". In the second example, "friends" becomes definite through qualification by a sentence "we had seen (them) that morning", structured as a relative clause. The relative clause does not supply new information, but contains known information which serves to identify "friends".

[^29]Notice that the relative clause "we saw (them) that morning" identifies its unstated object "them" with the agent "friends" of the principal clause, an identification which is set up solely for the individual sentence. Neither the principal nor the relative clause has any effect on the functional structure of the other.

Relative clauses are facilitated by relative pronouns:
Italian: "la ragazza a cui scrivo" "the girl to whom I am writing"
"il pittore, i cui quadri sono famosi" "the painter whose pictures are famous"
Arabic: "jalasa 1-rajulu llāð̄̄ yataḥadda日u" "The man who is talking sat."
[Sat the-man the-one he-is-talking.] ${ }^{97}$
Persian: "mardhai ke ketabhara be anha dade budid raftand"
"The men to whom you gave the books went."
[Men-the who books ${ }_{\text {(object) }}$ to them given you-were went.] ${ }^{98}$
Indonesian:
"Beberapa orang yang dikirimi surat belum menjawab."
"Several of the people who were sent letters have not yet replied."
[Several people who were-sent letter not-yet reply.] ${ }^{99}$
Swahili: "Nimeijibu barua iliyokuja jana."
"I have answered the letter which came yesterday."
[I-have-it-answered letter it-did-which-come yesterday.] ${ }^{100}$
Individual nouns ("John", "London") possess an inherent identity. A pronoun may stand for a definite or indefinite word (Chapter 2., Pronoun):

Italian: "Ce li trovarai." "You'll find them there." [There them find-will-you.]
Hungarian:
"előttem" "in front of me" [in-front-of-me] ${ }^{101}$
"a füzetemből" "out of my notebook" [the notebook-my-from] ${ }^{102}$
Russian: "v sadu ya uvidela chto-to tëmnoe." "I saw something dark in the garden."
[In garden I saw something dark.] ${ }^{103}$
Malay: "Yang sudah dipakai tidak bisa dikembalikan." "The used ones can't be returned."
[Which have been-used not can bereturned.] ${ }^{104}$

Japanese:
"Watashi wa kuroi no ga hoshii." "I want a black one."
$\left[I_{\text {(topic) }}\right.$ black one ${ }_{(\text {subject })}$ is-wanted.] ${ }^{105}$
Swahili: "Umekileta kitabu?" "Have you brought the book?" [You-have-it-bring book?] ${ }^{106}$

[^30]
## Addition

Many sentences connect a single topic to more than one comment, or more than one topic to a single comment:
"Paul ate an apple and a pear from the basket." "Paul and Philip saw the rainbow."
Since these sentences describe more than one action or state, they are in reality two sentences, linked by the discourse element $\{$ and $\}$, meaning "and in addition":
"Paul ate an apple $\{$ and $\}$ Paul ate a pear."
"Paul saw the rainbow \{and\} Philip saw the rainbow."
In reality, it is not necessary to restate the common elements, and the sentences are usually expressed:
"Paul ate an apple \{and\} a pear. Paul \{and \} Philip saw the rainbow."
Such a sentence is a compound sentence. In terms of discourse structure they can be summarised:
\{definite - indefinite $_{1}$ - and - indefinite $_{2}-$ circumstance $\}$
$\left\{\right.$ definite $_{1}-$ and - definite $_{2}-$ select $\}$.
Similarly, if we choose slightly different topics or comments, for example:
"Paul ate the apple and the pear. Paul and Philip saw a rainbow in the sky"
we have the parallel structures:
$\left\{\right.$ definite - select $_{1}-$ and - select $\left._{2}\right\} \quad\left\{\right.$ definite $_{1}-$ and - definite $_{2}-$ indefinite - circumstance $\}$.
If both a topic and a comment contain \{and\}, ambiguity arises because it is not clear which topic applies to which comment. In:
"Jane and Edna saw Paul eating an apple and a pear"
it is not clear whether one apple and pear were seen to be eaten, or two. Languages resolve this problem with the words "together" and "each" or their equivalents, which indicate how \{and\} is to be understood:
"Jane and Edna together saw Paul eating an apple and a pear" means:
"Jane \{and\} Edna saw Paul eating an apple and a pear"
$\left\{\right.$ definite $_{1}-$ and - definite $_{2}-$ indefinite - circumstance $\}$
"Jane and Edna each saw Paul eating an apple and a pear" means:
"Jane saw Paul eating an apple and a pear \{and\} Edna saw Paul eating an apple and a pear"
$\left\{\right.$ definite $_{1}-$ and - definite $_{2}-$ indefinite $_{1}-$ and - indefinite $_{2}-$ circumstance .
When applied to a negative, $\{$ and $\}$ means that neither event happened:
"Paul did not eat an apple or a pear" means "Paul \{not $\}$ ate an apple $\{$ and $\}$ ate a pear."
$\left\{\right.$ definite - not - indefinable $_{1}-$ and - not - indefinable $\left._{2}\right\}$.
Similarly, when applied to a question, \{and \} means that both events are queried:
"Did Paul eat an apple and a pear?" means "Paul \{query\} ate an apple \{and\} ate a pear." $\left\{\right.$ definite - query - indefinable $_{1}$ - and - query - indefinable $\left._{2}\right\}$.

## Alternative

The discourse element $\left\{\begin{array}{c}\text { or }\} \text { indicates that a statement is true for either one of two (or more) entities, }\end{array}\right.$ which may be \{definite\} or \{indefinite\}. If the entities are \{definite\}, the alternative relates to the topic:
"John or Henry is in the pub"; "John or Henry is in a pub";
$\left\{\right.$ definite $_{1}-$ or - definite $_{2}-$ select $\}\left\{\right.$ definite $_{1}-$ or - definite $_{2}-$ indefinite - circumstance $\}$. or to the comment, and hence to the element $\{$ select $\}$ :
"John is in the pub or the cafe"";
$\left\{\right.$ definite - select $_{1}-$ or - select $\left._{2}\right\}$.
If the alternative entities are \{indefinite\}, the selection is according to the \{circumstance\}, which generally determines which alternative is adopted. There is therefore only one \{circumstance\}:
"John is in a pub or a café (according to the time of day)";
"John is English or Welsh (by nationality)".
The structure is:
$\left\{\right.$ definite - indefinite $_{1}-$ or - indefinite $_{2}-$ circumstance .
The element \{or\} cannot meaningfully be applied to both the topic and the comment of the same sentence. *"John or Henry is in the pub or the café" conveys no information.
\{or\} can be applied to a definite negative or definite question:
"John is not in the pub or the café." "Neither John nor Henry is in the pub."
"Is John in the pub or the café?" "Is John or Henry in the pub?"
The element \{or\} cannot be applied meaningfully to an \{indefinable\}. "We have no apples or bananas" means "We have no apples and we have no bananas", and "or" has the same meaning as \{and\}. We have already observed this in the previous section:
"Paul did not eat an apple or a pear" means "Paul $\{$ not $\}$ ate an apple $\{$ and $\}$ ate a pear."
Conversely, "and" when applied to a negative implies an $\{$ or $\}$ construction:
"Paul did not eat (both) an apple and a pear" means
"Paul ate an apple $\{$ and $\}\{$ not $\}$ a pear $\{$ or $\}$ ate a pear $\{$ and $\}\{$ not $\}$ an apple."
"Paul did not eat (both) the apple and the pear" means
"Paul ate the apple $\{$ and $\}$ not $\}$ the pear $\{$ or $\}$ ate the pear $\{$ and $\}$ not $\}$ the apple."

## Stative Relations

When a sentence expresses movement, or a state arising from movement, the movement generally constitutes new information and the word expressing movement can express the comment:
"We came to London"; "We were arrived in London".
For a sentence which expresses a state or condition without any reference to movement, the condition generally constitutes the new information and can express the comment, even if a stative auxiliary such as "be" is not used:

Russian: "Gorod krasiv." "The city is beautiful" [City beautiful.]

Hungarian:
"Ez a ház hatalmas." "This house is huge." [This the house huge.]
Arabic: "al-daw?u nāṣi¢un""The light [is] clear."
Turkish: "Vesika kasada." "The document is in the safe." [Document safe-in.]
Chinese:"Zhè ge fángjiān shí mĭ kuān." "This room is ten metres wide."
[This unit room ten metre wide.]
Japanese:
"Hon wa takai." "The book is expensive." [Book (topic) expensive.]
If the comment is a person or thing with which the sentence identifies the topic, and the auxiliary "be" is not available, the only way in which topic and comment can be distinguished is by word order:

Turkish: "Kızın adı Fatma." "The girl's name is Fatima." [Girl-of name-her Fatima.] ${ }^{107}$
Arabic: "hā?ulā?i hunna banātī" "These are my daughters." [These they daughters-my.] ${ }^{108}$
Indonesian:
"Ini keputusan saya." "This is my decision." [This decision me.]
"Harimau itu binantang liar." "The tiger is a wild animal." [Tiger the animal wild.]
Alternatively, the comment can be marked with a case to show that it is indefinite:
Russian:"Moi brat byl uchitelem." "My brother was [a] teacher (instrumental). ."
"Odnoi iz nashikh glavnikh problem byl transport."
"One ${ }_{\text {(instrumental) }}$ of our main problems was transport." ${ }^{109}$
If the comment is a person or thing, and the relationship with the topic is one of possession, then word order is generally not sufficient to indicate meaning, and an auxiliary "have" or its equivalent must be used:

French: "Il a beaucoup d'argent." "He has plenty of money."
"J'en ai peur." "I am afraid of him." [I of-him have fear.]
German:"Wir haben ein neues Auto." "We have a new car."
"Ich habe Hunger." "I'm hungry."
Greek: "E $£ \omega$ بóvo $\tau \rho \varepsilon \iota \varsigma \lambda i ́ \rho \varepsilon \varsigma . " ~ " I ~ h a v e ~ o n l y ~ t h r e e ~ p o u n d s . " ~$
Persian: "do bab xane darad" "He has two houses." [Two unit houses he-has.] ${ }^{110}$
For many languages, "have" is a locative function of the possessor:
Russian:"U menya novyi kostyum." "I have a new suit." [With me new suit.]
Hungarian:
"Jóska feleségének jó állása van." "Joska’s wife has a good job."
[Joska wife-his-to good job-her is.] ${ }^{111}$
Welsh: "Y mae'r fasged gan Mair." "Mary has the basket."

[^31]$$
\text { [There-is the basket with Mary.] }{ }^{112}
$$

Irish: "Tá gúna nua ag Eibhlín." "Eileen has a new dress." [Is new dress at Eileen.] ${ }^{113}$
Other languages repeat the topic:
Indonesian:
"Rumah besar itu rumah Tomo." "That big house is Tomo's." [House big that house Tomo.]

The function of the possessive sentence is discussed further in Chapter 15. (The Possessive Sentence).
A state or condition is sometimes expressed by attaching an auxiliary (which we have called a converse link) to a noun expressing that state or condition. In English, these are generally adapted locatives:

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"at risk"; "at rest"; "in flight"; "in haste"; "in awe"; "on schedule".
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## Dynamic Sentences

Every dynamic sentence implies a sentence which describes the state after the action is completed, and every stative sentence implies an action which caused the state to arise:

```
"They became hungry." "They were hungry."
"They sat down to table." "They were seated at table."
"They looked at the menu." }->\mathrm{ "They saw the menu."
"They ordered lunch." "Their lunch was on order."
"The ate lunch." "Their lunch was eaten."
```

In the case of physical occurrences, the action is physical, and the distinction between the dynamic and stative expressions is clear. For mental occurrences, this distinction is often less evident:
"He took pleasure in the conversation."
$\rightarrow \quad$ "He was pleased with the conversation."
"He was frightened by the dark." $\rightarrow$ "He was afraid of the dark."
"He obeyed the rules." $\quad \rightarrow \quad$ "He was obedient to the rules."
The manner in which an action is performed can sometimes be expressed by an attribute of the agent. The origin of such an attribute in a dynamic sentence may not be important:
"They were sincere in their expressions of regret."
"You were very kind to answer my letter so promptly."
In many languages a passive construction, in which an object rather than an agent is the topic, has the same form whether it is dynamic or stative:
"Lunch was ordered"; "Lunch was eaten".
Russian: "Pis'mo podpisano ministrom." "The letter has been/is signed by a minister." [Letter signed by-minister.] ${ }^{114}$

While the distinction between dynamic and stative sentences is often essential to meaning, its principal purpose is to relate the occurrence of the sentence to the previous and following sentences, as will be shown in the following section (Aspect). Movement is principally a feature of the discourse structure rather than the internal functional structure of the sentence.

Movement is often expressed by auxiliaries attached to an event noun or attribute:

[^32]English: "They fell in love." "We put them to flight." "She got very cold."
Irish: "Tá sé ag gearradh adhmaid." "He is cutting wood." [Is he at cutting of-wood.]
"Táid ina luí ar an urlár." "They are lying on the floor."
[They-are in-its lying on the floor.] ${ }^{115}$
Turkish: "Bu iki eseri mukayese ediyor." "He is comparing these two works."
[These two works (object) comparison he-is-making.] ${ }^{116}$
"Öksürük oldu." "He's caught a cough." [Cough he-became.]
Hindi: "mai~ nau baje darvāzā band kartā hū̃"" "I close the door at nine o'clock." [I nine o'clock door closed making am.]
"laṛke ne pūrā pannā paṛh diyā" "The boy read out the entire page."
[Boy-by entire page reading gave.] ${ }^{117}$

## Japanese:

> "Watashi wa chūkoguko o benkyō shite iru." "I am studying Chinese."
> $\quad\left[\mathrm{I}_{\text {(topic) }}\right.$ Chinese $_{\text {(object) }}$ study doing there-is.]
> "Yamada wa teigaku ni natta." "Yamada got suspended from school."
> [Yamada ${ }_{\text {(topic) }}$ suspension-in became. $]$ "18

Similarly, an auxiliary is often attached to an action word to express a causer, initiator, or preventer of the action:

> "The fire caused us to flee." "The noise made us jump."
> "The printer started to print." "They went on walking." "We stopped talking."

## Aspect

As already mentioned, a sentence expresses movement primarily in order to relate its occurrence to the occurrences of preceding and following sentences:
"They were hungry when they sat down to table."
"While seated at the table, they looked at the menu."
"Having seen the menu, they ordered lunch."
"Before eating lunch, they had a drink."
"When lunch arrived, they ate it."
The first two of these examples describe a state during which an action occurs. The third and fifth describe an action which follows the completion of another action. The fourth example describes an action in anticipation of another action. This ability to sequence states and actions is called aspect, and is described in Chapter 5. (Aspect). Because aspect connects the sequence of sentences, it is part of their discourse structure. It is as important to language comprehension as other features of discourse structure, and is built into the grammar of most or all languages.

Aspect is a property, not of one sentence but of its relation with other sentences. When two or more sentences are connected as a compound sentence, we use the term clause to designated each part. If the first clause of the above examples is expressed as a separate sentence, it possesses meaning but in discourse terms is incomplete:
"They sat down to table." "They were seated at the table." "They had seen the menu."
"The were about to eat lunch." "Lunch had arrived."

[^33]In each case, the hearer asks him/herself "so what". To place the sentences in a discourse, we need to add the sentences which follow (the main clause). The occurrence of a clause or sentence, that is the time over which it occurs, therefore relates its aspect to the aspect of other clauses or sentences. The clause "They were hungry" describes a state which exists when the main clause takes place: "They sat down". Its aspect is stative. "They were seated at the table" has an occurrence which is still proceeding when the main clause occurs: "They looked at the menu". Its aspect is imperfective. The occurrences of the clauses "They had seen the menu" and "Lunch had arrived" are complete, but have an effect on the main clauses when those occur: "They ordered lunch"; "They ate lunch". Their aspect is perfective. The clause "They were about to eat lunch" describes an event which has not yet occurred but is expected when the main clause occurs "They had a drink". Its aspect is prospective. The main clauses themselves have an occurrence which is complete and is not related to any following sentence. Their aspect is aorist.

The clauses of the examples express different actions or states and are therefore separate sentences, which are connected aspectually through the use of conjunctions or participles. The functional structures of each clause are independent of each other. In "They were hungry when they sat down to table", the "they" of the first clause is a recipient and the "they" of the second clause is an agent. Similarly, in "While seated at the table, they looked at the menu", the "they" of the first clause is the object of a locative while the "they" of the second clause is again an agent. In both cases, the two "theys" are identified solely as a convenience in representing the discourse.

For the first four examples, the clauses are gerunds (Chapter 5., Gerund), in that they describe the state or condition of the subject of the following clause. For the last example, although the clause does not describe the state or condition of the subject of the following clause, it appears to describe the state or condition of its topic, and could as well be expressed: "When lunch arrived, it was eaten by them." If we broaden the definition of gerund to mean a clause which describes the state or condition of the topic of a subsequent clause, then all these sentence have the structure "gerund - sentence".

It can be seen that the aspectual function (other then aorist) is a property of the gerund, not of the main clause. The gerunds are stative, imperfective, perfective, or prospective, while the main clause is aorist. Since both the gerund and the main clause are separate sentences, they have the standard discourse structures $\{$ definite - select $\}$ or $\{$ definite - indefinite - circumstance $\}$. In order to describe this aspectual relation in discourse, we may employ the following elements in the gerund:

$$
\begin{array}{ll}
\{\text { state }\} & \text { a state not arising from a previous action; } \\
\text { \{imperfect }\} & \text { an action or state which is still proceeding; } \\
\text { \{perfect }\} & \text { a state arising from a previous action; } \\
\text { \{prospect }\} & \text { an action which is about to occur; } \\
\{\text { aorist }\} & \text { a completed action not resulting in a state. }
\end{array}
$$

Since aspect is a relation of a sentence with its successor, discourse requires that only the gerund has aspect in these examples. The main clause only needs aspect if it is connected to the occurrence of a subsequent sentence. Assuming that this is not so, the aspect of the main clause can be described with \{aorist\} or not at all. This notation results in the following pattern, the last sentence being understood as "When lunch arrived, it was eaten by them":

```
"They were hungry when they sat down to table."
\(\left\{\right.\) definite/circumstance \({ }_{1}-\) indefinite - state \(\} \quad\left\{\right.\) definite \(_{1}-\) select - aorist \(\}\).
"While seated at the table, they looked at the menu."
\(\left\{\right.\) definite \(_{1}-\) select - imperfect \(\}\left\{\right.\) definite \(_{1}-\) select - aorist \(\}\).
"Having seen the menu, they ordered lunch."
\(\left\{\right.\) definite \(_{1}-\) select - perfect \(\}\left\{\right.\) definite \(_{1}-\) select - aorist \(\}\).
"Before eating lunch, they had a drink."
\(\left\{\right.\) definite \(_{1}-\) select - prospect \(\} \quad\left\{\right.\) definite circumstance \({ }_{1}\) - indefinite - aorist \(\}\).
"When lunch arrived, they ate it."
\(\left\{\right.\) definite \(_{1}-\) select - perfect \(\}\left\{\right.\) definite - select \(_{1}-\) aorist \(\}\).
```

However, not all clauses which are linked aspectually are also connected as a gerund to a main clause:
"It was raining outside when they sat down to table."
"While they were seated, the waiter arrived."
"When the waiter had explained the menu, they ordered lunch."
"Before lunch, drinks arrived."
"When lunch arrived, they ate it."
These clause have the same discourse structure as those with a gerund, but without the " " subscript identifying the subjects or topics of the two clauses. The aspectual discourse structure can be summarised:

```
\{definite - indefinite - circumstance - imperfect/perfect/prospect \}/
\{definite - select - imperfect/perfect/prospect\}
\{definite - select - aorist \}.
```

Two additional features of aspect which we have not so far mentioned are "already" and "still". "Already" means refers to an occurrence which is taking place earlier than expected. "Still" refers to an occurrence which is taking place later than is expected. Because the expectations are set by other sentences, "already" and "still" are a feature of discourse structure. Both expressions can apply to positive and negative imperfective or stative sentences:
$\begin{array}{ll}\text { "It is already raining." "It is still raining." } \\ \text { "It is already not raining." } & \end{array}$
However, "already" only applies to a non-negative perfective sentence, and "still" only applies to a negative perfective one:
"He has arrived already." *"He has still arrived."
*"He has already not arrived." "He has still not arrived."
Only "already" applies to a prospective sentence:
"It is already about to rain." *"It is still about to rain."
*"It is already not about to rain." *"It is still not about to rain."
Elements \{already\} and \{still\} can be used in discourse structure to describe these concepts.
As Chapter 5. shows, gerunds occur widely and perhaps universally in languages. Other examples are:
Serbian: "Umoran, putnik se sinoć vratio kući."
"Tired, the traveller returned home last night."
[Tired ${ }_{\text {(indefinite) }}$, traveller himself last-night returned home.] ${ }^{119}$
Spanish:"Siendo estudiante, tendrás derecho a una beca."
"Since you're a student, you'll have the right to a grant."
[Being student, you will have right to a grant.] ${ }^{120}$
Turkish: "Kapıyı açarak sokağa firladı." "Opening the door, he rushed into the street."
[Door opening, street-to rushed-he.] ${ }^{121}$
A gerund can be regarded as a non-restrictive relative clause, qualifying the subject of the sentence. The same aspectual relations can also occur between a restrictive relative clause and the main verb of the sentence:

[^34]| "The house which you were looking at is sold." | \{imperfect\} |
| :--- | :--- |
| "The house which you have looked at is sold." | \{perfect\} |
| "The house which you are about to look at is sold." | \{prospect\} |
| "The house which you have already looked at is sold." | \{already\} |
| "The house which you have still not looked at is sold." | $\{$ still\} |

However, in this case the aspect element is not part of the discourse structure, which is simply "The house is sold", that is \{definitelcircumstance - indefinite\}, but of the relative clause which makes the topic "house" \{definite\}. It is therefore part of the functional structure to be described in the next chapter. For example, the second example is, in part:
$\left\{\right.$ definite $_{1} \backslash$ circumstance indefinite $\}\left\{\right.$ object $_{1}$ - perceive - agent $\mid$ recipient - imperfect $\}$.
In some languages, all verbs possess aspect, and in others it is only expressed when required by the discourse or functional structure. In many languages, aspect is expressed by auxiliaries:

French: "Les dames sont arrivées." "The ladies have arrived." [The ladies are arrived.]
Italian: "Stavano dormendo." "They were sleeping."
Spanish: "No he visto a tu madre esta semana." "I haven't seen your mother this week."
"Está haciendo sus cuentas." "He's doing his accounts." ${ }^{122}$
Irish: "Tá an leabhar caillte ag an ngarsún." "The boy has lost the book."
[Is the book lost at the boy.]
"Táim tar éis teacht isteach." "I have just come in." [I-am after coming in. ${ }^{123}$
Arabic: "fî 1-șabāḥi kāna l-maṭaru qad sakana" "In the morning the rain had calmed down." [In the-morning has-been the-rain calmed-down.]
"kāna 1-Rawlādu yatarākaḍūna" "The children were racing around."
[Have-been the-children are-racing-around.]
"ma§a ḥulūli l-ṣayfi sa-yakūnu yưaddī wājibahu bi-ntizam"
"By summer he will be performing his duties regularly."
[By summer he-will-be he-is-performing duties-his regularly.] ${ }^{124}$
Hindi: "vah kitāb likh rahā thā" "He was writing the book."
[He book write remaining was.] ${ }^{125}$
Indonesian:
"Ketika saya sampai di rumahnya Tom sedang makan."
"When I arrived at his house Tom was eating."
[When I arrive at house-his Tom was eat.]
"Ketika saya sampai di rumahnya Tom sudah bangun."
"When I arrived at his house Tom had already got up."
[When I arrive at house-his Tom already get-up.] ${ }^{126}$
Chinese:"Wŏ zái yínháng kāi le yī gè zhànghù." "I have opened an account at the bank." [I at bank open (aorist) ${ }^{\text {one unit account.] }}$
"Wŏ hēguo máotáijiŭ." "I have tried Maotai wine." [I drink (perfective) Maotai wine.]
"Jiāoxiăng yuètuán zài yănzòu Bèiduōfēn de yuèqŭ."
"The symphony orchestra is playing Beethoven's music."
[Join-sound music-group (imperfective) play Beethoven-of music-song.]
"Mèimei chuānzhe yī tiáo bái qúnzi." "My younger sister is wearing white skirt."

[^35]A different discourse relationship is exhibited by a gerund of purpose:
"They entered the restaurant in order to have lunch."
Hungarian:
"Felhasználtam az alkalmat arra, hogy elszökjek."
"I used the opportunity to get away."
[I-used the opportunity onto-that, that I away-get ${ }_{\text {(subjunctive). }}{ }^{128}$
Persian: "inra panhan kard ta kasi peida nakonad" "He hid this so that no-one would find it." [This ${ }_{\text {(object) }}$ hiding he-made so-that anyone finding not-he-makes $\left.{ }_{\text {(subjunctive) }}\right]^{129}$

The purpose in these examples, being a hypothesis, is \{indefinable\}, and lacks a relation in time with the main clause. Its discourse structure is therefore:

$$
\left\{\text { definite }_{1}-\text { indefinable }\right\}^{\left\{\text {definite }_{1}-\text { select }\right\} /\left\{\text { definite }_{1}-\text { indefinite } \text { c circumstance }\right\} . . . . ~}
$$

## Generality

Chapter 2. illustrates how a sentence referring to a specific entity can be constructed to refer to a class of such entities, whether a closed class (generic) or unbounded class (nonspecific):
"On Fridays, meetings take place."
"Meetings take place on Fridays."
In the first example, "Fridays" refers to all Fridays, a closed class, and "meetings" means those meetings which take place on Fridays, a class which was not closed until the sentence was uttered. In the second example, "meetings" refers to all meetings, a closed class, and "Fridays" means those Fridays on which meetings take place, a class which was not closed until the sentence was uttered.

A closed class refers to a known group of entities and can be treated as \{definite\}. In our terminology it is called generic. An unbounded class does not refer to a known group of entities and can be treated as \{indefinite\}. In our terminology it is called nonspecific. This correspondence between generic and definite and nonspecific and indefinite means that generality is independent of functional sentence structure in that same way as identity is.
"The friends used to sit down to table at 1.00 ;"
"Our customers sit down to table at 1.00 ;"
have the same functional sentence elements as the specific sentence "My friends sat down to table at 1.00 ".

Generality is also independent of aspect. The sample sentences quoted in the previous section can be expressed so that they relate, not to a series of specific incidents but to a set of settled habits:
"They were hungry when they used to sit down to table."
"While seated at the table, they used to look at the menu."
"Having seen the menu, they used to order lunch."
"Before eating lunch, they used to have a drink."
"When lunch arrived, they used to eat it."
These sentences relate to a specific set of individuals ("they"), but all the other entities are general: "sit", "table", "menu", "lunch", etc. Nevertheless, the aspectual relation between the gerunds and the

[^36]main sentences remain the same as for the specific sentences. Certain sentence functions would appear to be more general in their nature than others:
"Grass is green"; "A cabbage is a vegetable".
However, this generality arises because "grass" and "a cabbage" are generic. For a specific topic, the same types of sentence can be specific:
"The Vicar of Bray was Protestant under King Edward VI and Catholic under Queen Mary I." "Harold Wilson was Prime Minister in 1970 and Leader of the Opposition in 1971."

A sentence can have a specific topic and general comment or a general topic and general comment. It cannot have a general topic and specific comment:
"John eats lunch at 1.00." "Judges eat lunch at 1.00." *"Judges ate a lunch at 1.00."
Both the first and second sentence have the discourse structure \{definite - indefinite - circumstance \}. To distinguish between them, an element $\{$ general $\}$ can be used:
"John eats lunch at 1.00 " is \{definite - indefinite\general - circumstance \}.
"Judges eat lunch at 1.00 " is \{definite $\backslash$ general - indefinite\general - circumstance\}.
Elements \{definite\general\} are therefore generic and \{indefinitelgeneral\} are nonspecific.
Some languages mark a generic noun with a definite article and a nonspecific noun with no article:
Italian: "Il vino fa male alla salute." "Wine is bad for your health."
[The wine makes bad to-the health.]
"Vendono fiori." "They sell flowers."
Spanish: "Odio las novelas di ciencia ficciòn." "I hate science fiction novels."
[I-hate the novels of science fiction.]
"Escribo novelas di ciencia ficciòn." "I write science fiction novels."
[I-write novels of science fiction.] ${ }^{130}$

German:"Der Kampf um die Freiheit der Rede geht weiter."
"The struggle for [the] freedom of speech continues."
"Der Kampf um Freiheit geht weiter." "The struggle for freedom continues." ${ }^{131}$
Hungarian:
"A bálna a legnagyobb emlősállat." "Whales are the largest mammals."
[The whale the largest mammal.]
"Minden este János levest főz." "Janos makes soup every night."
[Every evening Janos soup cooks.] ${ }^{132}$
Many languages can mark a verb as general rather than specific:
Spanish: "El cobre es ideal para los cables." "[The] Copper is (general) ideal for [the] cables."
"Estaba rojo de vergüenza." "He was (specific) ${ }^{\text {red with shame." }}$ "33
Welsh: "Cerddai ef dros y mynydd yn yr haf."
"He used to walk over the mountains in summer."
[Walked ${ }_{\text {(general) }}$ he over the mountain in the summer.]
"Euthum i am dro ar hyd y traeth." "I went for a walk along the beach."

[^37]```
                                    [Went (specific)
Hindi: "mai~ bharāt me~ hindī boltā hū"" "I speak Hindi in India."
                                    [I India-in Hindi speaking (general) am.]
    "vah mujhse hindī me~ bolī"" "They spoke to me in Hindi."
    [They to-me Hindi-in spoke (specific).]
Swahili: "Kila mwaka baba yangu hulima shamba la mpunga."
    "Every year my father cultivates a field of rice.
    [Every year father my cultivates (general) field of rice.] [136
Inuit: "Quinartuuvuq." "He is amusing." [Amusing (general)
    "Quinarpuq." "He was amusing." [Amuse (specific)-he.] }\mp@subsup{}{}{137
```

We now turn to a feature of general sentences, which is that a \{circumstance\} which qualifies an \{indefinite\} comment can itself be qualified, in a way which does not arise with a specific comment. Let us consider parallel specific and general examples:
"The professor gave a lecture at 10.30 ".
"The professor gives lectures at 10.30."
We may apply a phrase beginning "except..." to the second sentence but not the first:
*"The professor gave a lecture at 10.30 except..."
"The professor gives lectures at 10.30, except on Fridays when he gives them at 11.00 ."
In the first example, which is specific, \{circumstance\} enables a subsequent sentence to distinguish the \{indefinite\} element, in this case "a lecture", and so to refer to it: "the lecture which took place at 10.30 ". In the second example, which is general, \{circumstance\} assigns bounds or limits to a \{indefinite\} and nonspecific element, in this case "lectures", so that a subsequent sentence can treat them as a bounded or generic class and so refer to them: "the lectures which take place at 10.30 except on Fridays when they are at 11.00 ". The expression "except..." qualifies these bounds.

The expression "except..." can also apply to an indefinite identification sentence with a specific topic:
"The Vicar of Bray was Protestant except under Queen Mary I."
"Harold Wilson was Prime Minister from 1964 to 1976, except from 1970 to 1974 when Edward Heath was Prime Minister."

It does not apply to a definite identification sentence with a specific topic:
*"Harold Wilson was the Prime Minister in 1964, except..."
This indicates that the comment of an indefinite identification sentence with a specific topic is not specific, but general. "The Vicar of Bray was Protestant" and "Harold Wilson was Prime Minister" assign their topics to a class of entities, which if not qualified by a \{circumstance\} are unbounded and so nonspecific. An "except..." expression then qualifies the \{circumstance\} further, but the comment remains general and does not thereby become a specific entity. "Harold Wilson was Prime Minister from 1964 to 1976, except from 1970 to 1974" can be described as:

$$
\left\{\text { object }- \text { role }- \text { competence }_{1}\right\} \quad\left\{\text { not }_{1}-\text { competence }_{2}\right\} .
$$

It can also apply to any indefinite attribute or verb which does not have a specific object or target:
"The weather is good, except that it rained yesterday."

[^38]"She was walking, but occasionally stopped to look at the view."
"I like chocolate, but not milk chocolate."
In these sentences, the attribute or verb are again nonspecific, and relate to a class of qualities or actions which are not specified. The "except..." or "but..." expressions limit the class of qualities or actions, without making them specific. Another test of a nonspecific comment is that the adverbial "generally" or "in general" can be applied:

```
"The professor generally gives lectures at 10.30 , except..."
"The Vicar of Bray was generally Protestant, except..."
"Harold Wilson was generally Prime Minister from 1964 to 1976, except..."
"The weather is generally good, except..."
"She was walking in general, but..."
"In general I like chocolate, but not..."
```

Finally, we can apply an "except..." expression to an identification sentence with a generic topic and nonspecific comment:
"Cabbage, except for red cabbage, is a green vegetable."
This has the discourse structure \{definitelcircumstance - indefinite\}. The "except..." is a qualification to the $\{$ circumstance $\}$ which in this case is the same as the topic.

## Inference

We have so far considered six ways in which discourse connects sentences together: identity, selection, aspect, generality, addition, and alternation. Identity determines whether an entity can be referred to, selection determines which of a choice of entities is referred to, aspect determines how the occurrence of sentences relate in time, and generality determines whether a reference is to a single entity or to a class. Addition and alternation are concerned with whether two or more sentences relate to the same or a different topic or comment.

Inference is a further feature of discourse, which is concerned with the fact that the statements in a dialogue or narrative are connected in logic. This is evidently so in serious works:
"I think, therefore I am."
It is also so of all forms of informal discourse:
"It is cloudy; it will probably rain tonight."
"You must be drunk."
"Stocks are rising, and have probably reached their peak."
"You are doubtless aware that I have resigned."
"Perhaps you would like to come to dinner."
"Of course you will be welcome."
In informal discourse, the logically preceding statement may be assumed and not made: "You are staggering about; you must be drunk"; "It is generally known that I have resigned; you have doubtless heard"; "I would like you to come to dinner; perhaps you will agree;" "I have every intention to make you welcome."

These examples show that inference has two purposes: it shows that one statement follows from a previous statement, and it indicates the likelihood of the second statement occurring. The more formal the narrative, the greater is the use of "therefore" or "accordingly" to indicate the application of strict logic. The more informal the narrative or dialogue, the more frequent is the omission of the logically preceding statement, and the greater the uncertainty of the logically consequent one.

Inference is most commonly expressed by an adverbial:
"It is cloudy; it will therefore/certainly/of course/doubtless/probably/possibly/perhaps
rain tonight."
Other languages treat inference as a verb, applied to the comment:

## Japanese:

"Are wa Tonpuson-san ni chigainai." "That must be Mr Thompson."
[That ${ }_{\text {(topic) }}$ Thompson-Mr doubtless.]
"Ano apāto wa takai deshō." "That apartment is probably expensive." [That apartment ${ }_{\text {(topic) }}$ expensive probably.]
"Gogo ame ga furu kamoshirenai." "It might rain in the afternoon."

$$
\text { [Afternoon rain }{ }_{(\text {subject })} \text { fall might.] }{ }^{138}
$$

Inuit: "Nuummi apinnguatsiarpuq." "It's presumably snowing in Nuum." [Nuum-in snow-presumably-it-is.]
"Qamajunniarsivuq." "He's probably out hunting seals."
[Out-hunting-seals-probably-he-is.] ${ }^{139}$
It is clear that inference applies to a comment. It is independent of whether that comment is definite or indefinite:
"You must be Mr Jones." "You must be a friend of Mr Jones."
If we employ an element $\{$ infer $\}$, a sentence with inference has the discourse structure:
$\{$ definite - infer - select $\} /\{$ definite - infer - indefinite - circumstance $\}$.
\{infer\} can be applied to a $\{$ not $\}$ or $\{$ query $\}$ :
"You are perhaps not Mr Jones." "You are perhaps not a friend of Mr Jones."
"Doubtless you are not Mr Jones?" "Doubtless you are not a friend of Mr Jones?"
"Dr Livingstone, I presume?"
However, \{infer\} cannot be applied to an element which is subject to the \{not\} or \{query\}:
*"It is not so that you are therefore/doubtless/probably/perhaps Mr Jones."
*"Is it so that you are therefore/doubtless/probably/perhaps Mr Jones?"
Thus, we can for example have $\{$ definite - infer - not - select $\}$ but not:

* $\{$ definite - not - infer - select $\}$.

The following sentences are also not meaningful:
*"They asked him to possibly come."
*"He is able to probably cook Italian food."
*"We resolved to certainly invite you."
*"He ought to doubtless answer the question."
We shall see in Chapter 15. that the words to which \{infer\} is applied in the above examples are \{indefinable\}. Since they are not known to exist, a logical deduction cannot be made concerning them.

There are adverbials which express a degree of certainty in the mind of an observer, such as "reportedly", "apparently", or "supposedly":
"He is reportedly on holiday this month."
"Apparently, she is at college this week."
"They are supposedly in possession of the funds."

[^39]These adverbials are not inferences as we have defined them. An inference expresses the factual likelihood of a statement in consequence of some previous statement. The sentences do not indicate whether the statements "He is on holiday this month"; "She is on college this week"; "They are in possession of the funds" are likely to be true or false, but instead that they have been reported or perceived to be true in the mind of a third-party observer. The statement that is reported or perceived may, however, be inferred:
"It was reported that he must be on holiday this month."
"It appears that she is probably at college this week."
"It is supposed that they are therefore in possession of the funds."
Inference in discourse is similar to the function of causative adverbials in Chapter 17. (Adverbials of Causation):
"Because the speech addressed their main concerns, the audience became excited."
"Because the wound in my leg has not yet healed, it is causing me pain."
"Because she walks a mile every day, she keeps fit."
These sentences could be rephrased:
"The speech addressed their main concerns. The audience therefore became excited."
"The wound in my leg has not yet healed. It is therefore causing me pain."
"She walks a mile every day. She therefore keeps fit."
The difference is that a causative is in dialogue terms a single sentence, in which a causer induces an agent or instrument to act:
"The speech addressing their main concerns excited the audience."
"The unhealed wound in my leg is causing me pain."
"Walking a mile every day keeps her fit."
Inference is a connection between two sentences which may be explicit or may be inferred by the speaker, and is rarely as precise as a causative or preventive.

Languages also possess a means of indicating that a statement cannot be inferred from a previous one. This is usually achieved by an adverbial or conjunction:
"It is cloudy; nonetheless, it will not rain tonight."
"He is clever; however, he is not rich."
"He is poor, but he is happy."
"Incidentally, we expect to start half-an-hour early."
These words "nonetheless", "however", "but", or "incidentally" can also be represented by the element \{infer\}, since the discourse structure of sentences which contain them is the same as those words or expressions which imply a logical connection:

$$
\{\text { definite }- \text { infer }- \text { select }\} /\{\text { definite }- \text { infer }- \text { indefinite }- \text { circumstance }\} .
$$

The definition of \{infer\} can therefore be extended to include any element which describes the consequence or lack of consequence of one sentence upon another.

## 15. The Functional Analysis of Sentence Structure

## Summary

Sentences can be classified into about 38 functional sentence types, each one characterised by a different combination of functional sentence elements. The same notation is used as for discourse sentence elements, that is each element is represented by a variable of the form $\{x\}$, meaning all entities which fulfil the function " $x$ ".

Since any functional element of a sentence can be a topic, comment, enquiry, or hypothesis, functional sentence structure is independent of discourse structure (Chapter 13.), of identity, and of the rules of grammar by which discourse structure and identity are realised (Chapter 14.). The order of functional elements is not material, other than to distinguish between an existential sentence and an identification sentence. The discourse elements \{not\}, \{query\}, and \{infer\} remain necessary to express negation, questions, and inference. Certain functional elements are only characterised by their identity, and are denoted \{definite\}, \{select\}, \{circumstance\}, \{indefinite\}, or \{indefinable\}.

Since the relation of movement and state is expressed by the aspect function of discourse structure, each functional sentence type describes both a stative condition or relation and the dynamic process whereby the condition or relation came about. In addition, since the functional elements of a sentence are not affected by the relation of that sentence to other sentences, functional sentence structure is independent of the rules of grammar which connect sentences in discourse, and which employ one sentence to identify another. All these discourse purposes are described in Chapter 14.

A creation sentence creates an entity which did not previously exist.
\{agent - create - creation - (constituent) - (instrument) $\}$.
A transformation sentence transforms an entity into a new form.
$\{$ object - (transform) - attribute - (instrument) - (agent) $\}$.
A locative sentence locates an entity in space.
\{object - locative - location\}.
A movement sentence moves an entity in space.
\{object $-($ move $)-$ locative $_{1}-$ location $_{1}-$ locative $_{2}-$ location $_{2}-$ (agent)

- (instrument) $\}$.

A transformation locative sentence transforms and locates an entity in one action.
$\{$ object - transform $\backslash$ move - attribute - locative - location $-($ agent $)$ - (instrument) $\}$.
A time sentence locates an occurrence at a point in time.
\{object - time - sequence $\}$.
An attributive sentence describes for an entity a state or condition, called an attribute. A quantity is the attribute of number, which must relate to a countable unit.
\{object - attribute .
A constituent sentence constitutes an entity and assigns to it an attribute or quantity. The entity so constituted may be the attribute of another entity.
\{object - constitute - attribute - (agent) - (instrument) $\}$
$\left\{\right.$ object - attribute $\left._{1}\right\} \quad\left\{\right.$ object $_{1}-$ constitute - attribute $\}$.

In an effect sentence, an entity is altered or affected by an external cause.
\{object - effect - instrument - (agent) - (measure) \}.
A freedom sentence relieves an entity of an effect.
\{object - free - not - definite - (agent) - (instrument) .

A dependency sentence subjects an object or person to a risk.
$\{$ object - depend - indefinable - (measure) - instrument - (agent) $\}$.
A relief sentences relieves a risk from an object or person.
$\{$ object - relief - not - indefinable - (instrument) - (agent) $\}$.
An identification sentence identifies a definite entity with another definite or nonspecific entity.
$\{$ object - identification - (agent) $\}$.
A substitution sentence substitutes one entity for another in a function or role.
$\{$ object - substitute - original - identification $-($ agent $)-($ instrument $)\}$.
A comparison sentence compares a characteristic of two objects, persons, or actions, which may be quantifiable.
$\{$ object - compare - base - (agent)/(instrument) $\}$
In a participation sentence, a person participates in a function in relation to a target. \{agent - participate - (participants) - target \}.

A role sentence states a function which a person or object fulfils in human society.
$\{($ agent $)$ - object - role - (competence) - target $\}$.
A style sentence states a quality or style which a person exhibits in performing a known action:
\{object - style - definite .
A possession sentence establishes a relationship between a person and an object.
$\{$ recipient - possession - object - (agent) - (instrument) $\}$.
A deficiency sentence records that a person has need of an object.
$\{$ beneficiary - lack - not - object - (possession) - (agent) $\}$.
An exchange sentence establishes a possession with one person in compensation for another possession with another person.

```
{agent 
{\mp@subsup{agent }{1}{= recipient }}
{agent 
{agent }\mp@subsup{\mp@code{L}}{= recipient }{}}}
```

In a perception sentence, a person receives or does not receive new information concerning an object.
$\{$ recipient - perceive - object - select/indefinite/circumstance - (instrument) $\}$.
\{recipient - not - perceive - object - select/indefinable $-($ instrument $)\}$.
In a negative perception sentence, a person perceives that certain information concerning an object is not true.
$\{$ recipient - perceive - object - not - definite/indefinable $-($ instrument $)$.
In an opinion sentence, a person has and may communicate a considered mental reaction to known information.
$\{($ agent $) \backslash$ recipient - opinion - definite $-($ agent $)\}$.
$\left\{\right.$ agent $\backslash$ recipient ${ }_{1}$ - (instrument) - opinion - definite - recipient $\left._{2}\right\}$.
In a supposition sentence, a person supposes a hypothesis concerning a real or hypothetical object.
$\{($ agent $) \backslash$ recipient - suppose $-($ object $)-$ indefinable $\}$.
In a communication sentence, a person communicates or fails to communicate new information concerning an object.
\{agent - (instrument) - communicate - object - select/indefinite/circumstance - recipient $\}$.
\{agent - (instrument) - not - communicate - object - definite/indefinable - recipient $\}$.
In a negative communication sentence, a person asserts that certain information concerning an object is not true.
\{agent - (instrument) - communicate - object - not - definite/indefinable - recipient $\}$.
In a proposal sentence, a person proposes a hypothesis concerning an object.
\{agent - propose - (instrument) - object - indefinable - recipient $\}$.
An interrogation sentence poses a question concerning an object.
\{agent - (instrument) - communicate - query - (recipient) - object - definite/indefinable\}.
A representation sentence creates a representation of an object.
$\{$ agent - create - (instrument) - object - representation - (recipient) $\}$.
A benefit sentence describes the opportunity or advantage, or misfortune or disadvantage, arising to a beneficiary.
$\{$ beneficiary - benefit - definite/indefinable - (agent) - (instrument) $\}$.
A warranty sentence describes a commitment by a guarantor:
\{agent - benefit - object - definite/not - indefinable - (beneficiary) \}.
$\left\{\right.$ causerlbeneficiary - benefit $_{1}$ - object - not - indefinable $^{-}$(agent) $\} \quad\left\{\right.$ object $_{1}$ - attribute $\}$.
An ability sentence describes the ability of a person to fulfil an action.
$\{$ recipient - able - object - indefinable $-($ agent $) ~-~(i n s t r u m e n t) ~\} . ~ . ~$
A necessity sentence describes a compulsion upon a person to fulfil an action.
$\{$ recipient - not - able - not - object - indefinable - (agent) - (instrument) $\}$.

A responsibility sentence describes an obligation that a person has to complete an action, or his/her guilt or innocence in completing it.
\{recipient - ought - object - indefinable - (agent) \}
\{agent|recipient ${ }_{1}$ - ought - object - indefinable - recipient ${ }_{2}$.
\{agent ${ }_{1}$ - agentlrecipient ${ }_{2}$ - not - ought - not - object - definite/indefinable $\}$.
\{agent|recipient ${ }_{1}$ - agentlrecipient ${ }_{2}-$ not - ought - not - object - definite $\}$.
In a causative sentence, an agent or instrument initiates an action.
\{causer - agent/instrument - (definite) - select $\}$
\{causer - agent/instrument - (definite) - indefinite - circumstance $\}$.
In a preventive sentence, an agent or instrument stops or prevents an action.
\{causer - agent/instrument - definite $_{1}$ ) - not - definite $_{2}$ \}
\{causer - agent/instrument $-($ definite $)-$ not - indefinable $\}$.
In an inchoative sentence, an agent or instrument commences or continues an action or state by itself.
\{agentlobject - inchoate - (definite) - select $\}$
\{agentlobject - inchoate - (definite) - indefinite - circumstance\}
\{instrumentlobject - inchoate - (definite) - select \}
\{instrumentlobject - inchoate - (definite) - indefinite - circumstance $\}$.
In a cessative sentence, an agent or instrument ceases an action or state by itself.
\{agentlobject - inchoate - (definite $_{1}$ ) - not - definite $_{2}$ \}
$\left\{\right.$ instrumentlobject - inchoate $-\left(\right.$ definite $\left._{1}\right)-$ not - definite $\left._{2}\right\}$.
An error sentence describes an action or state contrary to the intention or expectation of a causer, agent, or recipient
$\{$ definite - error - object - (correct) - (agent) .

## Terms Defined or Introduced

Functional sentence type, functional element, functional sentence structure, transformation, deficiency, supposition, proposal, ability, necessity, error.

## Introduction

To illustrate the nature of functional sentence structure, let us consider five sentences already mentioned in the previous chapter: a stative sentence "They were hungry", an intransitive sentence "They sat down to table", a possession sentence "They looked at the menu", a communication sentence "They ordered lunch", and a transitive sentence "They ate lunch". As has been pointed out by Lyons and others ${ }^{140}$, language has a bias towards describing the activities and experiences of persons, by placing persons in topic position. However, if the sentences were parts of different narratives, they could have been expressed as "Hunger was felt by them"; "The menu was looked at by them"; "The table was sat down to by them"; "Lunch was ordered by them", or "Lunch was eaten by them", in which "they"/"them" is not the topic but part of the comment. Moreover, in these ten sentences, the verbs "felt", "looked at" "sat", "ordered", and "ate" are part of the comment. If they were constructed as "Hunger was what they felt"; "A menu was what they looked at"; "A table is where they sat"; "Lunch was what they ordered/ate", the same verbs would be part of the topic.

The analysis of a sentence by means of topic and comment is therefore a good guide to its role in discourse but provides no information on the respective functions of its elements. To analyse these, let us represent our sample sentences in an abstract way as a string of words not connected by grammar:

$$
\begin{aligned}
& \text { "they - hunger"; "they - sit - table"; "they - see - menu"; "they - order - lunch"; } \\
& \text { "they - eat - lunch". }
\end{aligned}
$$

We can now focus on the functional structure of the sentences without reference to their role in discourse. The first observation is that "they" has five distinct roles. If we may use the terms "subject" to refer to "they", "they - hunger" is a state or condition that the subject is in; "they - sit - table" is a state or condition that the subject has entered into through a voluntary action on itself, that of sitting; "they - see - menu" is a mental state that the subject possesses in relation to an external object, a menu, though a voluntary action it has taken, that of looking; "they - order - lunch" is a communication by the subject to an unknown person about an object, lunch, and "they - eat - lunch" is a voluntary action that the subject engages in which affects the same object.

The second observation is that the elements of each abstracted sentence are sufficient to guess at its core meaning. They each perform a function which differs between each sentence, and which can be called the functional elements. We can guess that the second sentence means "They sat down to table", or something like that, and no further element is needed for the sentence to be meaningful. The term "argument" is sometimes used by linguists with the same meaning. Of course, further elements can and often should be present; if the location and time of the event are significant, five elements are present: "They sat down to table in a restaurant at 1 o'clock" and can be represented abstractly as "they - sitting - table - restaurant - 1 o'clock". But the location and time can be omitted, while "they", "sitting", and "table" cannot.

In this chapter, we examine these five sentence structures and others, amounting in number to about 37, which we identified and described in Chapters 6 . to 11 . Each structure is uniquely characterised by its functional sentence elements; if examination shows that two structures have the same elements, they are considered the same for the purpose of this analysis. For example, we show that "They sat down to table" has the elements \{agentlobject - move - locative - location\}. We may say that each structure of elements is a functional sentence type. The number of functional sentence types is not determined precisely, but estimated to be "about" 37 , since we recognise that a different analysis might reach a different conclusion. Neither language nor the world that it describes are a closed intellectual system. The sentence types are composed of functional elements, such as \{agent\}, \{object\}, \{move\}, \{locative\}, and \{location\}, which are different from those of the discourse sentence structure. An \{agent\} can be definite, indefinite, or indefinable. However, as we shall see, in some functional sentence types, in particular dependency, identification, perception, communication, ability, necessity,

[^40]and responsibility, certain elements are characterised as \{definite\}, \{indefinite\}, or \{indefinable\}, and those discourse elements appear in those functional sentence structures.

The same notation is used as in the previous chapter. In a sentence $\{x-y-z \ldots\}$, each of the elements $\{\mathrm{x}\},\{\mathrm{y}\},\{\mathrm{z}\}$, etc perform a different function. Optional elements are placed in brackets: $\{\mathrm{x}-\mathrm{y}-$ (z)...\}. Some elements can be combined, that is their function can be performed by a single word, and these are separated by "\": \{x\y-z...\}. If a function is repeated, it is only represented once. For example, in "We had bread and jam for tea", and "She hopped and skipped down the road", "bread and jam" and "hopped" and "skipped" are each one function and therefore one element. Some sentence types contain the same functional class in two different capacities, and these are represented by different elements $\left\{\mathrm{x}_{1}\right\},\left\{\mathrm{x}_{2}\right\}$, etc. All the functional classes to which the notation applies are defined in the Glossary at the end of this book.

The sequence of elements with which a function are expressed in a particular language do not affect that function, except that in many languages an identification sentence can only be distinguished by word order from an existential sentence.

## The Creation Sentence

Creation is a human act, and is therefore not distinguishable from the \{agent\} who performs it:
"Philip built the house." "Anne wrote the letter."
"Henry cooked lunch." "Joan painted the picture."
The means of creation cannot be inferred from the object created. Alternatives could be "Philip designed the house"; "Anne typed the letter"; "Henry prepared lunch.". The object created is not the thing affected by the act of creation, but the outcome of it. Using \{create\} as the element for the act of creation and \{creation\} for the thing created, the elements are therefore:

$$
\{\text { agent }- \text { create }- \text { creation }\} .
$$

If there is no need to state the constituents from the which the object was created, or the means whereby it was done, the meaning of these sentences is complete. Alternatively, the \{constituent\} and the means employed may be included. The means are the \{instrument\} which works on the \{constituent\}. Including these optional elements, the elements are:

$$
\{\text { agent }- \text { create }- \text { creation }-(\text { constituent })-(\text { instrument })\} .
$$

The resultant sentence expresses the constituents out which the creation was created, the agent and instrument being optional:
"The house was built in brick (by Philip)." "The letter was by Anne."
"The family's lunch was chicken." "The picture was in oils."
The stative creation sentence is therefore:

$$
\{\text { creation - constituent - (create) - (instrument) - agent }\} .
$$

## The Transformation Sentence

Destruction has a different functional description than creation. A patient, or \{object \}, is destroyed. If the act is unintentional, an \{instrument\} is often stated:
"The earthquake destroyed the houses." "The blow broke the vase."
"Fire burnt the woodland." "The illness killed him."
If the act involves intent, the $\{$ agent \} must be stated, and in that case the instrument may be unnecessary:
"The friends ate lunch". "The vandal broke the window (with a stone)".
"She shredded the documents".
However, in some cases neither agent not instrument may be required:
"The building collapsed." "The crowd broke up." "The clouds dispersed."

The resultant state or \{attribute\} of the patient may be described by the act of destruction, with the option of the $\{$ instrument $\}$ which effected it:
"The houses in ruins (from the earthquake)."
"The vase was in pieces (from the blow)."
"The woodland was burnt to ashes." "He was dead (from the illness)."
"The lunch was eaten." "The documents were shredded."
Both the act of destruction and the resultant state can be described by:
$\{$ object - attribute $-($ instrument $)-($ agent $)\}$.
In addition, the act of destruction may not be adequately described by the resultant \{attribute \}:
"The earthquake shook the houses to ruins." "The blow broke the vase to pieces."
"Fire burnt the woodland to ashes."

We may therefore use the element $\{$ transform $\}$ for the act of destruction, so that the sentence becomes:
$\{$ object - (transform) - attribute - (instrument) $-($ agent $)\}$.
Many transitive sentences describe a change which neither creates something new nor destroys something, but transforms an \{object\}. The transformation can be due to deliberate action by an \{agent $\}$ by means of an $\{$ instrument $\}$ :
"James chopped up the logs with an axe." "John preserved the fence with creosote."
"The garage serviced the car." "Sheila mowed the grass short."
Alternatively, a transformation may be due to natural forces, expressed as an \{instrument\}:
"Rain softened the ground." "The sun melted the snow."
or to a deliberate action effected by an \{instrument\} but for which no agent is stated
"The paintstripper melted the paint." "The computer printed the figures".
The result of the transformation is an \{attribute\} which may be adequately described by the act of transformation, with the option of the \{instrument\} which effected it:
"The logs were chopped (with an axe)." "The fence was preserved (with creosote)."
"The car was roadworthy (from the service)." "The grass was short."
"The ground was soft (with rain)." "The snow was melted (by the sun)."
"The paint was melted (by the paintstripper)." "The figures were printed (by the computer)."
This resultant state of a transformation action can be described by the elements:
$\{$ object - attribute - (instrument) $\}$.
In addition, the transformation action may not be adequately described by the resultant \{attribute\}:
"Sheila mowed the grass short." "The garage serviced the car."
The transformation action may therefore by described by a further element. If this is \{transform\}, the transform sentence has the same structure as the destruction sentence described above:
$\{$ object $-($ transform $)-$ attribute $-($ instrument $)-($ agent $)\}$.
Most transformations are to the advantage or disadvantage of a \{beneficiary\}, expressed directly or by a genitive link:

> "James chopped up our logs with an axe"; "John preserved their fence with creosote";
> "The garage serviced my car"; "The computer calculated the result for us";
> "Mary washed her friend's hair"; "The knife cut him on the hand".
> German: "Er hat uns das Leben gerettet." "He saved our lives."
> [He has to-us the life saved.] ${ }^{141}$
> Italian: "Morde la mano al professore." "He bites the teacher's hand."
> [He-bites the hand to-the teacher.] ${ }^{142}$
> Irish: "Dhóigh sé an fraoch orm." "He burned my heather."
> [Burned-he the heather on-me.] ${ }^{143}$
> Japanese:
> "Tarō wa Haruko ni tabako o suwareta."
> "Taro had a cigarette smoked by Haruko on him."
> [Taro ${ }_{\text {(topic) }}$ Haruko-by cigarette ${ }_{\text {(object) }}$ smoked $\left._{\text {(passive). }}\right]^{144}$

The \{beneficiary $\}$ appears also in the resultant state:
"Our logs were chopped"; "My car was serviced"; "His hand was cut".
In Italian, for instance, the beneficiary is marked by the by the preposition "a" ("to"):
"Ho rifatto il letto a Paolo." "I've remade Paolo's bed for him."
[I've remade the bed to Paolo.] ${ }^{145}$
In these sentences, the \{beneficiary\} is generally a restrictive qualifier to the \{object\}, as discussed further below (The Benefit Sentence).

An agent may effect a transformation to his own advantage or disadvantage, often when the patient is his/her own possession:
"James chopped up his (own) logs"; "Mary washed her (own) hair";
"He's cut his hand on the knife".
German:"Er hat sich eine Verletzung zugezogen." "He has incurred an injury."
[He has to-himself an injury sustained.]
In that case, the \{agent $\}$ is stated and combined with the \{beneficiary\}:

$$
\{\text { agentlbeneficiary }- \text { transform } \backslash \text { benefit }- \text { object }- \text { attribute }-(\text { instrument })\} .
$$

An agent may also effect a transformation on him/herself:
"Lloyd George resigned from office." "Henry shaved with his electric razor."
The same elements apply as previously, but those for $\{$ agent $\}$ and $\{$ object $\}$ are combined:

[^41]$\{$ agentlobject $-($ transform $)-$ attribute $-($ instrument $)\}$.
Sentences such as "She shredded the documents" and "John creosoted their fence" describe a transformation by means of a human appliance intended for that purpose, in which the verb is derived from the appliance. Other examples are:
"He brushed their yard clean." "She sawed the log in half."
"The judge imprisoned the convict." "He hoovered the carpets."
German:"Ich verband dem Kind die Hand." "I bandaged the child's hand."
[I bandaged to-the child the hand.] ${ }^{146}$
These transformations have the same element, but the transformation action and \{instrument\} are combined. The agent is usually stated:
\{agent - transformlinstrument - object - attribute \}.
The English word "use", or its equivalent, is an auxiliary word for a transformation action by means of an appliance:
"He used the brush to clean the yard." "She used the saw to cut the log in half."
An appliance intended for one purpose may be used for another:
"He used a shoebox as his card file."
The structure of this is:
$\left\{\right.$ agentlbeneficiary - transform\instrument ${ }_{1} \backslash$ benefit - instrument $\left._{2}\right\}$.
The same elements describe the resultant state of the patient:
"Their yard was brushed clean." "The convict was imprisoned." "The log was sawn in half."
An agent can again employ the appliance to his/her dis/advantage or upon him/herself:
"Mary shampooed her hair"; "He brushed his clothes";
"He brushed himself down";
as indicated by the sentence structures:
\{agentlbeneficiary - transform $\operatorname{instrumentlbenefit~-~object~-~attribute\} ~}$ \{agentlobjectlbeneficiary - transform\instrumentlbenefit - attribute\}.

## The Locative and Movement Sentences

A locative sentence describes the physical \{location $\}$ of an \{object \} (animate or inanimate) in space:
"The chair is in the hall." "The book is on the table." "The pot was on the stove."
"The newspaper is through the letter-box." "The picture is hanging on the hook."
"He was seated on the chair." "She was wearing her new outfit."
Because space has three dimensions, the relationship between the \{object\} and the $\{$ location $\}$ can be expressed in many different ways, called a \{locative\}. The sentence is therefore:
\{object - locative - location $\}$.

[^42]An individual \{location\} often includes its own \{locative\}, so the sentence is \{object locative $\backslash$ location $\}$ :
"We were at home." "They were in the garden." "She is at Cambridge."
Many \{locative $\}$ can be measured:
"The lion was 10 metres away from them." "The aircraft was 5 miles up."
The measure consists of a unit and quantity. As we shall see in a later section (The Constituent Sentence), a unit is a constituent of \{locative\} and a quantity is an attribute of the constituent:

$$
\left\{\text { object }- \text { locative }_{1}-\text { location }\right\}^{\left\{\text {object }_{1}-\text { constitute }- \text { attribute }\right\} .}
$$

The transitive sentence of which these sentences are the resultant is a movement sentence. Some movement sentences (underlined) are a dynamic form of the locative, with an \{agent\}, giving the structure $\{$ agent - object - locative - location $\}$ :
"He put the pot on the stove." $\quad \rightarrow \quad$ "The pot was on the stove."
Other movements include a movement action and a direction of movement (underlined in these examples):
"She fetched the chair into the hall." "He put the book down onto the table."
"The newspaper was pushed through the letter-box." "She put the picture up onto the hook."
If we call this movement action and direction of movement \{move\}, the movement sentence has the structure:

$$
\{\text { agent - object - (move) - locative - location }\} .
$$

In the movement sentence, the $\{$ location $\}$ can be omitted:
"She fetched the chair in." "He laid the book down." "He put the pot on."
"The newspaper was pushed through." "She put the picture up."
However, the $\{$ location $\}$ is usually understood, and since the function of the sentence is to alter the physical relation between two objects, it can be argued that it is not an optional element.

The movement action may appear in the resultant stative locative sentence. These again have the elements \{object - move - locative - location $\}$ :
"The chair was fetched in." "The book was laid on the table." "The picture was put up."
"The pot was put on the stove."
In some movement actions, the $\{$ agent $\}$ acts on him/herself, in which case the $\{$ agent $\}$ and $\{$ object $\}$ are the same:
"He sat in the chair." "She put on her new outfit."
\{agentlobject - (move) - locative - location $\}$.
Many movement actions transfer an $\{$ object $\}$ from one $\left\{\right.$ location $\left._{1}\right\}$ to another $\left\{\right.$ location $\left._{2}\right\}$, or remove an \{object $\}$ from a \{location\}. The movement action is underlined in these examples:
"He took the pot off the stove." "He levered the nail out of the wood."
"The book was taken from the bookshelf to the table."

Both $\left\{\right.$ location $\left._{1}\right\}$ and $\left\{\right.$ location $\left._{2}\right\}$ have a $\{$ locative $\}$, since the $\{$ object $\}$ is being moved from a spatial relation with one location to a spatial relation with another location. For example, the last example means:
"The book was taken from being on the bookshelf to being on the table."
The element $\{$ move $\}$ includes the direction of movement from $\left\{\right.$ location $\left._{2}\right\}$. The sentence is therefore:
$\left\{\right.$ object $-($ move $)-($ agent $)-$ locative $_{1}-$ location $_{1}-$ locative $_{2}-$ location $\left._{2}\right\}$.
A sentence in which a person moves him/herself is commonly called a verb of motion:
"Mary went from London to Cambridge."
$\rightarrow \quad$ "Mary was at Cambridge."
"John is coming from London." $\rightarrow \quad$ "John is arrived from London."
"Bernard drove back home." $\rightarrow \quad$ "Bernard was back home."
"James flew back from America." $\rightarrow$ "James was back from America."
In addition, a movement sentence may have an \{instrument\}:
"The wind blew the chair across the lawn." "The lorry knocked Henry off his bicycle."
"He levered the nail out of the wood with pliers."
"Mary took the train from Cambridge to London."
Movement actions, being physical actions in space, can be measured:
"She pulled the chair one metre away from the wall."
$\rightarrow \quad$ "The chair was one metre from the wall."
"Bernard drove five miles back home."
$\rightarrow \quad$ "Bernard was back home."
The measure consists of a unit and quantity, which qualify \{move\}. The notation is described below (The Constituent Sentence):

$$
\left\{\text { object }- \text { move }_{1}-\text { locative }- \text { location }- \text { agent }- \text { instrument }\right\}\left\{\text { object }_{1}-\text { constituent }- \text { attribute }\right\} .
$$

Many movement sentences are to the advantage or disadvantage of a \{beneficiary\}, who may be the possessor of the $\{$ object $\}$ :

English: "The newspaper was pushed through our letter-box".
Spanish: "Te he dejado la camisa en el otro cuarto." "I've left your shirt in the other room."
[To-you I've left the shirt in the other room.] ${ }^{147}$
Italian: "Stringiamo la mano al presidente." "We shake the president's hand." [We-shake the hand to-the president.]
"La pentola le scivolò tra le mani." "The saucepan slipped through her hands."
[The saucepan to-her slipped through the hands.] ${ }^{148}$
Russian: "On po-druzheski pozhal mne ruku." "He shook my hand in a friendly manner."
[He in-friendly shook to-me hand.]
Including these elements, the movement sentence is:
$\left\{\right.$ object $-{\text { movelbenefit }- \text { locative }_{1}-\text { location }_{1}-\text { locative }_{2}-\text { location }_{2}-(\text { agent })-(\text { instrument })-~}_{\text {- }}$ beneficiary .

[^43]The \{object\} moved may be the possession of the \{agent\}, in which case the \{agent \} is also the \{beneficiary\}:
"He spread out his arms." "He opened his mouth." "Sheila changed into new clothes."
Italian: "Lui si mette il capotto." "He puts on his overcoat."
[He to-himself puts the overcoat.] ${ }^{149}$
In such sentences, the element $\{$ agent $\}$ is combined with the $\{$ beneficiary $\}$ :
$\{$ agentlbeneficiary - object - movelbenefit - locative - location - (instrument) $\}$.
A movement may be effected by means of an appliance designed for the purpose:
"He levered the nail out." "She bicycled round the track."
In that case, the elements for the movement action and instrument are combined:
\{object - movelinstrument - locative - location - (agent) \}
\{agentlobject - movelinstrument - locative - location \}.
The English word "use", or its equivalent, is an auxiliary word for a movement action by means of an appliance:
"He used a lever to extract the nail." "She used the bicycle to go round the track."

## The Transformation Locative Sentence

Some movement actions result directly in a change to the object moved:
"He cleaned the leaves out of the drain." "She sawed the branch off the tree."
"She nailed the planks together with a hammer." "They attached the bicycles to the railings."
The patient of these sentences has two resultants: the changed state, and the altered location:
"The drain was cleaned out of leaves." "The branch was sawed off the tree."
"The planks were nailed together." "The bicycles were attached to the railings."
As with the transformation and movement sentences, the action can have a beneficiary:
"He cleaned the leaves from our drain." "They attached our bicycles to the railings."
These sentences therefore combine the elements of the transformation and movement sentences:
\{object - transform $\backslash$ movelbenefit - (attribute) - locative - location - (agent) - (instrument)

- beneficiary\}.

The sentence may state the location from which the movement took place:
"He cleaned the leaves out of the drain into a bucket."
The elements then include both the original and the destination location:
\{object - transform $\backslash m o v e \backslash$ benefit - (attribute) - (agent) - (instrument) - beneficiary locative $_{1}-$ location $_{1}-$ locative $_{2}-$ location $\left._{2}\right\}$.

As with other transformation sentences, the \{agent\} can be the same as the \{beneficiary\}:

[^44]"He cleaned the leaves from his drain." "They attached their bicycles to the railings."
\{agentlbeneficiary - transform\movelbenefit - object - (attribute) - locative - location (instrument) $\}$.

The transformation action can be the same as the instrument:
"She sawed the branch off the tree." "She locked her bicycle to the railings."
\{agent - transform\movelinstrumentlbenefit - object - (attribute) - beneficiary - locative ${ }_{1}$ location $_{1}-$ locative $_{2}-$ location $\left._{2}\right\}$.

Transformation locative sentences can in principle have two patients, since both the patient which is moved and the location to which it is moved may be affected:
"Water flooded two miles across the fields." "Dust covered the furniture."
In such sentences, the patient which is moved is also often the instrument which moves it. No agent is mentioned, but could be present: "The damkeeper flooded the water...". The elements are therefore:
$\left\{\right.$ object $_{1} \backslash$ instrument - transform $\backslash$ move - locative - locationlobject ${ }_{2}$ - (agent $\left.)\right\}$.

## The Time Sentence

A time sentence identifies and states the point in time of an occurrence:
"The meeting was at 10.00." "We went home on Friday."
A time sentence contains two pieces of information. It states the unit of time which is used to specify the time, such as the hour, day, month, or year, and the sequence of that unit. In ordinary experience, time is a sequence of events, one after the other. For instance, these examples mean:
"The meeting was at the tenth hour." "We went home on the sixth day."
If $\{$ object $\}$ is the occurrence whose point in time is identified, $\{$ time $\}$ is the unit, and \{sequence $\}$ is the sequence of that unit, a time sentence has the structure:

$$
\{\text { object - time }- \text { sequence }\}
$$

where \{object \} is "we had a meeting" and "we went home". This sentence structure assumes that the occurrence is known, and the $\{$ time $\}$ is new information. The sentences mean:
"The meeting was at 10.00 , not 11.00 ." "Our going home was on Friday, not Thursday."
Alternatively, the \{time\} is known and the occurrence is new information:
"At 10.00 , we had a meeting." "On Friday, we went home."
A clock or calendar $\{$ time $\}$ can lie within another $\{$ time $\}$ of wider compass:
"The meeting was at 10.00 on Friday."
"Friday" is in this case a qualifier to " 10.00 ", giving:
$\left\{\right.$ object - time $_{1}-$ sequence $\}\left\{\right.$ object $_{1}-$ time - sequence $\}$.
A $\{$ time $\}$ can be set by a dynamic sentence, which may have an $\{$ agent $\}$ or $\{$ instrument $\}$ :
"We set Friday as the day of our return home."

In this sentence, the occurrence or $\{$ object $\}$ is "our return home", and $\{$ time $\}$ is "to be Friday". The sentence is:

$$
\{\text { agent }- \text { object }- \text { time }- \text { sequence }\} .
$$

\{time\} can be expressed not by a particular hour or day, etc, but by another event, which may be before, after, or at the same time:
"We returned home when we were ready."
In these instances, $\{$ time\} expresses the concepts of "when", "before", "after", etc, and \{sequence\} is the event to which it is related. With respect to the time function of these sentences, the same structure:

$$
\{\text { object - time - sequence }\}
$$

therefore applies. For example, "We returned home when/before/after we were ready" is:

$$
\begin{aligned}
& \left\{\text { agentlobject }_{1}-\text { move }_{2}-\text { locative } \text { - location }\right\} \\
& \left\{\text { object }_{2}-{\text { time } \left.- \text { sequence }_{3}\right\}\left\{\text { object }_{1}-\text { attribute }_{3}\right\} .}^{\text {. }} .\right.
\end{aligned}
$$

\{time\} is a function of a particular occurrence. The relative times of the occurrences of successive sentences in a discourse are described by the aspect elements \{state\}, \{imperfect\}, \{perfect\}, \{prospect\}, \{aorist\}, \{already\}, and \{still\} (Chapter 14., Aspect).

In addition to referring to a unit of time, $\{$ time $\}$ can be any occurrence to which a sequence can be assigned, and the same functional structure therefore applies to sentences of the type:
"James Monroe was the fifth President of the United States."
In this case, $\{$ time $\}$ is "President" or "Presidency". The sentence is:

$$
\left\{\text { object }- \text { time }_{1}-\text { sequence }\right\}\left\{\text { object }_{1}-\text { role }- \text { target }\right\} .
$$

The element \{sequence\} implies a base point from which it is counted. In the case of clock or calendar \{time\}, this base point does not generally need to be expressed. For other \{sequence\}, it can be meaningful:

## "James Monroe was the fifth President since George Washington."

Reference to the base point is then a \{compare\} function (The Comparison Sentence, below):

$$
\left\{\text { object }- \text { time }- \text { sequence }_{1}\right\} \quad\left\{\text { object }_{1}-\text { compare }- \text { base }\right\} .
$$

## The Attributive Sentence

A transformation sentence (above) alters the state or condition of its \{object\}. Its resultant is a stative sentence which describes the state or condition, for which we use the term \{attribute\}. The sentence is an attributive sentence:

$$
\text { \{object - attribute }\}
$$

Evidently, such a sentence can be expressed without any reference to the means whereby the state or condition came about:
"The logs were chopped." "The fence was preserved." "The car was roadworthy."
"The grass was short." "The ground was soft." "The figures were printed."
An attributive sentence is implied whenever the \{attribute\} is used as a qualifier:
"the chopped logs"; "the preserved fence"; "the roadworthy car"; "the short grass";
"the soft ground"; "the printed figures".
The qualifier can be expressed as:

$$
\left\{\text { object }_{1}\right\}\left\{\text { object }_{1}-\text { attribute }\right\}
$$

A quantity is an attribute of an \{object\} or other entity in the form of a number, which implies that the entity can be counted. That which the quantity counts is a unit. It may be physical, or conceptual, or a measure in time or space:
"three cars"; "two suggestions"; "four metres"; "five hours"; "six colours"; ten kilos".
For some entities, clarification of the unit may be needed. "Five sands" may mean five grains of sand or five types of sand. "Three wines" may mean three bottles of wine or three wine labels. This concept of countability is not the same as that used in English grammar, in which certain words may not take a plural (*"behaviours"; *"leisures"; *"poetries"; *"safeties"). It means simply that a countable unit has to be identified.

A quantity occurs more usually as a qualifier:
"He has three cars"; "She made two suggestions"; "He measured four metres".
Such a sentence can be understood as an observation on an earlier sentence which identifies the entity which is counted. The entity is interpreted as a unit and a quantity is assigned to it:
"He has some cars; they are three." "She made some suggestions; they were two."
"He measured some metres; they were four."
Alternatively, the entities which are counted may have been identified at an earlier stage in the discourse, so that the sentence is:
"The cars that he has are three in number." "The suggestions that she made were two."
"The tape that he measured was four metres."
Since a quantity is an attribute, it is expressed by the same element as other \{attribute\}:
\{object - attribute $\}$.
For example, under the notation of the Possession Sentence (below):
"He has three cars" is $\left\{\right.$ recipient - possession - object $\left.{ }_{1}\right\}$ \{object ${ }_{1}$ - attribute $\}$.
However, quantities show some characteristics not found with other \{attribute\} functions. A quantity can be a proportion of a single unit:
"He has eaten half the loaf"; "She has read two-thirds of the book".
We cannot employ for this sentence the same structure as for whole numbers, for example we cannot say:
*"The loaf that he has eaten is one-half" or *"The book which she has read is two-thirds".
The function of these sentences is to relate a part to the whole:
"The part of the loaf which he has eaten is one half."
"The proportion of the book which she has read is two-thirds."
Similarly, the relation of a part to a whole occurs when a quantity is applied to another quantity:
"Two of the three cars are in the garage." "I like two of your three suggestions."
The same relation occurs when the unit which the quantity counts is independent of the entity measured:
"He measured four metres of tape." "He bought two kilos of apples."
In these cases, the unit, such as "metres" or "kilos, is a part of the tape or the apples.
For all these constructions, generally termed the "partitive function", the structure \{object - attribute \} is not sufficient. A further element is needed which describes the relation of a part to the whole. In the following section (The Constituent Sentence), we propose the element \{constitute\}, so that the expressions "half of the loaf", "two of the three cars", and "four metres of tape" are described by:

$$
\text { \{object - constitute }- \text { attribute }\} .
$$

The examples are considered further below.

## The Constituent Sentence

A constituent sentence states that one entity is part of another entity. Simple examples are:

The list included Mrs Smith.
The building has baroque details. The Library supplied the five books. Mary has green eyes.
The carpet has a hole in it.

Mrs Smith was on the list.
The baroque details belong to the building.
The five books are from the Library.
The green eyes belong to Mary.
There is a hole in the carpet.

As we shall see in Chapter 16. (The Object Component), every sentence has an \{object\} which it places in a state or relationship. In the first examples, the \{object \} contains a part. In the second, the \{object\} is part of a larger entity. In both cases, the sentence can be described by the \{object\} and the entity with which it has a constituent relationship, whether as a part or containing a part. This constituent relationship is generally expressed by a noun and an auxiliary verb such as "has" or "is from". We may call it \{constitute\}, so that the structure is:
\{object - constitute $\}$.
In reality, the discourse purpose of many constituent sentences is not to describe the constituent relationship of the \{object\}, which is known, but to provide more information on the \{constitute\} in the form of an attribute or quantity, expressed by \{attribute\}. This additional information is underlined in the following examples:

The houses in this street have slate roofs.
The Smith family includes three brothers. The County Library supplied these books. The paper bag contained five red apples. This old jug has a broken handle.

The slate roofs belong to the houses in this street. The three brothers are from the Smith family. These books are from the County Library. The five red apples are in the paper bag. The broken handle is from this old jug.

The full structure is therefore:
\{object - constitute - attribute $\}$.
The qualifiers of the \{object\}, being part of the topic, are not part of this functional structure. However, these qualifiers may themselves be a constituent, expressed by a genitive link in the form

```
{\mp@subsup{object }{1}{}}{\mp@subsup{\mathrm{ object }}{1}{}-\mp@subsup{\mathrm{ constitute - attribute }:}}{\mathrm{ :}}{}=0
"the building's baroque details";"Mary's green eyes"; "the bag's six red apples".
```

A genitive link is also used to express the connection between a possession and a recipient. Certain languages reflect this distinction by two different words for the functions of the genitive link Chapter 12., The Genitive Link):

$$
\begin{array}{cl}
\text { Samoan:"'o le solofanua a Eti"""Ted's horse""[the horse of Ted] } & \text { \{possession\} } \\
\text { ""'o le ulu o le tama"""the boy's head" [the head of the boy] } & \text { \{constitute\} }{ }^{150}
\end{array}
$$

Italian does not permit a genitive link for a constituent and requires the auxiliary "avere" ("have"):

> "Aveva un occhio che gli faceva molto male." "His eye was hurting him a lot." not *"Il suo occhio gli faceva molto male." [The his eye to-him made very bad.]

The foregoing describes the basic constituent function. However, unlike most other functions the constituent function can repeat itself, so that the \{attribute\} has a further \{constitute\} with its own \{attribute\}:
"The houses have roofs made of Welsh slate." "The Library supplied five of the six books."
"The building's details are Strawberry Hill Gothic."
We may express this recursive relationship with:
as many times as is necessary.
This construction in which a quantity is a \{constitute\} of another quantity is called the "partitive function":
"six metres of rope"; "three pieces of paper"; "seven head of cattle";
"three columns of the newspaper"; "three breeds of dog"; "six shades of blue".
All of these are examples of $\left\{\right.$ attribute $\left._{1}\right\} \quad\left\{\right.$ object $_{1}$ - constitute - attribute $\}$. They occur in sentences such as:
"He has three of the five cars"; "She made two of the three suggestions";
"He measured four of the six metres of tape".
For example, the first of these sentences is:
$\left\{\right.$ recipient - possession - object $\left._{1}\right\}\left\{\right.$ object $_{1}-$ attribute $\left._{2}\right\} \quad\left\{\right.$ object $_{2}-$ constitute - attribute $\left._{3}\right\}$.
In these sentences, all the elements are definite. In the following examples, the first \{attribute\} is indefinite:
"He has some of the three cars"; "He measured some of the six metres of tape".
The constituent relationship may arise through the action of an \{agent\} or \{instrument\}, in which case the $\{$ object $\}$, being altered, is a patient:
"The Secretary included Mrs Smith on the list."
"The architect gave the building 25 baroque details."
"The cigarette burnt a hole in the carpet."
"The knock broke the handle of the old jug."
"She selected five books from the County library."
The elements are:

[^45]$\{$ object - constitute - attribute $-($ agent $) ~-~(i n s t r u m e n t) ~\} . ~ . ~$
A particular instance of a constituent relationship is the physical dimensions of an object in space, time, or some other measure:
"Mount Everest is 8848 metres high." "The River Thames is 338 kilometres long."
"The price of apples is $£ 1.20$ per kilo." "The earth’s diameter is 6378 km ."
"The meeting lasted two hours." "It rained all week."
We may regard the dimensions height, length, price, diameter, and duration as a part of the \{object\}, expressed by \{constitute\}, and the measure (such as 8848 metres) as the \{attribute\}. However, the measure generally includes both a quantity (8848) and a unit (metres). This means that the measure has a \{constitute\} in the form of the unit and an \{attribute\} which is the quantity:
$$
\left\{{\text { object } \left.- \text { attribute }_{1}\right\} \quad\left\{\text { object }_{1}-\text { constitute }- \text { attribute }_{2}\right\} . . . . ~}_{\text {. }}\right.
$$

Many dimensions, but not all, are relative to a base point:
"Mount Everest is 8848 metres high from sea level."
"The River Thames is 338 kilometres long from its source to the North Sea."
"The meeting lasted two hours, from 10.00 to 12.00 ."
For this, we refer to the comparison sentence (The Comparison Sentence, below):

```
{object - attribute }\mp@subsup{}{1}{}}\quad{\mp@subsup{\mathrm{ object }}{1}{}-\mp@subsup{\mathrm{ constitute - attribute }}{2}{}
{\mp@subsup{object }{2}{-}\mathrm{ compare - base}.}
```

Like other \{constitute\}, a dimension can in some cases be by an \{agent\} or \{instrument \}:
"The greengrocer set the price of apples at $£ 1.20$ per kilo."
"She took two hours to finish the report."
"He measured four metres of tape."

$$
\left\{\text { agent }- \text { object }- \text { attribute }_{1}\right\} \quad\left\{\text { object }_{1}-\text { constitute }- \text { attribute }\right\} .
$$

A constituent sentence can also include the statement that the $\{$ object $\}$ lacks a $\{$ constituent $\}$ :

$$
\text { "My car has lost its exhaust." } \quad \rightarrow \quad \text { "My car needs a new exhaust." }
$$

\{object - not - constitute - attribute $\}$.
Such a lack can arise through the action of an \{agent\} or \{instrument \}:
"The mechanic removed the old exhaust from the car with a spanner."
$\rightarrow \quad$ "My car needs a new exhaust."
"The collision knocked the bumper off my car."
$\rightarrow \quad$ "My car needs a new bumper."
The sentence then has the structure:

$$
\{\text { object }- \text { not }- \text { constitute }- \text { attribute }-(\text { agent })-(\text { instrument })\} .
$$

## The Effect Sentence

Some states or conditions, both mental and physical, are the involuntary reaction of a person or object to an external cause. This is expressed in language by an effect, which must include the cause as an element. Effects are created by a transitive sentence, including transitory behavioural reactions which do not have a stative resultant:

## Mental effects

| "His behaviour angered her." | $\rightarrow$ | "She felt angry at his behaviour." |
| :--- | :--- | :--- |
| "The results were surprising to us." $\rightarrow$ | "We were surprised at the result." |  |
| "The future worries us." | $\rightarrow$ | "We are worried about the future." |
| "The speech excited the audience." $\rightarrow$ | "The audience was excited at the speech." |  |
| "Seeing you here has made her happy." |  |  |
| "The outcome disappointed us." | $\rightarrow$ | "She is happy to see you here." |

## Physical effects

"The wound in my leg is causing me pain."

| "Walking keeps her fit." | $\rightarrow$ | "I am in pain from a wound in my leg." |
| :--- | :--- | :--- |
| "Baggage burdened down the car." | $\rightarrow$ | "She is fit from walking." |
| "Asbestos polluted the building." | $\rightarrow$ | "The building was wolluted with asbestos." |
| "Errors corrupted the text." | $\rightarrow$ | "The text was riddled with errors." |

Because the effect is involuntary, the person suffering it is not an agent, but a patient, and the cause is an instrument. The result of the effect is expressed by its action. The elements are therefore:

$$
\{\text { object - effect - instrument }\} .
$$

If the effect is physical, it can in principal be measured:

$$
\{\text { object - effect - instrument - (measure })\} .
$$

Effects can operate in succession, and are then expressed by more than one instrument:
"His behaviour so angered her that she felt faint."
"Software bugs caused errors which corrupted the text."
Many but not all effects can be due to the action of an agent:
"He burdened down the car with the baggage."
"He angered her with his behaviour."
"She excited the audience with her speech."
The full elements for an effect are therefore:

$$
\{\text { object }- \text { effect }- \text { instrument }-(\text { agent })-(\text { measure })\} .
$$

## The Freedom Sentence

Many effects can be removed by an action which we can call a freedom. A mental effect is removed by another effect:
"His remarks reassured her."
"The audience was calmed again by the following speech."
"The nurse relieved the pain by tending the wound."
"Contractors have freed the building of asbestos."
"The editor used software to get rid of the errors in the text."

The freedom is brought about by an \{agent\} or \{instrument\}, or both. The outcome is that the \{object\} is $\{$ free \} of the effect. As the effect is known, it can be designed \{definite\} and marked as negative:

$$
\{\text { object }- \text { free }- \text { not }- \text { definite }-(\text { agent })-(\text { instrument })\} .
$$

A freedom is a reversal of an effect (Chapter 18., The Complementary Sentence).

## The Dependency Sentence

The sentences we have so far been considering describe an actual state or condition, or the actions causing that state or condition. Other sentences refer to a state or condition which may or may not arise, which we call a dependency:
"Parliament subjected this law to the Human Rights Act."
"Subsidence placed the building at risk of collapse." "The storm endangered the boat."
"Smoking is a threat to our health."
A dependency is a risk or uncertainty to a \{object\}, which may be definite or indefinite. The dependency is uncertain and therefore \{indefinable\}. It arises through an external cause or \{instrument\}. If we use $\{$ depend $\}$ for the state of risk or uncertainty, the core elements are:

$$
\{\text { object }- \text { depend }- \text { indefinable }- \text { instrument }\} .
$$

In addition, the sentences state that the dependency may arises through the action of an \{agent\}. The elements are therefore:

$$
\{\text { object }- \text { depend }- \text { indefinable }- \text { instrument }-(\text { agent })\} .
$$

It seems useful to apply this formula to the above examples:

| Patient | Depend | Indefinable | Instrument/Agent |
| :---: | :---: | :---: | :---: |
| this law | subject | effects of the Act | Parliament |
| the building | risk | collapse | subsidence |
| the boat | danger | sinking (not stated) | the storm |
| our health | threat | deterioration (not stated) | smoking |

The \{indefinable\} consequences of the risk or uncertainty may or may not be not stated. If not stated, it is inferred from \{depend\}. The state of risk or uncertainty, \{depend\}, is not indefinable and is always given. In fact, \{depend\} can be quantified:
"There is a $75 \%$ risk of smokers dying before they are 75. ."
The full elements can therefore be stated:
$\{$ object - depend - indefinable $-($ measure $)$ - instrument $-($ agent $)\}$.
If the object of the dependency is a person, he/she may place him/herself in that position:
"He put himself at risk of bankruptcy with the loan."
"He risked his health through smoking."
In that case, the agent is the same as the patient:

$$
\text { \{agentlobject - depend - indefinable - (measure) - instrument }\} .
$$

The object may be inanimate, but may nevertheless be the $\{$ instrument $\}$ of its dependency:
"The Society's charter makes it dependent on donations."
"The rock's structure makes it liable to crumble."
$\{$ instrumentlobject - depend - indefinable - (measure $)$.

## The Relief Sentence

A risk or threat to a $\{$ object $\}$ can be relieved through the action of an $\{$ agent $\}$ or $\{$ instrument $\}$ :
"Flying buttresses protect the cathedral walls from collapsing."
"He rescued his friend from drowning."
"The guard protected the king from attack."
A sentence to express this includes the \{indefinable\} dependency from which the patient is relieved, as well as the $\{$ relief $\}$ action:
$\{$ object - relief - not - indefinable $-($ instrument $) ~-~(a g e n t) ~\} . ~$.
A \{relief\} is a reversal of a dependency (Chapter 18., The Complementary Sentence).

## The Identification Sentence

An identification sentence states that two entities, of which at least one is definite, are the same. Since an identification is a state or condition, the definite entity is an \{object\}, and entity with which the \{object\} is identified is an \{identification\}:
"His office is his bedroom." "The eighth planet of the solar system is Neptune."
An identification sentence can also identify two general classes, of which at least one is generic:
"A cygnet is a young swan." "A capital city is the seat of government."
An identification sentence is therefore:
\{object - identification $\}$.
An identification sentence may select one entity from a class of definite entities, and identify that selected entity with the $\{$ object $\}$ :
"His office is his bedroom, not his kitchen."
"The eighth planet is Neptune, not Uranus."
"A capital city is the seat of government, not necessarily the seat of commerce."
In discourse terms, this is $\{$ definite - select $\}$. In functional terms, it is:
$\left\{\right.$ object - identification $_{1}-$ not - identification $\left._{2}\right\}$.
In the foregoing examples, the \{identification\} is definite. It may also be indefinite, in which case the sentence selects one entity from a class of indefinite entities, and identifies that with the \{object $\}$ :
"My son is a teacher at the local school." "Neptune is a planet of the solar system."
"My son is a teacher, not an accountant." "Neptune is a planet, not an asteroid."
It was shown in Chapter 6. (The Identification Function) that this indefinite \{identification\} is nonspecific. An individual noun can be either the $\{$ object $\}$ or the \{identification $\}$ :
"Frederick is my elder son." "My elder son is called Frederick."
The first sentence refers to a known person, Frederick. The second sentence states that the name "Frederick" has been selected for a known person.

An identification can be the result of a process of naming or selecting the \{identification\}:
"He selected his bedroom as his office."
"The eighth planet was named Neptune in 1846."
"A capital city is defined as the seat of government of a country."
"This rock is limestone, according to the local museum."
If we call the naming or selecting element \{agent\}, the identification sentence is:
$\{$ object - identification - (agent) $\}$.
Correct use of the element \{identification\} resolves the ambiguity in sentences such as: "There was tittle-tattle about his lovers". This has the functional structure \{suppose - object - indefinable\}. If the identification of the lovers are supposed to be known, \{indefinable\} is information about them. If the sentence means "There was tittle-tattle about who were his lovers", then \{indefinable\} is their \{identification\}.

Languages express identification by an auxiliary verb "be" or its equivalent:
Spanish: "París es la capital de Francia." "Paris is the capital of France."152
Irish: "Is é an leabhar mór an duais." "The big book is the prize."
[Is it the book big the prize.]
"Is maith an múinteoir é Séamas." "James is a good teacher." [Is good the teacher he James.] ${ }^{153}$

Russian:"Moi brat byl uchitelem." "My brother was [a] teacher ${ }_{\text {(instrumental) }}$."
Chinese:"Zhè shì Wáng xiāngsheng." "This is Mr Wang." [This is Wang-Mr.] ${ }^{154}$
Japanese:
"Ano hito wa sensei da." "That person is a teacher." [That person (topic) teacher is.] $^{155}$
Or by a rule of word order which distinguishes the $\{$ object $\}$ from the $\{$ identification $\}$ :
Russian: "On vrach." "He is the doctor." [He doctor.]
Arabic: "naḥnu fallāḥūna" "We [are] farmers." ${ }^{156}$
Maori: "He pukapuka hou tēnei." "This is a new book." [A book new this.] ${ }^{157}$
Or by a suffix to the \{identification\}, making it into a verb:

```
Akkadian:
    "šarrāta" "Thou art king." [King-thou]
Inuit: "Uanga Tuumasiuvunga." "I am Tuumasi." [I Tuumasi-am-I.] 158
```


## The Substitution Sentence

A substitution replaces an object with another entity. The substitution may be in the physical world, in time, in human affairs, in an intellectual concept, or in a person's emotions:

[^46]```
"The sash windows were replaced with casement windows."
            \(\rightarrow \quad\) "The windows were casement (not sash)."
"The fourth item on the schedule was replaced with the new proposal."
                    \(\rightarrow \quad\) "The fourth item was the new proposal."
"Lloyd George replaced Asquith as Prime Minister."
                    \(\rightarrow \quad\) "Prime Minister was Lloyd George (not
                            Asquith)."
"Evolution replaced the book of Genesis as the theory of the origin of species."
\[
\rightarrow \quad \text { "The theory of the origin of species was }
\]
                            evolution (not Genesis)."
"Angela replaced Jacqueline as his favourite."
                    \(\rightarrow \quad\) "Angela was his favourite (not Jacqueline)."
"The weather today has turned sunny instead of the rain."
                    \(\rightarrow \quad\) "It is sunny, not raining today."
```

The $\{$ object $\}$ of the substitution is therefore that function or role which was originally occupied by one entity but is now occupied by another. The resultant sentence is that the \{object $\}$ is identified with the new entity, in the form of an identification sentence. The original occupant of the function or role can be called \{original\}:
$\{$ object - identification $-($ not original $)\}$.
The action of substitution is \{substitute\}, so that the substitution sentence has the core structure:
$\{$ object - substitute - original - identification $\}$.
A substitution sentence can have an \{agent \} or $\{$ instrument $\}$ :
"King George V appointed Lloyd George Prime Minister in place of Acquith."
"Scientific opinion substituted evolution for the book of Genesis as the theory of the origin of species."
"His volatile emotions replaced Jacqueline with Angela as the favourite."
Including these elements, we have:
$\{$ object - substitute - original - identification $-($ agent $)-($ instrument $)\}$.

## The Comparison Sentence

A comparison sentence compares the same characteristic of two entities. This characteristic can be anything which can in some way be measured or contrasted, such as a constituent or attribute:
"My father lived longer than my mother."
"These apples are cheaper than those."
"Sarah is more beautiful than Harriet."
Or an action:
"John runs faster than Jim."
Or a possession:
"Jim has more money than John."
These sentences can be expressed in a common format:
"The life of my father was longer than that of my mother."
"The price of these apples is less that those."
"Sarah's beauty is greater than Harriet's."
"John's running is faster than Jim's."
"Jim's money is more than John's."
One entity is the \{object\} of the comparison. The other is the definite \{base\} against which the comparison is made. We may use \{compare\} to refer to the comparison of the two characteristics, so that the comparison sentence is:

$$
\{\text { object - compare - base }\} .
$$

We saw in the attributive sentence (above) that a countable unit it can be qualified by a quantity: "a life of 75 years"; "a price of one pound per kilo"; "a play of three hours"; "a rod of ten metres". If the characteristic which a comparison sentence compares is countable, then the quantity of \{compare\} is its relative size between the $\{$ object $\}$ and the $\{$ base $\}$ :
"My father lived five years longer than my mother."
"These apples are 50 pence per kilo cheaper than those."
"John runs twice as fast as Jim."
Again, these sentences mean:
"My father's life was five years longer than that of my mother."
"The price of these apples is 50 pence less per kilo than that of those."
"John's running as twice as fast as Jim's."
Such a quantified comparison can be represented:

$$
\left\{\text { object }- \text { compare }_{1}-\text { base }\right\}\left\{\text { object }_{1}-\text { constitute }- \text { attribute }\right\} .
$$

A comparison sentence can also compare a characteristic with the same characteristic of a class of entities, a structure called superlative. Such a sentence has the same structure as above, except that \{base\} refers to the class of entities:
"My father was the longest lived of his family."
"These apples are the cheapest in the shop."
"John's runs the fastest."
As we noted in Chapter 3. (Selection and Comparison), the class of entities which is the \{base\} of a superlative can be generic (a definite superlative) or non-specific (an indefinite superlative). In the latter case, $\{$ base \} is of course indefinite:

> German:"Eisen ist das härteste der Metallen." "Iron is the hardest of the metals." (definite superlative)
> "Eisen ist am härtesten." "Iron is hardest." (indefinite superlative)
> Arabic: "Rafḍalu l-tajhīzāti l-ṭibbiyyati" "the best of medical equipments" [best the-equipments the-medical] (definite superlative)
> "Raqṣā heurriyyatin mumkinatin" "the greatest possible freedom" [greatest freedom possible] ${ }^{159}$ (indefinite superlative)
> Italian: "Venezia è la città più splendida che c'è in Italia." (definite superlative)
> "Venice is the most splendid city there is in Italy."
> [Venice is the city most splendid that there is (indicative) in Italy.]
> "Venezia è la città più splendida che ci sia." (indefinite superlative)
> "Venice is the most splendid city there is."
> [Venice is the city most splendid that there is (subjunctive). $^{160}$

[^47]A comparison can result in the observation that the quantities of the two characteristics are the same, in which case the quantity qualifying \{compare $\}$ is nil:
"My parents each died at the age of 75 years." "These apples are the same price."
The same structure applies to another form of comparison, a similarity (Chapter 6., The Identification Function). This is an identification or difference between a characteristic of two (or more) entities:
"She resembles her sister in looks." "My wife and I have different hobbies."
In the first sentence, $\{$ object $\}$ and $\{$ base $\}$ are the looks of the two sisters and \{compare $\}$ is "similar". In the second sentence, $\{$ object $\}$ and $\{$ base $\}$ are the hobbies of myself and my wife and \{compare $\}$ is "different". Neither of these sentences is quantified.

A comparison is a stative sentence, which does not necessarily result from a dynamic one. However, it may do, in which case there is an $\{$ agent $\}$ or $\{$ instrument $\}$ :
"The shopkeeper priced these apples at 50 pence per kilo less than those."
A comparison may not be established by an \{agent\}, but may be observed by one:
"The historian contrasted the economic policies of the Roman and Byzantine Empires."
The full structure of a quantifiable comparison is therefore:

$$
\left\{\text { object }- \text { compare }_{1}-\text { base }-(\text { agent }) /(\text { instrument })\right\} \quad\left\{\text { object }_{1}-\text { constitute } \text { - attribute }\right\} .
$$

A comparison can compare a characteristic of a single entity, before and after a change. This change can be the result of an external \{agent\} or \{instrument\}:
"The road was widened by 10 metres."

$$
\rightarrow \quad \text { "The road was } 10 \text { metres wider." }
$$

"The bank raised the interest rate by $1 / 4 \%$."
$\rightarrow \quad$ "The interest rate was $1 / 4 \%$ higher."
"The move reduced his drive to work by one hour."
$\begin{array}{lll}\text { "She half filled the bucket with water." } & \text { "He lives one hour closer to his work." } \\ \text { "She removed } £ 100 \text { from her account." } & \text { "The bucket was half filled with water." }\end{array}$
In these cases, \{object\} and \{base\} are the same, and \{compare\} is the difference between the characteristics before and after:

$$
\left\{\text { object }_{1}-\text { compare }_{2}-\text { base }_{1}-(\text { agent }) /(\text { instrument })\right\}\left\{\text { object }_{2}-\text { constitute }- \text { attribute }\right\} .
$$

All the above examples compare the characteristics of two objects, called \{object \} and \{base\}. For the comparison to be possible, \{base\} must be definite, or in the case of an indefinite superlative, indefinite. An action may however be compared with a hypothetical or non-existent $\{$ base $\}$ :
"She rode like a whirlwind." "He lives as though there were no tomorrow."
In these examples, "rode" and "lives" are definite. The \{base\} "whirlwind" and "there were no tomorrow" are indefinable. The sentences could be expressed:
"Her riding was like a whirlwind." "His living is as though there were no tomorrow."
In some languages, $\{$ base $\}$ is in the subjunctive in this type of expression:

Italian: "Mi ha guardato come se fossi matto." "He looked at me as if I were mad."
[To-me he-has looked as if I-were ${ }_{\text {(subjunctive) }}$ mad.]
Russian: "Usnula tak, kak budto by ona chto-to sovershila."
"She fell asleep as if she had accomplished something."
[She-fell-asleep so, as if ${ }_{\text {(subjunctive) }}$ she something accomplished.] ${ }^{161}$
Hindi: "baccā darvāze par khaṛā thā jaise kisī ke intazār me~ ho"
"The boy was standing at the door as if waiting for someone."
[Boy door-on standing was as-if someone-of waiting-in he-was $\left.{ }_{\text {(subjunctive). }}\right]^{162}$
The comparison sentence also includes the concept of sufficiency, and the related ones of insufficiency and excess. An \{object $\}$ is or is not sufficient to achieve an indefinable objective expressed by \{base\}:
"There is sufficient/insufficient/too much butter in the fridge."
"The weight of evidence is sufficient/insufficient/more than sufficient to accuse him."
The first sentence implies "sufficient/insufficient/excessive for our daily needs". The application of the comparison sentence to these examples can be summarised:

| \{object $\}$ | \{compare $\}$ | base $\}$ |
| :--- | :--- | :--- |
| butter | sufficient/insufficient/excessive quantity | our daily needs |
| evidence | sufficient/insufficient/excessive weight | to accuse him |

## The Participation Sentence

In a participation sentence, an \{agent\} participates in an action, either by him/herself or with other \{participants\}, towards an inanimate $\{$ target $\}$ without altering it. The sentence describes the action and the $\{$ agent $\}$ 's involvement, but not the relation with the $\{$ target $\}$. The elements are therefore:
\{agent - participate $-($ participants $)-$ target $\}.$
A participation sentence include the concepts of "cope with", "play at", "fulfil", "attend to", "speak", "protest against", "take part in", among others:

English: "He took part in the attack on the fortress."
"He played a game of croquet with his friends."
French: "Ils jouent aux cartes." "They are playing [at] cards."
Italian: "Giocano a scacchi" "They are playing [at] chess."
Spanish: "Ella se ocupa de la parte técnica." "She takes care of the technical side." [She herself occupies of the side technical.] ${ }^{163}$

German:"Er wohnte der Versammlung bei." "He attended [to] the meeting."
"Er kam seiner Pflicht nach." "He fulfilled [to] his duty."
Russian: "Ego protivniki napali na etu teoriyu." "His opponents attacked [on] the theory."164
"Ona igraet na pianino." "She is playing [on the] piano."
Arabic: "yatakallamāni 1-luyata nafsahā""They both speak the same language."

[^48]$$
\text { [They-speak-themselves }{ }_{\text {(dual) }} \text { the-language the-same.] }{ }^{165}
$$

Persian: "be in e?teraz kard" "He protested at this." [To this protest he-made.] ${ }^{166}$
Malay: "Mandy memenuhi semua keperluan kerja itu."
"Mandy fulfilled all the requirements for the job."
[Mandy fulfil all necessity job-the.] ${ }^{167}$
A participation also includes the concepts of "resist", "attack", "obey", and "care for":
French: "Je lui ai résisté." "I resisted him." [I to-him have resisted.] ${ }^{168}$
Italian: "I ragazzi hanno ubbidito al professore." "The boys [have] obeyed [to] the teacher." 169

German:"Er kümmert sich um einen Kranken." "He is looking [himself] after a sick person."
Russian: "Borolsya s vragom." "He fought the enemy." [He fought-himself with the enemy.]
Persian: "be ma taPaddi kard" "He oppressed us." [On us oppression he-made.]
"bar došmanan taxtand" "They attacked the enemy." [On enemy they-attacked.] 170
Hindi: "hamne duśman par hamlā kiyā" "We attacked the enemy."
[By-us enemy-on attack made.] ${ }^{171}$
The $\{$ target $\}$ is not an $\{$ object $\}$, since an $\{$ object $\}$ has to be in some way affected. While the participation action may have some effect on the \{target\}, the sentence provides no information on what that might be. A \{beneficiary\} may occur as a qualifier to the $\{\operatorname{target}\}$ :
"The army attacked the enemy's position." "They protested against Government policy." "She is looking after my back problems."

$$
\left\{\text { agent }- \text { participate }_{1}-(\text { participants })-\text { target }_{2}\right\} \quad\left\{\text { object }_{2}-\text { benefit }_{1}-\text { beneficiary }\right\}
$$

Since the change effected by the participation occurs generally in the mind of the agent, it is difficult to detect whether it has been completed or not. Participation sentences are therefore often expressed by an adjective: "They were obedient to the rules/aggressive towards the enemy/attentive to the task/involved in the event", etc.

As we shall see in the following section, many participations are carried out by virtue of a \{role\} that the \{agent $\}$ possesses:
"The doctor treated me for arthritis."
"Our tax accountant is Mrs Jones."
"The scientists researched the problem."
"The aggressors attacked without warning."
"The rebels rose against the regime."
"The warriors fought the battle."
These are:
\{agentlrole - participate - (participants) - target $\}.$

[^49]
## The Role Sentence

As we discuss in Chapter 12. (Role), a role is a noun which describes a function in human society. A role sentence is one which assigns a role to particular individual:
"John is a hospital consultant." "Lloyd George was Prime Minister." "My grandfather was French." "Sarah is a foreign exchange dealer."

Implicit in this sentence is the competence by which the role is exercised:
"John is a consultant at Guy's hospital."
"Lloyd George was Prime Minister as head of a coalition Government."
"My grandfather was French by birth."
"Sarah is employed as a foreign exchange dealer."
The person fulfilling the $\{$ role $\}$ is not an agent, and so is represented by the element $\{$ object $\}$. If we call the competence by which the \{role\} is exercised \{competence\}, a role sentence is:

$$
\{\text { object - role - competence }\} .
$$

A role can have a sphere of performance, which is distinct from the \{competence\}. In these examples, the \{competence\} is in brackets:

```
"Louis XIV was (hereditary) king of France from 1643 to 1715."
"Mary is (the elected) Treasurer of the Society."
"John is a consultant (in tropical diseases) at Guy's hospital."
"Lloyd George was Prime Minister of Great Britain (as head of a coalition Government)."
"G.R. Elton was a (recognised) historian of Tudor England."
```

The role sentence does not state any effect of the \{role\} on its sphere of operation, so the sphere of operation is not a patient but a $\{$ target $\}$, and the sentence becomes:
$\{($ agent $)-$ object - role - competence $-($ target $)\}$.
A role can be an industry such as construction or oil extraction, in which case the \{object\} is the company or enterprise engaged in it, the \{competence\} is the competence whereby it does so, and the \{target\} is its sphere of activity:
"Shell is a company in the oil industry." "Taylor Woodrow is a registered house builder."
A role frequently occurs in sentences in which a person or object fulfils another function by virtue of an competence which he/she/it holds:
"As king of France, Louis XIV built the Palace of Versailles."
"As Treasurer of the Society, Mary signs the cheques."
If the competence is also stated, these sentences would be:
"As hereditary king of France, Louis XIV built the Palace of Versailles."
"As elected Treasurer of the Society, Mary signs the cheques."
and can be represented as:

$$
\left\{\text { agent }_{1}-\text { create }- \text { creation }\right\}\left\{\text { object }_{1}-\text { role }-(\text { competence })-\text { target }\right\}
$$

$\left\{\right.$ agent $_{1}-$ transform - object $\}\left\{\right.$ object $_{1}-$ role $-($ competence $)-$ target $\}$.
However, if the sentences are:
"As king, Louis XIV built the Palace of Versailles."
"As Treasurer, Mary signs the cheques."
they can be summarised as:

$$
\left\{\text { agent }_{1}-\text { create }- \text { creation }\right\} \text { and }\left\{\text { agent }_{1}-\text { transform }- \text { object }\right\}\left\{\text { object }_{1}-\text { role }\right\} .
$$

In all the above examples, the $\{$ object $\}$ of the $\{$ role $\}$ is the subject. It is also possible for the $\{$ role $\}$ to be the subject:
"Louis XIV's reign was the longest in French history."
"My grandfather's French nationality was inherited from his mother."
"The treasurership is an onerous position."
"The history of Tudor England is frequently studied."
"The oil industry grew by $5 \%$ last year."
These sentences refer to a \{role\} as an office or industry rather than as a person or company. The first example has the structure:
$\left\{\right.$ object $_{1}-$ constitute attribute $\left._{2}\right\} \quad\left\{\right.$ role $_{1}-$ object $\}\left\{\right.$ object $_{2}-$ compare - base $\}$.

## The Style Sentence

In fulfilling an action in human society, a person may exhibit a certain quality or style, which is expressed by a style sentence:
"John has a certain style of speaking in public."
"Mary is an honest Treasurer of the Society."
"The Court of King James I was corrupt."
"He was meticulous in his preparation of the accounts."
"She was aggressive in her interview of the witness."
"They were sincere in their expressions of regret."
"Henry was an expert oarsman."
"Joan had difficulty preparing the report."
A style sentence does not provide new information on the action itself or express its performance, but assumes that the hearer knows that it is performed. The action is therefore \{definite\}, and the person showing the style is not its agent. In addition, the person showing it is not a recipient, since the sentence does not assume that the style has been received from an outside source. The sentence describes an quality or condition of the person, who is therefore an \{object\}. If \{style\} is the style function, a style sentence is:

$$
\{\text { object }- \text { style }- \text { definite }\} .
$$

A sentence which describe a similar but different function to a style is an ability sentence (see below), such as "John can speak in public". However, an ability has not yet been performed, and is therefore \{indefinable\}. Also discussed below is an opinion sentence, in which a person has a considered mental reaction to a \{definite\} object. However, the holder of an opinion is a \{recipient\}.

Since a style sentence describes a quality, it is stative. Since a style describes the performance of an action, it often occurs as an adverbial to a sentence which expresses the performance:

> "John spoke in public with a certain style."
> "Mary acted honestly as Treasurer of the Society."
> "The Court of King James I operated corruptly."
> "He prepared the accounts meticulously."
> "She interviewed the witness aggressively."
> "They expressed sincere regrets."
> "Henry rowed expertly."
> "Joan completed the report with difficulty."

A style may also express the manner of an inchoative or adoptive modal sentence:
"She hastened to complete the report."
"She persisted in writing the report."
"She hesitated to write the report."
"She ventured to write the report."
As with other adverbials (Chapter 16., The Adverbial Component), such a construction is two sentences: an action is performed, and it is performed in a particular style. The structure is, for example:

$$
\begin{aligned}
& \left\{\text { agent }_{1}-\text { participate }_{2}-\text { target }\right\} \quad\left\{\text { object }_{1}-{\text { style } \left.- \text { definite }_{2}\right\}, \text { or }}^{\left\{\text {agent }_{1}-\text { transform }_{2}-\text { object }- \text { resultant }\right\}\left\{\text { object }_{1}-\text { style }- \text { definite }_{2}\right\} .} .\right.
\end{aligned}
$$

Since a \{style\} is definite, it cannot be indefinite or indefinable:

> *"Joan prepared a report with difficulty." *"Joan did not prepare a report with difficulty."

## The Possession Sentence

A possession is a relationship between a person (or animate being), called a \{recipient\}, and an \{object\} which may be animate or inanimate. A possession can be a mental image in the mind of the recipient, or an external concept.

Possessions may arise from an action (a dative sentence) in which an agent or instrument establishes the relationship between the recipient and the object. The following are agential datives:

$$
\begin{aligned}
& \text { "Mary gave the book to John." } \rightarrow \text { "John has the book." (possession) } \\
& \text { "Mary showed the book to John." } \rightarrow \text { "John sees the book." (sight) } \\
& \text { "Mary taught John geography." } \rightarrow \text { "John understands geography." (understanding) } \\
& \text { "Mary lent the book to John." } \rightarrow \quad \text { "John has the book on loan." (loan) } \\
& \text { "Mary introduced Shirley to John." } \rightarrow \quad \text { "John is acquainted with Shirley." (acquaintance) } \\
& \text { "Mary brought John's attention to the noise." } \\
& \rightarrow \quad \text { "John hears the noise." (sensation) } \\
& \text { "Mary explained the details to John." } \\
& \rightarrow \text { "John knows the details." (knowledge) } \\
& \text { "Mary reminded John about the appointment." } \\
& \rightarrow \quad \text { "John remembers the appointment." (memory) } \\
& \text { "Mary entrusted John with the children." } \\
& \rightarrow \quad \text { "John has care of the children." (care) }
\end{aligned}
$$

The possession is expressed in noun form, in brackets. The dative sentences can be understood as "x gives possession of $y$ to $z$ " and the possession sentences as " $z$ has possession of $y$ ". A stative possession sentence may also be the result of a dynamic sentence of the form " $z$ receives or takes possession of $y$ " (a receptive or adoptive sentence), without the intervention of an agent or instrument:

| "John found the book." | $\rightarrow$ | "John has the book." |
| :--- | :--- | :--- |
| "John noticed the book." | $\rightarrow$ | "John sees the book." |
| "John got to know Shirley." |  |  |
| "The noise came to John's attention." | "John is acquainted with Shirley." |  |
| "John learnt the details." | $\rightarrow$ | "John hears the noise." |
| "John recollected the appointment." $\rightarrow$ | "John knows the details." |  |

Dative, receptive, and adoptive sentences are together called transfers. The following dative sentences have both an agent and an instrument:
"Mary sent the book to John through the post."
"Mary explained the details to John with the aid of diagrams."

The following dative sentences are instrumental, and an instrument can also be part of the possession sentence:

```
"The post delivered the book to John."
    \(\rightarrow \quad\) "John has the book from the post." (possession)
"The diagrams explained the details to John."
    \(\rightarrow \quad\) "John understands the details from the
    diagrams." (understanding)
"The noise gave John a headache." \(\rightarrow\) "John has a headache from the noise."
```

                                    (headache)
    Possession and transfer sentences therefore have the elements:

```
\(\{\) recipient - possession - object \(-(\) agent \() ~-~(i n s t r u m e n t) ~\} . ~\).
```

A possession can be a person or material object, and the connection between it and the recipient can be expressed by a genitive link:

| "They elected Mrs Jones as our Chairman." | "Mrs Jones is our Chairman." | (chairman) |
| :--- | :--- | :--- | :--- |
| "We were sold a Ford Focus as our car." | "Our car is a Ford Focus." | (car) |

The connection between the recipient and the object possessed is not clear if no possession is stated, for example *"John, headache" or *"John, book red". Languages therefore generally possess a default possessive auxiliary, which in English is usually "have", "feel", or "suit". For many languages, this possessive auxiliary is not structured as a verb, but as a locative applied to the recipient. This "indirect recipient" is often placed in topic position, while the object possessed is often marked existentially:

German:"Mir ist kalt." "I feel cold." [To-me is cold.]
"Mir ist traurig zumute." "I feel sad." [To-me is sad to-mood.]

Italian:"Mi duole il dito." "My finger hurts." [To-me hurts the finger.]
Russian:"U menya novyi kostyum." "I have a new suit." [With me new suit.]
"Eto menya vpolne ustraivaet." "That will suit me perfectly."
[That of-me fully suits.] ${ }^{172}$
"Ucheniku veselo." "The pupil feels cheerful." [To-pupil cheerful.] ${ }^{173}$
Hungarian:
"Jóska feleségének jó állása van." "Joska’s wife has a good job."
[Joska wife-his-to good job-her is.]
"Lajos bácsinak fáj a feje." "Mr Lajos has a headache."
[Lajos Mr-to hurts the head-his.] ${ }^{174}$
Welsh: "Y mae'r fasged gan Mair." "Mary has the basket."
[There-is the basket with Mary.] ${ }^{175}$
Irish: "Tá gúna nua ag Eibhlín." "Eileen has a new dress." [Is new dress at Eileen.]
"Tá eolas an bhaile go maith aige." "He knows the town well."
[Is knowledge of-the town well at-him.] ${ }^{176}$


[^50]Turkish: "Evin bahçesi var." "The house has a garden." [House-of garden-its there-is.] ${ }^{178}$
Arabic: "lahu banūna fī 1-jāmi§ati" "He has sons in the University." [For-him sons in the-University.]
"maৎī 1-1āna 71,5 frank" "I had with me 71.5 francs." [With-me 71.5 francs.] ${ }^{179}$
Hindi: "mere pās ek gār̄̄ hai" "I have a car." [Me-with a car is.]
"unko uskā nām mālūm thā" "They knew his name." [To-them his name known was.]
"āj kā din mujhe hameśā yād rahegā"" "I shall always remember today."
[Today-of day to-me always mind will-remain.]
"mujhe bhūkh lagī hai" "I am hungry." [To-me hunger attached is.] ${ }^{180}$
Malay: "Dia ada rumah baru." "He has a new house." [He there-is house new.] ${ }^{181}$
Chinese:"Wŏ yŏu gè dìdi." "I have a younger brother." [I there-is unit younger-brother.]
"Dŏngshìzhăng xīnshuĭ shífên gāo."
"The director of the board has an extremely high salary."
[Board-director salary extremely high.] ${ }^{182}$
Japanese:
"Watashi ni wa ki no ue no chīsana tori ga mieta."
"I could see small birds on the tree."

"Watashi ni wa uguisu no koe ga yoku kikoeru."
"I can clearly hear the cries of a nightingale."
[I-to (topic) ${ }^{\text {nightingale-of voice }}{ }_{\text {(subject) }}$ well is-audible.] ${ }^{183}$
Swahili: "Kalamu ina mwalimu." "The teacher has the pencil." [Pencil is-with teacher.] ${ }^{184}$

Inuit employs an auxiliary suffix:
"Aninngaasaatiqarpunga." "I have some money." [Money-some-have-I.]
"Ilinniartitsisuraarput." "He is our teacher." [Teacher-have-we-him.]
"Niaqunnguvuq." "He has a headache." [Head-haspain-he.] ${ }^{185}$
Some possessive relations between persons are expressed by the non-literal use of locative words:

$$
\begin{array}{ll}
\text { "We support the President." "We're all behind you." } \\
\text { "Jones is under Smith." "We're right beside you." }
\end{array}
$$

In the provision of goods and services, the relationship between the agent and recipient is the same as the means by which it is established:

> "The consultancy manned the team with accountants."
> "The soldiers were armed with rifles."
> "The ostler fed the horses."
> "They named their son Frederick."
> "Tenniel illustrated 'Alice in Wonderland'."
(man)
(arms)
(feed)
(name)
(illustration)

[^51]"The aid workers clothed the victims."
"The workers were housed in cottages on the estate." (clothes)

In these sentences, the elements \{possession\} and \{instrument\} are therefore combined:

$$
\{\text { recipient }- \text { possession }
$$

A stative possession sentence can also be the result of a dynamic sentence of the form " $x$ takes possession of $y$ ", in which the recipient acts as agent in establishing the relationship between him/herself and the object. In such adoptive sentences the elements \{recipient\} and \{agent\} are combined:

$$
\{\text { agentlrecipient }- \text { possession }- \text { object }-(\text { instrument })\} .
$$

The adoptive can be expressed by an auxiliary or by a specific adoptive verb:

| "John took the book." | $\rightarrow$ | "John has the book." |
| :--- | :--- | :--- |
| "John looked at the book." | $\rightarrow$ | "John sees the book." |
| "John studied geography." | $\rightarrow$ | "John understands geography." |
| "John borrowed the book." | $\rightarrow$ | "John has the book on loan." |
| "John listened to/for the noise." | $\rightarrow$ | "John hears the noise." |
| "John investigated the details." | $\rightarrow$ | "Our car is a Ford Focus." |
| "We bought a Ford Focus." | $\rightarrow$ | "John has a large salary." |
| "John earns a large salary." |  |  |
| "Sheila took a share in the enterprise." |  |  |
| "The Smiths settled in Blackpool."" | "Sheila shares in the enterprise." |  |
| "I have read your book." | $\rightarrow$ | "I am Smiths' home is in Blackpool." |
| "John took care of the children." | $\rightarrow$ | "John has the child your book." in his care." |

In some languages, an adoptive sentence is constructed by a dative reflexive which can be understood as "take to oneself":

Italian: "S'è presa cura dei cinque bambini." "She took care of the five children."
[Herself she-is taken care of the five children.]
Welsh: "Erbyn hyn mae teulu newydd o foch daear wedi ymgartrefu'n hapus."
"A new family of badgers has now settled in happily."
[By now is family new of badgers after itself-settle in happy.] ${ }^{186}$
Russian: "Zabotilas' o roditelyakh." "She took care of her parents."
[She-cared-herself about parents.]
Arabic: "lā Tataðakkaru Rannī Ralqaytu naẓarī đalayhi marratan"
"I do not remember that I ever once cast a glance at him."
[Not I-remember-myself that-I cast glance-my at-him once.] ${ }^{187}$
The following sections describe sentence types which are variations of the possession function.

## The Deficiency Sentence

A deficiency is the absence of a relationship between a person and an \{object\}, which is felt by the person as a need. Since the deficiency is to the disadvantage of the person, he/she is not the recipient but a \{beneficiary\}:
"John needs a new car."
"John lacks practice in public speaking."

[^52]A deficiency is not simply the negative of a possession, which does not imply that a need was felt: "I do not have car" does not mean "I need a car", but a reversal of a possession (Chapter 18., The Complementary Sentence).

A deficiency may arise from a process whereby the $\{$ beneficiary $\}$ loses the $\{$ object $\}$ :
"John has lost his wallet." $\quad \rightarrow \quad$ "John is missing his wallet."
Alternatively, a deficiency may the result of an action by an \{agent $\}$ to remove the $\{$ object $\}$ :
"The thief stole John's wallet." $\quad \rightarrow \quad$ "John is missing his wallet."
"My driving license was withdrawn."
$\rightarrow \quad$ "I lack a driving license."
If we use $\{$ lack \} for the deficiency function, a deficiency sentence is:
$\{$ beneficiary - lack - not - object $-($ possession $) ~-~(a g e n t) ~\} . ~$
The element $\{$ not $\}$ is expressed because the $\{$ object $\}$ which is lacking can be either \{definite $\}$ or \{indefinable\}, not \{indefinite\}. In "John is missing his wallet", the wallet exists but is missing. In "I lack a driving licence", no driving licence exists.

It is possible for a \{beneficiary\} to renounce a definite \{object\} of which he/she previously had need:
"We have given up the cottage;" "She rejected the opportunity;"
"He has wasted his inheritance;"
or an indefinable $\{$ object $\}$ which he/she does not yet possess:
"We renounce all worldly goods." "She rejected any opportunity of promotion."
In these cases, the elements $\{$ agent $\}$ and $\{$ beneficiary $\}$ are combined:
$\{$ agentlbeneficiary - lack - not - object $-($ possession $)$ (instrument) $\}$.
Languages often construct a deficiency with a locative beneficiary in topic position:
French: "Il leur faudra cent francs." "They will need 100 francs."
[It to-them will-be-necessary 100 francs.] ${ }^{188}$
German:"Es fehlt mir an nötigen Gelde." "I lack necessary funds."
[It lacks to-me at necessary funds.]
Italian: "Mi era occorso l'aiuto dei miei studenti." "I needed my students' help."
[To-me was needed the help of-the my students.]
"A Giorgio manca il passaporto." "George lacks his passport."
[To George lacks the passport.] ${ }^{189}$
Russian: "Detyam nuzhen khoroshii ukhod." "Children need good care."
[To-children necessary good care.] ${ }^{190}$
Welsh: "Y mae eisiau bwyd ar y bachgen." "The boy needs food." [There-is need food on the boy.] ${ }^{191}$

Irish: "Tá an leabhar caillte ag an ngarsún." "The boy has lost the book."

[^53][Is the book lost at the boy.]
Hindi: "hame ${ }^{\sim}$ ye pustke nahr̃ cāhie" "We don't need these books." [To-us these books not necessary.] ${ }^{192}$

The beneficiary may also be marked with a locative in the dative deficiency sentence:
French: "On lui a volé son argent." "They have stolen his money".
[One to-him has stolen the money.] ${ }^{193}$
Spanish:"Les robaron el coche." "They stole your car." [To-you they-stole the car.]

## The Exchange Sentence

In an exchange sentence, a mutual relationship exists between an \{agent\} and \{recipient \}. There are therefore potentially two transfer and possession sentences, relating to an $\left\{\right.$ object $\left._{1}\right\}$ and a compensating \{object ${ }_{2}$ :

$$
\begin{array}{ll}
\left\{\text { agent }_{1}-\text { possession }_{1}-\text { object }_{1}-\text { object }_{2}-\text { recipient }_{1}\right\} & \text { \{agent } \\
1 & \left.=\text { recipient }_{2}\right\} \\
\left\{\text { agent }_{2}-\text { possession }_{2}-\text { object }_{2}-\text { object }_{1}-\text { recipient }_{2}\right\} & \text { agent } \left._{2}=\text { recipient }_{1}\right\}
\end{array}
$$

Examples are:
"She sold the book to a friend for $£ 10$."
"Her friend bought the book for $£ 10$."
"He rescued his companion."
"His companion thanked him for rescuing him."
"Mary won a good grade for her work at school."
"The school congratulated Mary for her work."
An exchange sentence can have a \{beneficiary $\}$ who is different from either agent or recipient:
Indonesian:
"Dia membelikan adiknya buku." "He bought his brother a book."
[He bought-for brother-his book.] ${ }^{194}$
Swahili: "Numewanunulia sukari." "I have bought sugar for them."
[I have bought-for-them sugar.] ${ }^{195}$
Japanese:
"Watashi wa chichi ni kamera o katte moratta."
"My father bought a camera for me."
$\left[I_{\text {(topic) }}\right.$ father-by camera ${ }_{\text {(object) }}$ buying received.] ${ }^{196}$
This gives the structure:

$$
\left.\begin{array}{c}
\left\{\text { agent }_{1}-\text { possession }_{1} \backslash \text { benefit }- \text { object }_{1}-\text { object }_{2}-\text { recipient }_{1}-(\text { beneficiary })\right\} \\
\left\{\text { agent }_{1}=\text { recipient }_{2}\right\} \\
\left\{\text { agent }_{2}-\text { possession }_{2} \backslash \text { benefit }\right. \text { object }
\end{array} 2 \text { object }_{1}-\text { recipient }_{2}-(\text { beneficiary })\right\}_{\left\{\text {agent }_{2}=\text { recipient }_{1}\right\}} .
$$

An agent can also carry out an exchange for his/her own benefit:

[^54]"James bought the book from the bookshop for his own use."
"The bookshop sold James the book for his own use."
\[

$$
\begin{aligned}
& \left\{\text { agent }_{1} \backslash \text { beneficiary } \text { possession }_{1} \backslash \text { benefit }- \text { object }_{1}-\text { object }_{2}-\text { recipient }_{1}\right\} \\
& \left\{\text { agent }_{1}=\text { recipient }_{2}\right\} \\
& \left\{\text { agent }_{2}-\text { possession }_{2} \backslash \text { benefit }- \text { object }_{2}-\text { object }_{1}-\text { recipient }_{2} \backslash(\text { beneficiary })\right\}_{\left\{\text {agent }_{2}=\text { recipient }_{1}\right\}}
\end{aligned}
$$
\]

## The Perception Sentence

A perception is mental impression which a \{recipient\} has of an \{object\}, either at first hand though the senses or at second hand though memory or knowledge. The \{object\} can be already known to the recipient, or new to him/her:
"John saw the/a book." "John heard the/a noise." "Mary knew John."
"Mary remembered the/an appointment." "Peter heard about his neighbours."
"Henry saw the/a mistake."
The mental impression (the perception) can also be of some quality or action of the $\{$ object $\}$ :
"John saw that the book was open at page 109."
"John heard the noise come from behind some bushes."
"Mary knew James to be an indifferent correspondent."
"Mary remembered that the appointment was due tomorrow."
"Peter heard that his neighbours had a large family."
If as in these examples the $\{$ object $\}$ is known to the $\{$ recipient $\}$, it is definite. The $\{$ object $\}$ and the perception constitute a statement of which the \{object\} is the subject, and which the \{recipient\} perceives: "The book was open at page 109 "; "The noise came from behind some bushes", etc. We may therefore expect that the elements of the perception are similar to the elements of a statement (Chapter 13., Statement). We can distinguish perceptions which are known to the \{recipient $\}$ and are therefore definite:
"John saw that the book was open at page 109."
"Mary remembered that the appointment was due tomorrow."
In these sentences, the \{recipient\} is selecting one perception from a range of possible known perceptions concerning a definite $\{$ object \}. If we call the act of perceiving \{perceive\}, the structure is:
\{recipient - perceive - object - select $\}$.
In other sentences, the $\{$ recipient $\}$ is perceiving new information concerning a definite $\{$ object $\}$ :
"John heard the noise come from behind some bushes."
"Mary knew James to be an indifferent correspondent."
"Peter heard that his neighbours had a large family."
As we noted in Chapter 13. (Statement), a statement containing an indefinite comment qualifies the comment with a definite element \{circumstance\} so that the comment can be definite in a subsequent sentence. In an indefinite perception of a definite \{object\}, the \{circumstance\} is provided by the action of perception and does not need to be further stated. Taking the above sentences as examples, the bushes are identified by John's hearing of a noise, James' identification as an indifferent correspondent is made by Mary, and the large family is identified by Peter's hearing about them. The elements of these perception sentences are therefore:

$$
\{\text { recipient - perceive - object - indefinite }\} .
$$

If the $\{$ object $\}$ is definite, the sentences can be expressed with it as the topic, which means only that the order of elements is different:

> "The book was seen to be open at page $109 . "$
> "The noise was heard by John to come from behind some bushes."
> "James was known by Mary to be an indifferent correspondent."
> "The appointment was remembered by Mary to be due tomorrow."
> Italian: "Ti credevo già partita." "I thought you'd already gone."
> [You I-thought already gone.]

The distinction between a definite and indefinite perception of a definite object can be seen in the examples:
"John was found alive." "John was found to be alive."
In the first example, "alive" is known information which is \{select\} in preference to the alternative, which might be "dead". In the second example, "alive" is new information and therefore \{indefinite\}.

We now consider perceptions in which the \{object $\}$ is new information to the $\{$ recipient $\}$ and therefore indefinite. The \{recipient $\}$ perceives some definite information concerning the $\{$ object $\}$ which enables him/her to identify it:
"John saw a book open at page 109."
"John heard a noise coming from behind the bushes."
"Mary remembered an appointment which was due tomorrow."
"Henry saw a mistake in the text."
This identifying information has the same purpose as \{circumstance\} in a statement with an indefinite comment. The structure is therefore:

$$
\{\text { recipient - perceive - object - circumstance }\} .
$$

The \{circumstance\} cannot be indefinite. It is not possible for a new quality or action to be perceived on an indefinite $\{$ object $\}$ :
*"John saw a book open at a page."
*"John heard a noise coming from behind bushes."
*"Mary remembered an appointment in a schedule."
*"Henry saw a mistake in a text."
An indefinite $\{$ object $\}$ of a perception can be made the $\{$ object $\}$ of an existential sentence:
"A book was seen to be open at page 109."/"There was a book seen to be open at page 109."
"A noise was heard by John to come from behind the bushes."/"There was a noise heard..."
"An appointment was remembered by Mary to be due."/"There was an appointment..."
"A mistake was seen by Henry in the text."/"There was a mistake..."
It will be recalled from Chapter 13. (Existential Sentence) that the structure of an existential sentence is \{indefinite - circumstance\}, which is consistent with the foregoing.

We can therefore summarise a perception sentence as:

$$
\text { \{recipient - perceive - object - select/indefinite/circumstance\}, }
$$

depending on the nature of the $\{$ object $\}$ and the perception. A perception can take place with the aid of an $\{$ instrument $\}$ :
"John saw the book through the telescope to be open at page 109."
"From previous experience, Mary knew James to be an indifferent correspondent."
"Her diary reminded Mary that the appointment was due."

[^55]$\{$ recipient - perceive - object - select/indefinite/circumstance $-($ instrument $)\}$.
As with other sentence types, a perception includes its negative, that is a failure to perceive. If the \{object\} and the perception are definite, the truth or falsehood of the perception is not affected by whether it is perceived or not:
"John did not see that the book was open at page 109."
$\{$ recipient - not - perceive - object - select $-($ instrument $)\}$.
If a possible perception concerning a definite $\{$ object $\}$ is indefinite, a failure to perceive it does not establish whether the perception occurred or not. In that case, the perception is \{indefinable\}:
"John did not hear the noise come from behind some bushes."
"Peter did not hear that his neighbours had a large family."
The elements of a sentence which describes a failure of perception concerning a definite object can therefore be summarised:
$\{$ recipient - not - perceive - object - select/indefinable $-($ instrument $)\}$.
However, if the \{object\} is indefinite, a failure to perceive it does not supply information on whether it exists or not. Both the \{object\} and the \{perception\} are then \{indefinable\}. Such sentences are not perceptions, but suppositions, and are discussed below (The Supposition Sentence):
"John did not see a book which was open at page 109."
"John did not hear a noise which came from behind the bushes."
A perception may be involuntary; a person may not wish to see, hear, know, or remember something. Alternatively, it may be adopted by the recipient as a deliberate action:
"John looked at the book open at page 109."
"John listened to the noise coming from behind the bushes."
"Mary realised that James was an indifferent correspondent."
"Mary recollected that the appointment was due tomorrow."
If the perception is adopted, the element \{recipient $\}$ combines with $\{$ agent $\}$ :
\{agent|recipient - perceive - object - select/indefinite/circumstance $-($ instrument $)$.
An adoptive perception is expressed in some languages through a dative reflexive, in the sense "to oneself":

Italian: "Mi sono accorto che era tardi." "I realised it was late."
[Myself I-am realised that it-was late.]

## The Negative Perception Sentence

This heading refers not to a failure by a recipient to perceive ("John did not see the book"; "Mary did not remember the appointment"), but to a perception that something is not true. Let us first consider a negative definite perception concerning a definite object:
"John saw that the book was not open at page 109."
"Mary remembered that the appointment was not due tomorrow."
In that case, the \{recipient\} is not selecting a perception but perceiving that a particular definite condition is not valid for the $\{o b j e c t\}$. The structure is therefore:

$$
\{\text { recipient }- \text { perceive }- \text { object }- \text { not }- \text { definite }\} .
$$

If the $\{$ object $\}$ is definite, but the negative perception is indefinite, we have sentences such as:
"John heard that the noise did not come from behind some bushes."
"Mary knew that James was not an indifferent correspondent."
"Peter heard that his neighbours did not have large family."
These sentences mean: "There were no bushes from which the noise came"; "There is no indifferent correspondent who is James"; "There is no large family belonging to the neighbours". The perception is \{indefinable\}, so the sentence is:

$$
\{\text { recipient }- \text { perceive }- \text { object }- \text { not }- \text { indefinable }\} .
$$

If we add the element \{instrument\}, the elements of a negative perception can be summarised as:
$\{$ recipient - perceive - object - not - definite/indefinable $-($ instrument $)$.
All the above examples relate to a definite \{object\}. A negative perception cannot relate to an indefinite object. The following sentences are meaningless:
*"John saw that a book was not open."
*"Mary remembered that an appointment was not due."
*"John heard a noise not coming from behind some bushes."
*"Henry saw a mistake which was not in the text."
However, it is possible for an $\{o b j e c t\}$ to be negative, in which case it is indefinable:
"John saw no book." "Mary remembered no appointment."
"There was no noise which John heard." "Henry saw no mistake."
In Italian, the verb of an indefinite negative perception is subjunctive:
"Sembra che Alberto non arrivi in tempo." "It seems that Alberto will not arrive in time."
[It-seems that Alberto not arrive ${ }_{(\text {subjunctive }}$ in time.] ${ }^{198}$
"Non so se sia già partito." "I don't know whether he's (subjunctive) ${ }^{\text {already left." }}$ " ${ }^{199}$

## The Opinion Sentence

A opinion is a considered mental reaction by a person to an event which he/she has perceived. The event is an action or state, which may relate to the opinion-holder or to a third party. An opinion sentence does not express the perception, but the mental reaction to it. It can be expressed with the opinion-holder or the event as the topic:
"We were pleased by the play."
"He was satisfied with the contract."
"He likes skiing."
"He objected to the proposal."
"She was offended at the offer."
"They trusted the information."
"She was interested in his work."
"She pitied their distress."
"She is proud of her work."
"We take the matter seriously."
"He was ashamed at his performance."
"The play pleased us."
"The contract satisfied him."
"The proposal was objected to"
"The offer offended her."
"The information gave them confidence."
"His work interested her."
"Their distress was pitiful to her."
"Her work gives her pride."
"The matter is serious for us."
"His performance shamed him."

The event can be expressed by any factual sentence, which may again be the topic:

[^56]"She was pleased that Johnnie had eaten his lunch."
"She was interested that Hilary and Tensing had climbed Mount Everest."
"Johnnie's having eaten his lunch pleased her."
"Hilary and Tensing's climbing of Mount Everest interested her."
An opinion sentence can be expressed as a possessive sentence in which the opinion is the possession, with either "have" or "take" as an auxiliary:
"We had/took pleasure in the play." "He had/took satisfaction with the contract."
"They had confidence in the information." "She took an interest in his work."
The opinion-holder is therefore a \{recipient\}. From the above examples, it might appear that an opinion is held with regard to an object, but this is not so. In other sentence categories, an $\{$ object $\}$ is an entity which a sentence places in state or event. For example, a perception perceives a state or event concerning an $\{$ object $\}$ :
"She read that Hilary and Tensing had climbed Mount Everest."
"She saw that Johnnie had eaten his lunch."
In contrast, an opinion is held concerning the state or event itself. The sentences at the start of this section mean:
"We were pleased by the performance of the play."
"He was satisfied with the performance of the contract."
"He likes the experience of skiing."
"He objected to what was proposed."
This distinction is shown by the ability to place the words "the fact that" in front of an opinion event, but not in front of a perception:
"She was pleased at the fact that Johnnie had eaten his lunch."
"She was interested in the fact that Hilary and Tensing had climbed Mount Everest."
*"She saw the fact that Johnnie had eaten his lunch."
*"She read the fact that Hilary and Tensing had climbed Mount Everest."
Since the event concerning an \{opinion\} is held is known, it is $\{$ definite $\}$. The elements of an opinion are therefore:
\{recipient - opinion - definite $\}$.
Like other possession sentences, $\{$ opinion $\}$ are often constructed with a locative recipient:
French: "Ça va lui faire plaisir." "He will be pleased at that."
$$
\text { [That will to-him cause pleasure.] }{ }^{200}
$$

Spanish:"Le daba vergüenza contestar." "He was too ashamed to answer."
[To-him gave shame to-answer.] ${ }^{201}$

Italian: "Ci sono piaciute le tue poesie." "We liked your poems."
[To-us are pleased the your poems.] ${ }^{202}$
Welsh: "Y mae'n well gennyf i weithio yn yr ardd." "I prefer to work in the garden."
[It is better with me to work in the garden.]
"Y mae'n ddrwg gennyf i glywed am eich dannoedd."
"I'm sorry to hear of your toothache."
[It is bad with me hearing of your toothache.] ${ }^{203}$

[^57]> Greek: " $\Delta \varepsilon \mu \circ v \alpha \rho \varepsilon ́ \sigma \varepsilon ı ~ \alpha v \tau o ́ ~ \tau о ~ к р \alpha б i ́ . " ~ " I ~ d o n ’ t ~ l i k e ~ t h i s ~ w i n e . " ~$
> [Not to-me it-likes this the wine.] ${ }^{204}$
> Persian: "in ketab mara pasand amand" "I liked this book."
> [This book to-me pleasant came.] ${ }^{207}$
> Hindi: "mujhe tumhārī bāto~ par viśvās nahĩ hai" "I don't trust what you say."
> [To-me your words-on trust not there-is.]
> "hame~ rīnā par bahut garv hai" "We are very proud of Rina."
> [To-us Rina-on much pride is.] ${ }^{208}$

An \{opinion\} can sometimes be the result of an intentional action by a third party:
"He interested his wife in Spanish architecture."
"She satisfied him that the contract had been fulfilled."
"He offended her with his remarks."
"He was true to his friends."
The elements of such a sentence are:
$\{$ recipient - opinion - definite $-($ agent $)\}$.
However, the majority of \{opinion\} arise from an intentional action by the \{recipient to adopt it, and can be described by:

$$
\{\text { agentlrecipient - opinion - definite\}. }
$$

These are the same as adoptive sentences for other possessions: Examples are:

| "We took pleasure in the play." | "The play pleased us." |
| :---: | :---: |
| "She took an interest in his work." $\rightarrow$ | "His work interested her." |
| "He took satisfaction in the contract." |  |
| " $\rightarrow$ | "He was satisfied with the contract." |
| "She took pity on their distress." | "She pitied their distress." |
| "She takes pride in her work." | "She is proud of her work." |
| "We take the matter seriously." | "The matter is serious for us." |
| "He took a liking to skiing." | "He likes skiing." |
| "He took objection to the proposal." |  |
| $\rightarrow$ | "He disliked the proposal." |
| "She took offence at the offer." | "The offer offended her." |
| "They took confidence from the information." |  |
| $\rightarrow$ | "They were confident of the information." |
| "He took shame at his performance." |  |
| $\rightarrow$ | "He was ashamed at his performance." |

Some languages express an adoptive \{opinion\} by a dative reflexive construction which can be understood as "take to oneself":

[^58]Italian: "S'è pentito d'aver detto tante bugie." "He repented of having told so many lies."
[Himself he-is repented of having told so many lies.] ${ }^{209}$
"Mi vergogno di averlo fatto." "I am ashamed of having done it."
[Myself I-shame of having-it done.]
"Mi rammarico di averlo scritto." "I regret having written it."
[Myself I-regret of having-it written.]
Greek: "N $\tau \rho \varepsilon ́ \pi о \mu \alpha ı \gamma \imath \alpha \tau \eta \sigma \nu \mu \pi \varepsilon \rho \iota \varphi о \rho \alpha ́ \mu \circ v$." "I'm ashamed of my behaviour." [I-shame-myself for the behaviour my.]

[I regret-myself that lost the Nikos the job his.]
" $\Delta \varepsilon ́ \chi \tau \eta \kappa \varepsilon \tau \eta \nu \pi \rho o ́ \tau \alpha \sigma \eta \mu \alpha \varsigma \alpha \mu \varepsilon ́ \sigma \omega \varsigma . " ~ " H e ~ a c c e p t e d ~ o u r ~ p r o p o s a l ~ i m m e d i a t e l y . " ~$
[He-accepted-himself the proposal our immediately.] ${ }^{210}$
Russian:"On zainteresovalsya filosofiei." "He became interested in philosophy."
[He interested-himself with philosophy.]
"Ona gordilas' svoim synom." "She was proud of her son."
[She prided herself with her son.]
"My voskhishchalis' ikh igroi." "We admired his acting."
[We admired-ourselves with his acting.] ${ }^{211}$
Arabic: "iftaqaduhu ṣadīqan""I believed him a friend." [I believed-myself-him friend.]
"i¢taraḍa l-i $\theta$ nāni ¢alā ṣarāmati l-qawānīna"
"The two men objected to the harshness of the laws."
[Objected-themselves the-two to harshness the-laws.] ${ }^{212}$
An opinion sentence can be expanded to include the communication of that opinion to a third party \{recipient\}:
"He complained to the management about the standard of service."
"They showed interest in the proposal."
"They rejoiced at their good luck."
"They lamented their ill fortune to their friends."
"They expressed pleasure to me that you had succeeded."
The \{opinion\} is communicated by an \{agent \} who is also its \{recipient\}. The opinion communication sentence therefore includes two recipients, $\left\{\right.$ recipient $\left._{1}\right\}$ who holds the opinion and $\left\{\right.$ recipient $\left.{ }_{2}\right\}$ who receives the communication. The event is known to both the speaker and the hearer, and so is \{definite\}. In addition, the agent uses a means or \{instrument\} to communicate, which may be stated or may not:
"He complained to the management in writing about the standard of service."
"Their expressions showed their interest in the proposal."
The elements of a communicated \{opinion\} are therefore:
$\left\{\right.$ agent $\backslash$ recipient $t_{1}-($ instrument $)-$ opinion - definite - recipient $\left._{2}\right\}$.
The addition of $\{$ instrument $\}$ and $\left\{\right.$ recipient $\left._{2}\right\}$ differentiates this sentence from an $\{$ opinion $\}$ which is not communicated.

The \{instrument $\}$ of a communicated \{opinion\} may be a document:
"He wrote a letter of complaint to the management about the standard of service."
"The ambassador presented her credentials to the Foreign Minister."

[^59]"He issued a certificate of satisfaction on the performance of the contract."

In that case, the document itself expresses the \{opinion\}, so that the \{instrument\} and \{opinion\} are the same entity:
$\left\{\right.$ agent $\backslash$ recipient ${ }_{1}$ - opinion $\backslash$ instrument - definite - recipient $\left._{2}\right\}$.
We should also consider negative \{opinion\}:
"We are sorry that you are not well." "We are glad that it is not raining."
We recall that an \{opinion\} is a considered mental reaction to an event that a \{recipient\} has perceived. If the event has not happened, the \{recipient\} cannot have perceived it. However, the \{recipient $\}$ may have perceived that an expected event has not happened: "We are sorry that you are not well". In that case, the expected event is \{definite\} and the opinion sentence is:

$$
\{\text { recipient }- \text { opinion }- \text { not }- \text { definite }-(\text { agent })\} .
$$

Alternatively, the \{recipient\} may have hypothesised that an expected event might have occurred "We are glad that it is not raining". In that case, the expected event is \{indefinable\} and the mental reaction is a supposition, as discussed below.

## The Supposition Sentence

We have so far considered two types of mental impression that a \{recipient \} has of a \{object\}, in both of which the impression is true or believed by the speaker to be true. In a perception, the impression becomes a fact in the mind of the \{recipient\} through being perceived. In an opinion, the \{recipient $\}$ considers the impression further and forms a considered view on it:
"She saw the picture; she thought it was beautiful."

Another form of considered mental response is to an event which may occur but has not, which we can call a supposition. A supposition may be something expected, or hoped for, or feared, or doubted, or imagined, or intended, or wished for:

```
"She considered the argument to be closed."
    \(\rightarrow \quad\) "She thought the argument to be closed."
"They took fright that the king might die."
    \(\rightarrow \quad\) "They feared the king might die."
"I take hope that you will recover." \(\rightarrow\) "I hope you will recover."
"We doubt if it will rain."
"We imagined that it might rain." \(\rightarrow\) "We supposed it might rain."
"We took a decision to go home." \(\rightarrow\) "We decided to go home."
"We expected them to come." \(\rightarrow\) "We waited for them to come."
"We resolved to invite you." \(\rightarrow \quad\) "We wish to invite you."
"I intend to have muffins for tea." \(\rightarrow\) "I wish we had muffins for tea."
```

A supposition can be expressed as a possession sentence, in which the \{recipient\} possesses an expectation of an event: "We have a fear about..."; "We have hope that..."; "We have doubts whether..."; "We have an idea that..."; "We have the intention that..."; "We have a desire for...". As a voluntary response, it can also be the result of an intentional action by the \{recipient\} to adopt it. In the above examples, the first sentence is the adoptive and the second is the possessive. Since the point at which a recipient adopts a supposition is often not clear, the distinction in meaning between the adoptive and possessive may be slight.

The supposition may refer to an \{object\} which is known to the $\{$ recipient $\}$ and is therefore definite. The event supposed can be any type of sentence:
"She hoped that the lunch was ready."
"She hoped that Johnnie would eat his lunch."
"She hoped that they would go home."
Unlike an event which is subject to an opinion, a supposed event has not occurred at the time that it is expected, and may not occur at all. It is therefore \{indefinable\}, and may be expressed in the subjunctive in languages which possess that form:

Italian: "Credo che sia già partito." "I think that he's (subjunctive) ${ }^{\text {already gone." }}$
"Cerco una giacca che vada bene con questa gonna."
"I'm looking for a jacket which goes (subjunctive) well with this skirt." ${ }^{213}$
Spanish: "Prefiero un coche que tenga cuatro puertas."
"I prefer a car which has (subjunctive) four doors." ${ }^{214}$
"Tenía miedo no le vieran." "He was afraid that they would see him."
[He-had fear not him they-saw $\left.{ }_{\text {(subjunctive) }}\right]^{215}$
In the second Spanish example, the \{indefinable\} character of the supposition is reinforced through use of the negative "no".

German:"Ich wünschte, ich wäre zu Hause." "I wish I were ${ }_{\text {(subjunctive) }}$ at home."
Greek: "To $\beta \rho \alpha ́ \delta 1$ Ө $̇ \lambda \varepsilon ı v \alpha \beta \lambda \varepsilon ́ \pi \varepsilon ı ~ \tau \eta \lambda \varepsilon o ́ \rho \alpha \sigma \eta . " ~$
"In the evening she wants to watch television."
[The evening she-wants that she-watches (subjunctive) television.] $^{216}$
Persian: "tasavvor mikonam ta hala raside bašad" "I think he will have arrived by now."
[Supposition I-make by now arrived he-is (subjunctive).]
"tasmim gereftand ke beravand" "They decided to go."
[Decision they-took that they go ${ }_{\text {(subjunctive) }}$. ${ }^{217}$
Hindi: "maĩ cāhtā hū̃ ki vah hindī sīkh le" "I want him to learn Hindi."
[I wanting am that he Hindi learns ${ }_{\text {(subjunctive) }}$. $]^{218}$
Swahili: "Nataka watoto waje hapa ili tupate kuanza kazi yetu."
"I want the children to come here so that we can begin our work."
[I-want children they-come ${ }_{(\text {subjunctive })}$ here so-that we-can ${ }_{\text {(subjunctive) }}$ begin work our.] ${ }^{219}$
A supposition cannot be made concerning an indefinite object which is not known to the \{recipient\}. Such an indefinite object is part of the supposition and is therefore \{indefinable\}:
"She hoped that there were fairies at the bottom of the garden."
"I'm looking for a jacket which goes well with this skirt."
"I prefer a car which has four doors."
If we use $\{$ suppose $\}$ for the mental process, the elements of a supposition sentence are:

$$
\{\text { recipient - suppose }-(\text { object }) \text { - indefinable }\}
$$

and of an adopted supposition are:
\{agent|recipient - suppose - (object) - indefinable .
A supposition may also be made by the recipient concerning him/herself:

[^60]"They imagined that they had become rich." "She hoped she would pass the exam."
In that case, the elements \{recipient\} and \{object\} are combined:

```
{recipientlobject - suppose - indefinable}
{agentlrecipientlobject - suppose - indefinable}.
```

A locative recipient construction may be used for a supposition:
Italian: "Gli dispiaceva che essi non venissero." "He was sorry that they would not come."
[To-him was displeasing that they not came ${ }_{\text {(subjunctive).] }}$
Irish: "Ní miste leis fanúint leat." "He does not mind waiting for you."
[It-is-not harm with-him waiting for you.] ${ }^{220}$
Hindi: "us ādmī ko das aṇ̣e cāhie" "That man wants ten eggs."
[That man-to ten eggs are-wanted.] ${ }^{221}$
The same languages which employ a dative reflexive for an adoptive opinion may also employ it for a supposition:

German:"Ich habe mir vorgenommen, das nächste Woche zu tun."
"I intend to do that next week." [I have to-myself intended, that next week to do.]
Italian: "S'é decisa di non verderlo." "She decided not to see him."
[Herself is decided of not to-see-him.]

[He-fears-himself lest not her he-meets.] ${ }^{222}$
" $\Sigma \kappa \varepsilon ́ \pi \tau \tau \mu \alpha \iota ~ v \alpha ~ \pi \alpha ́ \omega ~ \sigma \tau \eta \nu ~ К \rho \eta ́ \tau \eta ~ \tau о ~ П \alpha ́ \sigma \chi \alpha . " ~$
"I'm thinking of going to Crete for Easter."
[I-think-myself that I-go to-the Crete the Easter.] $]^{223}$
Russian:"Ya nadeyus' vskore uvidet' vas." "I hope to see you soon."
[I hope-myself soon to-see you.]
"Mogu sebe predstavit', chto on govoril." "I can imagine, what he said."
[I-can to-myself imagine, what he said.] ${ }^{224}$
Arabic: "taṣawwara Panna l-baḥra fì ṣiqilliyyata PakӨaru zurkatan"
"He imagined that the sea in Sicily is bluer."
[He-imagined-himself that the-sea in Sicily more in-blueness.]
"tamannaytu law tursilī Rilayya šay?an" "I wished you would send me something." [I-wished-myself if you-sent to-me something.] ${ }^{225}$

When a supposition is a gerund, it is an intention in the mind of the \{agent\}:

Italian: "Studia molto affinché possa vincere il premio."
"He's studying a great deal so as to win the prize."
[He-studies much so-that he-can ${ }_{\text {(subjunctive) }}$ win the prize.]
"Aprite la porta senza che lui se ne accorga." "Open the door without his noticing."
[Open the door without that he himself of-it notices ${ }_{\text {(subjunctive) }}$.] ${ }^{226}$

[^61]German:"Sie ging vorbei, ohne daß sie mich auch nur einmal angeschaut hätte."
"She passed by without even once looking at me."
[She passed by, without that she me even once looked-at had ${ }_{\text {(subjunctive) }}$. $]^{227}$
Hungarian:
"Felhasználtam az alkalmat arra, hogy elszökjek."
"I used the opportunity to get away."
[I-used the opportunity onto-that, that I away-get $\left.{ }_{\text {(subjunctive). }}\right]^{228}$
Persian: "inra panhan kard ta kasi peida nakonad" "He hid this so that no-one would find it." [This (object) ${ }^{\text {hiding he-made so-that anyone finding not-he-makes }}{ }_{\text {(subjunctive). }}{ }^{229}$

## The Communication Sentence

A communication is the intentional transfer of a mental impression, or message, and is therefore carried out by an \{agent\}. The message relates to an \{object\}, and conveys new information to the \{recipient\}. The \{object\} may be a person or thing, and may be known or unknown:
"Mary told John that the weather was fine."
"John reminded Mary that the appointment was due."
"Mary showed John some books in the library."
"Mary brought to John's attention a noise from behind the bushes."
"Henry telephoned to James that their father was out of hospital."
"James' expression showed that he was happy."
The $\{$ object \} is therefore definite or indefinite. If it is definite, the \{agent\} may have selected some existing information which he/she wishes to connect with the $\{$ object $\}$ :
"John told Mary that the appointment was on Tuesday (not Wednesday)."
"Mary said to John that his car was in the garage (not at home)."
"James's expression showed that he was happy (not sad, or indifferent)."
In that case, the new information is $\{$ select $\}$. If we use $\{$ communicate $\}$ as the act of communication, the elements of the sentence are:

$$
\{\text { agent }- \text { communicate }- \text { object }- \text { select }- \text { recipient }\} .
$$

A communication on a definite $\{$ object $\}$ may also supply a new piece of \{indefinite $\}$ information:
"Mary brought to John's attention the noise from behind some bushes."
"Henry telephoned to James that their father was out of hospital."
"Ann told her sister that she had a new grandchild."
We noted in Chapter 13. (Statement) that a statement containing an indefinite comment identifies it with a definite \{circumstance\}, so that it can be definite in a subsequent sentence. In the case of an indefinite communication concerning a definite \{object\}, the \{circumstance\} is provided by the act of communication. In the above examples, they are: "the bushes from which the noise came, to which Mary brought John's attention"; "the release from hospital of their father, which Henry told James about"; "Ann's new grandchild that she told her sister about". The \{circumstance\} therefore does not need to be further stated, and the sentence has the elements:

$$
\{\text { agent }- \text { communicate }- \text { object }- \text { indefinite }- \text { recipient }\} .
$$

As with a perception, the definite $\{$ object $\}$ of a communication can be placed in topic position:

[^62]"The appointment on Tuesday was advised to Mary."
"The noise from behind the bushes was brought to John's attention."
"Their father's departure from hospital was telephoned to James."
"Her new grandchild was advised by Ann to her sister."
Italian: "Vi direbbero nati negli anni sessanta." "They said you were born in the 1960's." [You they-said born in-the years sixty.] ${ }^{230}$

Alternatively, the \{object\} of a communication can be new information and therefore indefinite. In that case, the communication includes some definite information which is sufficient to identify it:
"John told Mary about an appointment on Tuesday."
"James's face showed an expression of happiness."
"Mary brought to John's attention a noise from behind the bushes."
This definite information is the same as the \{circumstance\} in statements concerning an indefinite comment (Chapter 13., Statement). The structure of the communication is therefore:
\{agent - communicate - object - circumstance - recipient $\}.$
A \{circumstance\} cannot be indefinite. An indefinite communication concerning an indefinite object conveys no meaning:
*"John told Mary about an appointment on a day."
*"James's face showed an expression of feeling."
*"Mary brought to John's attention a noise from behind bushes."
The indefinite $\{$ object $\}$ of a communication can be the $\{$ object $\}$ of an existential sentence:
"An appointment on Tuesday was advised to Mary."/"There was an appointment..."
"An expression of happiness showed on John's face."/"There was an expression..."
"A noise from behind the bushes was brought to John's attention."/"There was a noise..."
We may therefore summarise the communication sentence as:

$$
\text { \{agent - communicate - object - select/indefinite/circumstance - recipient }\}
$$

depending on the nature of the \{object \} and the communication. Note that a communication does not necessarily result in a perception, which depends on the will and ability of the receiver to accept the message:
"She described the apartment to her friend as comfortable" does not imply
"Her friend believed that the apartment was comfortable."
The message is conveyed by some process such as speech, gesture, picture, notice, email, letter, or telephone, which is the \{instrument\} of the communication, and which may be omitted if the means of communication are evident. Communication is a human act by an \{agent\} to a human \{recipient\}, but both the $\{$ agent $\}$ and the \{recipient $\}$ may be implied:
"The notice said that the paint was wet."
"James's expression showed that he was happy."
"The email gave the date of the conference."
Including the \{instrument $\}$ gives us the structure:
\{agent - (instrument) - communicate - object - select/indefinite/circumstance - recipient $\}$.

[^63]A particular form of communication is an argument in which a conclusion is drawn from evidence. In that case, the evidence is the \{instrument\} of the communication:
"It appears from the evidence that the defendant is guilty."
"Eratosthenes' measurements showed the diameter of the earth."
As with other sentence functions, a communication includes its negative, that is a failure to communicate. If the \{object\} and the communication are definite, the communication remains true even though it is not communicated:
"John did not tell Mary that the appointment was on Tuesday."
"Mary did not say to John that his car was in the garage."
"James's expression did not show that he was happy."
The failure to communicate is not selected information, but a failure to connect a particular \{definite\} information to the $\{$ object $\}$. The structure is therefore:

$$
\text { \{agent }- \text { (instrument }) \text { - not }- \text { communicate }- \text { object }- \text { definite }- \text { recipient }\} .
$$

If the failed communication concerning a definite \{object $\}$ is indefinite, the failure does not establish whether the communication is true or not. It is therefore \{indefinable\}:
"Mary did not bring to John's attention the noise from behind some bushes."
"Henry did not telephone to James that their father was out of hospital."
"Ann did not tell her sister that she had a new grandchild."
Italian puts such a failed communication in the subjunctive, while the communication of a negative is in the indicative:

$$
\begin{aligned}
& \text { "Non diceva che i gioielli fossero falsi." "He did not say that the jewels were false." } \\
& {[\text { Not he-said that the jewels were (subjunctive) }}
\end{aligned} \text { false.] } \quad \begin{aligned}
& \text { "Diceva che i gioielli non erano falsi." "He said that the jewels were not false." } \\
& {\left[\text { He-said that the jewels not were }{ }_{\text {(indicative) }} \text { false. }\right]^{231} }
\end{aligned}
$$

The elements of a failure to communicate upon a definite \{object \} may therefore be summarised:

$$
\{\text { agent }-(\text { instrument })-\text { not }- \text { communicate }- \text { object }- \text { definite/indefinable }- \text { recipient }\} .
$$

## The Negative Communication Sentence

A negative communication is a communication that information concerning an \{object\} is not true. The information may be known, in which case the communication asserts that it does not apply to the \{object $\}$ :
"Jack denied that he had stolen the tarts."
Alternatively, the communication may assert that a hypothetical event with regard to the $\{$ object $\}$ did not occur:
"Jack denied that the tarts had been stolen."
The above negative communications relate to a definite $\{$ object $\}$. The $\{$ object $\}$ may also be indefinable:
"Jack denied that there were any tarts."
In languages with a subjunctive, that may be employed for the verb of the hypothetical negative information:

[^64]```
French: "Je nie que cela soit vrai." "I deny that that is (subjunctive) true." \({ }^{232}\)
Italian: "Negava che fosse uno studente." "She denied he was a student."
    [She-denied that he-was \({ }_{\text {(subjunctive) }}\) a student.] \({ }^{233}\)
Spanish: "Niego que haya venido." "I deny she's come."
    [I-deny that she-has \({ }_{\text {(subjunctive) }}\) come.] \({ }^{234}\)
```

Consistent with our previous notation, the structure of a negative communication sentence is:

$$
\{\text { agent }- \text { (instrument })-\text { communicate }- \text { object }- \text { not }- \text { definite/indefinable }- \text { recipient }\} .
$$

## The Proposal Sentence

We have noted earlier that a supposition is a belief held by a person who does not know whether it is true, but who expects, hopes, fears, doubts, imagines, intends, or wishes that it may or will be so:

$$
\{\text { recipient - suppose - (object) - indefinable }\} .
$$

Similarly, a communication can be made to a recipient that an event may be true or may occur, but which has not happened or is not known to have happened. We can call such a communication a proposal:
"He forecast that it would rain."
"He suggested that they should go for a walk."
"He claimed that he had been away on business."
"He alleged that they had committed the crime."
"He encouraged them to complete the course."
"He told them to keep off the grass."
The purpose of such a communication is to induce an opinion or action on the part of the recipient. What is communicated is a hypothesis, and is \{indefinable\} as is the hypotheses of the supposition which the recipient may hold. As with other communications, a proposal of a hypothesis may or may not result in a supposition of the same hypothesis in the mind of the recipient.

A proposal may be a proposal of fact or action, an encouragement, or an instruction. It can be expressed as an event noun:
"His forecast was that it would rain."
"He made a suggestion that they should go for a walk."
"His claim was that he had been away on business."
"He made an allegation that they had committed the crime."
"He gave encouragement to them to complete the course."
"He gave an order that they keep off the grass."
A proposal has an \{agent\}, but that can be omitted: "The forecast was..."; "The suggestion was made..."; The claim was that...", etc. It has a \{recipient\}, but that can also be omitted as in some of the above examples. However, since a proposal is human act to a human audience, both \{agent\} and \{recipient\} are implied if not expressed.

The act of communication can be performed by an impersonal \{instrument\}, which ultimately derives from the human agency:
"The television forecast was for rain." "The notice said 'Keep off the grass'."

[^65]Both an \{agent\} and \{instrument\} may be stated:
"His brother's example encouraged him to complete the course."
"He gave an order in writing that they should keep off the grass."
The $\{$ instrument $\}$ may take the form of an argument for a particular course of action:
"Our stockbroker's advice was to invest in mining stocks."
"The medical evidence is that you should give up smoking."
The proposal of an \{indefinable\} hypothesis generally concerns an \{object\}. If we use \{propose\} for the proposal, the elements are therefore:
\{agent - propose - (instrument) - object - indefinable - recipient $\}$.
An agent can make a proposal concerning him/herself:
"He claimed that he had been away on business."
"He offered to accompany them to the station."
"He pretended to be an insurance inspector."
In that case, the $\{$ agent $\}$ and $\{$ object $\}$ are combined:

An \{agent $\}$ can also make a proposal concerning an $\{$ object $\}$ which is his/her possession, in which case the $\{$ agent $\}$ is also the $\{$ beneficiary $\}$ of the proposal:
"She asked the doctor to examine her painful knee."
Alternatively, the \{beneficiary\} can be third party:
"She asked the doctor to examine her child's throat."
As with other hypotheses, some languages may express it with a subjunctive:
Italian: "Il capitano comanda che tu venga subito."
"The captain orders you to come at once."
[The captain orders that you come ${ }_{\text {(subjunctive) }}$ at-once.] ${ }^{235}$
Greek: "A $\rho v \eta$ $\theta \eta \kappa \varepsilon v ’ \alpha \pi \alpha \nu \tau \eta ́ \sigma \varepsilon ı . "$ "He declined to answer."
[He-declined-himself that he-answers $\left.{ }_{\text {(subjunctive). }}\right]^{236}$
Hungarian:
"Azt írták, hogy jöjjek haza." "They wrote that I should come home." [That they-wrote, that I-come ${ }_{\text {(subjunctive) }}$ home.] ${ }^{237}$

Arabic: "ṭalaba minhu Ran yaṭba@ahā lahu""He asked him to type it for him."
[He-asked to-him that he-type-it (subjunctive) for him.] $]^{238}$
Persian: "xaheš mikonam darxaste mara qabul konid"
"I ask you to agree to accept my request."
[Request I-make request-of me ${ }_{\text {(object) }}$ accept you-make $\left.{ }_{(\text {subjunctive). }}\right]^{239}$

[^66]Swahili: "Mama amekataa nisiende." "Mother has refused to let me go." [Mother has-refused I-not-go (subjunctive). $]^{240}$

A particular form of proposal is an imperative, either second person:
"Go home!" "Sit down!""Turn right!" "Do your homework!"
or third person:
"Let them go home!""Let them sit down!" "Let him turn right!"
"Let them do their homework!"
An imperative is different from other proposals, in that \{propose\} is omitted, as its function is understood. So also is $\{$ agent \}, which is understood to be the orderer, and \{instrument\}. \{recipient\} and \{object\} are the same, and either understood to be "you", or stated if third-person. An imperative therefore has elements:
\{recipientlobject - indefinable\}.
A more politely worded imperative may restore $\{$ agent $\},\{$ propose $\}$, or $\{$ instrument $\}:$
"Please sit down." "I suggest you turn left." "Here are your homework instructions."
As with other hypotheses, an imperative may be in the subjunctive:
Italian: "Mi scriva presto." "Write to me soon." [To-me write ${ }_{\text {(subjunctive) }}$ soon.]
Greek: "A̧ $\mu \lambda \lambda \alpha ́ \varepsilon ı ~ o ́ \sigma o ~ \theta \varepsilon ́ \lambda \lambda \varepsilon ı . " ~ " L e t ~ h i m ~ s p e a k ~ a s ~ m u c h ~ a s ~ h e ~ w a n t s . " ~$ [Let he-speak (subjunctive) as-much he-wants.]

Swahili: "Chakula kipate moto." "Let the food get hot." [Food it-get (subjunctive) ${ }^{\text {heat.] }}$ "Mwambie mtoto asome." "Tell the child to read."

$$
\left[\text { Him-tell }{ }_{(\text {subjunctive) }} \text { child he-read }{ }_{(\text {subjunctive). }}\right]^{241}
$$

## The Interrogation Sentence

Like other forms of communication, a interrogation is a question posed by a human \{agent\}, but can be made by a non-human \{instrument\} for which an agent is ultimately responsible:
"She asked him why he had applied for the job."
"He asked when the train would depart."
"He asked whether she had been to China."
"This conclusion leads us to ask about his original motives."
"The letter asked questions about our lifestyle."
An \{agent\} and \{instrument\} can of course occur in the same sentence:
"He asked in a letter whether she had been to China."
As we have noted elsewhere, a question consists of two elements: a topic, concerning which the enquiry is posed, and an enquiry. The topic is definite by its nature, and the enquiry is either \{definite\} or \{indefinable\} according to whether the question is definite or indefinite. The questions of the above four examples have the following structure, in which the enquiry is marked as definite or indefinable:

| Topic | Enquiry |
| :--- | :--- |
| his application for the job | reason (definite) |

[^67]| the train's departure | time (definite) |
| :--- | :--- |
| she | a visit to China (indefinable) |
| his original motives | identification (definite) |
| our lifestyle | details (definite) |

When a question is posed in an interrogation, the topic is the \{object\} and the enquiry is again either \{definite\} or \{indefinable\}. There may be a \{recipient\}. The element \{query\} includes the action of asking. The elements are therefore:
\{agent - (instrument) - communicate - query - (recipient) - object - definite/indefinable \}.
In "He asked whether she had been to China", the \{object $\}$ is also the $\{$ recipient $\}$. In "He wondered whether she had been to China", the $\{$ agent $\}$ is also the $\{$ recipient $\}$, giving the following structures:
\{agent - (instrument) - communicate - query - recipientlobject - definite/indefinable\}
\{agent|recipient - (instrument) - communicate - query - object - definite/indefinable\}.

## The Representation Sentence

A representation is a creative act by which an \{object\} is represented in a new way. It therefore usually has an $\{$ agent $\}$ :
"Gainsborough painted his sitter as a country gentleman."
"The Prime Minister was photographed arriving at the conference."
"She summarised the article in five lines."
"We translated the book into Greek for the Greek market."
"The battle was commemorated by a monument."
An act of representation is creative in that it causes something to exist which did not previously exist. It therefore has the same element $\{$ create $\}$ as a creative sentence, but the outcome is not a \{creation\} but a \{representation\} of the \{object\}. There may be a \{recipient\}, to whom the representation is communicated, or a \{beneficiary\} on whose behalf it was produced. The representation may employ a means or $\{$ instrument $\}$ :
"Gainsborough painted his sitter in oils..."; "She summarised the article in a letter..."
A representation is therefore:

$$
\{\text { agent }- \text { create }-(\text { instrument })-\text { object }- \text { representation }-(\text { recipient })\} .
$$

If the $\{$ object $\}$ is definite, it can be placed in topic position:
"The Prime Minister was photographed arriving at the conference."
"The book was translated into Greek for the Greek market."
"The battle was commemorated by a monument."
An \{agent\} can represent himself as $\{$ object $\}$ :
"Rembrandt painted his self-portrait."
$\{$ agentlobject - create $-($ instrument $)-$ representation $-($ recipient $)\}$.
The representation sentence also includes the concept of significance or implication. In these, an event or information is interpreted to construct an implication:
"These figures mean that the company will case trading in five weeks."
"That sky means that it will rain tomorrow."

The interpretation is the creative act or \{create\}. The \{object\} is that which is interpreted, in these instances the figures or the sky. The \{representation\} is the implication which is drawn, namely that the company will cease trading or that it will rain. Since it has not yet occurred the implication is indefinable, unlike the physical representation of a painting, photograph, translation, etc which is a new entity and therefore indefinite.

## The Benefit Sentence

As explained in Chapter 12. (Benefit and Adversity), a benefit is the availability to a \{beneficiary\} of an opportunity or advantage. In these examples, the availability is underlined and the \{beneficiary\} is in brackets. The opportunity or advantage may be a possession:
"The bank account is accessible to John."
"The view was visible to our friends."
"We had the opportunity to see his paintings."
"She had the advantage of a good education."
("John")
("our friends")
("we")
("she")

Or an action or role:
"We had the good luck to arrive on time."
("we")
"He had great success as an estate agent."
("he")
"It was easy/simple for him to write the letter."
("him")
"It was convenient for him to write the letter."
("him")
Or a service:
"We have the benefit of the local park."
("we")
The opportunity or advantage can therefore take different forms, but in each case it is an object or action which exists or occurs or is expected to exist or occur. It is therefore \{definite\} or \{indefinable\}. If the benefit element is \{benefit\}, the structure of the benefit sentence is:

$$
\{\text { beneficiary - benefit - definite/indefinable }\} .
$$

A \{benefit \} does not express the effect on the \{beneficiary\} of the opportunity or advantage, as in "We were pleased/happy to see the paintings", nor whether the opportunity or advantage is realised. Nor does it refer to any ability or obligation of the \{beneficiary\}, such as "We could see the paintings" or "We should see the paintings". These are expressed by modal sentences (see below). It describes only the availability of the action or object to the \{beneficiary\}.

A \{benefit\} can be granted to the beneficiary by a third party, an \{agent\} or \{instrument\}:

> "The bank manager made the account available to John." ("John") "Our tickets gave us the opportunity to see the paintings." ("us")

The $\{$ benefit $\}$ may include the motive of the $\{$ agent $\}$ in granting it:
"You were very kind to answer my letter so promptly." ("me")
"She was very generous in allowing him to borrow her car." ("him")
"He was very polite to his friend in allowing him to stay." ("his friend")
We may therefore add the optional elements:

An $\{$ agent $\}$ may be his/her own \{beneficiary $\}$ :

| "She took the opportunity to see the paintings." | ("she") |
| :--- | :--- |
| "He took advantage of the offer of a loan." | ("he") |
| "He accessed his bank account." | ("he") |

"She succeeded in climbing the mountain."
\{agentlbeneficiary - benefit - definite/indefinite\}.
A purpose in the mind of an \{agent \} is a human activity which benefits from another human activity:
"She took the car to the garage to be mended."
"He peeled the potatoes for lunch."
"He opened the dam to let out the flood water."
"She hung out the washing to dry."
It is therefore a \{benefit\} as we have described it. However, as in the above examples the \{beneficiary\} may be implied and not stated. Alternatively, the \{beneficiary\} of a purpose may be assumed to be the $\{$ agent $\}$ :

```
"She went for a walk." ("she")
"He wrote to his father to ask for money." ("he")
```

Or be a third party:

```
"The drawbridge was raised to let the ship pass."
("the ship")
"Come here so that I can see you."

A purpose is different from an intention, as described in the supposition sentence (above):
Italian: "Studia molto affinché possa vincere il premio."
"He's studying a great deal so as to win the prize."
[He-studies much so-that he-can \({ }_{\text {(subjunctive) }}\) win the prize.]
An intention may or may not occur, and is therefore \{indefinable\}. A purpose is expected to occur at the time of the purposive action, and like other benefits is therefore either \{definite\}:
"The drawbridge was raised to let the ship pass."
or \{indefinable\}:
"He wrote to his father to ask for money."
A purpose is also different from a causation, as that occurs in the causative sentence (below):
"The noise made us jump." "The threat of fire caused us to flee."
A causation is an action which follows from another action, but the sentence states that it occurs and it may be intentional or not. As we have seen, a benefit sentence is not concerned with whether the benefit is realised or not, and a \{benefit \(\}\) is intentional.

We now turn to the discourse structure of a benefit sentence. In the first examples cited, the \{benefit\} is the verb of the sentence, with the \{beneficiary\} or the opportunity or advantage as subject:
"The bank account is accessible to John." "We had the opportunity to see his paintings."
"She had the advantage of a good education."
"We had the good luck to arrive on time."
"He had great success as an estate agent." "She succeeded in climbing the mountain."
"It was easy/simple for him to write the letter."
"You were very kind to answer my letter so promptly."
Alternatively, the opportunity or advantage is the grammatical verb, and the \{benefit\} is an additional element. In that case, one possible interpretation is that the \{benefit \} is a qualifier, assigning an identity to an \(\{\) object \(\}\) which would otherwise be indefinite. The \(\{\) benefit \(\}\) is then a \(\{\) circumstance \(\}\) :
"Henry cooked lunch for his family."
"We bought Simon a bicycle."
"An email for you has just come in."
"The treatment eased James' back pain."
"She took the car to the garage to be mended."
"He peeled the potatoes for lunch."
"She hung out the washing to dry."
"She went for a walk."
"He wrote to his father to ask for money."
"Come here so that I can see you."
("his family")
("Simon")
("you")
("James")
(no beneficiary)
(no beneficiary)
(no beneficiary)
("she")
("he")
("I")

Another interpretation is that the opportunity or advantage which is expressed by the grammatical verb is the topic of the sentence, and the benefit is the comment. In that case, the above examples are to be understood as:
"Henry's lunch cooking was for his family."
"The bicycle we have bought was for Simon."
"The email which has just come in is for you."
"The back treatment was for James."
This construction is also applicable if the \(\{\) object \(\}\) is definite. The sentences:
"Henry cooked the lunch for his family";
"Sheila brought the accounts to good order for the Society";
"The drawbridge was raised to let the ship pass";
"He opened the dam to let out the flood water";
are to be understood as:
"Henry's cooking of the lunch was for his family."
"Sheila's ordering of the accounts was for the Society."
"The drawbridge raising was to let the ship pass."
"The dam opening was to let out the flood water."
This construction is called an adverbial sentence, and is discussed further in Chapter 17. (Adverbials).
The third interpretation is that the sentences are compound sentences, comprising the opportunity or advantage as one sentence and the benefit as another. This only applies if the \(\{\) object \(\}\) is definite. The above sentences mean:
"Henry cooked the lunch. It was for his family."
"Sheila ordered the accounts. They are the Society's."
"The drawbridge was raised, and the ship could pass."
"The dam was opened, and the flood waters were let out."
Chapter 12. also describes a sentence which conveys a disadvantage or misfortune (an adversity), so that a \{beneficiary \} is denied an opportunity or advantage:
\begin{tabular}{ll} 
"She had the disadvantage of a poor education." & ("she") \\
"We had the misfortune to arrive late." & ("we") \\
"He failed as an estate agent." & ("he") \\
"It was hard for him to write the letter." & ("him") \\
"It was inconvenient for him to write the letter." & ("him")
\end{tabular}

The opportunity or advantage which the adversity denies to the \{beneficiary\} is again \{definite\} or \{indefinite\}, so that if we extend the scope of \{benefit \} to include an adversity, the sentence has the same structure:
\[
\{\text { beneficiary - benefit - definite/indefinable }\} .
\]

The adversity can again be effected by an agent or instrument:
```

"He was very rude in his behaviour towards his friend." ("his friend")
"Hitler was very cruel in his treatment of the Jews." ("the Jews")
"The ill luck of heavy traffic made us late."
("us")

```
\(\{\) beneficiary - benefit - definite/indefinable \(-(\) agent \()\) - (instrument \()\}\).

As in the previous examples, the misfortune can be the main sentence, the adversity being an additional element with the implied meaning "to the disadvantage of"
```

"Henry's wife has run away from him."
("Henry")
"Mary had smoke blown on her."
"The knife cut him on the hand."
("Mary")
("him")

```

As we noted in Chapter 10., a \{beneficiary \} in topic position is often expressed by an indirect link:
German:"Es ist mir gelungen, zu kommen." "I succeeded in coming."
[It is to-me succeeded, to come.]

Italian: "Vi stenta consegnare il compito oggi."
"You'll find it hard to hand in the assignment today."
[To-you it-is-hard to-deliver the assignment today.]
Finnish: "Hänen oli vaikea selitää sitä." "It was difficult for him to explain that." [Of-him it-was difficult to-explain that.] \({ }^{242}\)

Hungarian:
"Neki könnyű volt válaszolnia." "It was easy for her to answer."
[To-her easy was answering-her.]
"Sikerűlt neked elérned a főnököt?" "Did you manage to reach the boss?" [Managed to-you reaching-your the boss?] \({ }^{243}\)

Irish: "Má dheinid a ndícheall, éireoidh leo.""If they do their best, they will succeed." [If they-do their best, it-will-succeed with-them.]
"Theip orm an obair a dhéanamh." "I failed to do the work." [It-failed on-me the work its doing.] \({ }^{244}\)

\section*{The Warranty Sentence}

A warranty is an undertaking by an \{agent \(\}\) to a \{beneficiary \(\}\) who may be stated or implied:
"The manufacturer warranted the dishwasher (to the purchaser) for three years."
"I guarantee (to the management) that the project will be completed in six months."
"I guarantee that it will rain tomorrow."
The warranty is a \{benefit\} which relates to an \{object\} and specifies for it a particular \{definite\} quality, for example a constituent or occurrence. The elements of a warranty of this type are therefore:
\(\{\) agent - benefit - object - definite \(-(\) beneficiary \()\}\).
Alternatively, a warranty undertakes that an adversity will not arise or has not arisen. We can call this a negative warranty:
"The manufacturer warranted that the dishwasher would require no servicing for three years."

\footnotetext{
\({ }^{242}\) Whitney, 215.
\({ }^{243}\) Rounds, 278-9.
\({ }^{244}\) Dillon \& Ó Crónín, 97.
}
"I guarantee that the project will run no longer than six months."
"I guarantee that it will not rain tomorrow."
The negative warranty specifies that a particular constituent or occurrence will not apply to the \{object \(\}\). The structure is therefore:
\[
\{\text { agent }- \text { benefit }- \text { object }- \text { not }- \text { indefinable }-(\text { beneficiary })\} .
\]

Warranties of this negative type may be expressed in the subjunctive, indicating that they are \{indefinable\}:

Spanish: "No hay ninguna garantía de que vengan."
"There is no guarantee that they will come."
[Not there-is no guarantee of that they-come \(\left.{ }_{\text {(subjunctive). }}\right]^{245}\)
It can be argued that a warranty is form of promise to the \{beneficiary\} and is therefore described within the responsibility sentence (above). The difference is that the responsibility sentence refers to the commitment on behalf of the responsibility-holder, while the warranty describes the benefit which results.

An insurance is a form of negative warranty in which the \{beneficiary\} obtains an undertaking from the guarantor of compensation, called the cover, if the adversity comes to pass:
"She insured her house against fire for \(£ 1\) million."
"We took out public liability insurance for \(£ 10\) million."
The guarantor (the insurance company) is still the \{agent\} of the warranty, and the customer who asks for it is therefore the \{causer\}. The \{causer\} may take out the insurance in favour of a third party:
"She insured her son’s house against fire for \(£ 1\) million."
However, more usually the \{beneficiary\} seeks the insurance for him/herself, and is then the \{causerlbeneficiary\}. If we include the cover within the \{benefit\} element, an insurance sentence is:
\[
\left\{\text { causerlbeneficiary }- \text { benefit }_{1}-\text { object }- \text { not }- \text { indefinable }-(\text { agent })\right\}\left\{\text { object }_{1}-\text { attribute }\right\} .
\]

The premium paid by the insurer is an exchange, described by the exchange sentence (above):
\[
\begin{array}{ll}
\left\{\text { agent }_{1}-\text { possession }_{1}-\text { object }_{1}-\text { object }_{2}-\text { recipient }_{1}\right\} & \text { agent } \left._{1}=\text { recipient }_{2}\right\} \\
\left\{\text { agent }_{2}-\text { possession }_{2}-\text { object }_{2}-\text { object }_{1}-\text { recipient }_{2}\right\} & \text { agent } \left._{2}=\text { recipient }_{1}\right\}
\end{array}
\]

\section*{The Ability Sentence}

Chapter 13. (Hypothesis) describes a sentence of the form \{definite - indefinable\}, which states a hypothesis which may or may not be true. In English, such sentences can be constructed with "may":
"The computer may operate." "The mountains may be seen."
If the sentence is not agential, "can" or its equivalent has the same meaning:
"The computer can operate." "The mountains can be seen."
If the English sentences are agential, "can" or "cannot" has the meaning "possess the ability to" or "does not possess the ability to":
"Mr Smith can/cannot go to work by train." "Mr Smith can/cannot pay the invoice."
"Mr Smith can/cannot speak French." "Mr Smith can/cannot ride a bicycle."

\footnotetext{
\({ }^{245}\) Harrap, 203.
}

Such a sentence is still a hypothesis, since it does not state that an action has taken place, only that Mr Smith does or does not have the ability to perform it. Moreover, since the sentences do not describe an action by Mr Smith, he is not the agent. They describe an ability which he possesses, and he is therefore the \(\{\) recipient \(\}\). The ability is \{indefinable\}. It may operate on an \{object\} which is definite or not definite:
\[
\begin{array}{ll}
\text { "Mr Smith can drive his car." } & \text { "Mr Smith can drive a car." } \\
\text { "Mr Smith can pay the invoice." } & \text { "Mr Smith can pay bills." }
\end{array}
\]

If the \(\{\) object \(\}\) is not definite, then since the ability is a hypothetical \{indefinable\} activity, the \(\{\) object \(\}\) is also \{indefinable\}. If we use \{able\} as the element for ability, the sentences have the structure:
\[
\{\text { recipient - able - object - indefinable }\} \quad\{\text { recipient }- \text { not }- \text { able - object - indefinable }\} .
\]

In sentences such as "Mr Smith can go home" and "Mr Smith can speak French", the \{object\} which the ability operates on is the \{recipient\}, in that case Mr Smith himself:
\(\{\) recipientlobject - able - indefinable \(\}\) \{recipientlobject - not - able - indefinable \(\}.\)
The non-agential nature of the \{recipient \} of an ability is shown in topic-comment constructions:
Japanese:
"Okamoto-san wa roshiago ga dekiru." "Mr Okamoto can speak Russian."
[Okamoto-Mr \({ }_{\text {(topic) }}\) Russian \(_{\text {(subject) }}\) is-possible.] \({ }^{246}\)
The \{indefinable\} nature of an ability is shown in those languages which express it as a verb. It is then often in the subjunctive:

[He-could that he-eat (subjunctive) ten eggs for breakfast.] \({ }^{247}\)
Arabic: "qadi staṭā¢a ?an yajida l-ḥalla l-ṣaḥīha"" "He was able to find the right solution."
[He was-able that he found \({ }_{\text {(subjunctive) }}\) the solution the-right.] \({ }^{248}\)
Persian: "mitavanam beravam" "I can go." [I-can I-go (subjunctive). \(]^{249}\)
An ability can be the result of an action to give or deny it to the \{recipient\}. This can be agential or instrumental:
"Mrs Smith taught Mr Smith to speak French."
\(\rightarrow \quad\) "Mr Smith can speak French."
"We helped Mr Smith to pay the invoice."
\[
\rightarrow \quad \text { "Mr Smith can pay the invoice." }
\]
"His funds prevented Mr Smith from paying the invoice."
\(\rightarrow \quad\) "Mr Smith could not pay the invoice."
"His boss permitted Mr Smith to take the day off"
\[
\rightarrow \quad \text { "Mr Smith could take the day off." }
\]

In many languages, the \(\{\) recipient \(\}\) in such a sentence is marked with "to" or its equivalent dative case:
German:"Ich habe ihr geholfen, den schweren Korb zu tragen."
"I helped her to carry the heavy basket."
[I have to-her helped, the heavy basket to carry.]
Italian: "Il tempo gli ha impedito a venire oggi."

\footnotetext{
\({ }^{246}\) Makino \& Tsutsui, 201.
\({ }^{247}\) Holton et al, 202.
\({ }^{248}\) Badawi et al, 421.
\({ }^{249}\) Lambton, 54.
}
"The weather prevented him from coming today."
[The weather to-him has prevented to come today.]
Russian:"Vy ne pomozhete mne naiti moi veshchi?" "Will you help me find my things?"
[You not help to-me to-find my things?]
"Den'gi dali emu vozmozhnost' puteshestvovat'."
"The money enabled him to travel." [Money gave to-him ability to-travel.] \({ }^{250}\)
The elements can therefore include an \{agent \(\}\) or \(\{\) instrument \(\}\) :
\[
\begin{aligned}
& \{\text { \{recipient }- \text { able }- \text { object }- \text { indefinable }-(\text { agent })-(\text { instrument })\} \\
& \{\{\text { recipient }- \text { not }- \text { able }- \text { object }- \text { indefinable }-(\text { agent })-(\text { instrument })\} .
\end{aligned}
\]

The adoptive construction of an ability sentence expresses the concepts "try", "prepare to", or "hesitate to", in which an \{agent\} gives or fails to give him/herself an ability:
"Mr Smith tried to/prepared to ride a bicycle." "Mr Smith hesitated to ride a bicycle."
Such sentences have the structure:
\{agentlrecipient - able - object - indefinable \}
\{agentlrecipient - not - able - object - indefinable\}.
As with other adoptives, an adoptive ability can be expressed by a dative reflexive:
Italian: "S'è preparata ad avviarsi." "She got ready to set out."
[Herself she-is prepared to set-out.]
"S'è azzardata ad avviarsi." "She ventured to set out."
[Herself she-is ventured to set-out.]
Russian: "Chelovek popytalsya vstat'." "The man tried to stand up."
[Man tried-himself to-stand-up.]
"Ne stesnyaites' sprashivat'." "Don't hesitate to ask." [Not hesitate-yourself to-ask.] \({ }^{251}\)

An adoptive ability, being \{indefinable\}, can again be in the subjunctive:
Greek: "Пробла́ \(\theta \eta \sigma \alpha \nu \alpha\) тov \(\alpha \pi о \varphi u ́ \gamma \omega . "\) "I tried to avoid him."
[I-tried that him I-avoid \(\left.{ }_{\text {(subjunctive) }}.\right]^{252}\)
Hungarian:
"Arra törekszik, hogy új állást kapjon." "He’s trying to get a new job."
[Onto-that he-tries, that new job he-gets (subjunctive). \(^{253}\)
Arabic: "ḥāwaltu Pan Pưalliqa bi-biḑ̣i kalimātin" "I tried to add a few words." [I-tried that I-add \({ }_{\text {(subjunctive) }}\) in few words.] \({ }^{254}\)

\section*{The Necessity Sentence}

It was remarked in Chapter 11. (The Facilitative and Modal Functions) that an ability and a necessity are related in the following way:
"He is not able not to write the letter" = "He must/ought to write the letter";
"He is not obliged not to write the letter" = "He can/may write the letter".

\footnotetext{
\({ }^{250}\) Folomkina \& Weiser, 151, 216.
\({ }^{251}\) Folomkina \& Weiser, 218, 548.
\({ }_{252}\) Holton et al, 454.
\({ }_{253}\) Rounds, 43.
\({ }^{254}\) Badawi et al, 613.
}

A person who is not able to avoid doing something is under a compulsion to do it. A person who is not under a compulsion not to do something has the freedom to do it. Since having the freedom to do something is not the same as having the ability to do it, it is the first of these double negatives which is useful for functional analysis:
"Mr Smith is not able not to pay the invoice" means "Mr Smith must pay the invoice".
"Mr Smith is not able not to ride a bicycle" means "Mr Smith must ride a bicycle".
We may therefore construct these sentences with the same element \{able\} as for an ability, but with a double negative:
\[
\{\text { recipient }- \text { not }- \text { able }- \text { not }- \text { object }- \text { indefinable }\} .
\]

The \{recipient \} nature of the possessor of a necessity is shown in those languages which express it with a locative in topic position:

Russian: "Emu ne nuzhno govorit' dvazhdy." "He doesn't need to be told twice."
[To-him not need to-tell twice.] \({ }^{255}\)
"Vam nado budet mnogo pisat'." "You will have to do a lot of writing."
[To-you necessary will-be much writing.]
Hungarian:
"Gábornak tanulnia kell ma este." "Gábor must study this evening."
[To-Gábor studying-his must today evening.] \({ }^{256}\)
Welsh: "Bydd yn rhaid i mi godi." "I shall have to get up."
[Will-be in necessity to me rise.] \({ }^{257}\)

Hindi: "apkō apnī cābī lānī paregì" "You'll have to bring your own key."
[You-to own key bringing will-fall.] \({ }^{258}\)
Swahili: "Yanibidi kusema hivi." "I must say this." [It to-me is-obliged to-say this.] \({ }^{259}\)
A necessity, like an ability, is not an event whose occurrence is certain, and is therefore \{indefinable\}. It applies to an \{object\} which can be definite or hypothetical. This is shown by those languages which express a necessity with a subjunctive:

Italian: "Bisogna che tu venga presto domani." "You need to come early tomorrow."
[It-is-necessary that you come \({ }_{\text {(subjunctive) }}\) early tomorrow.]


Arabic: "yajibu £alā l-ṣā?imi Ran yamtani£a §ani 1-tadxīni"
"The fasting person must refrain from smoking."
[It-is-incumbent on the-faster that he-refrains \({ }_{\text {(subjunctive) }}\) from the-smoking.] \({ }^{261}\)
Persian: "bayad beravam" "I must go." [It-is-necessary I-go (subjunctive). \({ }^{262}\)
As the last example shows, the \(\{\) object \(\}\) of a necessity can be the same as the \(\{\) recipient \(\}\) :

\footnotetext{
\({ }^{255}\) Folomkina \& Weiser, 326
\({ }^{256}\) Rounds, 113.
\({ }^{257}\) Bowen \& Rhys Jones, 116.
\({ }^{258}\) McGregor, 80.
\({ }^{259}\) Perrott, 57.
\({ }^{260}\) Holton at al, 200.
\({ }^{261}\) Badawi et al, 179.
\({ }^{262}\) Lambton, 55.
}
\(\{\) recipientlobject - not - able - not - indefinable \(\}\).
A necessity, like an ability, can arise from an action to give it to the \(\{\) recipient \(\}\) :
"His health obliged Mr Smith to give up smoking."
"His wife forced Mr Smith to give up smoking."
The construction is therefore:
\[
\{\text { recipient }- \text { not }- \text { able }- \text { not }- \text { object }- \text { indefinable }-(\text { agent })-(\text { instrument })\} .
\]

However, this sentence type only applies if the necessity is hypothetical. If it is real, then the sentence is a causative or preventive, discussed below.

\section*{The Responsibility Sentence}

A necessity is an external compulsion on a recipient which he or she cannot avoid. A responsibility is an obligation which a person possesses to fulfil or not to fulfil some task, which he or she may choose to carry out or not:
"She has to complete the project." "She has an obligation to bring up the children."
"She ought to pay for the damage." "She ought to have come to the lecture."
This distinction is expressed approximately in English by the auxiliaries "must" for a necessity and "should", and "ought to" for a responsibility, but is often blurred. In German, it is expressed more precisely by "müssen" which is generally a necessity, and "sollen" which is generally a responsibility:
"Man mußte zuerst fragen." "One had to ask first." [One had-to first ask.]
"Man soll viel obst essen." "One should eat plenty of fruit." [One should much fruit eat.]
A responsibility refers to either a future or a past action. We consider first a responsibility for a future action. Since its fulfilment is not certain, it is \{indefinable\}. Since it is possessed by the responsibility-holder, that person is the \{recipient\}. The task for which the \{recipient is responsible operates on an \{object\}. If we use the element \{ought\} for the responsibility, the structure of the sentence is therefore:
\[
\{\text { recipient - ought - object - indefinable }\} .
\]

In general, a responsibility applies to an \{object\} which has already been assigned, and which is therefore definite as in most of the examples cited. However, it can be not definite, and in that case it is not shown to exist and is indefinable:
"They ought to buy a car." "She should learn a foreign language."
The \(\{\) object \(\}\) may be the same as the \(\{\) recipient \(\}\) :
```

"They ought to go home." "They ought to obey the rules."
\{recipientlobject - ought - indefinable $\}$.

```

Responsibilities can also be expressed with a recipient participle:
"She is in charge of completing the project."
"She has care of the upbringing of the children."
"She is liable to her neighbours for the damage."
The \{recipient \(\}\) nature of the holder of an unfulfilled responsibility is shown in those languages which employ a locative recipient construction:

Italian: "Vi spetta consegnare il compito oggi."
"It's up to you to hand in the assignment today."
[To-you it-is-due to-deliver the assignment today.]
Finnish: "Hänen täytyi lähteä kouluun." "She had to set off for school."
\[
\text { [Of-her it-ought to-set-off to-school.] }{ }^{263}
\]

Arabic:"‘alayhi ?an yafiya bi-waidihi""He has to fulfil his promise."
[On-him that he-fulfils \({ }_{\text {(subjunctive) }}\) at promise-his.]
Hindi: "usko yah nahī karnā cāhie thā" "He ought not to have done this." [Him-to this not doing needed was.] \({ }^{264}\)

Swahili: "Inanipasa kurudi sasa." "I ought to go back now." [It to-me is-right to-return now.] "Yafaa tuondoke sasa." "We had better go now."
\[
\left[\text { It-is-good we-go (subjunctive) }{ }^{\text {now. }}\right]^{265}
\]

The \{indefinable\} nature of a responsibility is shown in those languages which employ a subjunctive for it:

[It-would-be-necessary that we-leave \({ }_{(\text {subjunctive) }}\) more early.] \({ }^{266}\)

Arabic: "yanbay \(\overline{1}\) Ran nuyassirahā lahā" "We ought to make it easier for it." [It-is-desirable that we-make-easier-it \({ }_{\text {(subjunctive) }}\) for it.] \({ }^{267}\)
"'alayhi Pan yafiya bi-wafdihi" "He has to fulfil his promise."
[On-him that he-fulfils \({ }_{\text {(subjunctive) }}\) at promise-his.] \({ }^{268}\)
A responsibility can be the outcome of a dative sentence in which a person or body assigns it to the holder:
"Her manager made her responsible for completion of the project."
"Her manager put her in charge of the project."
"The Court gave her care of the five children."
"Her neighbours held her liable for the damage."
More generally, every responsibility is in principle due to some person or body who has assigned it, whether that person is expressed or not. It cannot be due, as a necessity can be, to an impersonal compulsion. The more complete structure is therefore:
\(\{\) recipient - ought - (definite) - indefinable - (agent) \(\}\).
A responsibility can be voluntarily accepted as an obligation by the holder:
"She took/accepted responsibility for completion of the project."
"She took/accepted charge of the project."
"She took/accepted care of the five children."
"She took/accepted liability for the damage."
In that case, the \{agent \(\}\) and the \(\{\) recipient \(\}\) are the same:
\[
\{\text { agentlrecipient - ought - (definite) - indefinable }\} .
\]

\footnotetext{
\({ }^{263}\) Whitney, 214.
\({ }^{264}\) McGregor, 79.
\({ }^{265}\) Perrott, 57.
\({ }^{266}\) Holton et al, 209.
\({ }^{267}\) Badawi et al, 395.
\({ }^{268}\) Badawi et al, 167
}

As with other adoptive constructions, this may be expressed with a dative reflexive:
Italian: "S'è assunta responsibiltà per il progetto."
"She assumed responsibility for the project."
[Herself she-is assumed responsibility for the project.]
"S'è presa cura dei cinque bambini." "She took care of the five children."
[Herself she-is taken care of the five children.]
Russian: "Zabotilas' o roditelyakh." "She took care of her parents."
[She-cared-herself about parents.]
The voluntary acceptance of a responsibility can be made to a third party, to whom the holder remains responsible for its performance:
"She promised to her manager that the project would be completed."
"She undertook charge of the project on behalf of her manager."
"She took care of the five children on behalf of the Court."
"She accepted liability to the aggrieved party."
Such a sentence therefore has two \{recipient\}, the responsibility holder who is also the \{agent\} in that he/she accepted it voluntarily, and the person to whom the responsibility is accepted to be due:
\[
\left\{\text { agent|recipient }{ }_{1} \text { ought }-(\text { definite })-\text { indefinable }- \text { recipient }_{2}\right\} .
\]

The dative and adoptive sentences can include the denial or withdrawal of the responsibility:
"Her manager withdrew from her responsibility for the project."
\(\rightarrow \quad\) "She was no longer responsible for the project."
"She refused to her manager to be responsible for the project."
\(\rightarrow \quad\) "She was not responsible to her manager for the project."
"She declined liability for the damage."
\(\rightarrow \quad\) "She was not liable for the damage."
The structure then includes the element \(\{\) not \(\}\) :
```

{recipient - not - ought - (definite) - indefinable - (agent)}
{agentlrecipient - not - ought - (definite) - indefinable}
{agent\recipient

```

Language is also concerned with a past action for which a person held a responsibility, generally because the action did not occur:
"You should have greeted your guests";
or because the action did occur and should not have:
"You should not have been rude to your guests."
A responsibility which should have been carried out has an \{agent\} who is also the \{recipient\} of the responsibility. If the responsibility has not been carried out, it is \{indefinable\}. The \{object\} to which it relates can be definite, as in the above example, or indefinable:
"You should have greeted your guests"; "You should have greeted some guests".
The responsibility can be towards a third party:
"You promised me that you would greet the guests/some guests."

The functional structure of an unfulfilled responsibility for a past action is therefore the same as for a future action:
\[
\left\{\text { agent }^{\text {recipient }}{ }_{1} \text { - ought }- \text { object }- \text { indefinable }- \text { recipient }_{2}\right\} .
\]

A different functional structure applies for an action which was carried out, but should not have been. In that case, the responsibility and the \{object \} to which it relates are already identified and therefore \{definite\}:
"Jack was guilty of stealing the tarts."
The person guilty of performing the action which he/she should not have performed is both the \{agent \} and the holder or \(\{\) recipient \(\}\) of the obligation not to perform it:
\[
\text { \{agentlrecipient - ought - not - object }- \text { definite }\} .
\]

Alternatively, the \{agentlrecipient\} was not guilty of performing the offending action, assuming that the action took place but someone else was guilty of it:
"Jack was innocent of stealing the tarts."
\{agentlrecipient - not - ought - not - object - definite\}.
It is possible that the supposed offending action did not take place:
"Jack was innocent of stealing any tarts."
\{agentlrecipient - not - ought - not - object - indefinable \}.
Guilt or innocence can be determined by a third party \{agent \(\}\) :
"The magistrate found Jack guilty/innocent of stealing the tarts/any tarts."
\{agent \({ }_{1}\) - agentlrecipient \({ }_{2}\) (not) - ought - not - object - definite/indefinable \(\}\).
We noted earlier that an obligation for a past action can have been made to a third party:
"You promised me that you would greet the guests."
\{agentไrecipient \({ }_{1}-\) recipient \(_{2}-\) ought - object - indefinable \(\}\).
If the action did not occur, the third party can relieve the responsibility-holder of the responsibility:
"I forgive you for not greeting the guests/any guests."
In that case, the third party is the \{agent\} of the forgiveness of a responsibility towards him/herself:
\(\left\{\right.\) agentlrecipient \(_{1}-\) agent \(^{\text {recipient }}{ }_{2}-\) not - ought - not - object - definite/indefinable \(\}\).
Alternatively, the third party can forgive the responsibility-holder for an action which he/she performed but should not have:
"I forgive you for being rude to the guests."
\{agent|recipient \({ }_{1}\) - agent|recipient \({ }_{2}-\) not - ought - not - object - definite \(\}\).

\section*{The Causative and Preventive Sentences}

In a causative sentence, an agent causes another agent, who may be omitted, to perform an action:
"He walked the dog." "He had his hair cut."
"She started the child riding on the bicycle."
French: "Je fais lire ce livre à mon fils." "I make my son read this book."

\section*{Hungarian:}
"Kivasaltattam az ingemet a férjemmel." "I had my husband iron my shirt."


Turkish: "Mektubu müdüre imzalattım." "I got the director to sign the letter."
\(\left[\text { Letter }_{\text {(accusative) }} \text { director-to sign-caused-I.] }\right]^{271}\)
Hindi: "maĩ apne bhāī se pustak chapvāū̃ gā" "I shall get my brother to print the book."
[I my brother-by book print-cause-shall.] \({ }^{272}\)
Indonesian/Malay:
"Saya mencucikan pakaian pada wanita itu."
"I have my clothes washed by that woman."
[I wash-make clothes by woman that.] \({ }^{273}\)
Japanese:
"Tomodachi wa watashi ni chippu o harawaseta." "My friend made me leave a tip."
[Friend (topic) me-to tip (object) leave-caused.] \({ }^{274}\)
Swahili: "Wasimamishe watoto." "Make the children stand up."
[They-stand-cause \({ }_{\text {(imperative) }}\) children.] \({ }^{275}\)
Since a causative sentence can have two agents, we may call the originating or initiating agent \{causer\}, and retain \{agent\} for the person actively engaged in the action. The element \{causer\} is therefore also suitable for someone who initiates or maintains an instrumental action in which he/she is not actively involved:
"She started the dishwasher." "She started the engine running."
"She kept the engine running."
Similarly, an instrument can be the originator of a voluntary or involuntary action by a person:
"The noise made us jump." "The threat of fire caused us to flee."
For an action not involving an \{agent\}, the same distinction can be made between an instrument which initiates the action and the \{instrument\} which carries it out:
"The wind broke the windshield with a branch."
"The clouds cleared, allowing the sun to dry the ground."
We may therefore extend the meaning of \{causer\} to include any human or inanimate initiator of an action which is performed by an agent or instrument. In principle, such an element should be possible for any dynamic sentence. If such a sentence is a statement, it will have the structure:
```

{causer - agent/instrument - (definite) - select} or
{causer - agent/instrument - (definite) - indefinite - circumstance}.

```

If such sentences are a question or negative, they will be of the form:
"Did he walk the dog?" "Did he have his hair cut?" "Did the noise make us jump?"

\footnotetext{
\({ }^{269}\) Fraser \& Squair, 216.
\({ }^{270}\) Rounds, 62.
\({ }^{271}\) Lewis, 146-7.
\({ }^{272}\) McGregor, 113.
\({ }^{273}\) Sneddon, 75.
\({ }^{274}\) Makino \& Tsutsui, 388.
\({ }^{275}\) Perrott, 166.
}
"He did not walk the dog." "He did not have his hair cut."
"The noise did not make us jump."
The \(\{\) query \(\}\) or \(\{\) not \(\}\) relates to the action of the \(\{\) causer \(\}\). The sentences are therefore:
```

{causer - query/not - agent/instrument - (\mp@subsup{\mathrm{ definite }}{1}{}) - definite }\mp@subsup{\mp@code{Z}}{2}{
{causer - query/not - agent/instrument - (definite) - indefinable}.

```
depending on whether the question or negative is definite or indefinite.
A variant of a causative sentence is one in which an action is prevented or stopped, so that it does not happen. We term this a preventive sentence:
\[
\begin{array}{ll}
\text { "I prevented him going to work." } \rightarrow & \begin{array}{l}
\text { "He did not go to work." } \\
\text { "The letter was not written." } \\
\text { "I stopped the letter being written." } \rightarrow
\end{array} \\
\text { "I stopped him writing any letters." } \rightarrow & \text { "No letters were written." } \\
\text { "The dam stopped the water falling." }
\end{array} \quad \text { "The water did not fall." }
\]

The prevented action would, if it happened, have had an \{agent\} or \{instrument\}. The prevention is brought about by an animate or inanimate \{causer\}. The prevented action is either known \{definite\} or does not occur, and is hypothetical \{indefinable\}. The preventive sentence may therefore be summarised:
\[
\begin{aligned}
& \left\{\text { causer }- \text { agent/instrument }-\left(\text { definite }_{1}\right)-\text { not }- \text { definite }_{2}\right\} \text { or } \\
& \{\text { causer }- \text { agent } / \text { instrument }-(\text { definite })-\text { not }- \text { indefinable }\} .
\end{aligned}
\]

Preventive sentences are discussed further in Chapter 18. (The Complementary Sentence).

\section*{The Inchoative and Cessative Sentences}

Chapter 11. (The Inchoative Function) considers sentences which describe the starting or continuing of an event, which we classify together as inchoation. The event can be an action:
"She began to write"; "She carried on writing";
or a state:
"She began to be happy"; "She went on being happy".
The inchoation can refer to a human subject, as in these examples, or to an inanimate one:
"The rain began to fall"; "The rain went on falling".
"The weather began to be hot"; "The weather went on being hot".
The common feature of these sentences is that they have a resultant action or state:
"She was writing/happy"; "The rain was falling"; "The weather was hot."
The inchoative verb "begin/continue" can have an aspect which reflects the aspect of the resultant action or state:
"She is beginning to write"; "She has begun to write".
"She is beginning to be happy"; "She has begun to be happy".
The inchoative verb can also be queried or negated, in a manner which independent of a query or negation of the resultant action or state although evidently related to it:
"Has she begun to write?" "She did not carry on writing"; "The rain did not stop falling."

It appears therefore that there is a distinct inchoative function \{inchoate\}. A person ("she") performs a function as \{agent \(\}\) so that he/she engages in or continues with a resultant action or state ("write"/"be happy"). Since the resultant action or state applies to the \{agent\}, then in these examples the \{object\} of the function is the same as the \{agent\} and the sentence is intransitive. Similarly, an inanimate subject ("rain"/"weather") undergoes a function as \{instrument \} so that it engages in or continues with a resultant action or state ("fall"/"be hot"). Since the \{object \} of the resultant action or state is the same as the \{instrument \}, the sentence is again intransitive.

Inchoation can apply to any selection or circumstance sentence, which may or may not have a separate topic:
"She began the letter that she had drafted/a letter to her friend."
"The wind continued to blow/continued as it had blown that morning."
If \{definite\} is the optional topic of the inchoation, we may summarise the inchoative structure:
\[
\begin{aligned}
& \text { \{agentlobject }- \text { inchoate }-(\text { definite })-\text { select \} } \\
& \text { \{agentlobject }- \text { inchoate }-(\text { definite })-\text { indefinite }- \text { circumstance }\}, \text { or } \\
& \text { \{instrumentlobject }- \text { inchoate }-(\text { definite })-\text { select }\} \\
& \text { \{instrumentlobject }- \text { inchoate }-(\text { definite })-\text { indefinite }- \text { circumstance }\} .
\end{aligned}
\]

We observed in Chapter 11. that many inchoatives are intransitive verbs for which the resultant action is the complement:

French: "Elle a continué à écrire." "She continued to write."
German:"Sie haben begonnen zu lachen." "They began to laugh."
Russian: "Ona nachala nakryvat' na stol." "She began to set [onto] the table."276
Turkish: "Yürümeğe başladık." "We began to walk." [Walking-to we-began.] \({ }^{277}\)

Arabic: "sa-yuwāṣilu l-kitābata" "He will continue to write." [He-will-continue the-writing.] \({ }^{278}\)

Persian: "šoru? kard be neveštan" "He began to write." [Beginning he-made to write.] \({ }^{279}\)
Hindi: "din lambe hone lage" "The days started getting long." [Days long be-to began.] \({ }^{280}\)
Others may be reflexive:
French: "Il s’est obstiné à venir." "He persisted in coming."
[He himself is persisted to come.]
Arabic: "istamarra ya§dū ḥattā nqaṭąat Ranfāsuhu"
"He continued running until his breath failed him."
[He-continued-himself he-ran until failed his-breath.] \({ }^{281}\)
Others modify the resultant verb:
Japanese:

\footnotetext{
\({ }^{276}\) Folomkina \& Weiser, 57.
\({ }^{277}\) Lewis, 168.
\({ }^{278}\) Badawi et al, 365.
\({ }^{279}\) Lambton, 143.
\({ }^{280}\) McGregor, 133.
\({ }^{281}\) Badawi et al, 429.
}

\title{
"Sensei wa hon o kakihajimeta." "The teacher began to write a book." [Teacher \({ }_{\text {topic) }}\) book \(_{\text {(object) }}\) write-began.] \\ "Kyūni ame ga furidashita." "Suddenly it began to rain."
}
[Suddenly rain (subject) fall-began.] \(^{282}\)
Inuit: "Danmarkimili kalaallisut ilinnialirpuq."
"He began studying Greenlandic already in Denmark." [Denmark-in-already Greenlandic study-began-he.] \({ }^{283}\)

All the above examples are intransitive. The inchoative function can also operate transitively:
"She started/kept the child riding on the bicycle."
"She started/kept the engine running."
"The network kept the lights on."
In these cases, the \{object\} "child", "engine", and "lights" are not the same as the \{agent\} or \{instrument\}. The resultant of the inchoation is again the action that the \{object\} commences or continues:
```

{agent - inchoate - object - select}
{agent - inchoate - object - indefinite - circumstance}
{instrument - inchoate - object - select}
{instrument - inchoate - object - indefinite - circumstance}.

```

We now consider a inchoative question or negative. As with other questions or negatives, the function which is subject to inchoation is either \{definite\} or \{indefinable\}, and cannot be indefinite. The sentence asks whether or denies that an identified action has been commenced or continued, or whether it exists:
"She has not begun to write the letter." Has she begun to write the letter?"
"She has not begun to write a letter." "Has she begun to write a letter?"
This may be represented:
\[
\begin{aligned}
& \left\{\text { agentlobject }- \text { query }^{\text {not }}-\text { inchoate }-\left(\text { definite }_{1}\right)-\text { definite }_{2}\right\} \\
& \{\text { agentlobject }- \text { query/not }- \text { inchoate }-(\text { definite })-\text { indefinable }\} \text { or } \\
& \left\{\begin{array}{l}
\text { instrumentlobject } \left.- \text { query/not }- \text { inchoate }-\left(\text { definite }_{1}\right)-\text { definite }_{2}\right\} \\
\{\text { instrumentlobject }- \text { query/not }- \text { inchoate }-(\text { definite })-\text { indefinable }\} .
\end{array} .\right.
\end{aligned}
\]

Similarly, the verbs "avoid" or "fail" express the concept of an \{agentlobject\} or \{instrumentlobject\} not proceeding with an action, whether known or hypothetical, and therefore are a negative inchoative:
"She avoided writing a letter/the letter." "He avoided getting into debt."
"He failed to read the book." "The water failed to boil."
Chapter 11. also discusses actions which result in an action being stopped, called cessation:
"She stopped writing." "She stopped being happy."
"The rain stopped falling." "The weather stopped being hot."
A person ("she") performs a function as \{agent \} so that he/she ceases to engage in a known action or state ("write"/"be happy"), and the action or state no longer occurs. The ceased action or state applies to the \{agent\}, so the \{object\} of the function is the same as the \{agent\} and the sentence is intransitive. Similarly, an inanimate subject ("rain"/"weather") undergoes a function as \{instrument\} so that it ceases to engage in a known action or state ("fall"/"be hot"). The ceased action or state

\footnotetext{
\({ }^{282}\) Makino \& Tsutsui, 103, 132.
\({ }^{283}\) Fortescue, 98.
}
applies to the \(\{\) instrument \(\}\), so the \{object\} of the function is the same as the \(\{\) instrument \(\}\) and the sentence is again intransitive. We may use the same element \{inchoate\} to describe a cessation:
\{agentlobject - inchoate - (definite \(\left._{1}\right)-\) not - definite \(_{2}\) \}
\(\left\{\right.\) instrumentlobject - inchoate \(-\left(\right.\) definite \(\left._{1}\right)-\) not - definite \(\left._{2}\right\}\).
Cessative sentences are constructed in various languages according to the same pattern as inchoatives:
French:"Il s'est arrêté à venir." "He stopped coming." [He himself is stopped to come.]
Indonesian:
"Saya sudah berhenti merokok." "I've stopped smoking."284
Inuit: "Tassanngaannaq nirissaarpuq." "He suddenly stopped eating."
[Suddenly eat-stop-he.] \({ }^{285}\)
A cessative can also be transitive:
"She stopped the child riding on the bicycle."
"She stopped the engine running."
"The network turned the lights off."
Cessative sentences are discussed further in Chapter 18. (The Complementary Sentence).

\section*{The Error Sentence}

An error can be an action or state. If it is an action, it is one which is contrary to the intention or expectation of an animate agent or causer:
"He turned left when he meant to turn right."
"He filed the paper in the wrong folder."
"She had the wrong car repaired."
"She missed the opportunity to apply for the job."
The agent or causer may be omitted. Nevertheless, the error sentence implies that there is an animate person who intended or expected other than what happened:
"The signpost showed left when it should have shown right."
"The paper was filed in the wrong folder."
"The wrong car was repaired."
Either the action, or the object or resultant of the action, can be in error:
"He filed the paper when he meant to shred it."
"He filed the wrong paper in the folder."
"He filed the paper in the wrong folder."
In an error which is a state, an animate recipient perceives something to be other than what it is:
"He misunderstood their silence to mean consent."
"She misheard what was said."
"He overestimated the quantity required."
Alternatively, a recipient possesses something other than what he or she intended or expected:
"She was sent the wrong item in the post."
"He has mislaid his spectacles."

\footnotetext{
\({ }^{284}\) Sneddon, 270.
\({ }^{285}\) Fortescue, 97.
}

An error cannot apply to a physical action or state where there is no animate intention or expectation:
*"The rain fell in the East when it should have fallen in the West."
*"The volcano erupted on Tuesday when it ought to have erupted on Wednesday."
These sentences only have meaning in the sense that there was an error in the mind of the vulcanologist or meteorologist who uttered them.

An error is an action or a state which already exists. It cannot apply to an action or state which has not yet arisen, since that can in principle be realised correctly. A benefit cannot therefore be in error:
*"We had the opportunity to mishear his remarks."
*"It was convenient for him to mislay his spectacles."
We may define an element \(\{\) error\} to means an action or state contrary to the intention or expectation of a person. It applies to an \(\{\) object \(\}\) which is definite, as in the above examples, or indefinite:
"He filed a wrong paper in the folder."
"He filed the paper in a wrong folder."
"She was sent a wrong item in the post."
"He has mislaid a pair of spectacles."
Since an \(\{\) error \(\}\) must apply to an actual entity, its \(\{\) object \(\}\) cannot be indefinable. For example, we cannot say:
*"Was there a paper which he filed in the wrong folder?"
*"There were no spectacles which he mislaid."
It will be seen that, except for the \(\{\) object \(\}\) of the \(\{\) error \(\}\), the rest of the sentence must be \(\{\) definite \(\}\), since otherwise it cannot be known that an \{error\} has occurred. We cannot have:
*"He filed the wrong paper in a folder."
*"He filed a paper in the wrong folder."
*"He mislaid the spectacles in a room."
In the first example, if the identity of the folder is not known, it cannot be said that the wrong paper had been filed in it. In the third example, if the identity of the room is not known, it cannot be said that the spectacles have been mislaid in it. We may therefore summarise an error sentence with the structure:
\[
\{\text { definite }- \text { error }- \text { object }\}
\]
where \(\{\) definite \(\}\) is the environment in which the \(\{\) error \(\}\) arises, and the \(\{\) object \(\}\) is definite or indefinite. An \{error\} can itself arise in the future, for example a risk:
"He is at risk of misdirecting the letter/losing his spectacles."
A supposition or proposal can be of an \{error\} that might occur in the future:
"He feared that he had misfiled the paper."
"We imagined that you had taken a wrong turning."
"He forecast that they would take the wrong turning."
"He claimed that they had misunderstood his remarks."
The future element in these sentences is described by an \{indefinable\}, but that \{indefinable\} is identified with an \(\{\) error \(\}\), not with its \(\{\) object \(\}\). For example, the risk of an \(\{\) error \(\}\) is:
\[
\left\{\text { object }- \text { depend }_{1}-\text { indefinable }_{2}\right\} \quad\left\{\text { definite }_{1}-\text { error }_{2}-\text { definite/indefinite }\right\}
\]
and the supposition of an \(\{\) error \(\}\) is
```

{recipient - suppose - object

```

A further element in an error sentence can be the action which would have been taken, the state which would have occurred, or other entity which was missed when the erroneous action or state was undertaken:
"He turned left when he meant to turn right."
"He filed the paper in the actioned folder when he should have filed it in pending."
"He filed the paper when he meant to shred it."
"He misunderstood their silence to mean consent."
We may call this omitted action, state, or entity \{correct \(\}\). It can be definite or indefinable:
"He used a pencil when he should have used the pen."
"He used a pencil when he should have used a pen."
"She mistook her friend for an enemy."
"She mistook a friend for an enemy."
The error sentence is therefore:
\(\{\) definite - error - object \(-(\) correct \()\}\).
We have so far been describing \{error\} which arise through accident. It may also occur to one person through the deliberate action of another:
"The salesman misinformed the customer on the benefits of the product."
"He misdirected her on the direction to the meeting."
"We were misled on the prospects of the company."
This adds a further possible element, \{agent \}:
\[
\{\text { definite }- \text { error }- \text { object }-(\text { correct })-(\text { agent })\} .
\]

\section*{16. \\ The Components of a Sentence}

\section*{Summary}

This chapter relates the functional structure of sentences described in Chapter 15. to the conventional mode of sentence description described in Chapter 1. Under this, concept words are categorised as nouns, verbs, adjectives, prepositions, and adverbs, and a sentence is structured with the components \{subject - verb - object - complement - (adverbial) \}.

A \{verb\} describes the action or state of a sentence, and thereby specifies the unique functional type to which the sentence belongs. A stative \{verb\} includes attributive and locative functions. A \{verb\} takes the form of either a distinct word or an auxiliary in combination with another word.

A \{noun\} is a concept word in a sentence which is not a \{verb\} or a \{complement\}, and which is necessary for the sentence to be meaningful. A sentence can only contain one \{verb\}, so that all other concept words necessary for its meaning are \{noun\} or \{complement \(\}\).

A \{subject\} is a \{noun\} which is engaged in the action or subject to the state described by the \{verb\}. A \{verb\} and its \{subject\} are a semantic unit.

An \(\{\) object \(\}\) is a \{noun\} which a \{verb\} places in a state, condition, or relationship, and which is not a \{recipient\} or a \{beneficiary\}. A patient is an \{object\} which a sentence alters or affects, and a \(\{\) creation \(\}\) is an \(\{\) object \(\}\) which is created.

A transitive sentence is one whose \(\{\) subject \(\}\) and \(\{\) object \(\}\) are distinct entities. An intransitive sentence is one whose \(\{\) subject \(\}\) and \(\{\) object \(\}\) are the same entity.

A \{complement\} describes the state, condition, or relationship into which a \{verb\} places an \{object\}. It is absent if its purpose is performed by the \(\{\) verb\}. It cannot be a \{recipient\} or \{beneficiary\}.

An \{object\} and its \{complement\} may be definite or indefinite, except in the case of a negative or question, a supposition or proposal, a modal, a preventive, a cessative, or an interrogative. For these sentence types, the \{object\} and its \{complement \(\}\) may be definite or indefinable, but not indefinite.

A definite \{noun\} or \{verb\} includes restrictive qualifiers attached to it. A restrictive qualifier attached to an indefinite \(\{\) verb\} or \{object\} is a \{circumstance\}, and is the \{complement \(\}\) of the \(\{\) object \(\}\).

Non-restrictive qualifiers are not necessary for the meaning of a sentence, and express another sentence. A non-restrictive qualifier of a \{noun\} expresses a further sentence of which the \{subject\} is the \{noun\}. A non-restrictive qualifier of a \{verb\} is an \{adverbial\}, and expresses a further sentence of which the \(\{\) subject \(\}\) is that \(\{\) verb \(\}\) in noun form.

By identifying the \(\{\) subject \(\}\) of a \(\{\) verb \(\}\) with the topic of the sentence, the discourse structure of a sentence can be aligned with the functional structure. It follows that if the grammatical verb is identified with the \(\{\) verb\}, it is in agreement with the topic. While this argument is valid for the majority of sentences, on certain occasions the grammatical verb is in agreement with the comment.

An existential sentence has the structure \(\{\) object - complement \(\}\).

\section*{Terms Defined or Introduced}

Verb, subject, object, complement, adverbial, noun.

\section*{Overview}

The conventional sentence description, "subject - verb - object - complement - adverbial", has achieved wide acceptance for the good reason that it corresponds with the way sentences behave. Sentences generally include a subject, concerning which a verb stipulates an action or state. For a "transitive" sentence, the verb operates on an object, and for an "intransitive" sentence, it does not ("transitive" and "intransitive" are so written because of the lack of precision with which these terms are often used). In addition, a complement is often needed in order to provide more information on the object. The sentence is analysed as a subject, which it is about, and a predicate. The predicate consists of the verb and all the rest of the sentence, and provides information on the subject. An adverbial may be attached to qualify the verb.

The terms themselves suggest their grammatical function. "Subject" suggests a topic. "Verb" comes from the Latin for "word", which suggests that it is the core word in the sentence. "Object" is what the verb operates on. "Complement" is what is needed to complete the sentence. "Adverbial" is attached to a verb.

As we have discussed in detail earlier, linguists have puzzled over the use of these terms because, on closer analysis, it has proved difficult to give them a precise definition which applies to all sentence types. Is a subject a topic or an agent? What is the relationship between the subject of an active and that of a stative sentence? Does the model apply to a passive or an existential sentence? How does it apply to languages which separate the topic and the subject, to "impersonal" sentences which appear to have no subject, or to sentences with an element in focus? Why do some sentences have an object and others not? How do modal sentences fit into the structure? What is a complement, other than something which completes a sentence? The huge variety of sentences which languages construct, in English and in languages with a different structure to English, are difficult to fit into the model except by making arbitrary assumptions.

The second source of problems is that the structure "subject - verb - object - complement - adverbial" is evidently not complete. Additional elements are needed:
"John picked up the litter from the ground with a grabber."
"The litter was picked up by John from the ground with a grabber."
Where do "with a grabber" and "by John" fit into the model? They cannot simply be adverbials, as they are essential to an understanding of the core sentence. Moreover, sentences are conventionally divided into "simple" and "complex", for example:
"John picked up the litter while you were watching."
"John said that he had picked up the litter."
"John would have picked up the litter if you had asked him."
"John intends to pick up the litter tomorrow."
These "complex" structures are conventionally handled by arbitrary extensions to the model, which again show its insufficiency and lack of precision.

A third difficulty is that subjects, verbs, and objects do not fall into separate semantic categories. According to a simple interpretation of the model, a verb should be a word which describes an action or state, while a subject or object should be a word which describes a person or thing. This is evidently not the case; languages possess verbal and adjectival nouns which can be either subjects or objects, according to the semantic range possessed by the verb:
"She is skilled at playing the cello; her skill is famous."
"He translated the novel in French; the translation was well received."
"He argued the case well; I sought to disprove his argument."
"I was surprised at your arrival so soon; my surprise was obvious."
We attempt to address these questions in three stages. In Chapter 13. the topic-comment structure of a sentence is distinguished from the subject-verb structure. It was shown that the purpose of a sentence in discourse can be denoted by analysing it in terms of three types of identity: \{definite\}, \{indefinite\},
and \{indefinable\}, supported by \{select\} and \{circumstance\}. The three discourse elements \(\{\) not \(\}\), \{but\}, and \{query\} provide for negation and enquiry. Chapter 14. summarises how this topic-comment structure is realised in actual languages, by means of grammatical words and rules of word order. Addition, alternation, aspect, generality, and inference are also features of discourse, denoted by further elements in the topic-comment structure.

Chapter 15. analyses all sentences into about 37 functional sentence types, which describe the way in which a sentence expresses meaning. Each functional sentence type is uniquely specified by the elements which make it up, of which 27 occur in only one sentence type and 21 occur in more than one. The discrepancy between the 37 sentences types and the 27 unique functional elements arises because some sentence types have different negative and positive versions, or different definite and indefinite versions. We have also classified causatives, preventives, inchoatives, and cessatives as separate sentence types, when in reality they are the same as the sentence types which they are causing, preventing, inchoating, or cessating.

The functional sentence types are independent of discourse structure. Any functional element can be part of a topic and any can be part of a comment, and accordingly can be \{definite\}, \{select\}, \{circumstance\}, \{indefinite\}, or \{indefinable\}, except that these discourse elements themselves occur as functional elements in certain sentence types. The same functional structure applies for statements, negative statements, questions, and hypotheses, and for sentences which are specific and general. It is also the same whether a sentence refers to an action or to the results of an action. The pairs of sentences:
"The cat sat on the mat"; "The cat was sitting on the mat";
"He noticed his friend from a distance"; "His friend was seen at a distance";
have the same functional elements although one sentence refers to a process and the other to a state resulting from it.

Discourse and functional analysis are the first two stages of our analysis of sentence structure. The third stage, which is the subject of this chapter, is to consider again how the conventional sentence description "subject - verb - object - complement - adverbial" represents it. The following notes summarise our conclusions. We have already noted that for many sentences the topic-comment structure is adequately expressed as "subject - predicate" (where the predicate is everything other than the subject), and where it is not, the "subject - predicate" construction can often be adapted to do so.

In addition to representing its role in discourse, a sentence has to express an action or state. If we isolate the 27 elements which occur only in each functional sentence type, we find that each one uniquely describes the action or state of the sentence. That element can be designated the \(\{\operatorname{verb}\}\) of the sentence. The \(\{\operatorname{verb}\}\) therefore determines how the rest of the sentence should be structured, that is what other elements are needed to make it meaningful.

In this way, we find that the verb is indeed the core word in the sentence, since around it the rest of the sentence is structured, and we have defined a class of words as \{verb\}. Since the \{verb\} determines the structure of a sentence, a sentence can have only one \{verb\}. It can also have only one \{complement\}. We therefore need a term to describe the remaining concept words in a sentence, for which we use \{noun\}. We find moreover that all the \{noun\} in sentences belong to one of the 22 elements which we have identified as arising with more than one sentence type.

We go on to define a \{subject\} as the \{noun\} which is engaged in the action or subject to the state described by the \(\{\) verb\}. By identifying the \(\{\) subject \(\}\) with the topic, we can align the discourse structure and functional structure of a sentence. The \{subject\} of a sentence is therefore definite, and includes any restrictive qualifiers attached to it.

We observe that all sentence types assign a state, condition, or relationship to a particular \{noun\} which we define as an \(\{\) object \(\}\), the state, condition, or relationship being the \{complement \(\}\). If the \{object\} is definite, it includes any restrictive qualifiers attached to it. If the \{object \(\}\) is indefinite, the \{complement \(\}\) includes a restrictive qualifier as a \(\{\) circumstance \(\}\).

An \{adverbial\} can be defined as a non-restrictive qualification of a verb. It therefore supplies additional information to the sentence containing the verb, and amounts to a further sentence of which the \(\{\) verb \(\}\) is the \(\{\) subject \(\}\).

These definitions achieve a degree of precision in use of the conventional sentence description, and account for the difficulties in that conventional description. The five elements so defined \{subject verb - object - complement - adverbial \} are the components of a sentence, and study of them is component analysis. They have implications for the use of the terms which are outlined in this chapter, but which we will summarise here for convenience:
(i) A \(\{\) verb \(\}\) includes both an auxiliary and the word which the auxiliary supports. Examples (underlined) are: "He has come home"; "We were frightened"; "You are Mr Jones".
(ii) In an existential sentence, the \(\{\) verb \(\}\) is the \(\{\) circumstance \(\}\) and the indefinite object is the \{object \(\}\). In "There is a fly in the ointment", the \(\{\) object \(\}\) is "a fly" and the \(\{\) verb \(\}\) is "there is in the ointment".
(iii) \(\mathrm{A}\{\) verb \(\}\) must be so constructed that it is clear what is its \(\{\) subject \(\}\).
(iv) \{verb \(\}\) includes adjectives, attributes, identifications, and locatives. Example (underlined) are: "This is difficult"; "She is in love"; "He is a grocer"; "They are in the shop"; "The computer was on".
(v) A definite \{noun\} includes any restrictive qualifier which is needed to identify it, for example: "the wheels of my car", "the king of France", "the eighteenth century", "the marriage of Figaro", "the man who came to dinner", "the lady with the little dog". An indefinite \{noun\} includes any \{circumstance\} needed to identify it, for example: "a wheel from my car"; "a king of France"; "someone who came to dinner"; "a lady with a little dog".
(vi) An \{object\} is the same entity as a \{subject\} if the \{verb\} operates on its \{subject\}, for example (underlined): "We went home"; "The water rose"; "The Minister was dismissed".
(vii) An \(\{\) object \(\}\) is the same entity as a \(\{\) subject \(\}\) if the \(\{\) verb \(\}\) expresses the state, condition, relationship, or constituents of its \{subject\}, for example (underlined): "The king is dead"; "The idea was accepted"; "Mr Jones was Chairman"; The car has an electric motor"; Mrs Smith is on the list of attendees".
(viii) The \{object\} of an embedded perception or communication is the same entity as the \{subject\} (underlined): "The birds are heard by us to sing".
(ix) The \{verb\} of a modal is the modal "can", "ought to", "must", etc. The \{object \(\}\) of a modal is the \{object\} of the modal activity (underlined): "She can speak French"; "She ought to study German".
(x) A perception or communication is a \{noun\}, even if is structured as a verb (underlined): "We heard the birds singing"; "We heard the singing of the birds".
(xi) The \{noun\} in many sentence types include categories which are not covered by \{subject\} and \{object\} as we have defined them. These include \(\{\) target \(\}\), \(\{\) recipient \(\}\), \{beneficiary \}, \{base \}, and \(\{\) participant \(\}\), and \{agent \(\}\) and \{instrument \(\}\) when they are not the \(\{\) subject \(\}\). \{definite \(\}\), \{select\}, \{circumstance\}, \{indefinite\}, and \{indefinable\} also occur in sentence types in functions where they are not the \(\{\) subject \(\}\) or \(\{\) object \(\}\).
(xii) Since a \(\{\) complement \(\}\) is the \(\{\) verb \(\}\) of the resultant sentence, it is formulated in the same way as a \(\{\) verb \}. If no \{complement \(\}\) is stated, it is the same entity as the \(\{\) verb \(\}\) (underlined): "We obeyed the rules"; "Constable painted the landscape".
(xiii) Sentences in focus are generally identification, locative, or time in function: "It was Jack who stole the tarts"; "It was in Florence/on Tuesday that we met."
(xiv) In some topic-comment sentences, the \(\{\) verb \(\}\) performs differently from the grammatical verb: (Russian) "Vash bagazh otpravyat v gostinitsu." [Your luggage they-take to hotel.]

\section*{Classification of Sentence Elements}

The approximately 37 functional sentence types described in the previous chapter are an attempt to explain how languages describe an action or state, independently of how they perform in order to integrate sentences into a discourse. Each functional sentence type is different, and that difference is defined by the elements that make it up. Certain elements are common to more than one sentence function, or do not describe the action or state of the sentence:
\begin{tabular}{|c|c|}
\hline \{agent & person who intentionally performs an action. \\
\hline \{instrument \} & physical object which effects an action. \\
\hline \{creation\} & created entity which did not previously exist. \\
\hline \{constituent \} & previous constituents of a creation. \\
\hline \{attribute & state or quantity which an \(\{\) object \(\}\) is in or to which it is changed. \\
\hline \{sequence\} & sequence of a \{time\}. \\
\hline \{location\} & position in space of an \{object \}. \\
\hline \{beneficiary & person to whose advantage or disadvantage an action or state occurs. \\
\hline \{base\} & base of a comparison or measurement. \\
\hline \{object\} & person or thing which is in or enters into a state or relationship, other than a \{beneficiary\} or \{recipient\}. \\
\hline \{participant \({ }^{\text {d }}\) & person with whom an \{agent\} participates. \\
\hline \{target \} & person or thing towards which an action occurs without any effect being stated. \\
\hline \{original \(\}\) & that which is replaced in a substitution. \\
\hline \{competence\} & competence whereby a \{role\} is fulfilled. \\
\hline \{recipient\} & person possessing a relationship with an \{object\}. \\
\hline \{representation\} & created representation of an \(\{\) object \(\}\). \\
\hline \{correct\} & entity which is omitted by an \{error\}. \\
\hline \{definite\} & entity whose identity is known. \\
\hline \{select\} & \{definite\} entity selected from a class of \{definite\} entities. \\
\hline \{indefinite\} & entity which exists but whose identity is not known when the sentence is uttered. \\
\hline \{circumstance \(\}\) & \{definite\} restrictive qualifier to an \{indefinite\} entity. \\
\hline \{indefinab & entity whose existence is not ascertained. \\
\hline \{causer\} & person or thing at whose instigation an \{agent\} or \{instrument\} performs or does not perform an action. \\
\hline
\end{tabular}

An ambiguity may exist in expressing the actions of animals. They are treated as a person to the extent that they are considered to have an intention, and as a thing to the extent that they are not.

Other elements only occur in one sentence function only, and describe the action or state of the sentence:
\begin{tabular}{|c|c|}
\hline \{create \} & action to create an entity which did not previously exist. \\
\hline \{transform\} & action to alter an \(\{\) object \(\}\). \\
\hline \{attribute\} & state or quantity of an \{object \(\}\). \\
\hline \{locative\} & relation in space of an \{object \} to a \{location\}. \\
\hline \{move \({ }^{\text {d }}\) & movement in space of an \{object \} relative to a \{location\}. \\
\hline \{time \({ }^{\text {d }}\) & unit in which the point in time of an \{object \} is expressed. \\
\hline \{constitute\} & constituent or dimension of an \{object\}. \\
\hline \{effect\} & involuntary state or condition of an \{object \} under the effect of an external cause. \\
\hline \{free\} & state of freedom of an \{object from the \{effect \(\}\) of an external cause. \\
\hline \{depend\} & risk to which an \(\{\) object \(\}\) is subject. \\
\hline \{relief\} & action to relieve a risk on an \{object \(\}\) \\
\hline \{identification\} & entity with which an \(\{\) object \(\}\) is identified. \\
\hline \{substitute\} & action of substitution. \\
\hline \{compare & difference between a characteristic of an \{object \(\}\) with that of another ent \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline \{participate & action by an \(\{\) agent \(\}\) towards a \{target \(\}\) which does not alter or affect it. \\
\hline & tion in human society fulfilled by virt \\
\hline tyle\} & ality or style by which an action is perfor \\
\hline \{possession\} & elationship between a \{recipient\} and an \{object\} \\
\hline \{lack\} & need by a \{recipient\} for the \{possession\} of an \{object \} \\
\hline \{perceive\} & mental impression by a \{recipient\} of new information concerning an \{object\}. \\
\hline \{opinion\} & considered mental response by a \{recipient\} to known information concerning an \(\{\) object \(\}\). \\
\hline \{suppo & consideration by a \{recipient\} of a hypothesis concerning an \{object \}. \\
\hline \{communic & communication of new information concerning an \{object \}. \\
\hline \{propose\} & communication of a hypothesis concerning an \{object \}. \\
\hline \{benefit\} & advantage or disadvantage arising to a \{beneficiary \}. \\
\hline \{able\} & ability of a person to fulfil a hypothetical action. \\
\hline \{ought \(\}\) & obligation of a person to fulfil a hypothetical action. \\
\hline \{error\} & action or state contrary to the intention or expectation of a causer, agent, or recipient. \\
\hline
\end{tabular}
\{locative\}/\{location\} and \{time\} can occur in any sentence which occurs in physical space or time. However, there also exists specific locative and time sentences in which these elements occur alone. This dual purpose is discussed further below (The Adverbial Component). In addition, a \{locative\} or \{time\} may be a restrictive qualifier to a definite or indefinite entity (The Noun Component; The Circumstance Component).
\{attribute\} is the state of an \{object\}, whether or not it results from a \{transform\}.
\{create\} is an action which applies to both a \{creation\} and a \{representation\}.

\section*{The Verb Component}

We therefore observe that each sentence contains a word which uniquely specifies the function of sentence, and which therefore contains its primary information. That information may be an action or a state. We can use the term \(\{\) verb \(\}\) for that word. If the \(\{\) verb \(\}\) of a sentence is known, the sentence function is known, and the other elements which are required to complete the functional meaning can be inferred and included by the speaker. We may therefore replace each of the elements which occur in only one sentence function by \(\{\) verb \(\}\). On that basis, the following list summarises the sentence types which were described in Chapter 15., but without the optional elements:
Creation:
Attribute:
Transformation:
Locative:
Movement:
Transformation locative:
Time:
Constituent:
Effect:
Freedom:
Dependency:
Relief:
Identification:
Substitution:
Comparison:
Participation:
Role:
Style:
Possession:
Deficiency:
Exchange:
Perception:
```

{agent - verb - creation}.
{object - verb}.
{object - verb - attribute}.
{object - verb - location}.
{object - verb - location }-\mp@subsup{\mathrm{ location }}{2}{}}
{object - verb - attribute - location}.
{object - verb - sequence}.
{object - verb - attribute}.
{object - verb - instrument}.
{object - verb - not - definite}.
{object - verb - indefinable}.
{object - verb - not - indefinable}.
{object - verb}.
{object - verb - original - identification}.
{object - verb - base}.
{agent - verb - target}.
{object - verb - target}.
{object - verb - definite}.
{recipient - verb - object}.
{beneficiary - verb - not - object}.
{agent - verb - object
{recipient - verb - object - select/indefinite/

```
\begin{tabular}{|c|c|}
\hline Negative perception: & \{recipient - verb - object - not - definite/indefinable . \\
\hline Opinion: & \{recipient - verb - definite . \\
\hline Supposition: & \{recipient - verb - indefinable\}. \\
\hline Communication: & \{agent - verb - object - select/indefinite/circumstance recipient \(\}\). \\
\hline Negative communication & \{agent - verb - object - not - definite/indefinable recipient \(\}\). \\
\hline Proposal: & \{agent - verb - object - indefinable - recipient \(\}\). \\
\hline Interrogation: & \{agent - verb - query - object - definite/indefinable recipient \(\}\). \\
\hline Representation: & \{agent - verb - object - representation\}. \\
\hline Benefit: & \{beneficiary - verb - definite/indefinite\}. \\
\hline Warranty: & \begin{tabular}{l}
\{agent - verb - object - definite/not - indefinable\}. \\
\{causerlbeneficiary - verb - object - not - indefinable\}.
\end{tabular} \\
\hline Modal (ability/necessity /responsibility) & \begin{tabular}{l}
\{recipient - verb - object - indefinable\}. \\
\{recipient - not - verb - not - object - indefinable \(\}\).
\end{tabular} \\
\hline Error & \{definite - verb - object , \\
\hline
\end{tabular}

The \(\{\) verb \(\}\) of a causative, preventive, inchoative, or cessative sentence is a causative, preventive, inchoative, or cessative version of the \{verb\} which is being caused or prevented (below, The Subject as Topic).

As we shall see, the \(\{\) verb \(\}\) of an existential sentence is a \(\{\) circumstance \(\}\). An existential sentence is not listed among the 37 or so functional sentence types in Chapter 15., but among the seven discourse sentence types in Chapter 13.

To test this definition, we select one dynamic sentence and its stative (or dynamic) resultant sentence from each functional category, underlining the \(\{\) verb \(\}\) in each case:
"Joan wrote this book on linguistics."
\begin{tabular}{|c|c|}
\hline \(\rightarrow\) & "The book on linguistics is by Joan." \\
\hline "John painted the fence green." & "The fence was painted green." \\
\hline "He laid the book on the table." \(\rightarrow\) & "The book was on the table." \\
\hline \multicolumn{2}{|l|}{"The meeting took place on Tuesday."} \\
\hline " \(\rightarrow\) & "The meeting was on Tuesday." \\
\hline \multicolumn{2}{|l|}{"The meeting was held for one hour."} \\
\hline \(\rightarrow\) & "The meeting lasted one hour." \\
\hline \multicolumn{2}{|l|}{"He cleaned the leaves out of the drain."} \\
\hline \(\rightarrow\) & "The drain was clean of leaves." \\
\hline (no dynamic sentence) \(\rightarrow\) & "She has four brothers." \\
\hline \multicolumn{2}{|l|}{"The houses were given slate roofs."} \\
\hline \(\rightarrow\) & "The houses have slate roofs." \\
\hline
\end{tabular}
\[
0
\]
\(\longrightarrow \quad \rightarrow \quad\) "The five books were from her library."
"The results were surprising to us." \(\rightarrow \quad\) "We were surprised at the result."
"Contractors have freed the building of asbestos."
\(\rightarrow \quad\) "The building is free of asbestos."
"Subsidence placed the building at risk of collapse."
\(\rightarrow\) "The building is at risk of collapse."
"He rescued his friend from drowning."
\(\rightarrow \quad\) "His friend did not drown."
"His bedroom became his office." \(\rightarrow\) "His bedroom is his office."
"A young swan is called a cygnet." \(\rightarrow\) "A cygnet is a young swan."
"Lloyd George replaced Asquith as Prime Minister."
\(\rightarrow \quad\) "The Prime Minister was Lloyd George."
"The shopkeeper priced these apples at 50 pence less than those."
\(\rightarrow \quad\) "These apples are 50 pence cheaper than those."
"He obeyed the rules of the Society."
\(\rightarrow \quad\) "He was obedient to the rules of the Society."
"Louis XIV acceded as king of France."
\(\rightarrow \quad\) "Louis XIV was king of France."
(no dynamic sentence) \(\quad \rightarrow \quad\) "He was meticulous in preparing the accounts."
"Mary lent the book to John." \(\rightarrow \quad\) "John has the book on loan."
"My driving license was withdrawn."
\(\rightarrow\)
"She sold the book to a friend for \(£ 10\)." \(\rightarrow \quad\) "Her friend owns the book."
"Mary recollected that the appointment was due."
\begin{tabular}{|c|c|}
\hline \(\rightarrow\) & "Mary remembered the appointment." \\
\hline "I was given a tiepin as a present." \(\rightarrow\) & "I have a tiepin as a present." \\
\hline "We took pleasure in the play." & "The play pleased us." \\
\hline "We imagined that it might rain." \(\rightarrow\) & "We supposed it might rain." \\
\hline \multicolumn{2}{|l|}{"Henry telephoned to James the date of the appointment."} \\
\hline \(\rightarrow\) & "James knew the date of the appointment." \\
\hline \multicolumn{2}{|l|}{"He alleged that they had committed the crime."} \\
\hline \(\rightarrow\) & (no separate resultant sentence) \\
\hline \multicolumn{2}{|l|}{"He asked when the train would depart."} \\
\hline \(\rightarrow\) & (no separate resultant sentence) \\
\hline \multicolumn{2}{|l|}{"We translated the book into Greek."} \\
\hline \(\rightarrow\) & "The book was available in Greek." \\
\hline (no dynamic sentence) \(\quad \rightarrow\) & "She was kind in offering him a loan." \\
\hline \multicolumn{2}{|l|}{"We helped him complete the task."} \\
\hline \(\rightarrow\) & "He was able to complete the task." \\
\hline \multicolumn{2}{|l|}{"The rain forced her to go under the shelter."} \\
\hline \(\rightarrow\) & "She went under the shelter." \\
\hline "I promised to pay a contribution." \(\rightarrow\) & "I ought to pay a contribution." \\
\hline \multicolumn{2}{|l|}{"The child started to ride the bicycle."} \\
\hline \(\rightarrow\) & "The child rode the bicycle." \\
\hline "I stopped him going to work." \(\rightarrow\) & "He did not go to work." \\
\hline "He misdirected his efforts." \(\rightarrow\) & (no separate resultant sentence) \\
\hline
\end{tabular}

It can be seen from the above examples that:
(i) A dynamic \(\{\) verb \(\}\) is generally a single word, but may comprise an auxiliary and another word, which may be a verbal adjective or a verbal noun (underlined):
"We are playing a game of croquet." "We do not play croquet." "Do we play croquet?"
Hindi: "larke ne pūrā pannā paṛh diyā" "The boy read out the entire page."
[Boy-by entire page reading gave.]
(ii) In a sentence which describes the constituent or dimension of a person or thing, the \{verb\} either consists of an auxiliary verb and the constituent or dimension or it is the constituent or dimension (underlined):
"The builder roofed the houses with slate"; "The houses are roofed with slate".
"The contractor lengthened the road by 20 metres"; "The road is 20 metres longer".
"She selected five books from the library"; "The five books were from her library."
Chinese:"Zhè ge fángjiān shí mĭ kuān." "This room is ten metres wide."
[This unit room ten metre wide.]
(iii) In languages with the auxiliary "be", a stative \{verb\} which describes an identification comprises "be" and the identification noun, and a stative \{verb\} which describes a state or condition comprises "be" and an attribute or quantity.

In addition, we saw in Chapter 13. that many languages do not have an auxiliary "be" or do not use it for all identifications or states. In these cases, a stative \{verb\} describing an
identification is the identification noun, and a stative \(\{\operatorname{verb}\}\) describing a state or condition is the attribute:

Russian: "Moskva - stolitsa Rossii." "Moscow [is the] capital [of] Russia.,"286
Turkish: "Vesika kasada." "The document is in the safe." [Document safe-in.]
In English, there are also stative \{verb\} describing a state or condition:
"The book includes an index." "The box contained some groceries."
(iv) A stative \(\{\operatorname{verb}\}\) describing a \(\{\) possession \(\}\), that is a relationship between a person and a thing or another person, is often a single word. Alternatively, it consists of an auxiliary such as "have" and a noun describing the \{possession\}, or the auxiliary "be" and a possessive attribute. If a language does not have the auxiliary "have", an alternative auxiliary is employed:

Hindi: "mere pās ek gāṛī hai" "I have a car." [Me-with a car is.]
(v) An auxiliary can assist in the formation of a causative and preventive \{verb\} from the verb which is caused or prevented:
"The noise made us jump." "The delay prevented the meeting taking place."
(vi) An auxiliary can assist the \(\{v e r b\}\) in its discourse functions of identity, aspect, tense, generality, negation, and interrogation:
"They were preparing to go out." "We have eaten lunch." "She will have gone out." "We do not play croquet." "Do we play croquet?" "We may have played croquet."

On this basis, we can extend our definition of \(\{\) verb \(\}\) : a \(\{\) verb \} is a word which expresses the unique action or state of a sentence. It may be distinct word or an auxiliary in combination with an attribute or noun which describes that action or state. In the case of a causative or preventive \{verb\}, it may be an auxiliary in combination with another verb.

In conventional grammatical usage, a verb is the first word of a predicate and so describes the action or state of the \(\{\) subject \(\}\), as we shall discuss below. This corresponds in many respects with our definition of \(\{\) verb \(\}\). However, \(\{\) verb \(\}\) is always a concept in the world. If an auxiliary is present, the \(\{\) verb \(\}\) is both the auxiliary and the word which the auxiliary is supporting. This means, for instance, that in a stative locative or time sentence the \(\{\) verb \(\}\) includes the locative or time preposition:
"The book was on the table." "The meeting was on Tuesday."
Since a \{verb\} is an action or state, it includes our concept of an adjective or attribute:
"The drain was clean of leaves."
"We were surprised at the result."
"The building is free of asbestos."
"The building is at risk of collapse."

As we observed in Chapter 15. (The Locative Sentence), a \{verb\} of movement includes the direction of movement:
"The spider climbs up the drainpipe." "The visitors walked around the park.
This definition of \(\{\) verb \(\}\) is reflected in the grammar of Maori. In Maori, the \(\{\) verb \(\}\) appears at the start of the sentence, and may be a conventional verb, an identification, an adjective, locative, or possession. The language does not have the auxiliaries "be" or "have":
"Kei te pupuri te taitama i to hōiho." "The young man is holding the horse."

\footnotetext{
\({ }^{286}\) Wade, 104.
}
[At the hold the young-man \({ }_{(\text {object })}\) the horse.]
"Kei to puritia te hōiho e te taitama." "The horse is being held by the young man."
[At the being-held the horse by the young-man.]
"Ko te kaiwhakahaere a Rōpata." "Ropata is the organiser." [It-is the organiser the Ropata.]
"He tino ātaahua tēnā kete huruhuru." "That feather kete is very beautiful."
[A very beautiful that kete feather.]
"Kei roto ngā kapu i te kapata." "The cups are in the cupboard."
[At inside the (plural) cup of the cupboard.] \(^{\text {a }}\)
"Nā tōku whaea tēnei tiki." "This tiki is my mother's." [Belong-to my mother this tiki.] \({ }^{287}\)
A further difference from conventional usage arises if we apply the definition of \{verb\} to an existential sentence (underlined):
"There is a telephone call for you." "There is a commotion outside."
These sentences could be rephrased:
"A telephone call is for you." "A commotion is outside."
The unique action or state of the sentence ("is for you"; "is outside") is definite information which introduces the indefinite subject "a telephone call"; "a commotion"). In Chapter 13. (Existential Sentence; Statement), we called this definite information a \{circumstance\}. Accordingly, in an existential sentence the \(\{\) verb \(\}\) is the \{circumstance\}. The \(\{\) verb \(\}\) either consists, as in English, of an auxiliary and definite information (often a locative) or, if no auxiliary is present, it is the definite information itself:

Russian:"Na stole vaza." "There is a vase on the table." [On table vase.]
The same applies to a negative existential sentence:
"There is no telephone call for you." "There is no commotion outside."
The \(\{\) circumstance \(\}\) is again the \(\{\) verb \(\}\) and the subject is indefinable.
Since the \(\{\) verb \(\}\) of a sentence is its unique action or state, a sentence can only include one \{verb\}. Other words constructed as verbs may appear, but they have different purposes:
- As a \{complement \(\}\) : "He put the book on the table"; "She loaned the book to her friend"; "I heard that the man had come to dinner"; "I said that the man had come to dinner".
- As a restrictive qualifier to a definite or indefinite \{noun\}: "the/a man who came to dinner". Since in that case the verb ("came") exists only to give an identity to the qualified \{noun\} ("man"), it is definite and part of the \{noun\}(below, The Noun Component).
- As a non-restrictive qualifier: "the man, who had come to dinner". Such a \(\{\) verb \(\}\) is a separate sentence.
- As a separate sentence connected by a conjunction, as summarised in Chapter 14.

\section*{The Subject Component}

It follows from the foregoing that, since a \{verb\} describes an action or state, a sentence generally includes a word for that which is engaged in the action or subject to the state. We can call this word a \{subject\}, and can test this concept on our sample sentences:
"Joan wrote this book on linguistics."
\[
\begin{array}{lll}
\text { "John painted the fence green.", } & \rightarrow & \text { "The book on linguistics is by Joan." } \\
\text { "He laid the book on the table." } & \rightarrow & \text { "The fence wook was painted green." }
\end{array}
\]

\footnotetext{
\({ }^{287}\) Foster, 17, 48, 58, 83, 89.
}
"The meeting was held for one hour."
"He cleaned the leaves out of the drain."
"The meeting lasted one hour."
\(\rightarrow \quad\) "The drain was clean of leaves."
(no dynamic sentence) \(\quad \rightarrow \quad\) "She has four brothers."
"The houses were given slate roofs."
\(\rightarrow \quad\) "The houses have slate roofs."
"She selected five books from the library."
\(\rightarrow \quad\) "The five books were from her library."
"The results were surprising to us." \(\rightarrow\) "We were surprised at the result."
"Contractors have freed the building of asbestos."
\(\rightarrow \quad\) "The building is free of asbestos."
"Subsidence placed the building at risk of collapse."
\[
\rightarrow \quad \text { "The building is at risk of collapse." }
\]
"He rescued his friend from drowning."
"His friend did not drown."
"His bedroom became his office." \(\rightarrow\) "His bedroom is his office."
"A young swan is called a cygnet." \(\rightarrow\) "A cygnet is a young swan."
"Lloyd George replaced Asquith as Prime Minister."
\(\rightarrow \quad\) "The Prime Minister was Lloyd George."
"The shopkeeper priced these apples at 50 pence less than those."
"He obeyed the rules \(\rightarrow \quad\) "These apples are 50 pence cheaper than those."
"He obeyed the rules of the Society."
\(\rightarrow \quad\) "He was obedient to the rules of the Society."
"Louis XIV acceded as king of France."
(no dynamic sentence) \(\quad \rightarrow \quad\) "He was meticulous in preparing the accounts."
"Mary lent the book to John." \(\rightarrow\) "John has the book on loan."
"My driving license was withdrawn."
\(\rightarrow \quad\) "I lack a driving license."
"She sold the book to a friend for \(£ 10\)."
\(\rightarrow \quad\) "Her friend owns the book."
"Mary recollected that the appointment was due."
"I was given a tiepin as a present." \(\rightarrow\) "Mary remembered the appointment."
"We took pleasure in the play."
"Wave a tiepin as a present."
"We imagined that it might rain." \(\rightarrow\) "The play pleased us."
"Wenry telephoned to James the date of the appointment."
"He alleged that they had committed the crime."
"He alleged that they had committed the crime."
\begin{tabular}{lll} 
"He asked when the train would depart." & (no separate resultant sentence) \\
"We translated the book into Greek." & (no separate resultant sentence)
\end{tabular}

These sentences illustrate the variety of functions which a \{subject\} performs. The \{verb\} states what action or state the sentence describes or refers to, and the \{subject\} states who or what is engaged in the action or subject to the state. The function of the \{subject \} evidently varies according to the nature
of the \(\{\) verb \(\}\), and is one of the elements common to the different sentence functions listed above (Classification of Sentence Elements):
\begin{tabular}{|c|c|}
\hline subject & what the verb describes \\
\hline \{agent & an action of a person; \\
\hline \{instrument\} & an action of an inanimate object; \\
\hline \{object \(\}\) & an action undergone, or \\
\hline & a state entered into, or \\
\hline & a relationship with a person, or \\
\hline & an identification, or \\
\hline & a style, or \\
\hline & a role; \\
\hline \{target \({ }^{\text {a }}\) & a participation by a person; \\
\hline \{original\} & substitution with an identified entity; \\
\hline \{recipient & a relationship with a person or thing; \\
\hline \{beneficiary\} & availability of an advantage or disadvantage; \\
\hline \{causer\} & instigation or prevention of an action by an \{agent\} or \{instrument\}; \\
\hline \{definite\} & action or relationship undertaken in error. \\
\hline
\end{tabular}

We saw in Chapter 15. that many of these purposes can be combined, for example:
\begin{tabular}{ll} 
\{agentlobject \(\}\) & an action by a person on him/herself. \\
\{agentlbeneficiary & an action of a person to his/her advantage or disadvantage. \\
\{agentlrecipient \(\}\) & an action of a person so that he/she enters into a relationship.
\end{tabular}

We can see also that the verb is constructed grammatically to be particular to its \{subject\}, so that if a different element is its \(\{\) subject \(\}\), the verb is generally different. In this way, \(\{\) subject - verb\} is a semantic unit.

A \{beneficiary\} does not in general occur as a \{subject\} in English, except in combination with an \{agent\}, but is found in other languages:

Tagalog:"Ipagaalis ng tindero ng bigas sa sako ang babae."
"For the woman, some rice will be taken by the storekeeper out of a sack."
[Will-be-taken-for-her a storekeeper some rice from sack the woman.]
Indonesian:
"Adiknya dibelikannya buku." "His brother was bought a book by him."
[Brother-his was bought-for-him book.] \({ }^{288}\)
Japanese:
"Watashi wa chichi ni kamera o katte moratta."
"I was bought a camera by my father."
[ \(\mathrm{I}_{\text {(topic) }}\) father-by camera \({ }_{\text {(object) }}\) buying received.]
Swahili: "Wamenunuliwa sukari." "For them, sugar has been bought." [They-have-been-bought-for sugar.]

In all the above examples, the \{subject\} is the topic of the sentence. We consider below (The Subject as Topic) whether that is necessarily so for all sentences. If it is, the "subject" of an existential sentence cannot be its \{subject\} since it is \{indefinite\}, and for a negative existential it is \{indefinable\}:
"There is a telephone call for you." "There is a commotion outside."
"A telephone call is for you." "A commotion is outside."
"There is no telephone call for you." "There is no commotion outside."

\footnotetext{
\({ }^{288}\) Sneddon, 251.
}

We shall see below that the "subject" of an existential sentence is its \{object\}.

\section*{The Object Component}

A number of the functional sentence types of Chapter 15. include an element object, patient, or creation, the difference being that the patient is altered by the action of the sentence, the creation is created, while the object is unaltered. The standard sentences which we have been using are listed with the object, patient, or creation, if present, underlined:
"Joan wrote this book on linguistics."
"John painted the fence green."
"He laid the book on the table."
"The meeting took place on Tuesday."
\begin{tabular}{|c|c|c|}
\hline & \(\rightarrow\) & "The book was available in Greek." \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{"We helped him complete the task."}} \\
\hline & & \\
\hline & \(\rightarrow\) & "He was able to complete the task." \\
\hline \multicolumn{3}{|l|}{"The rain forced her to go under the shelter."} \\
\hline & \(\rightarrow\) & "She went under the shelter." \\
\hline "I promised to pay a contributio & & "I ought to pay a contribution." \\
\hline \multicolumn{3}{|l|}{"The child started to ride the bicycle."} \\
\hline & \(\rightarrow\) & "The child rode the bicycle." \\
\hline "I stopped him going to work." & \(\rightarrow\) & "He did not go to work." \\
\hline "He misdirected his efforts." & \(\rightarrow\) & (no separate resultant sentence) \\
\hline
\end{tabular}

The common feature of each of the underlined entities is that the dynamic sentence places it in a state, condition, or relationship, which the resultant stative sentence expresses. On that basis, we can define an \{object\} as a person or thing which a sentence places in a state, condition, or relationship. Consistent with this definition, the term \{object\} can be extended to an identification sentence, and the relevant words are underlined above.

We argued in Chapters 6. and 7. that the term "object" is loosely and therefore unhelpfully applied in conventional grammatical usage. The foregoing definition provides some precision to the term, while separating its purpose from that of other sentence elements. A patient is an \{object\} which a sentence alters or affects. For a creation verb, an \{object\} is a \{creation\} or \{representation\} which did not previously exist:
"She gave birth to the baby." "She took a photograph of the scene."
For other sentence types, the sentence often states some state or condition of the \{object\}, or its relationship with some part, or with a person. The \{object \(\}\) is underlined in these examples:
"He turned on the computer." "He put the lid on the box." "He cut the paper in half."
"He gave the money to his wife." "He said that the train was late."
"He asked when the train would depart." "He named his son 'Frederick".
This definition of \{object\} varies in several ways from the conventional one. In the following examples, the \(\{\) object \(\}\) is underlined:
(i) An \(\{\) object \(\}\) can be the same entity as the \(\{\) subject \(\}\) of a sentence, if the sentence is:
reflexive: "Mary went to Cambridge." "Mary drove herself to work."
inceptive: "The dust blew in the window." "The meeting took place on Tuesday."
passive: "The dust was hoovered up."
inchoative: "She began to sing." "The wind stopped blowing."
(ii) Since a stative sentence expresses the state, condition, or relationship that an \(\{\) object \(\}\) is in, the \(\{\) object \(\}\) is \(\{\) subject \(\}\) of such a sentence:
"The book was on the table." "The meeting was on Tuesday."
"The drain was clean of leaves." "The houses have slate roofs."
"We were surprised at the result." "The building is free of asbestos."
"His bedroom is his office." "A cygnet is a young swan."
(iii) A participation sentence expresses an action in which an \{agent \} participates:
"We played a game of croquet." "She looked after her elderly parents."
"She defended her thesis." "He obeyed the rules of the Society."
It could be argued that the \{object\} of these sentences are "game", "her parents", "her thesis", and "the Society". However, while these elements may have been affected by the participation action, the sentences do not say what that effect was. On the other hand there has been an evident effect on the \{agent \(\}\) : a game of croquet has been played, a caring action
has been undertaken, a thesis has been defended, rules have been observed. The \(\{\) object \(\}\) is therefore the \(\{\) agent \(\}\), and the suggestion in Chapter 7. (The Participation Function) that participation sentences are intransitive is confirmed.
(iv) A substitution replaces one entity with another:
"The weather today has turned sunny instead of the rain."
The resultant of this substitution is "It sunny, not raining today". Its \{object \(\}\) is therefore not "rain", which has been displaced, but "the weather", the function or role in which the sun now predominates.
(v) A style sentence expresses the quality of an \{agent \(\}\) in performing an action. The \(\{\) agent \(\}\) is therefore also the \(\{\) object \(\}\) :
"John was meticulous in preparing the accounts." "George was sincere in his regrets."
(vi) For a possessive sentence, the \(\{\) recipient \(\}\) is often the \(\{\) subject \(\}\), if it is \(\{\) definite \(\}\) and placed in topic position. The \{object\} is the entity connected with the \{recipient \} by the \{possession\}:
"John has the book on loan." "James lacks a driving license."
"Her friend owns the book." "James knew the date of the appointment."
"Mary remembered the appointment was due."
In the corresponding dative sentence, the \(\{\) object \(\}\) is what is transferred:
"Mary lent the book to John." "She sold the book to a friend."
"The Court withdrew the driving licence from James."
"Henry telephoned to James the date of the appointment."
Receptive and adoptive sentences also transfer an \{object\} to or from a \{recipient \(\}\) :
"John acquired the book from Michael." "James gave up his driving licence."
"Mary learned the date of the appointment." "Mary studied the information in the diary."
(vii) The \(\{\) object \(\}\) of a perception, supposition, communication, proposal, or interrogation sentence is that concerning which the perception, supposition, communication, proposal, or interrogation is made:
"He realised that the train would be late." "He said that the train was late."
"He alleged that the train would be late." "He asked when the train would depart."
Generally, an \{object\} is definite or indefinite. A supposition or proposal may, however, only refer to an \(\{\) object \(\}\) which is definite or indefinable: "He hopes for a train which is not late"; "He intends to catch a train which is not late."
(viii) The \(\{\) object \(\}\) of a communication or perception may be in topic position if the \(\{\) verb \(\}\) is embedded:
"The train was reported to be late." "The train was believed to be late."
(ix) An opinion is the relationship between a \{recipient\} and a \{definite\} event, in the form of a considered mental reaction that the \{recipient \(\}\) holds. The event is therefore the \(\{\) object \(\}\) :
"He resented the intrusion by his neighbour." "He resented that his neighbour had intruded."
(x) The \{object\} of a benefit is the advantage or disadvantage made available to the \{beneficiary\}:

\section*{"She had the advantage of a good education." "She was kind in offering him a loan." "This calculation is our example."}
(xi) A modal is a relationship between a \{recipient\} and a hypothetical action which operates on an \(\{\) object \(\}\). If the action were to be performed the \{object\} would be placed in a state or relationship. This \(\{\) object \(\}\) is therefore the \(\{\) object \(\}\) of the modal:
\[
\begin{array}{ll}
\text { "You can repair the machine." "You should write the letter." } \\
\text { "You must go home now." } & \text { "You ought to buy a car." }
\end{array}
\]

As with other hypotheses, the \{object\} of a modal is either definite or indefinable. As in the third example, if the hypothetical verb is intransitive, the \{object \} may be the same as the \{recipient \(\}\).
(xii) A causative or preventive sentence initiates or prevents an action by an \{agent\} or \{instrument\}, in consequence of which an \{object\} is placed in a state or relationship. The \{object\} of such a sentence is therefore the \(\{\) object \} on which the \(\{\) agent \(\}\) or \(\{\) instrument \(\}\) is acting:
"She had her secretary prepare a reply." "He flew the plane to Rio."
In the case of a preventive or cessative, the \{object\} is definite or indefinable: "She stopped her secretary preparing the/a reply." "He avoided preparing the/a reply."
(xiii) An inchoative or cessative sentence initiates, continues or ceases an action or state by an \{object \(\}\) :
"He started talking." "She kept the conversation going." "He stopped the discussion."
(xiv) In an error sentence, the action of a causer or agent towards an \{object\} is misdirected or the perception of a recipient towards an \{object\} is misapprehended, contrary to that person's intention or expectation:
"She addressed the letter incorrectly." "He misunderstood the instructions." "He missed the opportunity." "She overestimated the quantity."

Since every sentence describes a state, relationship, or identification, every sentence has an \{object \}. It follows that the purpose of the \{object\} varies with the nature of the state, relationship, or identification so described:
(a) A transitive sentence places the \{object \(\}\) in a state or identification which is described by its resultant. The \(\{\) subject \(\}\) and the \(\{\) object \(\}\) are not the same.
(b) An intransitive sentence places an \{object \(\}\) in a state or identification which is described by its resultant. The \(\{\) subject \(\}\) and the \(\{\) object \(\}\) are the same.
(c) A transfer sentence connects an \{object \(\}\) to a \{recipient \(\}\) by means of a \{possession \(\}\).
(d) A benefit sentence makes available an \(\{\) object \(\}\) as a \(\{\) benefit \(\}\) to a \(\{\) beneficiary \(\}\).
(d) A modal sentence hypothesises a state, relationship, or identification for an \{object\}.
(e) A causative, preventive, inchoative, or cessative sentence initiates, prevents, continues, or terminates an action, state, relationship, or identification for an \(\{o b j e c t\}\).

An \{object\} can be definite or indefinite according to the rules laid out in Chapters 2. and 13. However, when the state, relationship, or identification of an \(\{\) object \} is hypothetical, the \(\{\) object \(\}\) can only be definite or indefinable. This arises if the sentence is:
- A negative or question.
- A supposition or proposal.
- A modal.
- A preventive.
- A cessative.

\section*{The Complement Component}

We have defined an \{object\} as a person or thing which a sentence places in a state or relationship, or to which it gives an identification. It follows that the state, relationship, or identification which a sentence expresses of an \{object\} is a separate component, which we can call a \{complement\} in accordance with conventional usage. This again gives a more precise definition to the term "complement", which we criticised for lack of clarity in Chapter 6. For example, the \{complement\} of a transformation or locative \(\{\) verb \(\}\) is its \(\{\) attribute \(\}\), which becomes the \(\{\) verb \(\}\) of the stative sentence. In all these examples, the \(\{\) complement \(\}\) is underlined:
\[
\begin{array}{ll}
\text { "She tore the paper into shreds." } & \rightarrow \\
\text { "She paper was in shreds." } \\
\text { "She pushed the window open." } & \rightarrow \\
\text { "The window was open." } \\
\text { "He turned on the computer." } & \rightarrow \\
\text { "He put the lid on the box." } & \rightarrow
\end{array} \text { "The lid was on the box." }
\]

The \{complement \(\}\) of a \(\{\) time \(\}\) is the time:
"The meeting took place on Tuesday."
\(\rightarrow \quad\) "The meeting was on Tuesday."
The \(\{\) complement \(\}\) of an identification \(\{\) verb \(\}\) is the identification:
```

"They named his son 'Frederick'." }->\mathrm{ "Their son was called 'Frederick'."
"She became a nun." "She was a nun."

```

The \(\{\) complement \(\}\) of a substitution is the \(\{\) identification \(\}\) which replaces the \(\{\) original \(\}\) :
"Lloyd George replaced Asquith as Prime Minister."
\(\rightarrow \quad\) "The Prime Minister was Lloyd George."
The \{complement\} of a dative, receptive, adoptive, or possessive sentence is the \{possession\}, which expresses the connection between the \{object\} and the \{recipient\}. It is usually the same as the \{verb\}:
\[
\begin{aligned}
& \text { "Mary lent the book to John." } \rightarrow \quad \text { "John has the book on loan." } \\
& \text { "The Court withdrew the driving licence from James." } \\
& \rightarrow \quad \text { "James lacks a driving license." } \\
& \text { "She sold the book to a friend." } \rightarrow \quad \text { "Her friend owns the book." } \\
& \text { "Henry telephoned to James the date of the appointment." } \\
& \rightarrow \quad \text { "James knew the date of the appointment." } \\
& \text { "Mary remembered the appointment was due." } \\
& \rightarrow \quad \text { "Mary has the date of the appointment in mind." } \\
& \text { "He gave the money to his wife." } \rightarrow \text { "His wife has the money." } \\
& \text { "His neighbour's intrusion caused him resentment." } \\
& \rightarrow \quad \text { "He resented the intrusion by his neighbour." } \\
& \text { "We took pleasure in the play." } \rightarrow \quad \text { "The play pleased us." }
\end{aligned}
\]

The \(\{\) complement \(\}\) of a communication is that which is communicated concerning the \(\{\) object \(\}\) :
"He said that the train was late."
The \{complement\} of a supposition or proposal is that which is supposed or proposed concerning the \{object\}. Unlike a perception, opinion, or communication, the \{complement\} of these sentences are \{indefinable\}:
"He alleged that the train would be late." "He supposed that the train was late."
As noted in Chapter 15. (The Interrogation Sentence), the \{complement \(\}\) of an interrogation is either \{definite\} or \{indefinable\}:
"He asked when the train would depart." "He asked whether the train would depart."
The \(\{\) complement \(\}\) of a creation sentence is the state of creation of the \(\{\) object \(\}\), and is again usually identified with the \(\{\) verb \(\}\) :
"She gave birth to the baby." \(\rightarrow \quad\) "The baby was born."
The \(\{\) complement \(\}\) of a participation sentence is the participation \(\{\) verb \(\}\) and any \{participant \(\}\) who is mentioned:
"We played a game of croquet with our friends." "She looked after her elderly parents."
"She defended her thesis." "He obeyed the rules of the Society."

The \{complement \(\}\) of a constituent sentence is the attribute or quantity of the constituent:
"The houses were given slate roofs."
\[
\rightarrow \quad \text { "The houses have slate roofs." }
\]
"She selected five books from her library."
\[
\rightarrow \quad \text { "The five books were from her library." }
\]

The \{complement \(\}\) of a benefit sentence is the benefit:
"She had the advantage of a good education." "She was kind in offering him a loan."

The \{complement\} of a modal sentence is the state or condition which the ability, necessity or responsibility hypothesises for the \(\{o b j e c t\}\) :
"You can repair the machine." "You should write the letter."
"You must go home now." "You ought to buy a car."
The \{complement\} of a causative, preventive, inchoative, or cessative sentence is the action or state which is caused to occur or not to occur for the \(\{\) object \(\}\) :
"She had her secretary prepare a reply." "He flew the plane to Rio."
"She stopped her secretary preparing the/a reply." "She started reading the letter."
"She avoided reading the letter."
The \{complement\} of an error sentence is the erroneous state of the \{object\} in consequence of the error:
"He put the letter in the wrong file." "He saw his friend as an enemy."
"She overestimated the quantity." "He misdirected the motorist to the wrong road."
We have seen that while the \{complement \} of most functions are \{definite\} or \{indefinite\}, that of certain functions are \(\{\) definite \(\}\) or \(\{\) indefinable \(\}\) :
- A supposition or proposal.
- A modal.
- A preventive.
- A cessative.
- The indefinite \{complement \(\}\) of an interrogation.

The \{complement\} of other functions are \{definite\} or \{indefinite\} provided that that function is not negative. If a function is negative, its \{complement\} must be \{definite\} or \{indefinable\}. The following indefinable \{complement\} are underlined:
"She did not tear the paper into shreds."
"John did not have the book on loan."
"She did not become a nun."
"The houses were not given slate roofs."

While a function may be non-negative, it is possible for its \{complement\} to be negative. This construction is discussed further in Chapter 18. (The Complementary Sentence).

\section*{The Noun Component}

In the conventional grammatical description, concept words are classified into the categories noun (and its substitute, pronoun), number, verb, adjective, adverbial, conjunction, and preposition/postposition. A conjunction is a means of linking two sentences in discourse structure, as described in Chapter 14. A verb and adjective (as predicate) are included within \{verb\} as we have defined it. A locative pre/postposition is either a \{verb\} (in a locative sentence) or a restrictive qualifier. An adverbial, if non-restrictive, is a further \{adverbial\} sentence or, if restrictive, is an identifying \{circumstance\}. We therefore have to consider the functions of a noun and other pre/postpositions.

The great majority of words in a language are nouns. The origin of the term, the Latin for "name", indicates its general nature; an alternative in many languages is "substantive", meaning something possessing substance. A noun is a word which refers to a person or thing. In the sentences we have been using as examples, the \{subject \(\}\) and \{object \(\}\) have been nouns or pronouns representing nouns. More generally, a \{noun\} fulfils in a sentence those elements which are listed above (Classification of Sentence Elements) as common to more than one functional sentence type, or as not describing the action or state of a sentence, or as not describing the state or condition of the \{object\}. As we have seen, in different sentences many of these \{noun\} elements are realised as \{subject\} or \{object\}, and are marked by word order. However, in other sentences, they are realised in English by a preposition which marks their purpose in the sentence:
"He dug the soil with a spade to a depth of two feet."
"She indexed the book for the publisher with her colleague."
In these sentences, there are \{noun\} elements (underlined) which lie outside the "subject - verb object - complement" pattern, but which are integral to the meaning of the sentence and not simply adverbial.

In inflecting languages, \{noun\} elements (if not distinguished by word order) are marked with inflexions, which in general we have called a "link" (Chapter 4., Links):
\begin{tabular}{|c|c|}
\hline \{agent & Samoan: "Ua fasia le pua'a e Ioane." "John has killed the pig." [Has been-killed the pig by John.] \({ }^{289}\) \\
\hline \{instrument & Russian: "Gora pokryta snegom." "The mountain is covered with snow." [Mountain covered snow (instrumental).] \({ }^{290}\) \\
\hline \{object\} & \begin{tabular}{l}
Russian: "On polozhil ruku na golovu rebënka." \\
"He placed his hand on the child's head." \\
[He placed hand \({ }_{\text {(accusative) }}\) on head \({ }_{\text {(accusative) }}\) child (genitive). \(]^{291}\)
\end{tabular} \\
\hline \{location & \begin{tabular}{l}
Hungarian: \\
"Kétemeletes házban lakom." "I live in a two-storey house." [Two-storey-having house \({ }_{\text {(inessive) }}\) I-live.] \({ }^{292}\)
\end{tabular} \\
\hline \{beneficiary & \begin{tabular}{l}
Turkish: "Hizmetçi bir palto alacağız." \\
"We are going to buy a coat for the servant." [Servant (dative) \({ }^{\text {a coat we-will-buy.] }}{ }^{293}\)
\end{tabular} \\
\hline \{creation\} & \begin{tabular}{l}
Turkish: "Bu gazeteyi çıkarmak zor bir iş." \\
"To publish this newspaper is a hard job."
\end{tabular} \\
\hline
\end{tabular}

\footnotetext{
\({ }^{289}\) Marsack, 72.
\({ }^{290}\) Wade, 122.
\({ }^{291}\) Folomkina \& Weiser, 370.
\({ }^{292}\) Rounds, 101.
\({ }^{293}\) Lewis, 36.
}
\begin{tabular}{|c|c|}
\hline & [This newspaper \({ }_{\text {(accusative) }}\) to-publish hard a job.] \({ }^{294}\) \\
\hline \{attribute & Russian: "Ugol' vesit tonnu." "The coal weighs a ton." [Coal weighs ton \(\left.{ }_{\text {(accusative). }}\right]^{295}\) \\
\hline \{original\} & "Lloyd George replaced Asquith as Prime Minister." \\
\hline \{base\} & \begin{tabular}{l}
Russian:"On starshe menya na tri goda." "He is three years older than me." \\
[He older me \({ }_{\text {(genitive) }}\) onto three years."] \({ }^{296}\)
\end{tabular} \\
\hline \{object\} & Russian: "On lyubit Mashu." "He loves Masha (accusative." \({ }^{\text {,297 }}\) \\
\hline \{participant & \begin{tabular}{l}
Russian: "Vy poobedaete so mnoi?" "Will you have dinner with me?" \\
[You will-dine with me \({ }_{\text {(instrumental) }}\) ? \({ }^{298}\)
\end{tabular} \\
\hline \{recipient\} & \begin{tabular}{l}
Hungarian: \\
"Gábornak fáj a lába." "Gabor’s leg hurts." [Gabor (dative) \({ }^{\text {hurts the leg.] }}{ }^{299}\)
\end{tabular} \\
\hline \{causer\} & \begin{tabular}{l}
Hungarian: \\
"Csak kíváncsiságból kérdeztem." "I only asked out of curiosity." [Only curiosity \({ }_{\text {(elative) }}\) I-asked.] \({ }^{300}\)
\end{tabular} \\
\hline
\end{tabular}

This analysis suggests that we can define a \{noun\} as any concept word used to complete a sentence, including but not limited to \{subject\} and \{object\}, which is not a \(\{\) verb \(\}\) or a \{complement \(\}\). An \{adverbial\} is not included in this definition, as it provides additional information and is not needed for the sentence to be meaningful. A pronoun is included in the definition, since it represents a noun. This definition accords with the conventional approach, in which concept words are generally categorised as nouns, verbs, and adjectives.

We saw in Chapter 13. (Statement), Chapter 14. (Identity), and above (The Circumstance Component) that a \(\{\) noun \(\}\), if indefinite, may gain an identity through a restrictive qualifier:

> "Mary lent a book out of her collection."
> "Mary lent a book which I had asked for."

Since an identity is necessary for a \{noun\} to fulfil its purpose in a sentence, it includes all the restrictive qualifiers which identify it. The \{object\} of these examples is "a book out of her collection" or "a book which I had asked for". A restrictive qualifier, if a relative clause, includes a grammatical verb and conforms to the grammatical rules of the language for a sentence. In this example "which I had asked for", the grammatical verb "ask for" has the subject "I". However, "ask for" is not the \{verb\}, since the action described by the sentence is "lent". The same restrictive qualifier could also have been expressed by means of a participle:
"Mary lent a book requested by me", or a noun in apposition:
"Mary lent a book, my request to her."
We saw in Chapter 2. (Pronoun) that a restrictive qualifier can be applied to a definite pronoun in order to express a \{noun\}, even though a grammatical noun is absent:
"Mary lent me what I had asked for."

\footnotetext{
\({ }^{294}\) Lewis, 35
\({ }^{295}\) Wade, 105.
\({ }^{296}\) Wade, 200.
\({ }^{297}\) Wade, 105.
\({ }^{298}\) Folomkina \& Weiser, 584.
\({ }^{299}\) Rounds, 113.
\({ }^{300}\) Rounds, 105.
}

In contrast, a non-restrictive qualifier which is not needed to identify a \{noun\} is not part of the \{noun\} but is a separate sentence with the \(\{\) noun \(\}\) as \(\{\) subject \(\}\) or \(\{\) object \(\}\). The \(\{\) object \(\}\) of:
"Mary lent me her copy of 'War and Peace' which I had asked for"
is "her copy of "War and Peace"". "I had asked for it" is a separate sentence.
Similarly, an indefinite \(\{\) locative \(\}\) can be identified by a restrictive qualifier:
"We went to a shop which she had recommended;"
"We went where she had recommended."
The qualifier contains the grammatical verb "recommended" but is nevertheless part of the \{locative\} \{noun\} "shop" or "where". The same expression can be a non-restrictive qualifier, and in that case is a separate sentence with "recommended" as \(\{\) verb \(\}\) :
"We went to the fashion shop, which she had recommended."
Since a \{noun\} includes all persons and things appearing in a sentence, apart from the \{verb\} and \{complement\}, it includes a \{noun\} describing an action or state which appears as the \{subject\}, \{object\}, or other \{noun\} of a \{verb\}. These verbal nouns are categorised in more detail in Chapter 12. They have their own syntactical links (underlined), as they would have if they were verbs:
"Travelling to London takes an hour." "The length of the day was \(81 / 2\) hours."
"His marriage to her was in haste and his repentance was at leisure."
"She likes speaking at these meetings." "Sheila's happiness at the news was extreme."
"Giving presents is the custom at Christmas." "The blow broke the vase."
"The walk along the canal made him feel better." "Her look at the report was cut short."
"The visitors' curiosity was short-lived."
Verbal nouns also appear in \{verb\} constructions, with a verbal auxiliary, but here they are classed as \{verb\} under our definition (underlined):
"They made three journeys to London last week." "The days are increasing in length." "She made a speech of welcome." "She had a meeting with her friend."
"They launched an attack on the enemy." "I started work on the batch."
"She paid a visit to her neighbours." "They had a game of chess."
Another verbal noun is one which described a state or condition, which becomes an attribute by means of an auxiliary, a construction we have called in Chapter 4. "converse link". These are also \{verb\} (underlined):
"We are at liberty to go home." "Our area is under threat from redevelopment."
"We are in search of a new candidate." "Rome was at war with Carthage."
A second sort of \{noun\} derived from a verb is one which describes the agent of an action, which we have called a role in Chapters 12 and 15. They can also have their own syntactical links (underlined):
"The doctor is treating my illness." "The scientists researched the problem."
"The villains concocted their plan." "The hero rescued Andromeda from the monster."
"The haulier transported the goods to the port."
"The viewers of the programme watched in silence."
"The store's customers selected their purchases."
"The victims of the earthquake were rescued."
The functions that these verb-derived \{noun\} fulfil in their sentences lie within the 17 functions of \{noun\} outlined in this section, that is they are an \{agent\}, \{instrument\}, \{object\}, \{creation\}, \{location\}, \{beneficiary\}, \{base\}, \{target\}, \{competence\}, \{participant\}, \{recipient\}, \{definite\}, \{indefinite \(\}\), \{indefinable \(\}\), \(\{\) select \(\}\), \{circumstance \(\}\), or \(\{\) causer \(\}\).

Within their sentences, they therefore do not encroach on the \{verb\} element which can only occur once in the sentence. Acting as verbs, they can also have their own dependent syntactical links, but these are restrictive qualifiers of the verbal noun or role, and accordingly do not affect their status as \{noun\}.

It will be seen from these examples that the \{object \(\}\) of a communication or perception is in fact a qualifier of the \(\{\) complement \(\}\). Such a construction is normal in Turkish:
"Kapıyı kilitlemenizi tavsiye ederim." "I recommend that you lock the door."
[Door \({ }_{\text {(object) }}\) locking-your \({ }_{\text {(object) }}\) recommendation I-make.]
"Kapıyı kilitlediğinizi unutmayınız." "Do not forget that you have locked the door."
[Door \({ }_{\text {(object) }}\) locked-having-your \({ }_{\text {(object) }}\) forget-not-(subjunctive)-you.] \(]^{301}\)
Finally, we can review the various functions of a preposition or postposition (underlined), and their equivalent inflexions:
(i) a \{locative \(\}\) verb or attribute:
"We are sitting in the garden"; "The flowers in the garden are coming into bloom";
(ii) the marker of a noun:
"The speech was given by the chairman"; "The chairman spoke to the audience";
(iii) the marker of an attribute formed from an attributive noun (a converse link):
"A body will remain at rest or in constant motion in a straight line unless acted on by an external force";
(iv) the marker of a possessive or \{possession\} qualifier:
"The voice of the speaker is too soft to be heard"; "The speaker with the soft voice stood up";
(v) the marker of the whole or part of a \{constituent \}:
"The keyboard of my computer is broken"; "The computer with a broken keyboard is mine".
(vi) the dependent syntactical links of a verbal noun or role:
"The talk by the speaker to the meeting was inaudible."
"The speaker to the meeting spoke inaudibly."

\section*{The Subject as Topic}

In our study of the sentence we have adopted three modes of analysis, all different:
- Discourse analysis, in which a sentence consists of a topic in the form of a \{definite\} element, plus a comment, enquiry, or hypothesis, which may be \{definite\}, \{select\}, \{circumstance\}, \{indefinite\}, or \{indefinable\}. An existential sentence consists of an \{indefinite\} element and a \{circumstance\}.
- Functional analysis, which identifies the \{verb\} as the unique action or state of the sentence, supported by the other elements necessary for that action or state to be meaningful.
- Component analysis, in which the \(\{\) verb \(\}\) is the unique action or state of the sentence as identified by functional analysis, the \{subject\} is that which is engaged in the action or state, and the \(\{\) object \(\}\) is that which the sentence places in a state, called a \{complement\}. \{subject - verb\} is a semantic unit. Other \{noun\} elements such as \{instrument\}, \{recipient\}, or \{beneficiary\} may be present.

\footnotetext{
\({ }^{301}\) Lewis, 254.
}

We emphasised that discourse analysis is distinct from functional analysis, in that any functional element can be topic and any can be comment, enquiry, or hypothesis. For example, in the questions and answers:
in "What did Jack do?" "He stole the tarts", the topic is "Jack";
in
"What happened to the tarts?" "They were stolen by Jack", the topic is "the tarts".
These sentences have the simple structure subject, verb, and object, and their identification with the components \(\{\) subject \(\}\), \(\{\) verb\}, and \(\{\) object \(\}\) as we have defined them depends on the assumption that the \(\{\operatorname{verb}\}\) is the same as the verb as this is conventionally understood. If this assumption is accepted, the \(\{\) subject \(\}\) may not be the same as the topic (although it very often is the same), and we indeed have three distinct modes of interpreting a sentence.

Let us however consider the possibility that the \{subject\} is necessarily the same as the topic. If we can find that this is so, then we have a way of aligning the three modes of sentence analysis. The \{subject\} is, on this supposition, the \{definite\} topic of a sentence and the \(\{\) verb \(\}\) is both the unique action or state of the sentence and the core word of the comment, enquiry, or hypothesis. The \{verb\} (plus the \{object\} if that is a distinct element) is accordingly \{select\} or \{indefinite\} in a positive statement and \{definite\} or \{indefinable\} in a negative statement or question.

As we shall show at the end of this section, in an existential sentence the \(\{\) verb \(\}\) is the \(\{\) circumstance \(\}\), there is no \(\{\) subject \(\}\), and the \(\{\) indefinite \(\}\) or \{indefinable \(\}\) element is the \(\{\) object \(\}\).

The implication which is evident from the preceding three examples is that, if our supposition is correct, a \{verb\} may not be the same as a verb as conventionally understood (although it very often is the same). We have already noted in this chapter (The Verb Component; The Noun Component) sentence structures in which the \(\{v e r b\}\) (underlined) differs from the conventional verb in English:
- A conventional verb may not be present:

Arabic: "hā?ulā?i hunna banātī" "These are my daughters." [These they daughters-my.]
- A verb may be an adjective or locative:

Japanese:
"Hon wa takai." "The book is expensive." [Book (topic) \({ }^{\text {expensive.] }}\)
Turkish: "Vesika kasada." "The document is in the safe." [Document safe-in.]
- A \(\{\) verb \(\}\) is a concept word: "We are at work on the task."
- The \(\{\) verb \(\}\) of an existential sentence is the \(\{\) circumstance \(\}\) : "There is a fly in the ointment."

In addition to these, the principal structures in which the conventional verb is not a \{verb\} arise with focussing sentences, causative/preventive sentences, and some topic-comment sentences. As examples of focussing, let us consider the three examples at the start of this section. In the second and third: "Jack stole the tarts"; "The tarts were stolen by Jack", there is no focussing. The \{verb\} is the conventional verb and describes the action of stealing, and the \{subject\} is the topic. The sentence is a deficiency sentence as described in Chapter 15. In the first example, there is focussing:
"It was Jack who stole the tarts"
The \(\{\) verb \(\}\) is not the conventional verb "stole", but "was Jack". The \(\{\) subject \(\}\) is "who stole the tarts". The action or state which the \(\{\) verb\} describes is not the action of stealing, but the identification of Jack as the perpetrator of the crime. According to the categories in Chapter 15., the sentence is an identification sentence.

Two further examples of focussing are:
"When was Caesar assassinated?" "On the Ides of March."
"What happened on the Ides of March?" "Caesar was assassinated."
Without focussing ("Caesar was assassinated on the Ides of March"), these are transformation sentences, in which the topic and \{subject\} are "Caesar". With focussing, the first sentence has the topic "Caesar was assassinated". If we express this as a \{subject\} in the form of a \{noun\}, the sentence becomes:
"The assassination of Caesar was on the Ides of March."
The second focussing sentence has the topic "the Ides of March". If we express this as a \{subject \(\}\) in the form of a \{noun\}, the sentence becomes:
"The Ides of March was the day Caesar was assassinated."
The focussing sentence are both time sentences with the \{verb\} "was on" or "was the day of", not transformation sentences as is the unfocussed sentence. We recall that the \{verb\} must be the action or state of one of the functional sentence categories of Chapter 15. The \(\{\) verb \(\}\) cannot be, for example, \{agent\}, \{object\}, or \{recipient\}, since these cannot have a \(\{\) subject \(\}\).

The foregoing interpretation may be placed on other clefting sentences, for example in Irish \(\left(_{(f)}\right.\) is the focus):
\begin{tabular}{ll} 
"Do tháinig sé inné." "He came yesterday." [Came he yesterday.] & (unfocussed) \\
"Is inné a tháinig sé." "It was yesterday \({ }_{(\text {(f) }}\) that he came." & (focus) \\
"Is yesterday that came he.]
\end{tabular}

It can also be applied to some languages which retain the unfocussed word order, but mark the focus with a particle. In Malay, it is "-lah":

Malay: "Dialah yang memberitahu saya." "It was he who informed me." \(\left[\mathrm{He}_{\text {(focus) }} \text { who informed me. }\right]^{302}\)

In Chinese, it "shi" before the focus element:
Chinese:"Shì wŏ dă pò zhèi gè bēizi de." "I was the one who broke this cup."
\([\text { (focus) } \text { I hit break this unit cup (focus). }]^{303}\)
It may be relevant that in Malay, "-lah" is part of the word "adalah" which means "be", and in Chinese "shi" means "be" for identification sentences. The examples can be interpreted as "He it-was [who] informed me" and "It-was I break this cup of". The particles function as auxiliaries which convert the focus into the \(\{\) verb \(\}\) of the sentence, leaving the rest of the sentence as the \(\{\) subject \(\}\). In Japanese, it is not the focus which is marked, but the topic, by the particle "wa". The first of the following sentences is unfocussed, in the second the focus is "fruit":

> "Kudamono wa Nihon de oshii." "The fruit in Japan is delicious." [Fruit \({ }^{\text {(topic) }}\) Japan-in delicious-is.]

\footnotetext{
\({ }^{302}\) Dodds, 130.
\({ }^{303}\) Yip \& Rimmington, 133.
\({ }^{304}\) Private information.
}

In this way, the element in front of the topic particle "wa" retains its function as \{subject\} and the focussed element is the \(\{\) verb\}. However, we must note that not all languages with focussing particles are so readily interpreted in this way. The Hindi focussing particle is "h \(\vec{\imath}\) ":
\[
\begin{aligned}
& \text { "Banāras ke } \log \text { hindī bolte haĩ." "The people of Banaras speak Hindi." } \\
& \text { [Banaras-of people Hindi speak.] } \\
& \text { "Banāras ke } \log \text { hindī hī bolte haĩ.""It is Hindi that the people of Banaras speak." } \\
& \text { [Banaras-of people Hindi (focus) speak.] }{ }^{305}
\end{aligned}
\]

The topic of the second sentence is "Hindi", but it is not the grammatical subject of "speak". "Hindi" is only the \{subject\} by a focussing interpretation of the whole sentence.

In addition to clefting and focussing particles, we have noted in Chapters 1. and 4. that focussing is achieved by changes in word order from the unfocussed sentence. The topic is put in subject position even though it is not the conventional subject, and the focus is put in comment position even though it is not the conventional verb or object. In this way, the topic is marked as \{subject\} and the focus as \{verb\}. In German and Spanish, the topic can be at the start and the comment at the end (f) is the focus):
"Die Studenten unterrichten zu diesen Zeiten die Kinder."
(unfocussed)
"The students teach the children at these times."
[The students teach at these times the children.]
"Zu diesen Zeiten unterrichten die Kinder die Studenten."
(focus)
"It is the students who teach the children at these times."
[At these times teach the children the students \(\left.{ }_{(\mathrm{f})}.\right]^{306}\)
"Mi secretaria ha escrito una carta." "My secretary has written a letter." (unfocussed)
"Esta carta la escribió mi secretaria."
(focus)
"It was my secretary who wrote this letter."
[This letter it wrote my secretary \({ }_{(\mathrm{f})}\).]
These focussing sentences can be interpreted as identification sentences with the focus as \{verb\}. In Turkish, that construction is not possible because the grammatical verb is always final. However, the focus is placed as late as possible before the grammatical verb:
"Ressam bize resimlerini gösterdi."
"The artist showed us his pictures." [Artist to-us pictures-his showed.]
"Bize resimlerini ressam gösterdi."
(focus)
"It was the artist who showed us his pictures."
[To-us pictures-his artist \({ }_{(\mathrm{f})}\) showed.] 307
In other languages, in unfocussed sentences the verb is at the start, followed by the subject and then the rest of the comment. In focus-topic sentences, the focus is at the start and in this way is marked as the \{verb\}. The conventional verb and object follow the focus element and are accordingly marked as the \{subject \(\}\) :

Welsh: "Collodd y dyn ei fag ar y trên ddoe."
(unfocussed)
"The man lost his bag on the train yesterday."
[Lost the man his bag on the train yesterday.]
"Y dyn a gollodd ei fag ar y trên ddoe."
"It was the man who lost his bag on the train yesterday."
[The man \({ }_{(f)}\) who lost his bag on the train yesterday.]
"Ei fag a gollodd y dyn ar y trên ddoe."
"It was his bag that the man lost on the train yesterday."
[His bag \({ }_{(\mathrm{f})}\) which lost the man on the train yesterday.]

\footnotetext{
\({ }^{305}\) McGregor, 27.
\({ }^{306}\) Lockwood, 346.
\({ }^{307}\) Lewis, 240-1.
}

Inuit: "Pitaap arviq tuquppaa." "Pitaaq killed the whale."
"Pitaamuna arviq tuqukkaa."
(focus)
"It was Pitaaq (f) who killed the whale."
[Pitaaq-(agent)-that whale killing-he-it.]
"Arviquna Pitaap tuqutaa."
"It is the whale (f) killed by Pitaaq."
[Whale-that Pitaaq (agent) \({ }^{\text {killed-his.] }}{ }^{308}\)
Note that in the Inuit example, "killed" in the unfocussed sentence is a grammatical verb, while in the focus sentences it is a participle in agreement with the \{subject\} as topic. The unfocussed sentence is a transformation sentence, while the sentences in focus are identification sentences, on "Pitaaq" and "whale" respectively.

We noticed earlier (The Verb Component) that the Maori sentence begins with the \{verb\}, whether that is a conventional verb, an identification, an adjective, locative, or possession. Consistent with this rule, an element in focus is placed at the start of the sentence and so is treated as \(\{\) verb \(\}\) :
"Nā te taitama te hōiho i pupuri." "It is the young man \({ }_{(f)}\) who is holding the horse."
[Belong-to the young-man the horse did hold.]
"Ko Rōpata te kaimahi nāna tērā whare i hanga."
"Ropata \({ }_{(\mathrm{f})}\) is the workman who built that house."
[It-is Ropata the workman belong-to-him that house did build.] \(]^{309}\)
Chapter 18. discusses how the Maori \{not \(\}\) words "kāhore" and "ēhara" also occur in \{verb\} position.
We now turn to the causative/preventive construction (Chapter 11., Causative), in which the topic of the sentence is often the \{causer\}. We note that in English the subject of the caused verb is in general not the \{causer\}. This is so, whether the subject is an \{agent\}, an \{object\}, a \{target\}, an \{instrument\}, or a \{recipient\}:
```

"I made him write the letter." "I had the letter written."
"I made him obey the rules." "I made him go to work."
"I made her read the article." "I caused the trees to be felled."
"I had the rules obeyed." "I had the speech given."
"The sun made the rain dry up." "The earthquake made the building fall."

```

In the first two of these sentences the \{causer\} is " l ", but in the first case the subject of the grammatical verb is "him" and in the second it is "the letter". This causative construction therefore appears to break our rule that the topic is the \{subject\}, if we interpret the grammatical verbs of these sentences as \(\{\) verb\} and their subjects as \{subject\}. The rule is, however, not broken if no separate subject is expressed; the subject is then the same as the \(\{\) causer \(\}\) :
"He was made to write the letter."
"The rain was made to dry up."
"He walked the dog."
"The trees were caused to be felled."
"The engine was kept running."

The rule is also not broken if we understand the \{verb\} of a causative/preventive differently, not as "run", "go", "write", "fell", "dry up", etc, but as "cause to run", "cause to go", "cause to write", "prevent from running", "prevent from going", "keep running", "keep writing", etc. This interpretation of the \{verb\} of a causative/preventive has already been suggested (The Verb Component). If it is accepted, the \{subject\} becomes the \{causer\}, the subject of the caused verb is simply another element (\{agent\}, \{object \(\}\), \{target \(\}\), \{instrument \(\}\), or \(\{\) recipient \(\}\) ), and the rule is retained.

We find such a causative construction in many languages. The \{verb\} is either a causative variation of the caused verb or is the caused verb supported by a causative auxiliary, and in both cases has the \{causer\} as subject. The subject of the caused verb is marked with the equivalent of "to" or "by":

\footnotetext{
\({ }^{308}\) Fortescue, 184.
\({ }^{309}\) Foster, 59, 73.
}

French: "Je fais lire ce livre à mon fils." "I make my son read this book." [I make read this book to my son.]

Hungarian:
"Kivasaltattam az ingemet a férjemmel." "I had my husband iron my shirt."
[Iron-caused-I the shirt-my (accusative) the husband-my-by.] \(^{\text {a }}\)
Arabic: "Pansāhumu 1-ka日īra mina 1-үarāPibi" "It made them forget many strange things."
[It-made-forget-them many of strange-things.] \({ }^{310}\)
Turkish: "Mektubu müdüre imzalattım." "I got the director to sign the letter."
[Letter (accusative) director-to sign-caused-I.]
Hindi: "maĩ apne bhāī se pustak chapvāū̃gā" "I shall get my brother to print the book." [I my brother-by book print-cause-shall.]

Indonesian/Malay:
"Saya mencucikan pakaian pada wanita itu."
"I have my clothes washed by that woman." [I wash-make clothes by woman that.]
Japanese:
"Tomodachi wa watashi ni chippu o harawaseta." "My friend made me leave a tip."
[Friend (topic) me-to tip (object) leave-caused.]
Swahili: "Wasimamishe watoto." "Make the children stand up."
\[
\text { [They-stand-cause }_{\text {(imperative) }} \text { children.] }
\]

Inuit: "Pisariaqartunik ikinngutinnit nassitsippunga."
"I had my friend send the necessary things."
[Necessary-being-with friend-my-by send-cause-I.] \({ }^{311}\)
In Japanese, if the caused verb is involuntary or unintentional, its subject is marked as a transitive object:

Japanese:
"Chichi wa watashi o aruite kaeraseta." "My father had me walk home."
[Father (topic) me \(_{\text {(object) }}\) on-foot return-caused.] \({ }^{312}\)
We now come to the third sentence construction in which, if the \{subject \} is the topic, it does not appear as a semantic unit with the \(\{\) verb \(\}\). These are some ergative and topic-comment constructions, as we have already mentioned in Chapter 13. (Background). An ergative construction is one in which the agent is marked even when it is the topic of the sentence. In some instances, such an ergative topic is also the \(\{\) subject \(\}\) in semantic union with the \(\{\) verb \(\}\) :

Basque: "Elinek hondo hitzegiten du euskaraz." "Elin speaks Basque well."
[Elin (agent) \({ }^{\text {well speaking has in-Basque.] }}\)
Inuit: "Akkam-ma aataaq aallaavaa." "My uncle shot the harp-seal."
[Uncle-my \({ }_{\text {(agent) }}\) harpseal shot-he-it.]
In others, it is the topic but is not in semantic union with the verb:
\[
\text { Hindi: "usne kitāb likhı} \bar{\imath} " \text { "He wrote the book." } \begin{aligned}
& {\left[\text { Him-by book }{ }_{\text {(feminine) }} \text { written }_{\text {(feminine) })}\right] }
\end{aligned}
\]

\footnotetext{
\({ }^{310}\) Badawi et al, 375.
\({ }^{311}\) Fortescue, 85.
\({ }^{312}\) Makino \& Tsutsui, 392.
}

The verb of this sentence agrees grammatically with the \{object \} "book", not with the topic "by him". As with the previous Hindi example, if the \{subject\} is the topic, the \(\{\) verb\} is not the same as the grammatical verb of the sentence. A similar interpretation can be placed on the other examples listed in Chapter 13.:

Italian: "Mi piace cioccolato." "I like chocolate." [To-me pleases chocolate.]
Russian: "U menya kniga." "I have a book." [With me book.]
Japanese:
"Watashi wa Eigo ga wakaru." "I understand English."
[ \(I_{\text {(topic) }}\) English \(_{\text {(subject) }}\) is-understandable.]
In these instances, the verb agrees grammatically with the \{object\}, respectively "chocolate", "book", and "English", not with the \(\{\) subject \(\}\) as topic, respectively "to me", "with me", "as for me". In the Russian example the \(\{\) verb \(\}\) is the same as the \(\{\) object \(\}\).

The reverse of this construction appears with those languages which can form the passive by placing the object in topic position. The \(\{\) object \(\}\) is \(\{\) subject \(\}\), but is not grammatically linked with the verb:

Spanish: "La reacción la provocó una alergia o una enfermidad."
"The reaction was produced by an allergy or illness."
[The reaction produced-it an allergy or an illness.] \({ }^{313}\)
Italian: "Di Camilla Cederna leggevo tutto." "I read everything by Camilla Cederna."
[Of Camilla Cederna I-read everything.] \({ }^{314}\)
Russian:"Vash bagazh otpravyat v gostinitsu." "Your luggage will be taken to the hotel." [Your luggage they-take to hotel.] \({ }^{315}\)

Chinese:"Nèi běn zhēntàn xiăoshuō wŏmen mài wán le."
"We have sold out of that detective novel."
[That unit detective novel \({ }_{\text {(topic) }}\) we sell finish now.] \({ }^{316}\)
In the following sentences, the \(\{\) subject \(\}\) as topic is the \(\{\) object \(\}\) of a constituent or possession, but is not the grammatical subject of an identification sentence:

> Arabic: "al-ḥujratu llatī ya@malu fìhā jawwuhā xāniqun"
> "The air of the room in which he works is suffocating."
> [The-room the-one-which he-works in-it, air-its suffocating.] \({ }^{317}\)
> Malay: "Sopir itu namanya Pak Ali." "The name of that driver is Mr Ali." [Driver-that (topic), \({ }^{\text {name-his Mr Ali.] }}\).

The common feature of these constructions is that the \{object \} is the topic, and therefore the \{subject\} on our interpretation, but the verb is not in semantic union with it. We can therefore only pursue our theory that the \{subject\} is always the topic by assuming that the constructions are in some way unusual, in that the verbal conjugation is not sufficiently flexible to accommodate them (as it is, for example, in Tagalog). We can argue that this indeed the case, by observing that in these same languages the verb is in agreement with the topic in the great majority of sentences.

Finally we turn, as previously mentioned, to the existential sentence, such as "There is a fly in the ointment." We observe in Chapter 13. (Existential Sentence) that the discourse structure of such a

\footnotetext{
\({ }^{313}\) Butt \& Benjamin, 396.
\({ }^{314}\) Maiden \& Robustelli, 359.
\({ }^{315}\) Folomkina \& Weiser, 54.
\({ }^{316}\) Yip \& Rimmington, 112.
\({ }^{317}\) Badawi et al, 327.
\({ }^{318}\) Sneddon, 278.
}
sentence consists of two elements \{indefinite - circumstance\}. The \{verb\} expresses the unique action or state of the sentence, which in the case of an existential sentence is that something or someone exists. In our example, it is "there is in the ointment". The apparent subject of such a \{verb\} is that which the sentence declares to exist, namely the subject "a fly". However, since "a fly" is indefinite it cannot be the topic. If we assume that the topic is the \{subject\}, "a fly" is not the \(\{\) subject \}.

To resolve this question, we note that an existential sentence describes a state or condition, that of existence. That which is in the state or condition must be its \{object\}, which can be indefinite. The apparent subject of an existential sentence therefore conforms to our definition of \{object\}, and in the notation of this chapter an existential sentence has the structure \{object - verb\}. It follows also that an existential sentence has no topic or \{subject\}.

\section*{Summary}

An \{adverbial\} is defined as a non-restrictive qualifier of a \{verb\}. It does not include a gerund, which qualifies an \{agent\}, or \{circumstance\} which is a restrictive qualifier of an \{object \(\}\) or \(\{\) target \(\}\).

An a non-restrictive qualifier, an \{adverbial\} represents an additional sentence to the \(\{\) verb \} that it qualifies. When combined in a single grammatical structure, we may speak of a main clause which contains the qualified \(\{v e r b\}\), and an adverbial clause which qualifies it.

An adverbial clause may also be expressed as a distinct sentence whose subject is the qualified \{verb\} in \{noun\} form, and whose predicate is the \{adverbial\}. This is called an adverbial sentence.

Eleven different categories of \{adverbial\} are analysed in greater detail: those of space, time, causation, condition, concession, comparison, observation, supposition, generality, benefit, and quantity. In each case, the discourse and functional structure is examined on the basis of the relevant adverbial sentence. It is shown that each category of \{adverbial \(\}\) can be analysed in terms of an existing functional class. Two express an \{instrument \(\}\) or \(\{\) causer \(\}\) to another function:
```

causation: {instrument} or {causer}
concession: {causer - agent/instrument - not} or
{causer - not - agent/instrument - not}.

```

Nine \{adverbial\} express functions:
```

space: {locative - location} or {constitute - attribute}
time: {time}
condition: {depend}
comparison: {compare}
observation: {perceive}, {communicate}, or {opinion}
supposition: {suppose} or {propose}
generality: {constitute}
benefit {benefit}
quantity {attribute}.

```
\{adverbial\} of space, time, causation, observation, generality, benefit, quantity and certain \{adverbial\} of condition, concession, and comparison, provide factual information on the \{verb\} which they qualify and their adverbial sentences are accordingly selection or circumstance. Most \{adverbial\} of condition, some of concession and comparison, and all \{adverbial\} of supposition, have an adverbial sentence which is a hypothesis.

\section*{Terms Defined or Introduced}

Adverbial, adverbial sentence, main clause, adverbial clause.

\section*{Adverbials in Grammar}

An adverbial is conventionally described as a qualifier of a verb or an adjective; hence its name adverb "attached to a verb". Grammarians tend to use the term adverbial to refer both a single-word adverb and an expression with the same purpose:
"She played beautifully"; "She played with great beauty".
We can say that "beautifully" is an adverb because the sentence means "Her playing was beautiful", which shows that it is the verb "play" which is qualified. Similarly, the adjective "long" is qualified in:
"The concert was extremely long"; "The concert was of extreme length".
However, we have noted instances of words with the "-ly" structure of an English adverbial for which this simple pattern is less clear:
"She played stylishly" means "She was very stylish in playing"
while the earlier example is not equivalent to "She was very beautiful in playing". "Stylish" describes the manner in which the \{agent\} of the sentences performs the action, whereas "beautiful" describes the action itself. "Stylish" is an example of the function \{style\} in Chapter 15. (The Style Sentence).

The term "adverbial" is also conventionally used for the expression "full of happiness" in:
"Full of happiness, she played with great style."
This does not mean "She played happily" and so does not refer to the action of the sentence, but to the state or condition of the \{agent\} in performing it. As we saw in Chapter 5. (Gerund), this construction is a gerund, that is two sentences which occur simultaneously: "She was full of happiness; she played with great style". Similarly:
"She excitedly opened the parcel."
means "She was excited at the opening of the parcel". It again refers to the state and condition of the \{agent\}, and is an effect (Chapter 15, The Effect Sentence).

Another gerund which is often categorised as an adverbial is an expression of purpose on the part of the \{agent\} of an action:
"She played the piece to impress the audience."
"She opened the parcel to find what it contained."
"to impress the audience" and "to find what it contained" are qualifications of "she" in these sentences, not of "played" or "opened".

It is therefore not particularly useful to employ "adverbial" to refer to the manner which an \{agent \} conducts an action, or to his/her state or condition in so doing. Nor is it a useful term for the attribute of an \{object \}, although again a word ending "-ly" may be used in English:
"He wrote the letter clearly" can mean
"He wrote the letter so that it was clear" or "His writing of the letter was clear".
"Adverbial" should on our definition refer to "clearly" in the second of these meanings, not the first.
We accordingly propose to limit the term \{adverbial\} to mean a qualification of a \{verb\}, not of a \{noun\} such as \{agent\}, \{instrument\}, \{object\}, or \{recipient\}. This usage has the advantage that it covers the functions of an \{adverbial\} in qualifying both a verb and an adjective, since in Chapter 16. (The Verb Component) our concept of \(\{v e r b\}\) includes both a dynamic verb and a stative adjective. The terminology may be tested on some sample sentences used in Chapter 15.:
"He cleaned the drain thoroughly."
"I firmly promise to pay."
"The houses were roofed in bad weather."
"We met on Tuesday."
"We met on Tuesday, as announced."
"We were greatly surprised at the result."
"She urgently needed shelter."
"His cleaning of the drain was thorough."
"My promise to pay is firm."
"The roofing was done in bad weather."
"Our meeting was on Tuesday."
"Our meeting had been announced."
"Our surprise at the result was great."
"Her need for shelter was urgent."

In the first of these pair of sentences, the \{verb\} is qualified by an \{adverbial\}. The \{subject\} of the second sentence is that same \(\{\) verb \(\}\) in the form of a verbal noun, and the \{adverbial \(\}\) is the predicate. The second sentence, which is functionally equivalent to the first, can be termed an adverbial sentence.

In all the above examples, the main sentences are selection sentences, and the \{adverbial\} provides additional information. This is not so if the main sentences are circumstance sentences. Let us compare the following two groups of examples, the first being selection and the second circumstance:
\[
\begin{aligned}
& \text { "We went to the meeting at } 10.00 . " \\
& \text { "We saw the play at the Old Vic theatre." "The meeting was at } 10.00 . " \\
& \text { "They played the croquet game last week." "The croquet game old Vic." } \\
& \text { "I had the lunch with my aunt." } \\
& \text { "Week." } \\
& \text { "The lunch was with my aunt." } \\
& \text { "They played a croquet game last week." "I had lunch with my aunt." } 10.00 . "
\end{aligned}
\]

In the first group, the qualifications "at 10.00 ", "at the Old Vic", "last week", and "with my aunt" provide additional information. They are non-restrictive qualifiers, and the adverbial sentences "Our meeting was at 10.00 "; "The play was at the Old Vic"; etc apply.

In the second group, the same qualifications do not provide additional information, but give an identity to the rest of the comment "a meeting", "a play", "a croquet game" and "lunch". They are restrictive qualifiers, and are the \{circumstance\} of the sentence in the terminology of Chapter 13. We find that for this group, the adverbial sentences "Our meeting was at 10.00 "; "The play was at the Old Vic"; do not apply. The most that could be expressed is the same sentences in existential form:
"There was at meeting we attended at 10.00 ."
"There was a play which we saw at the Old Vic."
"The was a croquet game we played last week."
"There was a lunch I had with my aunt."
We conclude that our definition of \{adverbial\} only applies to a non-restrictive qualifier of a \{verb\}. If the same expression is a restrictive qualifier, it is a \(\{\) circumstance \(\}\).

Adverbial sentences may occur with the \{subject\} not as a verbal noun but as a clause (underlined), which in English is anticipated by a dummy "it". These expressions are sometimes called "impersonal" or "subjectless":

> "It seems that our friends prefer the taverna."
> [The friends-our it-seems that they-prefer the taverna.] \({ }^{319}\)

Turkish: "Geleceği şüphesiz." "It is indubitable that he will come."
[Coming-future-his doubtless] \({ }^{320}\)
By expressing the \(\{\) verb \(\}\) of the "that" clause as a verbal noun, as already happens in the Turkish sentence, we see that they conform to the pattern of adverbial sentences discussed above, with the verbal noun as \(\{\) subject \(\}\). Alternatively, the \(\{\) verb \(\}\) of the adverbial sentence can be an \{adverbial \(\}\) to the "that" sentence:

> "Apparently, our friends prefer the taverna."
> "The preference of our friends for the taverna is apparent."
> "He will indubitably come."

While the qualification of a \{noun\} is covered by one or other of the functions described in Chapter 15., the qualification of a \(\{\) verb \(\}\) is not covered either there, or in the discourse structure that we have

\footnotetext{
\({ }^{319}\) Holton et al, 200.
\({ }^{320}\) Lewis, 212.
}
given in Chapters 13. and 14., or in the component structure of Chapters 16. and 17. We therefore need to consider the matter further.

\section*{Adverbials in Discourse}

In illustrate how an adverbial appears in a discourse, we refer again to the above examples:
"He cleaned the drain thoroughly." "His cleaning of the drain was thorough."
"I firmly promise to pay." "My promise to pay is firm."
"The houses were roofed in bad weather." "The roofing was done in bad weather."
"We met on Tuesday, as announced."
"We were greatly surprised at the result."
"She urgently needed shelter."
"She wrote the thesis in Cambridge."
"Our meeting had been announced."
"Our surprise at the result was great."
"Her need for shelter was urgent."
"The thesis-writing took place in Cambridge."

As we have observed, every sentence fulfils two purposes or roles, which can be simply described as follows:
(i) It supplies (or questions, or hypothesises) a new piece of information concerning a topic. That is its dialogue role.
(ii) It describes an action or state concerning a subject. That is its function.

If a sentence supplies more than one new piece of information, or describes more than one action or state, it is interpreted as more than one sentence. In our examples, a sentence including an \{adverbial\} can be interpreted as containing more than one piece of new information and describing more than one function, that is:
(a) the information and function provided by the \(\{\) verb\} (the main sentence);
(b) the information and function provided by the \{adverbial\} concerning the \{verb\} of the main sentence (the adverbial sentence).

Applying this approach to the first example, we see that it can mean either:
"He cleaned the drain; the cleaning was thorough", or simply
"His cleaning of the drain was thorough".
In the discourse role of the main sentence, the topic of the sentence is "he" and the comment is "cleaned the drain". For the adverbial sentence, the topic is "his cleaning of the drain" and the comment is "was thorough". Which of these interpretations is correct depends on whether the speaker and hearer do or do not know that he has cleaned the drain. In speech, a speaker generally distinguishes between the two interpretations by a pause (represented in English writing by a comma) between the sentence and the adverbial if there are two sentences, and by no pause (or comma) if there is only one:
"He cleaned the drain, thoroughly" or "He cleaned the drain thoroughly".
The same analysis can be applied to the other examples. "We met on Tuesday, as announced" means either:
"We met on Tuesday; the meeting had been announced", or
"Our meeting on Tuesday had been announced"
depending on whether the speaker and hearer do or do not know that we have met. In this case, the main sentence can also be expressed by placing the \{adverbial\} at the start:
"As announced, we met on Tuesday."
Similarly, a change in word order can be used to distinguish between the two meanings of:
"She needed shelter, urgently" and "She urgently needed shelter".

The device of placing an \{adverbial\} at the start can also be used to make it the topic:
"On Tuesday, we went home" means "Tuesday was when we went home".
This is also an adverbial sentence, but one in which the \{adverbial\} is the topic, unlike the other examples of adverbial sentences in which the \(\{\) verb \(\}\) is the topic.

A sentence containing an \{adverbial\}, which is not an adverbial sentence, can be ambiguous if it is negative or a question. "The houses were not given slate roofs on Tuesday" can mean either:
"The houses were given slate roofs on another day (such as Wednesday)", or
"On Tuesday, the houses were not given slate roofs."
"Were the houses given slate roofs on Tuesday?" means either:
"Were the houses given slate roofs on another day (such as Wednesday)?", or
"On Tuesday, were the houses given slate roofs?"
This is because the \(\{\) not \(\}\) or \(\{\) query \(\}\) can apply to either the main sentence \(\{\) verb \(\}\) or, if the sentence is adverbial, to the \(\{\) verb \(\}\) of the adverbial sentence.

For some types of \{adverbial\}, a structure implying two sentences is more common, for example an \{opinion\}:
"Interestingly, she was wearing a new outfit."
"Surprisingly, he had not yet made up his mind."
The reason that these are generally two sentences is that the \{object\} of an \{opinion\}, in these cases "interest" and "surprise", is \{definite\}. The \(\{\) verb \(\}\) of the main sentences "was wearing" and "not yet made up his mind" had therefore to be stated separately so that they could become the definite \{object\} of the \(\{\) adverbial \(\}\).

In our discourse notation, \{adverbial\} can be expressed simply as two linked sentences. To avoid confusion with the simple sentence without an \{adverbial\}, we shall use the term clause for each part of the sentence, the main clause and the adverbial clause, while reserving adverbial sentence for a sentence in which the adverbial is the \{verb\}. In the examples we have so far examined, the main clause is a selection statement, and the adverbial clause is either a selection statement or a circumstance statement:
"She wrote her thesis at Cambridge." "She wrote her thesis at a University in East Anglia."
An \{adverbial\} can also be an expression with its own \{verb\}, linked to the main clause by a conjunction:
"She wrote her thesis where she could find the necessary supervision."
On this basis, the discourse structure of \{adverbial\} can be summarised:
\[
\begin{aligned}
& \left\{{\text { definite } \left.- \text { select }_{1}\right\}}^{\left\{\text {definite }_{1}-\text { indefinite }- \text { circumstance }\right\} /\left\{\text { definite }_{1}-\text { select }\right\} .} .\right.
\end{aligned}
\]

In the following sections, we shall examine ten categories of \{adverbial\}, those of space, time, causation, condition, concession, comparison, observation, supposition, generality, and benefit. We consider both their functional and their discourse structure. We show that \{adverbial\} of space, time, causation, observation, generality, and benefit provide factual information on the \{verb\} which they qualify, and are therefore definite or indefinite according to the above pattern, as are certain \{adverbial\} of condition, concession, and comparison.

However, most \{adverbial\} of condition, some of concession and comparison, and all \{adverbial\} of supposition, have an adverbial sentence which is a hypothesis, and whose discourse structure is:
\{definite - indefinable\} or \{definite - not - indefinable\}.
In Chapter 14. (Inference), we discuss a further category of adverbials, those which express inference:
"Perhaps it will rain tonight."
"Therefore we will not pay the bill until next week."
"We are nevertheless not satisfied."
They can be expressed as adverbial sentences, but with some artificiality, and without adding to the understanding of the sentence:
"That it will rain tonight is possible."
"It follows that we will not pay the bill until next week."
"Our dissatisfaction is despite..."
While the other ten categories of adverbial considered here are functions, an inference adverbial is a discourse feature. We will therefore not discuss it further in this chapter.

\section*{Adverbials of Space}

As discussed in Chapter 15. (The Location and Movement Sentences), location is most commonly expressed as an attribute of an object, and movement is an action which brings that attribute into effect:
"She fetched the chair into the hall."
\(\rightarrow \quad\) "The chair is in the hall."
"The newspaper was pushed through the letter-box."
\(\rightarrow \quad\) "The newspaper is through the letter-box."
"Mary went from London to Cambridge."
\(\rightarrow \quad\) "Mary was at Cambridge."
"The aircraft climbed to 5 miles up."
\(\rightarrow \quad\) "The aircraft was 5 miles up."
"He sat in the chair." \(\rightarrow \quad\) "He was seated in the chair."
These locative attributes can be described by the elements \{object - locative - location\}.
A locative may also be an \{adverbial\} which qualifies a dynamic \(\{\) verb \(\}\), meaning that the action of the \{verb\} takes place at that location:
"He read the newspaper in the library."
"She wrote her thesis in Cambridge."
These may be expressed as adverbial sentences:
"The newspaper reading took place in the library."
"The thesis writing took place in Cambridge."
where "the library" and "Cambridge" are definite. The discourse structure of these adverbial sentences is:
\(\{\) definite - select \(\}\).
Alternatively, the location can be indefinite:
"He read the newspaper in a library in Cambridge."
"The newspaper reading took place in a library in Cambridge."
An adverbial locative can also be a clause, which is also often indefinite:
"We bought our house where we could find work."
"Our house-buying took place where we could find work."
"She painted where there was a studio." "Her painting took place where there was a studio."
These adverbial sentences of space are:
\[
\{\text { definite - indefinite - circumstance }\} .
\]

In the case of both definite and indefinite adverbials, the expression "took place in" is the function \{locative\} and "the library", "Cambridge", "a library in Cambridge", "where we can find work", and "where there is a studio" are \{location\}. The adverbial therefore has both a discourse and a functional structure. The discourse structure of the whole sentence is that already identified in the previous section:
\[
\begin{aligned}
& \left\{{\text { definite } \left.- \text { select }_{1}\right\}}^{\left\{\text {definite }_{1}-\text { indefinite }- \text { circumstance }\right\} /\left\{\text { definite }_{1}-\text { select }\right\} .} .\right.
\end{aligned}
\]

While the \{adverbial\} has the functional structure:
\[
\text { \{object - locative - location }\} \text {. }
\]

In addition to a location in space, a physical entity can also have a spatial extent relative to a base point:
"Mount Everest is 8848 metres high from sea level."
"The River Thames is 338 kilometres long from its source to the North Sea."
"The powder is one-half dissolved in water."
As discussed in Chapter 15. (The Constituent Sentence), this is described with the function \{constitute\}:
\{object - constitute - attribute \(\}\).
An event which occurs in the physical world can also have a physical extent. Very often, this extent is not an \{adverbial \(\}\) but a \(\{\) circumstance \(\}\) :
"He climbed 8848 metres high from sea level."
"The river Thames runs 338 kilometres long from its source."
"The powder dissolved one-half in water."
However, if the sentence is selection, the extent can be \{adverbial\}:
"He climbed Mount Everest, 8848 metres high from sea level."
"The river Thames runs to the North Sea, 338 kilometres long from its source."
"The powder dissolved one-half in the water."
Such an \{adverbial\} again has the functional structure \(\{\) object - constitute - attribute \(\}\).

\section*{Adverbials of Time}

In Chapter 15. (The Time Sentence), we introduced the \{time \(\}\) function:
"We held the meeting at 10.00 "; "We went home on Friday";
which correspond to the adverbial sentences:
"The meeting took place at 10.00 "; "Our departure for home took place on Friday".
\{time\} refers to the expressions beginning "took place at ...", and can only apply to an occurrence. The adverbial sentences have the functional structure \{object - time \(\}\). Since these \(\{\) time \(\}\) are definite, their discourse structure is:
\[
\{\text { definite }- \text { select }\} .
\]

It is also possible for a \(\{\) time \(\}\) to be indefinite:
"We called the meeting when we were ready."
"We will go home before it starts raining."
The indefinite nature of these \(\{\) time \(\}\) is brought out in the adverbial sentences:
"Our calling of the meeting took place at a time when we were ready."
"Our departure for home will take place before any rain starts."

The discourse structure of these adverbial sentences is therefore \(\{\) definite - indefinite - circumstance \(\}\).
The \{constitute\} function can describe two elapsed periods of time which are the same. The adverbial sentences have the structure \{object - constitute - attribute\} and employ the English verb "last":
"We held the meeting for two hours." "The meeting lasted two hours."
"It rained all week." "The rain lasted all week."

A period of time can also be expressed by an adverbial clause, which can be definite:
"As long as he was in charge, the operation ran smoothly."
"The smooth operation lasted for his period in charge."

Or indefinite
"While it was raining, they could not go out."
"Their inability to go out lasted as long as it was raining."
A time adverbial can only refer to an occurrence, and its \{object\} can therefore only be a \(\{\) verb \(\}\), in the form of a grammatical verb or a verbal noun. Time adverbials are closely related to but different from the five discourse elements of aspect which were discussed in Chapter 14. (Aspect):
\begin{tabular}{ll} 
\{state \} & a state not arising from a previous action; \\
\{imperfect \} & an action which is still proceeding; \\
\{perfect \(\}\) & a state arising from a previous action; \\
\{prospect \(\}\) & an action which is about to occur; \\
\(\{\) aorist \(\}\) & a completed action not resulting in a state. \\
\{already\} & an action or state which is earlier than expected. \\
\(\{\) still\} & an action or state which is later than expected.
\end{tabular}

The difference is that aspect expresses the general relation in time of one occurrence to other occurrences in the discourse, and is possessed by all sentences. Time adverbials express the precise time and period at which an event occurs, and are only used when that information is required. Sentences have aspect even when no time adverbial is specified:
"We called the meeting." "We were ready." "We will go home." "He was in charge."
"The operation ran smoothly." "The could not go out." "It was raining."
Aspect is also the means whereby a sentence distinguishes between a process, a state, and a state resulting from a process:

\footnotetext{
"We made ourselves ready." "We were ready." "We went home." "We were home."
}

\section*{Adverbials of Causation}

Causation is expressed by a causing clause, meaning "an event took place which had a result", and a caused clause, meaning "an event took place caused by the previous event". Because the causing and the caused events are related, their relation is part of discourse. Let us consider the following examples:
"Because the speech addressed their main concerns, the audience became excited."
"Because the wound in my leg has not yet healed, it is causing me pain."
"Because she walks a mile every day, she keeps fit."
"They gasped with amazement at the outrageousness of the claim."
"We shivered because it suddenly became cold."
Our definition of an \{adverbial\} is a qualifier of a \{verb\}, and of an adverbial sentence is one with the qualified \(\{\) verb \(\}\) as \(\{\) subject \(\}\). It appears that the caused clause occurs under the stimulus of the causing clause, and therefore the caused clause is an \{adverbial \(\}\) to the \(\{\) verb\} of the causing clause, not the reverse as might be expected. We find that indeed the caused clause can be expressed as an adverbial sentence:
"The speech addressing their main concerns excited the audience."
"The unhealed wound in my leg is causing me pain."
"Walking a mile every day keeps her fit."
"The outrageousness of the claim made them gasp with amazement."
"The sudden cold made us shiver."
In fact, the sentences can be structured with the caused clause rather than the causing clause marked as adverbial:
"The speech addressed their main concerns, so the audience became excited."
"The wound in my leg has not yet healed, so it is causing me pain." Etc.
The caused clause is an effect sentence (Chapter 6., The Effect Function; Chapter 15, The Effect Sentence), of which the \(\{\) verb\} of the causing clause is the \{instrument\}. They have the general functional structure:
\[
\{\text { instrument - effect - object }\} \text {. }
\]

Alternatively, the caused clause may already have an \{instrument\} or \{agent\}, in which case the \{verb\} of the causing clause is the \{causer\} of the caused clause, which has the structure of a causative sentence (Chapter 11., The Causative Function; Chapter 15., The Causative Sentence):
"Since the rain had cleared, they decided to go out."
"The rain had cleared, so they decided to go out."
"The clearing of the rain made them decide to go out."
"Because the accounts were complete and accurate, the auditor signed them off."
"The accounts were complete and accurate, so the auditor signed them off."
"The completeness and accuracy of the accounts enabled the auditor to sign them off."
"As arranged, we met in the bar at 19.00."
"Our meeting in the bar at 19.00 had been arranged."
The general functional structure of these adverbial sentences is:
\[
\{\text { causer - agent - definite }- \text { select }\} .
\]

It can be argued that some of these causative adverbial sentences can have an indefinite causer:
"A speech addressing their main concerns excited the audience."
"An unhealed wound in my leg is causing me pain."
"A sudden chill made us shiver."
However, when these sentences are expressed with a full causing clause, it can be seen that they are not a true \{adverbial\}:
"Because a speech addressed their main concerns, the audience became excited."
"Because a wound in my leg has not yet healed, it is causing me pain."
"We shivered because of a sudden chill."
The first two of these sentences introduce a new topic ("a speech", "a wound") and are existential. The third is a simple effect sentence. The question remains whether the caused clause can be indefinite as well as definite, as is the case with most of the above examples. We see that it can:
"The speech addressing their main concerns caused excitement."
"The unhealed wound in my leg is causing me pain."
"Walking a mile every day keeps one fit."
"The outrageousness of the claim caused gasps of amazement."
"The sudden cold caused a shiver."
We note also that a causing clause may prevent an event:
"Because it was raining, they could not go out." "The rain prevented their going out."
"Because the accounts were not accurate and complete, the auditor did not sign them off."
"The inaccuracy and incompleteness of the accounts prevented the auditor from signing them off."

These adverbial sentences have the functional structure:
\(\{\) causer - agent - definite - not - indefinable \(\}\).

\section*{Adverbials of Condition}

As described in Chapter 3. (Conditions), conditions are compound sentences which describe various conditions (protasis) that must be fulfilled or not fulfilled for a conditional (apodosis) to occur or not to occur, under varying degrees of likelihood:
"If he comes, I shall see him."
"If he does not come, I shall not see him."
"If he were to come, I would see him."
"If he were not to come, I would not see him."
"If he had come, I would have seen him."
"If he had not come, I would not have seen him."
The first two examples are statements containing new information, which we can call a real condition and real conditional. The last four examples contain statements which have not happened and whose truth is unknown, which we can call a hypothetical condition and hypothetical conditional. The condition and conditional can refer to the same topic:
"If he comes, he will be welcome."
"If he were to come, he would be welcome."
Our definition of an \{adverbial\} is a qualifier of a \(\{\) verb\}, and of an adverbial sentence is one with the qualified \(\{\) verb \(\}\) as \(\{\) subject \(\}\). If we consider three of the examples:
"If he comes, I shall see him"; "If he were to come, I would see him";
"If he were to have come, I would have seen him";
it appears that the occurrence of the verb "see" is dependent on the condition "if he comes"/"if he were to come". The condition is therefore the \{adverbial\}, and we find indeed that the conditions can be
expressed as adverbial sentences, whose \(\{\) subject \(\}\) is the \(\{\) verb \(\}\) of the conditional and whose \(\{\) verb \(\}\) is "dependent on" or its equivalent:
"My seeing him is dependent on his coming."
"My seeing him would be/would have been dependent on his coming."
We have already encountered this construction in the dependency sentence (Chapter 6., The Dependency Function; Chapter 15., The Dependency Sentence). Its functional structure is:
\{object - depend - indefinable \(\}\).
As we have already noted in Chapter 13. (Hypothesis), the discourse structure of the condition adverbial sentence is that of a hypothesis:
\{definite - indefinable \(\}\).
In this respect, it differs from that of the adverbial sentences of space, time, and causation which we have been considering. Its relationship with the main clause is also different. In adverbials of space, time, and causation, the main clause states a fact, and the adverbial clause provides further information on that fact:
"We bought our house where we could find work."
"As long as he was in charge, the operation ran smoothly."
"Because she walks a mile every day, she keeps fit."
In the case of a condition, the main (conditional) clause gives a hypothesis, and the condition clause states a further hypothesis which will become true if the main hypothesis turns out to be true:
"He may come; on the assumption that he does, I shall/shall not see him."
This can be described in discourse terms as:
\(\left\{\right.\) definite - indefinable \(\left._{1}\right\}\) \{definite \({ }_{1}\) - indefinable \(\}\).
The discourse structure of the main clause differs from the main clauses of the other \{adverbial\} that we have noted, which are all statements of fact. However, as we noted, some conditions and conditionals are not hypotheses but relate to events whose occurrences are expected as facts and are therefore \(\{\) definite \(\}\) or \(\{\) indefinite \(\}\) :
"If he comes, he will be welcome." "If he comes, I shall see him."
In this case, the condition means:
"He is expected to come, and when that happens he will be welcome/I shall see him."
The adverbial sentence is in reality stating a \{time\}:
"I shall see him/he will be welcome when he comes."
A real condition according has the functional and discourse structure of a \{time \(\}\) adverbial.

\section*{Adverbials of Concession}

A concession is a statement that an event (called a concessional) will or will not occur independently of whether another event (a concession) does or does not occur. It is therefore the antithesis of a condition, by which an event is dependent on another event:
"Although he may come, I shall not see him."
"Although he may not come, I shall see him."
"Whether or not he comes, I shall not see him."
"Even if he comes, I shall not see him."
"Even if he does not come, I shall see him."
"Even if he comes when I am busy, I shall see him."
"Even if he comes when I am not busy, I shall not see him."
The concession is the clause preceded by "although", "whether or not", or "even if", and the remainder is the concessional. The concession does not provide new information, and may express an accepted fact:
"Despite event A, event B will/will not happen."
We may call this a definite concession. Alternatively, the truth of the concession is unknown, so that the sentence means:
"Despite the possibility of A, event B will/will not happen".
We may call this an indefinite concession. The topic of the concession may be the same as the topic of the concessional:
"Although very sick, he will come."
"Although he may be very sick, he will come."
The adverbial sentences of a definite concession may be presented as follows:
"His coming will not cause me to see him."
"His failure to come will not prevent me from seeing him."
"My business when he comes will not prevent me from seeing him."
"My lack of business when he comes will not cause me to see him."
"His sickness will not prevent him coming."
The adverbial sentences of an indefinite concession are:
"His coming would not cause me to see him."
"His failure to come would not prevent me from seeing him."
"Any business of mine would not prevent me from seeing him."
"Any lack of business of mine would not cause me to see him."
"Any sickness of his would not prevent him coming."
These adverbial sentences show that the \{adverbial\} is not the concession clause, as might be supposed, but the concessional. In fact, a concession sentence can be structured with the concessional clause rather than the concession clause marked as adverbial:
"He may/might come; nevertheless, I shall not/should not see him."
"He may/might not come; nevertheless, I shall/should see him."
The non-standard use of "however" as a conjunction therefore reflects the \{adverbial\} nature of a concessional:
"He may/might come, however I shall not/should not see him."
"He may/might not come, however I shall/should see him."
In functional terms a concession is a preventive, that is a causative of a negative (Chapter 11., The Causative Function; Chapter 15, The Causative Sentence). A definite concession has the functional structure:
\[
\{\text { causer - agent/instrument - not - definite }\} \text { or }
\]
\{causer - not - agent/instrument - not - definite\}
and an indefinite concession is:
```

{causer - agent/instrument - not - indefinable} or
{causer - not - agent/instrument - not - indefinable}

```

This negative is the reason that a concession cannot be indefinite. In discourse terms, the two adverbial sentences are:
\[
\begin{aligned}
& \{\text { definite }- \text { not }- \text { definite }\} \\
& \{\text { definite }- \text { not }- \text { indefinable }\} .
\end{aligned}
\]

Because the main clause of a definite concession (a concessional) does not provide new information, it is not a separate sentence, and the above is the full discourse description. However, the main clause of an indefinite concession is a hypothesis, so that its discourse structure is:
\(\left\{\right.\) definite - indefinable \(\left.{ }_{1}\right\}\left\{\right.\) definite \(_{1}-\) not - definite \(\} /\left\{\right.\) definite \(_{1}-\) not - indefinable \(\}\).

\section*{Adverbials of Comparison}

Chapter 15. (The Comparison Sentence\} shows how a sentence compares a characteristic of an entity against a \{base\}. The function \{compare\} is the difference between the two characteristics. Very often, the entity whose characteristic is compared is a \(\{\) verb \(\}\), so that the comparison is an \{adverbial \(\}\) :
"My father lived longer than my mother."
"John runs faster than Jim."
"Jim has more money than John."
The corresponding adverbial sentences are:
"My father's life was longer than my mother's."
"John's running is faster than Jim's."
"Jim's money is more than John's."
As we have noted, the functional structure of these and other adverbial sentences is:
\[
\{\text { object - compare - base }\} .
\]

In these examples, both the entity which is being compared and the base against which it is being compared are known entities and therefore definite. The sentences are selecting the base as the standard of comparison, which is therefore \{select\}. In discourse terms, the adverbial comparison sentences are therefore:
\[
\{\text { definite }- \text { select }\} .
\]

Since the main sentence does not provide any more information than the adverbial sentence, this is the full functional description.

Alternatively, the comparison is with a hypothetical entity:
"She rode like a whirlwind." "Her riding was like a whirlwind."
"He lives as though there were no tomorrow."
"His living is as though there were no tomorrow."
The functional structure of these adverbial sentences is the same as before. Their discourse structure is:
\{definite - indefinable \(\}\).
As we showed in Chapter 15. (The Comparison Sentence), this indefinable base may be in the subjunctive:

Italian: "Mi ha guardato come se fossi matto." "He looked at me as if I were mad."
```

Hindi: "baccā darvāze par khaṛā thā jaise kisī ke intazār me~ ho"
"The boy was standing at the door as if waiting for someone."
[Boy door-on standing was as-if someone-of waiting-in he-was $\left.{ }_{\text {(subjunctive). }}\right]^{321}$

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\section*{Adverbials of Observation and Supposition}

A further class of \{adverbial\} involve the conjunction "as" or its equivalent:
"As we learned, he passed his exams."
"As we announced, he passed his exams."
"Surprisingly, he passed his exams."
"As is apparent to all, he has flouted the conventions."
These \{adverbial\} state that a known event is perceived or communicated, or an opinion is held on them. The adverbial sentences are:
"His passing of the exams was learned about." "His passing of the exams was announced."
"His passing of the exams caused surprise."
"His flouting of the conventions is apparent to all."
According to Chapter 15., these adverbial sentences are functionally perception, communication, or opinion sentences with the \{object\} in topic position:
\{object - perceive - select/indefinite/circumstance\}
\{object - communicate - select/indefinite/circumstance \}
\{object - opinion - select/indefinite/circumstance\}.
In discourse terms, the adverbial sentences are selection or circumstance. In a further class of \{adverbial\} with the conjunction "as", the main clause again refers to a known fact, but which has been subject to a previous supposition or proposal:
"As we expected, he passed his exams." "His passing of the exams had been expected."
"As we promised, he passed his exams." "His passing of the exams had been promised."
These adverbial sentences are functionally supposition or proposal sentence with the \(\{\) object \(\}\) in topic position:
\[
\{\text { object - suppose }- \text { indefinable }\}\{\text { object }- \text { propose }- \text { indefinable }\},
\]
the \{object\}being the \(\{\) verb \} of the main clause. In discourse terms, the comment of a supposition or proposal is also \{indefinable\}, so that that it is \{definite - indefinable \(\}\).

\section*{Adverbials of Generality}

An \(\{\) adverbial \(\}\) of generality places a \(\{\) verb \(\}\) in a class of actions or sates:
"Montmorency was sleeping the sleep of the just."
"She diligently did her accounts, as she did every month."
"He plays tennis like a maestro."
The adverbial sentence states the class of actions or states to which the \{verb \} belongs:
"Montmorency's sleep was that of a just person."
"Her doing of her accounts conformed to her monthly practice."

\footnotetext{
\({ }^{321}\) McGregor, 131.
}
"His tennis playing is in a master class."
The functional description of such an \{adverbial \(\}\) is that the \(\{\) verb \(\}\) belongs to a larger group, which we have called \{constitute\}, described with an \{attribute\} (Chapter 15., The Constituent Sentence):
\[
\{\text { object }- \text { constitute }- \text { attribute }\} .
\]

Both the \(\{\) verb \(\}\) and its \(\{\) constitute \(\}\) are definite or indefinite.

\section*{Adverbials of Benefit}

An \{adverbial\} of benefit states to whose advantage or disadvantage a \{verb\} has occurred, as we have seen in Chapter 15. (The Benefit Sentence). The sentences:
"Henry cooked lunch for his family."
"We bought Simon a bicycle."
"An email for you has just come in."
"The treatment eased James' back pain."
have the adverbial sentences:
"Henry's lunch cooking was for his family."
"The purchase of a bicycle was for Simon."
"The arrival of an email is for you."
"The back treatment was for James."

This construction is also applicable if the \(\{\) object \(\}\) is definite. The sentences:
"Henry cooked the lunch for his family";
"Sheila brought the accounts to good order for the Society";
"The drawbridge was raised to let the ship pass";
"He opened the dam to let out the flood water";
have the adverbial sentences:
"Henry's cooking of the lunch was for his family."
"Sheila's ordering of the accounts was for the Society."
"The drawbridge raising was to let the ship pass."
"The dam opening was to let out the flood water."

\section*{Adverbials of Quantity}

An \{adverbial\} of quantity states the number of the occurrences of a \(\{\) verb \(\}\) :
"The post comes twice a day;" "She gave the lecture three times that week;"
have the adverbial sentences:
"The daily deliveries of the post are two."
"The lectures that she gave that week were three."
An adverbial of quantity is expressed by applying the sentence \{object - quantity \(\}\) as a qualification to the \(\{\) verb \(\}\), for example:
\(\left\{\right.\) object - move \(_{1}-\) locative - location \(\}\left\{\right.\) object \(_{1}-\) constitute attribute \(\}\).
An adverbial of quantity includes the concepts of completeness and partiality:
"The drawbridge was completely/partially raised."

\section*{18. The Components of a Question and a Negative Sentence}

\section*{Summary}

A statement or negative statement can be analysed as an explicit or implicit reply to a question, for which it has the same topic or \{subject\}. In a question, that part marked by \{query\} is therefore the comment and the rest is the topic. In a negative statement, that part marked by the \(\{\) not \(\}\) is the comment and the rest is the topic. A question and its replies can be categorised as either verbal, nominal, complementary, adverbial, or gerundial. A verbal sentence queries, asserts, or denies an action or state, represented by a \(\{\) verb\}, or queries, asserts, or denies the existence of an entity.

A nominal sentence queries, asserts, or denies the connection of a \{noun\} with an action or state. The \{noun\} whose connection is asserted, queried, or denied is the focus of the sentence and becomes its \(\{\) verb\}. The rest of the sentence, being the topic, is the \(\{\) subject \(\}\). If the \(\{\) noun , is an \(\{o b j e c t\}\), it may be substituted by another \{noun\}.

A complementary sentence queries, asserts, or denies that a sentence places an \{object\} in a state or condition, or reverses the state or condition of an \{object\}. The \{complement \(\}\) is the focus of the sentence and the \(\{\) subject \(\}\), \(\{\) verb \(\}\), and \(\{\) object \(\}\) are the topic.

For most sentences, the \{complement\} of a complementary sentence is definite. It is indefinable in the case of a preventive, a cessative and a supposition, proposal, perception, or communication concerning an event which has not occurred.

An adverbial sentence queries, asserts, or denies a state or condition of the \{verb\} of another sentence. A gerundial sentence queries, asserts, or denies a state or condition of the \{subject\} of another dynamic sentence.

The response to an enquiry word question expressly or implicitly denies an alternative response. A "yes/no" question can therefore be regarded as a form of an enquiry word question with only two possible replies. Many syntactic constructions can be best understood if \(\{\operatorname{not}\}\) and \(\{q u e r y\}\) are interpreted as \(\{\) verb \(\}\).

\section*{Terms Defined or Introduced}

Verbal sentence, nominal sentence, substitution sentence, complementary sentence, reversal sentence, reversal, enquiry word, gerundial sentence.

\section*{Background}

The grammatical terms formulated in Chapters 16. and 17. were devised to describe the discourse and functional analysis of non-negative existential sentences and statements. In this chapter, we consider how they apply to questions and negative sentences. To summarise the position we have reached, a non-negative statement has the structure \{subject - verb - object - complement - adverbial\}, where:
- A \(\{\) verb \(\}\) is the unique action or state which a sentence describes.
- A \(\{\) subject \(\}\) is that which is engaged in the action or undergoes the state described by the \{verb\}. \{subject\} and \{verb\} are a semantic unit.
- An \(\{\) object \(\}\) is that which the sentence places in a state or relationship.
- A \{complement \(\}\) is the state or relationship into which the sentence places the \(\{\) object \(\}\).
- An \{adverbial \(\}\) is a non-restrictive qualifier of a \(\{\) verb \(\}\).

A non-negative existential sentence has the structure \{object - verb\}, where the \{verb\} places the \{object\} is a state of existence, and is therefore also the \{complement \(\}\).

Elements other than \(\{\) verb \(\}\), \{complement \(\}\), and \(\{\) adverbial \(\}\) are classed as \{noun \(\}\). They include not only \{subject \(\}\) and \(\{\) object \(\}\), but also further elements which may or may not be present, and may or
may not be identified with \{subject\} or \{complement\}. These are \{agent\}, \{instrument\}, \{location\}, \{beneficiary\}, \{base\}, \{participant\}, \{target\}, \{competence\}, \{recipient\}, and \{causer\}. In addition, the functions of some \(\{\) noun \(\}\) are identified with discourse elements: \(\{\) definite \(\}\), \(\{\) select \(\}\), \{indefinite \(\}\), \{circumstance\}, and \{indefinable\}.

Interrogation and negation place the element \{query\} or \(\{\) not \(\}\) in front of one element of a sentence. \{query\} questions whether the sentence applies to that element, and \{not\} denies that it does. The absence of either means that the sentence is a statement. Questions can take two forms, a "yes"/"no" question and an enquiry word question:
"Did he go to London today?" "Where did he go today?"
In discourse terms a "yes"/"no" question is a more constricted version of an enquiry word question. It could be paraphrased:
"Where did he go today, to London not to London?"
and has two possible answers: "He went/did not go to London today," while an enquiry word question:
"Where did he go today?"
has multiple possible answers both positive and negative:
"Today he went to London, not Birmingham"; or
"Today he went to Birmingham, not London."
In both cases, the question has the discourse form \{definite - query - select\} and the functional form \{agent/object - move - query - locative - location\}.

We have also noted that the elements before \{query\} are the topic, concerning which the question is asked, and that those after \{query\} are the enquiry. The basis of this chapter is that questions and their answers can be categorised by that part which is the topic and that part which is the enquiry:
- In verbal questions, the enquiry is the \(\{\) verb \(\}\) and the topic is its \(\{\) subject \(\}\) :
"Did he go to London today (instead of staying at home)?"
"What did he do today?"
- In nominal questions, the enquiry is a \{noun\} and the topic is the rest of the sentence including the \(\{\) verb \(\}\) :
"Did John go to London today (instead of Mary)?"
"Who went to London today?"
- In complementary questions, the enquiry is the \{complement\} and the topic is the rest of the sentence, including the \(\{\) verb \(\}\) and \(\{\) noun \(\}\) :
"Did he go to London today (instead of to Birmingham)?"
"Where did he go today?"
- In adverbial questions, the enquiry is the \(\{\) adverbial \(\}\) and the sentence is the topic:
"Did he go to London today (instead of yesterday)?"
"When did he go to London?"
- In gerundial questions, the enquiry is the state or condition of the \(\{\) subject \(\}\) and the sentence is the topic:
"Why did he go to London today?" "He had some business there."

Incorporating the question in the response shows that it is a \(\{\) gerund \(\}\) and not an \(\{a d v e r b i a l\}\) :
"Having some business in London, he went there today."
We see that in a verbal question and its possible replies: "Yes"/"No, he stayed at home," the topic and the subject of the grammatical verb coincide. In the other categories of question and response, they do not. Following the analysis in Chapter 1. (Focus), we can say that the element which is being queried, asserted, or denied (unless it is the verb) is in focus:
```

"Was his trip today to London?" "Yes"/"No, to Birmingham."
"Was his trip to London today?" "Yes"/"No, it was yesterday."
"Was his trip to London today for business or pleasure?" "Business"/"Pleasure."

```

The representation of a verbal sentence in component terms places the \{query\} or \(\{\) not \(\}\) in front of the \{verb\}:
\[
\{\text { subject - query/not - verb - object - complement - adverbial }\} .
\]

A nominal sentence can be represented with the \{query\} or \(\{\) not \(\}\) in front of the \{noun\} which is the focus of the sentence. For example, if it is the \(\{\) object \(\}\) :
\(\{\) subject - verb - query/not - object - complement - adverbial \(\}\).
In a complementary sentence, the \(\{\) query \(\}\) or \(\{\operatorname{not}\}\) are front of the \(\{\) complement \(\}\) :
\(\{\) subject - verb - object - query/not - complement - adverbial\}.
In an adverbial sentence, the \(\{\) query \(\}\) or \(\{\) not \(\}\) in front of the \(\{\) adverbial \(\}\) :
\(\{\) subject - verb - object - complement - query/not - adverbial\}.
In gerundial sentence, the \{gerund\} is a separate sentence which is itself queried, asserted, or denied:
\(\{\) subject - verb - object - complement - query/not - gerund \(\}\).
We have also noted that, while a definite element can occur in any sentence and in any position in a sentence, an indefinite element cannot occur in a question or negative sentence; we cannot question or deny an entity whose identity is not known. What we can do is to question or deny whether a entity exists, such an entity being \{indefinable\}:
"Have we any bananas today?", "We have no bananas today."
In the rest of this chapter, we explore these constructions further.

\section*{Verbal Sentence}

If a \(\{\) verb \(\}\) is questioned, the action or state that the sentence describes is questioned:
"Did he clean the leaves out of the drain?" "Did Mary lend the book to John?"
The sentence can be interpreted as placing the element \{query\} in front of the \{verb\}. It has two possible answers, "yes" or "no". If the answer is "yes", it is equivalent to a statement that the action or state occurred, which can be expressed by a sentence which has the \{verb\} without the \{query\}. If the answer is "no", it is equivalent to a denial that the action or state occurred, in which the \{verb\} is preceded by \(\{\operatorname{not}\}\) :
"He cleaned/did not clean the leaves out of the drain."
"Mary lent/did not lend the book to John."
Such a question and negative sentence can therefore be summarised as:
\{subject - query/not - verb - object - complement \(\}\).
The \(\{\) subject \(\}\), \{object \}, \{complement \(\}\), and other elements remain the same between the question, the "yes" reply, and the "no" reply. We may call such a question and negative sentence a verbal question and a verbal negative. Including in the definition a non-negative answer to a verbal question, we may refer to them as a verbal sentence. The same analysis applies if the question and negative are not definite, as in the above examples, but indefinite:
"Did he clean leaves out of the drain?" "He cleaned/did not clean leaves out of the drain."
"Did Mary lend a book to John?" "Mary lent/did not lend a book to John."
If the poser of a verbal question is expecting a particular "yes" or "no" answer, it may be formulated as a tag question:
"He did clean the leaves out of the drain, didn't he?"
"Many didn't lend the book to John, did she?"
In addition, the action or state of a sentence can be questioned in such a way that the possible answer is not "yes" or "no", but any \(\{\) verb \(\}\) suitable for the \(\{\) subject \(\}\) :
"What did Mary do?" "She lent/did not lend the book to John."
"What happened to the book?" "It was lent/not lent to John by Mary."
"What happened to John?" "He was lent/not lent the book by Mary."
Other possible replies to the first question are: "She gave the book to John." "She went for a walk" "She wrote a letter." However, a possible reply is not "yes" or "no". Both types of verbal question are inviting the respondent to select from a range of possible answers. For a "yes"/"no" question, that range is limited to two. In discourse terms, we may represent the question and replies as:
\[
\{\text { definite }- \text { query }- \text { select }\} \quad\{\text { definite }- \text { select }\} /\left\{\text { definite }_{1}-\text { not }- \text { definite }_{2}\right\}
\]
if the \(\{\) verb \(\}\) and \(\{\) object \(\}\) are definite, and
\[
\begin{aligned}
& \text { \{definite }- \text { query }- \text { indefinable }\} \\
& \{\text { definite }- \text { indefinite }- \text { circumstance }\} /\{\text { definite }- \text { not }- \text { indefinable }\}
\end{aligned}
\]
if the \(\{\) verb \(\}\) and \(\{\) object \(\}\) are indefinite.
In verbal negative sentences, \(\{\) verb \(\}\) means the action or state which does not apply to the \(\{\) subject \(\}\) : "not clean", "not lend/lent". \{object\} means that which is not in a state or relationship: "leaves", "book". \{complement\} means the state or relationship in which the \{object\} is not: "out of the drain", "lent to John". For an indefinite negative, \{complement\} means the indefinable state or relationship in which the \(\{\) object \(\}\) does not exist:
"There were no leaves cleaned out of the drain".
"There was no book lent by Mary to John."
These are evidently an extension of the non-negative meanings of the same terms \(\{\) verb \(\}\), \(\{\) object \(\}\), and \{complement\}. For many languages, this extension of meaning is an acceptable means of expressing negative sentences:

German:"Wir fahren morgen nicht ans Meer." "We're not driving to the sea tomorrow." [We drive tomorrow not to-the sea.] \({ }^{322}\)

Arabic: "lam Paltaqi bihi min qablu" "I have not met him before."
\[
\text { [Not I-met with-him before.] }{ }^{323}
\]

\footnotetext{
\({ }^{322}\) Durrell, 237.
\({ }^{323}\) Badawi et al, 473.
}

Indonesian:
"Mereka tidak menolong kami." "They didn't help us." [They not help us.] \({ }^{324}\)
\{not\} in these negative sentences is treated as an adverbial. However, it has a quite different purpose from that of an adverbial to a non-negative sentence, which we noted in the previous chapter is either an additional sentence (an \{adverbial\}):
"He cleaned the leaves out of the drain thoroughly;"
"Mary generously lent the book to John;"
or a \{circumstance\} which identifies an \{indefinite\} element:
"He cleaned leaves out of the drain twice a week;"
"Mary lent a book to John which she no longer needed."
In addition, in indefinite negatives, an adverbial \{not\} is often combined with an article which marks the \(\{\) object \(\}\) as indefinable:

French: "Il n'a pas de montre." "He has no watch." [He not has any watch.] \({ }^{325}\)

[Any his book not was-worth.] \({ }^{326}\)
Arabic: "lam yuktašaf ḥattā l-Rāna Rayyu ¢ilājin"
"No treatment has up to now been discovered."
[Not was-discovered up-to now any treatment.] \({ }^{327}\)
Hindi: "tālāb me \({ }^{\sim}\) kuch pānī nahī̃ hai" "There's no water in the tank."
[Tank-in any water not is.] \({ }^{328}\)
As an alternative approach, other languages perceive that a negative sentence does not in fact express an action or state of the \(\{\) subject \(\}\), but a denial of that action or state. Accordingly, the \(\{\) verb \(\}\) is the element \{not\} which expresses that denial, and the grammatical verb is a \{noun\} which expresses the action or state which is denied. This construction is found with some verb-initial languages such as Welsh and Maori, and with languages such as Finnish:

Welsh: "Nid wyf i yn byw yn y wlad." "I do not live in the country."
[Not am-I in living in the country.]
"Nid oes dim car gennyf i." "I haven't a car." [Not there-is no car with me.] \({ }^{329}\)
Finnish: "Minä en osta taloa." "I shall not buy a/the house." [I not buy house \({ }_{(\text {partitive) }}\) ].
"Maasaa ei ole hallitusta." "The country has no government." [Country-in not is government \(\left.{ }_{\text {(partitive) }}\right]^{330}\)

Maori: "Kāhore i a Hone taku wati." "Hone does not have my watch."
[Not at the Hone my watch.]
"Kāhore ōu hoa i te whare kura." "Your friends are not at the school."
[Not your friends at the school.] \({ }^{331}\)
A residue of such a \(\{\) not \(\}\) \{verb \} is found in Irish, which is also verb-initial. Certain Irish verbs have a "dependent" form which is only used after negatives, interrogatives, relative pronouns, and the

\footnotetext{
\({ }^{324}\) Sneddon, 195.
\({ }^{325}\) Fraser \& Squair, 237.
\({ }^{326}\) Holton et al, 421.
\({ }^{327}\) Badawi et al, 474.
\({ }^{328}\) McGregor, 43.
\({ }^{329}\) Bowen \& Rhys Jones, 25, 43.
\({ }^{330}\) Karlsson, 83.
\({ }^{331}\) Foster, 101.
}
equivalent of "that". Such a dependent grammatical verb can be translated by placing "that" in front of it. The following are non-negative and negative examples:
"Gheobhair-se litir amáireach is dócha." "You will probably get a letter tomorrow."
[You-will-get letter tomorrow is probable.]
"Ní bhfaighir aon tobac uaim-se." "You will not get any tobacco from me."
[Not that-you-get any tobacco from-me.]
Similarly, the Irish \{query\} particle "an" is treated as a \{verb\} and followed by a "dependent" form of the grammatical verb. The following examples are a statement and a question:
"Chífead Mícheál ar maidin." "I shall see Michael in the morning."
[I-shall-see Michael on morning.]
"An bhfacaís i n-aon áit iad?" "Have you seen them anywhere?"
[Query that-you-have-seen in any place them?] \({ }^{332}\)
The function of \(\{\) not \(\}\) as a \(\{\) verb \(\}\) can be seen in a prevented sentence (Chapter 15.):
"We prevented them from coming."
In this example, a \{causer\} "we" effects the non-arrival of "them", and such an effect can be represented by the element \(\{\) not \(\}\). The sentence can be summarised as:
\{causer - agent - not - indefinable \(\}\).
Similarly, the function of \{query\} as a \{verb\} appears in an interrogation sentence (Chapter 15.):
"She asked whether they would come."
In this example, an \{agent\} "she" executes an enquiry into the possible arrival of an object "they", and such an enquiry can be represented by the element \{query\}. The sentence can be summarised as:
\{agent - query - object - indefinable \(\}\).
The concepts of a verbal question and verbal negative apply equally to an existential sentence:
"Is there a fly in the ointment?" "There is/is not a fly in the ointment."
We have seen that the \{verb\} of such a sentence is the state or condition of existence: "there is in the ointment" and the \(\{\) object \(\}\) is that to which it applies "a fly". In the above examples, this \(\{\) verb \(\}\) is questioned or negated, and the existential question and negative can be summarised as:
\[
\{\text { object - query/not - verb }\} \text {. }
\]

The question or negation make the indefinite \(\{\) object \(\}\) an \(\{\) indefinable \(\}\).
A comparison is always a verbal sentence. A comparison between two quantities therefore compares two \(\{\) verb \(\}\) :
"My father lived five years longer than my mother;"
"These apples are 50 pence cheaper than those;"
as does a comparison between two actions or states:
"She rode like a whirlwind." "He lives as though there were no tomorrow."
"He was as rich as Croesus." "He was as rich as if he had won the lottery."

\footnotetext{
\({ }^{332}\) Dillon \& Ó Crónín, 86, 177, 179.
}

\section*{Nominal Sentence}

The purposes of interrogation and negation are different when applied to a \{noun\}. In that case, the sentence is not questioning or denying the action or state of the sentence, but questioning or denying that it applies to one element. That can be the \{subject\}, \{object\}, or any other element which is not the \(\{\) verb\}, or (as we shall see) the \{complement\}, \{adverbial\}, or \{gerund\}. Since the elements in a sentence which are not the \(\{\) verb\} are \{noun\}, we may call this sentence a nominal question and nominal negative. One form is a sentence which questions or denies that the grammatical verb applies to a known entity:
"Was it Mary who lent the book the John?" "It was/was not Mary..."
"Was it a book which Mary lent to John?""It was/was not a book..."
In this instance, the answer is either "yes" or "no". It will noticed that the answer is a focus sentence, and could be expressed:
"The lender of the book to John was/was not Mary."
"What was lent by Mary to John was/was not the book."
Each of these sentences could be an answer to a broader question, whose answer is not "yes" or "no", but any entity which can fulfil that function, whether definite or indefinite:
"Who lent the book to John?" "Mary, not Denise"; "a girl I know", etc.
"What did Mary lend to John?"" "the book, not the paper"; " a book he wanted to read", etc.
These questions again have a focus construction, and could be expressed:
"The person who lent the book to John was who?"
"The thing which Mary leant to John was what?"
It is not the action or state of a grammatical verb which is being enquired into and responded about, but the identifications respectively of the \{agent\} and \{object\}. To refer to them, we may use the term nominal sentence. The difference between a verbal and nominal sentence is therefore not grammatical, but functional. A verbal sentence is one which questions, states, or denies the action or state of the sentence. A nominal sentence is one which questions, states, or denies, an entity connected to the action or state. Its component structure can be understood as:
\{query/not - subject - verb - object - complement\} and
\{subject - verb - query/not - object - complement \}.
Alternatively, we may say that the \{subject\} are "the person who lent the book to John" and "the thing which Mary leant to John", and the corresponding \{verb\} are "was who?" and "was what?". The answers are a \(\{\) verb \(\}\) in the form of:
"was Mary"; "was not Denise"; "was a girl I know", etc;
"was the book"; "was not the paper", "was a book he wanted to read", etc.
Such a component structure is expressed as:
\[
\{\text { subject - query/not - verb }\} .
\]

This is of course the same grammatical structure as we have already defined for a verbal sentence, but without the \{object\} or \{complement\}. It is also the grammatical structure which we suggested for a sentence in focus in Chapter 16. (The Subject as Topic). On that interpretation, when a sentence is in focus, whether a question or its reply, the \(\{\) verb \(\}\) is not the grammatical verb but the element in focus, and the \(\{\) subject \(\}\) is the remainder of the sentence.

Nominal sentences do not only relate to \{subject\} and \{object\}, but to all \{noun\} functions other than a \{complement\}. For instance, a \{noun\} can be an \{instrument\}:
"How did Mary lend the book?""Through the College library service."
or a \(\{\) causer \(\}\) :
"Why did Mary lend the book?" "Because John asked for it."
or a \{competence \(\}\) :
"In what capacity did Mary lend the book?" "As librarian."
or an \{attribute\}:
"How many books did Mary lend to John?" "Six."
or a \(\{\) select \(\}\) :
"What did Mary say?" "That she had let the book to John."
or a \{definite \(\}\) :
"What did Mary object to doing?" "Lending the book to John."
or an \{indefinable \(\}\) :
"What does Mary want to do?" "Lend the book to John."
Each of these questions can be constructed as focus sentences with the enquiry word as \(\{\) verb \(\}\) and the rest of the sentence as \(\{\) subject \(\}\) :
"The means by which Mary lent the book was how?"
"The reason that Mary lent the book was why?"
"The capacity in which Mary lent the book was what?"
"The statement Mary made was what?"
"Mary disliked doing what?"
"Mary wants to do what?"
An alternative meaning of "how?" is "with what effect?":
"How did Mary lend the book?" "Politely." which can be interpreted as:
"The lending of the book by Mary had what effect?" "A polite one."
We noted in the previous section that Irish treats verbal \{not\} and \{query\} as \{verb\}. It also treats nominal enquiry words as \(\{\) verb \(\}\) by following them with a relative clause:
"Cé bheidh ag teacht?" "Who will be coming?" [Who that-will-be at coming?]
"Cá bhfuil tigh Dhomhnaill Uí Chonaill?" "Where is Daniel O’Connell's house?"
[Where that-is house of-Daniel O'Connell?] \({ }^{333}\)
Similarly, In Hausa, nominal enquiry words are followed by the relative form of the grammatical verb, indicating that it is in fact a \{noun\}:
"Mè̀ ya fā`ru?" "What happened?" [What which-did happen?] \({ }^{334}\)
Maori possesses two \{not\} verbs, one nominal and one verbal. In the previous section we noted the verbal \(\{\) not \(\}\), "kāhore". The nominal \(\{\) not \(\}\) is "ēhara":

\footnotetext{
\({ }^{333}\) Dillon \& Ó Crónín, 59, 189.
\({ }^{334}\) Kraft \& Kirk-Greene, 114.
}
"Ēhara tēnā i taku pukapuka." "This is not my book." [Not this at my book.]
"Ēhara a Hari i te minita." "Hari is not the minister." [Not the Hari at the minister.] \({ }^{335}\)
There is also a difference between the discourse structure of a verbal and nominal sentence. If the \{verb\} of both types of sentence are definite and non-negative, they \{select\} an entity from a range of possible definite entities. If they are definite and negative, they deny a connection with the \(\{\) subject \(\}\) :
"Did Mary lend the book to John?" "Yes"/"No".
"What did Mary do?" "She lent the book to John."
"What did Mary not do?" "She did not lend the book to John."
Such a sentence has the discourse structure:
\(\{\) definite - query - select \(\}\{\) definite - select \(\} /\left\{\right.\) definite \(_{1}-\) not - definite \(\left._{2}\right\}\).
If the \{verb\} of both types of sentence are indefinite and non-negative, they select an \{indefinite\} entity from a range of possible indefinite entities according to a \{circumstance\}:
"Did Mary lend a book to John?" "Yes, she lent him a book which he wanted."
"What did Mary do?" "She lent John a book which he wanted."
"Was it a book which Mary lent to John?" "Yes, one he wanted."
"What did Mary lend to John?" "A book which he wanted."
Such a sentence has the discourse structure:
\(\{\) definite - query - select \(\}\) \{definite - indefinite - circumstance .
However, a \{verb\}can be indefinite and negative only in the case of a verbal sentence:
"Did Mary lend a book to John?" "No."
"What did Mary not do?" "She did not lend John a book."
As we noted, this has the structure:
\{definite - query/not - indefinable \(\}\).
The \(\{\) verb \(\}\) of a nominal sentence cannot be indefinite and negative:
*"Was it a book which Mary did not lend to John?"
*"What did Mary lend to John?" "No book."/"She lent John nothing."
The sentences "No book" or "She lent nothing to John" cannot be the answer to "What did Mary lend to John?", since that question assumes that a loan has occurred, and the replies deny that a loan has occurred. They can only be the replies to the verbal questions:
"Did Mary lend John anything?" "Did Mary lend John a book?"
Of course, in an actual discourse the exchange "What did Mary lend to John?" "She lent John nothing" can occur, but only because the respondent disputes the premise of the question.

\section*{Complementary Sentence}

Our component description of a sentence is \{subject - verb - object - complement \}, supported by other \{noun\} elements such as \{instrument\}, \{recipient\}, and \{causer\}. For many sentence types, it is possible for the \{complement \} to be queried, asserted, or denied independently of the \{object\} or \{verb\}. Such a sentence queries, asserts, or denies that a \{verb\} places an \{object\} in a state or condition described by a \{complement\}. For example:

\footnotetext{
\({ }^{335}\) Foster, 102.
}

> "What colour did he paint the fence?"""Green, not brown."
> "Where did she put the vase?""On the shelf, not under it."
> "What sort of roofs were the houses given?" "Slate, not tiles."
> "What did you notice about the house?" "It was old, not new."
> "What did they say about the play?""It was entertaining, not boring."
> "Did Jack deny that he stole the tarts?""Yes"/"No".
> "To whom did Mary lend the book?"""John, not Philip."
> "Who was appointed Prime Minister?""Lloyd George, not Asquith."

Such a sentence is a complementary sentence. Its comment is the \{complement\} and the topic is the \{subject\}, \{verb\}, and \{object\}. A negative complementary sentence is one which states that a state or condition does not apply to the \{object \(\}\). We have already noted one example (Chapter 15., The Negative Perception Sentence; The Negative Communication Sentence):
"What did John see about the book?" "It was by Dickens, not George Eliot."
"What did Mary remember about the date of the appointment?" "It was today, not tomorrow."
"What did John say about the book?" "It was interesting, not boring."
For other sentence types, the \{complement\} is not queried, asserted, or denied independently of the \{verb\}, and a complementary sentence is therefore a verbal sentence:
"Was the door locked?" "Yes"/"No".
"Were you pleased with the play." "Yes"/"No".
"Do you want a muffin?" "Yes"/"No".
Complementary sentences can be described by means of the component elements:
\[
\{\text { subject - verb - object - query/not - complement }\}
\]
or their equivalent in functional notation, for example:
\[
\begin{aligned}
& \{\text { agent }- \text { transform }- \text { object }- \text { query } / \text { not }- \text { attribute }\} \\
& \{\text { agent }- \text { possession }- \text { object }- \text { query } / \text { not }- \text { recipient }\} .
\end{aligned}
\]

The discourse structure of a complementary sentence is the same as that of other types of sentence, since it is the function of all comments to select one definite or indefinite entity from others:
\(\{\) definite - query \(/\) not - select \(\} /\{\) definite - query/not - indefinable - circumstance \(\}\).
Complementary sentences can of course be negated, although such sentences rarely arise except in formal logic or jest:
"What colour did he not paint the fence?"
"Where did she not put the vase?"
"To whom did she not lend the book?"
We have noted that a complementary sentence queries, asserts, or denies that a \{verb\} places an \{object\} in a state or condition described by a \{complement\}. An extension of this is a sentence which reverses a previous state or condition that the \(\{\) object \(\}\) was in:
"He unlocked the door." "Mary withdrew her loan of the book."
"His father got him out of debt." "The soldiers were disarmed."
"He was de-selected as candidate for the election."
"She has lost her car key."
Further examples are verbs of motion from, off, or out of a location:
"Mary took the train from Cambridge to London."
"James flew back from America."
"The wind blew the chair across the lawn."
"The lorry knocked Henry off his bicycle."
"He levered the nail out of the wood with pliers."
"She pulled the chair away from the wall."
Such a sentence can be called a reversal sentence, and a \{complement\} which is reversed can be called a reversal. Since both the \{object \(\}\) and the reversal are known entities, a reversal sentences does not contain any indefinite entities, and its purpose is to state that a state or condition is reversed rather than left unchanged:
"He unlocked the door (rather than leaving it locked)."
"She withdrew the loan (rather than continuing to grant it)."
"He was de-selected as candidate (rather than remaining candidate)."
"She has lost her car key (rather than continuing to have it available)."
"James flew back from America (rather than staying there)."
"The wind blew the chair across the lawn (so that it was not where it was)."
"The lorry knocked Henry off his bicycle (so that he was no longer on it)."
The discourse structure is therefore \(\{\) definite - aorist - select\}. The component structure again indicates that, in consequence of the action of the verb, the \{complement\} does not apply to the \{object\}:
\(\{\) subject - verb - object - not - complement \(\}\).
There are related sentences which state that the \{complement \(\}\) does not apply to the \{object\} but are not a reversal of a previous state:
"The door was unlocked." "She did not loan the book."
"He was out of debt." "The soldiers were unarmed."
"He was not a candidate for the election."
"Her car key is not to hand."
"James is not in America."
"Henry is off his bicycle."
"The nail is not in the wood."
For these sentences, the component structure is that of a verbal sentence:
\(\{\) subject - not - verblcomplement - object \(\} /\{\) subjectlobject - not - verb \(\backslash\) complement \(\}\).
Another instance of a complementary sentence is a cessative, in which an agent or instrument ceases to engage in an action or state (Chapter 15., The Inchoative and Cessative Sentences):
"She stopped writing." "She stopped being happy."
"The rain stopped falling." "The weather stopped being hot."
In this case, the agent or instrument is its own \(\{\) object \(\}\) and the \(\{\) complement \(\}\) is the action or state that it is no longer engaged in. The \(\{\) verb \(\}\) is the act of cessation:
\{subjectlobject - verb - not - complement \(\}\).
We have so far been considering complementary sentences for a definite \{complement\}. Such a sentence queries, assets, or denies that an object is in a known state or condition, or in the case of a reversal sentence it states that a known state or condition is reversed. A complementary sentence may also refer to a hypothetical state or condition, which it queries, asserts or denies to apply to an \(\{\) object \(\}\). An example which we have already observed is the prevention of a hypothetical event (Chapter 15., The Causative and Preventive Sentences):
"She stopped her secretary preparing a reply."
"They prevented the meeting from taking place."
"He avoided getting into debt."

In these examples, the preparation of the reply, the occurrence of the meeting, and the getting into debt are hypothetical events which do not occur because of the action of the sentence. Other examples are a supposition that an event will not arise and a proposal that an event should not occur:
"I hope that it will not rain tomorrow."
"I forbid you from seeing her again."
Further examples are a perception or communication that an event has not occurred:
"The dog was not heard to bark in the night-time."
"Sherlock Holmes remarked that the dog did not bark in the night-time."
These all have the same component structure, where \{complement \(\}\) is indefinable:
\(\{\) subject - verb - object - not - complement \(\}\).
Many languages indicate this construction by a suitable verb, an object, and a complement which indicates what is not occurring. Some also mark the complement with a negative:

French: "J'évite qu'on ne me voie." "I avoid being seen." [I avoid that one not me sees \(\left.{ }_{\text {(subjunctive). }}\right]^{336}\)

Latin: "Atticus, nē qua sibi statua pōnerētur, restitit."
(Nepos)
"Atticus opposed having any statue raised to him."
[Atticus, lest any to-himself statue be-placed \({ }_{\text {(subjunctive) }}\), resisted.]
Indonesian:
"Bahasa Indonesia tidak dapat tidak terkena hukum perubahan."
"Indonesian cannot avoid being subject to the laws of change."
[Language Indonesia not can not get law change.] \({ }^{337}\)

\section*{Adverbial Sentence}

In Chapter 17., we defined an \{adverbial\} as a non-restrictive qualifier to a \(\{\) verb \(\}\) and showed that it could be represented by a sentence of which the \(\{\) verb \(\}\) is the \(\{\) subject \(\}\) in the form of a verbal noun, and the \(\{\) adverbial \(\}\) is the \(\{\) verb \(\}\), as in the following examples:
"He cleaned the drain thoroughly."
"I firmly promise to pay."
"The houses were roofed in bad weather."
"We met on Tuesday, as announced."
"We were greatly surprised at the result."
"She urgently needed shelter."
"She wrote the thesis in Cambridge."
"His cleaning of the drain was thorough."
"My promise to pay is firm."
"The roofing was done in bad weather."
"Our meeting had been announced."
"Our surprise at the result was great."
"Her need for shelter was urgent."
"The thesis-writing took place in Cambridge."

This representation of an \{adverbial\} is called an adverbial sentence. It assumes that that part of the sentence which is not the \{adverbial\} is the topic and the \{adverbial\} is the comment.

An \{adverbial\} may be queried, asserted or denied in the same way as a \(\{\) verb\}, \{noun\}, or \{complement \}. The nature of such a question and its reply places the \{adverbial\} in focus, so that the structure of an adverbial sentence is assumed:
"Did he clean the drain thoroughly?"/"Was his cleaning of the drain thorough?" "Yes"/"No".
"Did she urgently need shelter?"/"Was her need for shelter urgent?" "Yes"/"No".
The first of each pair of sentences is ambiguous as to what is being questioned: the need for shelter or its urgency? The second sentence of each pair, the adverbial sentence, focuses the question on the

\footnotetext{
\({ }^{336}\) Fraser \& Squair, 311.
\({ }^{337}\) Sneddon, 202.
}
\{adverbial\}. Adverbial questions can take a "yes"/"no" form, as in the above examples, or employ an enquiry word

> "To what extent did he clean the drain?"""Thoroughly."
> "To what extent did she need shelter?" "Urgently."

We also noted in Chapter 17. that \{adverbial\} fulfil a range of functions on \{verb\}, and classified \{adverbial\} by those functions. We now list the adverbial questions and responses for the functions we identified:
\begin{tabular}{|c|c|}
\hline \{locative\} & "Did she write the thesis in Cambridge?" "Yes"/"No". "Where did she write the thesis?" "In Cambridge." \\
\hline \{component & \begin{tabular}{l}
"Did he clean the drain thoroughly?" "Yes"/"No". \\
"To what extent did he clean the drain?" "Thoroughly."
\end{tabular} \\
\hline \{time \(\}\) & \begin{tabular}{l}
"Did we go home on Friday?" "Yes"/"No". \\
"When did we go home?" "On Friday."
\end{tabular} \\
\hline \{constitute\} & \begin{tabular}{l}
"Could we go out while it was raining?" "Yes"/"No". \\
"How long could we not go out?" "While it was raining."
\end{tabular} \\
\hline \{effect\} & \begin{tabular}{l}
"Does walking a mile every day keeps her fit?" "Yes"/"No". \\
"What keeps her fit?" "Walking a mile every day."
\end{tabular} \\
\hline \{causer\} & \begin{tabular}{l}
"Was our meeting in the bar at 19.00 arranged?" "Yes"/"No". \\
"Why did we meet in the bar at 19.00 ?" "We had arranged to do so."
\end{tabular} \\
\hline & \begin{tabular}{l}
"Will you see him even if he comes." "Yes"/"No". \\
"What will not cause you to see him?" "His coming."
\end{tabular} \\
\hline \{depend\} & "Is my seeing him dependent on his coming?" "Yes"/"No". "On what condition should I see him?" "If he should come." \\
\hline \{compare \} & \begin{tabular}{l}
"Does John run faster than Jim?" "Yes"/"No". \\
"How fast does John run, compared to Jim?""Faster."
\end{tabular} \\
\hline & \begin{tabular}{l}
"Did she work hard enough to pass the exam?" "Yes"/"No". \\
"How adequate was her work?" "Enough to pass the exam."
\end{tabular} \\
\hline \{perceive & \begin{tabular}{l}
"Did we hear about his passing of the exam?" "Yes"/"No". \\
"How was his passing of his exam learned about?" "We were told of it."
\end{tabular} \\
\hline \{communicate\} & \begin{tabular}{l}
"Did we announce his passing if his exam?" "Yes"/"No". \\
"How was his passing of the exam communicated?" "We announced it."
\end{tabular} \\
\hline \{opinion\} & \begin{tabular}{l}
"Were we surprised at his passing of the exam?" "Yes"/"No". \\
"How did we react to his passing of the exam?" "We were surprised."
\end{tabular} \\
\hline \{suppose\} & \begin{tabular}{l}
"Was his passing of the exam expected?" "Yes"/"No". \\
"How was his passing of the exam anticipated?" "It was expected."
\end{tabular} \\
\hline \{propose\} & \begin{tabular}{l}
"Was his passing of the exam promised?" "Yes"/"No". \\
"How was his passing of the exam anticipated?" "It was promised."
\end{tabular} \\
\hline \{constitute\} & \begin{tabular}{l}
"Was Montmorency's sleep that of the just?" "Yes"/"No". \\
"What sort of sleep was Montmorency's?" "The sleep of the just."
\end{tabular} \\
\hline \{benefit\} & \begin{tabular}{l}
"Did Henry cook lunch for his family?" "Yes"/"No". \\
"For whom did Henry cook lunch?" "For his family."
\end{tabular} \\
\hline
\end{tabular}
\{attribute\} "Does the post come twice a day?" "Yes"/"No".
"How often does the post come?" "Twice a day."
Each of these sentences has the component structure:
\[
\{\text { subject }- \text { verb }- \text { object }-(\text { complement })-(\text { query } / \text { not })-\text { adverbial }\} .
\]

The "yes"/"no" sentence questions, asserts, or denies whether the \{verb\} is qualified by the \{adverbial\}. The enquiry word sentence questions, asserts, or denies what particular \{adverbial\} qualifies the \(\{\) verb \(\}\).

Irish and Hausa again treat an adverbial enquiry word as a \{verb\}, followed by a relative clause in which the grammatical verb is treated as a \{noun\}:
"Cathain a ithis do dhinnèar?" "When do you have dinner?"
[When that you-eat for dinner?] \({ }^{338}\)
"Ìnā ka tàfi dà mōtàrmù?" "Where did you go with our car?"
[Where which-you-did go with car-the-our?] \({ }^{339}\)

\section*{Gerundial Sentence}

We saw in Chapter 5. (Gerund) and Chapter 17. (Adverbials in Grammar) that a gerund expresses the state or condition of the subject of a sentence at the time that the sentence occurs:
"Being very suspicious, she hesitated to open the door."
"Full of regret, he apologised."
"He met his neighbour while walking the dog."
"She came running."
"When ripe, the apples should be picked before they fall."
"Although very young, he was elected to Parliament."
"As your solicitor, I would say 'Chance it'".
"Full of happiness, she played with great style."
"She excitedly opened the parcel."
"They went home to have dinner."
A gerund expresses in a concise manner a functional relationship between the state or condition of the subject and the action of the sentence. This functional relation may be shown by an alternative construction, which places the action of the sentence in subject position and the gerund as the verb. We may term this alternative construction a gerundial sentence:
"Her hesitation to open the door was because she was suspicious."
"His apology was because he was full of regret."
"His encounter with his neighbour occurred while he was walking the dog."
"Her advance was at a running pace."
"To prevent apples falling, picking should be when they are ripe."
"His election to Parliament was notwithstanding his youth."
"My advice to chance it is given as your solicitor."
"Her stylish play was because she was happy."
"Opening the parcel made her excited."
"Their going home was in order to have dinner."
A gerundial sentence answers the question:
"Why did she hesitate to open the door?"
"Why did he apologise?"

\footnotetext{
\({ }^{338}\) Dillon \& Ó Crónín, 59.
\({ }^{339}\) Kraft \& Kirk-Greene, 313.
}
"When did he meet his neighbour?"
"How did she come?"
"In what condition should apples be picked?"
"Despite what impediment was he elected to Parliament?"
"Your advice to me is given in what capacity?"
"Why did she play with great style?"
"What effect on her did opening the parcel have?"
"Why did they go home?"
A gerundial sentence is therefore one which queries, asserts, or denies that the subject of an action is in a particular state or condition when the action occurs. That state or condition fulfils a range of functions on the action \{verb\}, in a similar way to an adverbial sentence. In our component terminology, the gerund can be identified as a distinct element \{gerund\}:
\[
\{\text { subject }- \text { verb }- \text { object }-(\text { complement })-(\text { query } / \text { not })-\text { gerund }\} .
\]

The \(\{\) subject \(\}\) of a gerundial sentence is again the \(\{\) verb \(\}\) in the form of a verbal noun and the \(\{\) verb \(\}\) is the \(\{\) gerund\}. The difference from an adverbial sentence is that the \{gerund\} has a grammatical subject which is the same as that of the \{verb\}. \{gerund\} can be classified by the function that it performs on the action \(\{\) verb \(\}\), in the same way as \(\{\) adverbial \(\}\) :
\begin{tabular}{ll} 
\{causer\} & "Being very suspicious, she hesitated to open the door." \\
& "Her hesitation to open the door was because she was suspicious." \\
& "Full of regret, he apologised." "His apology was because he was full of regret." \\
& "His election to Parliament was notwithstanding his youth." \\
& "They went home to have dinner." "Their going home was in order to have dinner." \\
\{time\} & \begin{tabular}{l} 
"He met his neighbour while walking the dog."
\end{tabular} \\
& \begin{tabular}{l} 
"His encounter with his neighbour occurred while he was walking the dog."
\end{tabular} \\
\{style\} & "Picking of apples should occur when they are ripe."
\end{tabular}

The range of functions performed by \{gerund \(\}\) is therefore less than that of \{adverbial \(\}\).
A \{gerund\} and an \{adverbial\} can be combined in one sentence:
"Excited, she opened the parcel for her friend."
"She spoke without hesitation twice that day."

\section*{19. Illustrations}

In this chapter, we apply the methodology described in the preceding chapters to some sample sentences.
(i) "Mike's boss gave him a day off yesterday."

It is assumed that the topic is "Mike's boss", although in reality "Mike" is as likely. It is also assumed that "yesterday" relates to "day", not to "gave".
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Sentence & Mike's & boss & gave & him & a day off & yesterday \\
\hline Discourse structure & \multicolumn{2}{|l|}{\{definite\}} & \{aorist & \{circumstance\} & \multicolumn{2}{|l|}{\{indefinite\}} \\
\hline Functional structure & \multicolumn{2}{|l|}{\{agent \(\}_{1}\)} & & \{recipient \(\}_{2}\) & \multicolumn{2}{|l|}{\{object \(\}_{3} \backslash\) \{possession \(\}_{4}\)} \\
\hline Functional qualifiers & \{target \(\}_{2}\) & \{role \(\}_{1}\) & & & \{object \(\}_{4}\) & \{time\} \\
\hline Component structure & \multicolumn{2}{|l|}{\{subject\}} & \{verb \} & \{complement \} & \multicolumn{2}{|l|}{\{object\}} \\
\hline
\end{tabular}

If the topic had in fact been "Mike", so that the sentence was understood (but not expressed) as "Mike was given a day off yesterday by his boss", the functional structure would be the same, but in the discourse structure, \(\{\) definite \(\}\) would be exchanged with \(\{\) circumstance \(\}\).
(ii) "Mike was peeling the potatoes for today's lunch."
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Sentence & Mike & was peeling & the potatoes & for & today's & lunch. \\
\hline Discourse structure & \{definite\} & \multicolumn{5}{|l|}{\{imperfect \(\} \backslash\{\) select \(\}\)} \\
\hline Functional structure & \{agent \(\}\) & \{transform\} \(\backslash\) attribute & \multicolumn{4}{|l|}{\{object \(\}_{1}\)} \\
\hline Functional qualifiers \({ }_{1}\) & & & \{object \(\}_{1}\) & \{benefit\} & \multicolumn{2}{|l|}{\{benefit \(\}_{2}\)} \\
\hline Functional qualifiers \({ }_{2}\) & & & & & \{time\} & \{object \(\}_{2}\) \\
\hline Component structure & \{subject\} & \{verb\} \(\backslash\) \{complement \(\}\) & \multicolumn{4}{|l|}{\{object \(\}\)} \\
\hline
\end{tabular}

The verb "peel" is both transforming the potatoes, and removing their peel.
(iii) "King Canute has sternly ordered the waves to retreat."
\begin{tabular}{|c|c|c|c|c|c|}
\hline Sentence & King Canute & has ordered & the waves & to retreat & sternly. \\
\hline Discourse structure \({ }_{1}\) & \{definite\} & \multicolumn{3}{|l|}{\{perfect \(\} \backslash\{\) select \(\}\)} & \\
\hline Functional structure \({ }_{1}\) & \{agent \({ }_{1}\) & \{propose\} & \{recipient \(\} \backslash\{\) object \(\}\) & \{indefinable\} & \\
\hline Functional qualifiers & \{object \({ }_{1}\) - role \} & & & & \\
\hline Discourse structure \({ }_{2}\) & \{definite\} & \multicolumn{4}{|l|}{\{perfect \(\} \backslash\{\) select \(\}\)} \\
\hline Functional structure \(_{2}\) & \{object\} & \multicolumn{3}{|l|}{\{definite\}} & \{style\} \\
\hline
\end{tabular}

This sentence contains two actions or states: the king's ordering of the waves, and his stern style in doing so. It is therefore two sentences; the second (his stern style) being an observation on the first.
(iv) "Sarah's work pleased her geography teacher."
\begin{tabular}{|c|c|c|c|}
\hline Sentence & Sarah's work & pleased & her geography teacher. \\
\hline Discourse structure & \{definite\} & \multicolumn{2}{|l|}{\{aorist \(\backslash\) \select \(\}\)} \\
\hline Functional structure & \{object \(\}_{1}\) & \{opinion\} & \{recipient \(\}_{2}\) \\
\hline Functional qualifiers & \{participate \({ }_{1}\) - agent \(_{3}\) \} & & \{role \({ }_{2}\) - competence - target \(_{3}\) \} \\
\hline Component structure & \{subject \(\} \backslash\{\) object \(\}\) & \{verb\} & \{recipient\} \\
\hline
\end{tabular}

The sentence describes how Sarah's work is pleasing to the teacher and is therefore the \{object \(\}\) of the opinion. It is also the \(\{\) subject \(\}\) of the sentence.
(v) "The date that you have proposed is convenient for my client."
\begin{tabular}{|l|l|l|l|}
\hline Sentence & The date that you have proposed & is convenient & for my client. \\
\hline Discourse structure & \(\{\text { definite }\}^{l}\) & \multicolumn{1}{l|}{ \{elect \(\}\)} & \\
\hline Functional structure & \(\left\{\right.\) object \(_{1}\) & \(\{\) benefit \(\}\) & \(\{\text { beneficiary }\}_{2}\) \\
\hline Functional qualifiers & oobject \(_{1}-\) propose \(_{3}-\) agent \(\} \backslash\{\text { perfect }\}_{3}\) & & \(\left\{\right.\) role \({ }_{2}-\) target \(\}\) \\
\hline Component structure & \(\{\) subject \(\} \backslash\{\) object \(\}\) & \(\{\) verb \(\}\) & \(\{\) beneficiary \(\}\) \\
\hline
\end{tabular}

This sentence contains a restrictive relative clause, "that you have proposed", which is perfective since the consequences of the proposal are being described. The main verb "is convenient" is stative, but its aspect is not relevant to the discourse structure. The date is the \(\{\) object \(\}\) of the convenience, but is also the \(\{\) subject \(\}\) of the sentence.
(vi) "Because it was sunny yesterday, we went out."

Assuming that both parts of this expression convey new information, they are two sentences: "It was sunny yesterday"; "Yesterday's sun caused us to go out", the second sentence being an adverbial to the first.
\begin{tabular}{|c|c|c|c|c|c|}
\hline Sentence & It was sunny & yesterday & so & we & went out. \\
\hline Discourse structure \({ }_{1}\) & \{indefinite \({ }_{1}\) & \{circumstance \(\}\) & & & \\
\hline Functional structure \(_{1}\) & \{object\} & \{time\} & & bial\} & \\
\hline Comp. structure \({ }_{1}\) & \{verb\} & \{circumstance \(\}\) & & bial\} & \\
\hline Discourse structure \({ }_{2}\) & \multicolumn{4}{|l|}{\{definite} & \{select \} \\
\hline Functional structure \({ }_{2}\) & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\{causer\}}} & & \{agent \(\backslash \backslash\{\) object \(\}\) & \{move \(\}\) \\
\hline Comp. structure \({ }_{2}\) & & & & \{subject \(\} \backslash\{\) object \(\}\) & \{verb\} \\
\hline
\end{tabular}
(vii) "Because it rained yesterday, we did not go out."

Assuming that both parts of this expression convey new information, they are two sentences: "It rained yesterday"; "Yesterday's rain caused us not to go out", the second sentence being an adverbial to the first.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Sentence & It rained & yesterday & so & we & did not & go out. \\
\hline Discourse structure \({ }_{1}\) & \({\text { \{indefinite }\}_{1}}\) & \{circumstance\} & \multicolumn{4}{|l|}{\{adverbial\}} \\
\hline Functional structure \({ }_{1}\) & \{object\} & \{time\} & \multicolumn{4}{|l|}{\{adverbial\}} \\
\hline Comp. structure \({ }_{1}\) & \{verb \} & \{circumstance \(\}\) & \multicolumn{4}{|l|}{\{adverbial\}} \\
\hline Discourse structure \({ }_{2}\) & \multicolumn{4}{|l|}{\{definite\}} & \{not \(\}\) & \{definite \\
\hline Functional structure \({ }_{2}\) & \multicolumn{3}{|l|}{\{causer\}} & \{agent\} \(\backslash\) \{object \} & \{not\} & \{move\} \\
\hline Comp. structure \({ }_{2}\) & & & & \{subject \(\} \backslash\{\) object \(\}\) & \multicolumn{2}{|l|}{\{verb\}} \\
\hline
\end{tabular}
(viii) "Come when you can."
\begin{tabular}{|l|l|l|l|l|}
\hline Sentence & Come & when & you & can. \\
\hline Discourse structure & \(\{\) indefinable \(\}\) & \multicolumn{4}{l|}{ \{definite \(\}\)} & \\
\hline Functional structure & \(\{\) object \(\}\) & \(\{\text { time }\}_{1}\) & & \(\{\) able \(\}\) \\
\hline Functional qualifiers & \(\{\text { indefinable }\}_{1}\) & \{recipient \(\}\) & \\
\hline Component structure & \(\{\) verb \(\}\) & \{circumstance \(\}\) & & \\
\hline
\end{tabular}
(ix) "Do as I say."
\begin{tabular}{|l|l|l|l|l|}
\hline Sentence & Do & as & I & say. \\
\hline Discourse structure & \(\{\) indefinable \(\}\) & \(\{\) definite \(\}\) & \multicolumn{2}{l|}{} \\
\hline Functional structure & \(\{\) perform \(\}\) & \(\{\text { target }\}_{1}\) & \{propose \(\}\) \\
\hline Functional qualifiers & \(\{\text { indefinable }\}_{1}\) & \multicolumn{4}{l|}{} \\
\hline Component structure & \(\{\) verb \(\}\) & \(\{\) circumstance \(\}\) & & \\
\hline
\end{tabular}
(x) "She passed her exam with flying colours."

This is again two sentences: "She passed her exam"; "Her passing of her exam was with flying colours". "With flying colours", being a metaphor, is treated as a single word.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Sentence & She & passed & her & exam & with colours. & flying \\
\hline Discourse structure \({ }_{1}\) & \{definite & \multicolumn{3}{|l|}{\{select\}} & \{adverbial & \\
\hline Functional structure \({ }_{1}\) & \{agent \(\}\) & \{perform\} \(_{1}\) & \multicolumn{2}{|l|}{\{target \(\}_{2}\)} & \{adverbial\} & \\
\hline Funct. qualifiers \({ }_{1}\) & & \{benefit \(\}_{1}\) & \{beneficiary\} & \{object \(\}_{2}\) & & \\
\hline Comp. structure \({ }_{1}\) & \{subject \(\} \backslash\{\) object \(\}\) & \{verb\} & \{beneficiary\} & \{target & \{adverbial\} & \\
\hline Discourse structure \({ }_{2}\) & \multicolumn{4}{|l|}{\{definite} & \{select\} & \\
\hline Functional structure \({ }_{2}\) & \{object \(\}\) & \multicolumn{3}{|l|}{\{definite\}} & \{style\} & \\
\hline Comp. structure \({ }_{2}\) & \multicolumn{4}{|l|}{\{subject \(\} \backslash\{\) object \(\}\)} & \{verb\} & \\
\hline
\end{tabular}
(xi) "The first person to gain 100 points wins the game."
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Sentence & The first & person & to gain & 100 & points & wins & the game. \\
\hline Disc. structure & \multicolumn{5}{|l|}{\{definite \({ }^{\text {a }}\)} & \multicolumn{2}{|l|}{\{general \(\} \backslash\{\) select \(\}\)} \\
\hline Funct. structure & \multicolumn{5}{|l|}{\{agent \(\}_{1}\)} & \{perform & \{target\} \\
\hline Funct. qualifiers \({ }_{1}\) & \{compare \(\}\) & \{object \(\}_{1}\) & \multicolumn{3}{|l|}{\{base\}} & & \\
\hline Funct. qualifiers \({ }_{2}\) & & & \{possession\} & \{object \(\}_{2}\) & & & \\
\hline Funct. qualifiers \({ }_{3}\) & & & & \{attribute \(\}\) & \{obj. \(\}_{2}\) & & \\
\hline Comp. structure & \multicolumn{5}{|l|}{\{subject\}} & \{verb\} & \{target\} \\
\hline
\end{tabular}

The function \{compare\} compares "the person" with the class of all those obtaining points.
The sentence is \(\{\) general \(\}\) as it states a general rule.
(xii) "With good luck, we will win the prize."
\begin{tabular}{|c|c|c|c|c|}
\hline Sentence & With good luck & we & will win & the prize. \\
\hline Discourse structure \({ }_{1}\) & \{adverbial\} & \{definite\} & \multicolumn{2}{|l|}{\{prospect\} \(\backslash\) \{select\}} \\
\hline Functional structure \(_{1}\) & \{adverbial\} & \{agent \(\} \backslash\) \{recipient \(\}\) & \{possession\} & \{object\} \\
\hline Comp. structure \({ }_{1}\) & \{adverbial\} & \{subject \(\} \backslash\{\) recipient \(\}\) & \{verb\} & \{object\} \\
\hline Discourse structure \({ }_{2}\) & \{select\} & \multicolumn{3}{|l|}{\{definite\}} \\
\hline Functional structure \({ }_{2}\) & \{benefit\} & \{beneficiary\} & \multicolumn{2}{|l|}{\{definite\}} \\
\hline Comp. structure \({ }_{2}\) & \{verb\} & \{subject\} & \multicolumn{2}{|l|}{\{definite\}} \\
\hline
\end{tabular}

The first sentence addresses the question: "Will you win the prize?", the answer being "Yes". "The second sentence addresses the question: "What advantage will you need to win the prize?", the answer being "Good luck".
(xiii) "Why did you say that?"
\begin{tabular}{|l|l|l|l|l|}
\hline Sentence & Why & you & \multicolumn{1}{l|}{ did say } & that? \\
\hline Discourse structure & \{query - select \(\}\) & \(\{\) definite \(\}\) & \multicolumn{2}{l|}{} \\
\hline Functional structure & \(\{\) query - causer \(\}\) & \(\{\) agent \(\}\) & \{communicate \(\}\) & \(\{\) object \(\}\) \\
\hline Component structure & \(\{\) query - causer \(\}\) & \(\{\) subject \(\}\) & \(\{\) verb \(\}\) & \(\{\) object \(\}\) \\
\hline
\end{tabular}
(xiv) "I said that because I was angry."
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Sentence & I & said & that & because & I & was angry. \\
\hline Discourse structure & \multicolumn{3}{|l|}{\{definite\}} & \multicolumn{3}{|l|}{\{select\}} \\
\hline Functional structure \(_{1}\) & \{agent \(\}_{1}\) & \{communicate\} & \{object\} & \multicolumn{3}{|l|}{\{causer\} \({ }_{2}\)} \\
\hline Comp. structure \({ }_{1}\) & \{subject\} & \{verb\} & \{object \(\}\) & \multicolumn{3}{|l|}{\{causer\}} \\
\hline Functional structure \(_{2}\) & & & & & \{object \(\}_{1}\) & \{effect \(\}_{2}\) \\
\hline Comp. structure \({ }_{2}\) & & & & & \begin{tabular}{l}
\{subject\}\} \\
\{object \}
\end{tabular} & \{verb\} \\
\hline
\end{tabular}

In discourse terms, this sentence is: "My saying that was caused by my anger." The caused clause: "I said that" is the topic and the causing clause: "I was angry" is the comment.
(xv) "How did you do that so quickly?"
\begin{tabular}{|c|c|c|c|c|c|}
\hline Sentence & How & you & did do that & so & quickly? \\
\hline Discourse structure & \{query - select\} & \multicolumn{4}{|l|}{\{definite} \\
\hline Functional structure & \{query - instrument\} & \{agent \(\}\) & \{participate \} & \multicolumn{2}{|l|}{\{circumstance \(\}_{1}\)} \\
\hline Functional qualifiers & & & & \{attribute\} & \{component \(\}_{1}\) \\
\hline Component structure & \{query - instrument \(\}\) & \{subject\} & \{verb\} & \multicolumn{2}{|l|}{\{circumstance\}} \\
\hline
\end{tabular}
(xvi) "I used a computer to do it."
\begin{tabular}{|c|c|c|c|c|}
\hline Sentence & I & used & a computer & to do it. \\
\hline Discourse structure & \{definite\} & \{aorist \} & \{indefinite\} & \{circumstance \(\}\) \\
\hline Functional structure & \{agent \(\} \backslash\{\) beneficiary & \multicolumn{2}{|l|}{\{benefit\}} & \{definite \(\}_{1}\) \\
\hline Functional qualifiers & & & & \{participate \({ }_{1}\) \\
\hline Component structure & \{subject\}\\{beneficiary } & \{verb \} & \{object & \{definite \\
\hline
\end{tabular}
(xvii) "Which bicycle did you borrow?"
\begin{tabular}{|l|l|l|l|l|}
\hline Sentence & Which bicycle & \multicolumn{1}{l|}{ you } & \multicolumn{1}{l|}{ did borrow } & \multicolumn{1}{l|}{ this morning? } \\
\hline Discourse structure & \{query - select \(\}\) & \(\{\) aorist \(\} \backslash\{\) definite \(\}\) & \\
\hline Functional structure & \{query - object \(\}\) & \(\{\) agent \(\}\) & \{possession \(\}\) & \{circumstance \(\}\) \\
\hline Functional qualifiers & \multicolumn{4}{l|}{} \\
\hline Component structure & \(\{\) object \(\}\) & \(\{\) subject \(\}\) & \(\{\) object \(\}\) & \(\{\) time \(\}\) \\
\hline
\end{tabular}
(xviii) "Although young, she is already wealthy."
\begin{tabular}{|c|c|c|c|c|c|}
\hline Sentence & Young & although, & she & is already & wealthy. \\
\hline Discourse structure \({ }_{1}\) & \{indefinite\} & & \{definite\} & & \\
\hline Functional structure \(_{1}\) & \{component \} & & \{object\} & & \\
\hline Discourse structure \({ }_{2}\) & \multicolumn{3}{|l|}{\{definite\}} & \begin{tabular}{l}
\{already\}\} \\
\{circumstance\}
\end{tabular} & \{indefinite\} \\
\hline Comp. structure \({ }_{1}\) & \multicolumn{2}{|l|}{\{gerund\}} & \{subject\} & \{verb \} & \{complement\} \\
\hline Functional structure \({ }_{2}\) & \{causer\} & \[
\begin{aligned}
& \text { \{not - causer } \\
& - \text { not }\} \\
& \hline
\end{aligned}
\] & \{object\} & \{circumstance\} & \{indefinite\} \\
\hline Funct. qualifiers \({ }_{2}\) & \{component \(\}\) & & & & \{possession object \(\}\) \\
\hline Comp. structure \({ }_{2}\) & \{subject\} & \{verb\} & \{object \(\}\) & \{complement \} & \\
\hline
\end{tabular}

This is the compound sentence: "She is young"; "Her youth does not prevent her being already rich". The double negative means that "wealthy" is \{indefinite\}, not \{indefinable\}.
(xix) "Although clever, he is not yet rich."
\begin{tabular}{|c|c|c|c|c|c|}
\hline Sentence & Clever & although, & he & is not yet & rich \\
\hline Discourse structure \({ }_{1}\) & \{indefinite\} & & \{definite & & \\
\hline Functional structure \({ }_{1}\) & \{attribute \} & & \{object\} & & \\
\hline Comp. structure \({ }_{1}\) & \multicolumn{2}{|l|}{\{gerund\}} & \{subject \({ }^{\text {a }}\) & \{verb & \{complement\} \\
\hline Discourse structure \({ }_{2}\) & \multicolumn{3}{|l|}{\{definite\}} & \{still\} \{not\} & \{indefinable\} \\
\hline Functional structure \(_{2}\) & \{instrument & \{not - causer\} & \multicolumn{3}{|l|}{\{indefinable \(\}_{1}\)} \\
\hline Funct. qualifiers \({ }_{2}\) & \{attribute\} & & \{recipient \(\}\) & \(\{\mathrm{not}\}_{1}\) & \{possession \} \\
\hline Comp. structure \({ }_{2}\) & \{subject\} & \{verb & \{object \(\}\) & \{complement & \\
\hline
\end{tabular}

This is the compound sentence: "He is clever"; "His cleverness is not yet the means of his being rich".
(xx) "If it is sunny, we can go out."
\begin{tabular}{|l|l|l|l|l|l|l|}
\hline Sentence & If & it is sunny, & we & can & go out. \\
\hline Discourse structure & \multicolumn{3}{l|}{ indefinable } & \(\{\) definite \(\}\) & \multicolumn{2}{l|}{} \\
\hline Functional structure & \(\{\) depend \(\}\) & \(\{\) indefinable \(\}\) & \(\{\text { definite }\}_{1}\) & \\
\hline Functional qualifiers \({ }_{1}\) & & \(\{\) effect \(\}\) & \(\{\) definite \(\}\) & \(\{\text { able }\}_{1}\) & \(\{\) indefinable \(\}\) \\
\hline Functional qualifiers & 2 & & & \(\{\) agent \(\} \backslash\{\) object \(\}\) & & \(\{\) move \(\}\) \\
\hline Component structure & \(\{\) verb \(\}\) & \(\{\) indefinable \(\}\) & & \(\{\) subject \(\}\) & \\
\hline
\end{tabular}

This sentence means: "Our ability to go our depends on whether it is sunny." The verb is therefore "if" and the subject is "can".
(xxi) "Harold Wilson was Prime Minister from 1964 to 1976, except from 1970 to 1974."
\begin{tabular}{|l|l|l|l|l|}
\hline Sentence & Harold Wilson & \begin{tabular}{l} 
was Prime \\
Minister
\end{tabular} & from 1964 to 1976 & \begin{tabular}{l} 
except from \\
1970 to 1974.
\end{tabular} \\
\hline Discourse structure & \(\{\) definite \(\}\) & \(\{\) indefinite \(\}\) & \(\{\) circumstance \(\}\) & \\
\hline Functional structure & \(\{\) object \(\}\) & \(\{\) role \(\}\) & \(\{\text { competence }\}_{1}\) & \\
\hline Functional qualifiers & & & \(\{\text { not }\}_{1}\) & \(\{\text { competence }\}_{2}\) \\
\hline Component structure & \(\{\) subject \(\} \backslash\{\) object \(\}\) & \(\{\) verb \(\}\) & \(\{\) adverbial \(\}\) & \\
\hline
\end{tabular}
(xxii) "She allowed enough time to complete the journey."
\begin{tabular}{|c|c|c|c|c|c|}
\hline Sentence & She & allowed & time & enough & to complete the journey. \\
\hline Discourse structure & \{definite & \multicolumn{3}{|l|}{\{indefinite} & \{circumstance\} \\
\hline Functional structure & \{agent\} \(\backslash\{\) beneficiary\} & \{benefit\} & \{object \(\}_{1}\) & \{benefit\} & \\
\hline Functional qualifiers \({ }_{1}\) & & & \{object \(\}_{1}\) & \{compare \(\}\) & \{base\} \\
\hline Component structure & \{subject\} & \{verb\} & \{object\} & \multicolumn{2}{|l|}{\{complement \}} \\
\hline
\end{tabular}
(xxiii) "The inflation rate has fallen to \(2 \%\)."
\begin{tabular}{|l|l|l|l|l|}
\hline Sentence & The inflation & rate & \begin{tabular}{l} 
has fallen \\
to
\end{tabular} & \(\mathbf{2 \%}\). \\
\hline Discourse structure & \{definite \(\}\) & \(\{\) perfect \(\}\) & \(\{\) select \(\}\) \\
\hline Functional structure & \(\{\text { object }\}_{1}\) & & \(\{\) constituent - attribute \(\}\) \\
\hline Functional qualifiers & \(\{\) object \(\}\) & \{constitute \(\}_{1}\) & & \\
\hline Component structure & \(\{\) subject \(\} \backslash\{\) object \(\}\) & \{verb \(\}\) & \(\{\) complement \(\}\) \\
\hline
\end{tabular}
(xxiv) "You must be pleased at the outcome."
\begin{tabular}{|l|l|l|l|l|}
\hline Sentence & You & must be & \multicolumn{1}{l|}{ pleased at } & the outcome. \\
\hline Discourse structure & \(\{\) definite \(\}\) & \(\{\) infer \(\}\) & \(\{\) select \(\}\) & \multicolumn{1}{l|}{} \\
\hline Functional structure & \{recipient \(\}\) & \(\{\) infer \(\}\) & \(\{\) opinion \(\}\) & \(\{\) instrument \(\}\) \\
\hline Functional qualifiers & & & & \{effect \(\}\) \\
\hline Component structure & \(\{\) subject \(\}\) & \(\{\) verb \(\}\) & & \(\{\) object \(\}\) \\
\hline
\end{tabular}

The sentence could be alternatively expressed: "The outcome must have pleased you". In that case, the component structure would be \(\{\) subjectlinstrument - verb - recipient \(\}\).
(xxv) "John was de-selected as candidate for the election."
\begin{tabular}{|c|c|c|c|c|c|}
\hline Sentence & John & was & de-selected & as candidate & for the election. \\
\hline Discourse structure & \{definite\} & \{aorist \(\}\) & \multicolumn{3}{|l|}{\{select \({ }^{\text {d }}\)} \\
\hline Funct. structure & \{object\} & & \{competence\} & \{not - role \(\}\) & \{target \(\}\) \\
\hline Comp. structure & \{subject \(\} \backslash\{\) object \(\}\) & \multicolumn{2}{|l|}{\{verb\}} & \{not - complement\} & \{target \} \\
\hline
\end{tabular}

This is a reversal sentence, in which a previous \{complement\} "candidate" is reversed.
(xxvi) "She has lost her car key."
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Sentence & She & has & lost & her & car & key. \\
\hline Discourse structure & \{definite & \{perfect\} & \multicolumn{4}{|l|}{\{select\}} \\
\hline Funct. structure &  & & \{not - benefit\} & \multicolumn{3}{|l|}{\{object \(\}_{2}\)} \\
\hline Funct. qualifiers & & & & \{beneficiary \(\}_{1}\) & \{benefit\} & \{object \(\}_{2}\) \\
\hline Comp. structure & \{subject\} & \{verb \} & \[
\begin{aligned}
& \{\text { not }- \\
& \text { complement }\}
\end{aligned}
\] & \multicolumn{3}{|l|}{\{object\}} \\
\hline
\end{tabular}

This is again a reversal sentence, in which a previous \{complement\} "have a car key available" is reversed.
(xxvii) "The man whose car you borrowed is my neighbour."
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Sentence & The man & whose & car & you & borrowed & is my & neighbour. \\
\hline Disc. structure & \multicolumn{5}{|l|}{\{definite\}} & \multicolumn{2}{|l|}{\{select\}} \\
\hline Funct. structure & \multicolumn{5}{|l|}{\{recipient \(\}_{1}\)} & \{obj. \(\}_{1}\) & \{possess.\} \({ }_{1}\) \\
\hline Funct. qualifiers \({ }_{1}\) & \{recip.\} \({ }_{1}\) & \{possess. \(\}_{2}\) & \{obj. \(\}_{2}\) & & & & \\
\hline Funct. qualifiers \({ }_{2}\) & & & \{obj. \(\}_{2}\) & \{recip. \(\}_{2}\) & \{possess. \(\}_{3}\) & & \\
\hline Comp. structure & \multicolumn{5}{|l|}{\{subject\}} & \{object \(\}\) & \{verb \({ }^{\text {c }}\) \\
\hline
\end{tabular}
(xxviii) "Peter has mislaid his spectacles."
\begin{tabular}{|l|l|l|l|l|l|l|}
\hline Sentence & Peter & has & mislaid & \multicolumn{2}{l|}{ his } & \multicolumn{1}{l|}{ spectacles. } \\
\hline Discourse structure & \(\{\) definite \(\}\) & \{perfect \(\}\) & \(\{\) select \(\}\) & \multicolumn{2}{l|}{} \\
\hline Functional structure & \(\{\text { recipient }\}_{1}\) & & \(\{\) error \(\} \backslash\{\) possession \(\}\) & \(\{\text { recipient }\}_{1}\) & \(\{\) object \(\}\) \\
\hline Component structure & \(\{\) subject \(\}\) & \(\{\) complement \(\} \backslash\{\) verb \(\}\) & \(\{\) object \(\}\) & \\
\hline
\end{tabular}
(xxix) "Has Peter mislaid his spectacles?"
\begin{tabular}{|c|c|c|c|c|c|}
\hline Sentence & Has & Peter & mislaid & his & spectacles? \\
\hline Discourse structure & \{query - perfect\} & \{definite\} & \multicolumn{3}{|l|}{\{select\}} \\
\hline Functional structure & \{query\} & \{recipient \({ }_{1}\) & \{error\} \(\backslash\) \{possession\} & \{recipient \({ }_{1}\) & \{object \(\}\) \\
\hline Component structure & & \{subject\} & \{complement \(\} \backslash\{\) verb \(\}\) & \{object\} & \\
\hline
\end{tabular}
(xxx) "He has read some of the ten books."

This sentence is not a statement, since it does not provide information on a known entity, but existential, since it introduces an entity for discussion: "There are some of the ten books which I have read".
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Sentence & He & has & read & some of & the ten & books. \\
\hline Disc. structure & \multicolumn{3}{|l|}{\{circumstance\} \(\backslash\) \{perfect\}} & \multicolumn{3}{|l|}{\{indefinite\}} \\
\hline Funct. structure & \{agent\} \(\backslash\) \{recipient \(\}\) & & \{possession\} & \{object \({ }_{1}\) & & \\
\hline Funct. qualifiers \({ }_{1}\) & & & & \{constitute\} & \{attribute\} & \{object \(\}_{1}\) \\
\hline Comp. structure & \{subject\} & & \(\backslash\) complement & \{object & & \\
\hline
\end{tabular}
(xxxi) "All I want is my two front teeth."
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Sentence & All & I & want & is my & two front & teeth. \\
\hline Disc. structure & \{only & \multicolumn{2}{|l|}{\{definite\}} & \multicolumn{3}{|l|}{\{select\}} \\
\hline Funct. structure & & \{agent \(\} \backslash\) \{recipient \(\}\) & \{suppose\} & \multicolumn{3}{|l|}{\{object \(\}\) \\{indefinable\} }} \\
\hline Funct. qualifiers \({ }_{1}\) & & & & & \{attribute \} & \{object\} \\
\hline Comp. structure & \multicolumn{3}{|l|}{\{subject \(\} \backslash\{\) object \(\}\)} & \{verb\} & \multicolumn{2}{|l|}{\{complement\}} \\
\hline
\end{tabular}

\section*{Notation and Transliteration}
/ indicates alternative usages.
Optional words are written in brackets ().
In a table, a dash - indicates that an item is absent.
\(\rightarrow\) derives a resultant sentence from its parent.
Each non-English quotation is followed by the English translation in inverted commas "". If the nonEnglish and English orders of words are not the same, an English version in the non-English order is given in square brackets [ ]. In that case, any postpositions or other postposited words are connected to their head nouns by a hyphen (-).

If the word order of a quotation is the same as the English translation, but contains more or less words than the English, those words are given in square brackets in the English version.
* indicates an improper usage.
\(\{x\}\) indicates a functional or discourse element " \(x\) " in Chapters 13. to 16. \(\{x \backslash y\}\) means that the elements " \(x\) " and " \(y\) " are a single word. Subscripts \(\left\{x_{1}\right\}\) are used to indicate that two elements are the same, if they have the same subscript, or different if their subscripts are different.

Alphabets other than Latin are transliterated into the Latin alphabet, except for Greek. The reason for this exception is that there is no generally agreed method of doing so. A phonetic transliteration from the Greek alphabet would not be acceptable, and a literal transliteration would be misleading. Greek means Modern Greek.

Russian transliterations are by the author, following the BSI system. ' indicates palatalisation of the preceding vowel (ь). 'indicates that the preceding vowel is hard (ъ).

Arabic transliterations follow Badawi et al. (2004), except that: \(?\) is the glottal stop; \(h\) and \(£\) are the pharyngeal consonants; ḍ, ṣ, t, and z are the velarised consonants; \(\theta\) and o are the interdental fricatives; x and \(\gamma\) are the velar fricatives. Arabic means the standard written language; the grammar of the spoken dialects differs in some respects. The definite article "al-"/"l-" is represented as a prefix. Nunation (tanwīn) is not represented by an indefinite article. Duals are translated as a prefixed "two-".

Hindi transliterations follow R.S. McGregor (1987), except that: ~ indicates nasalisation of the preceding vowel; \(\mathbf{d}, \mathrm{n}, \mathrm{r}, \mathrm{s}\), and t are the retroflex consonants.

In Chinese examples, "le" following a verb is translated by "(aorist)", and other aspectual words are treated similarly, although there may be some lack of correspondence with the English equivalent. The attribute particle "de" is translated "of".

Persian transliterations follow Lambton (1963), except that š is the "sh" sound (voiceless laminal fricative); \(?\) is the glottal stop. The ezafe "-e" is translated "of".

Inuit examples are taken from Fortescue (1984), and employ the standard Latin transliteration. It is the official language of Greenland.

Verbs are listed in the standard dictionary form. In the case of Greek, this is the first person singular of the present tense, ending in " \(-\omega\) " (active) or " \(-\mu \alpha\) " (passive or deponent). For Arabic, it is the third person singular of the past perfective.

Examples from Indonesian and Malay have been taken on the assumption that they are the same language.

\section*{Glossary}

References are to chapters. Elements appearing in Chapters 13., 14., 15., 16., 17., and 18. are in \(\}\).
\begin{tabular}{|c|c|c|}
\hline Ability & Capacity of a person to fulfil an action. \{able\} & 15. \\
\hline Active & Transitive or dative sentence or verb for which the subject is the agent or instrument. & 6.,7.,8. \\
\hline Addition & Discourse element which indicates that a statement is true or a question or hypothesis are valid for more than one entity. \{and\} & 14. \\
\hline Adoptive & Dynamic sentence or verb by which an agent causes him/herself to possess an object. & 9. \\
\hline Adoptive, benefactive/ adversative & Dynamic sentence or verb whose agent is the beneficiary of an action to his/her advantage or disadvantage. & 10. \\
\hline Adverbial & Non-restrictive qualifier of a verb or attribute. \{adverbial\} & 17. \\
\hline Adverbial sentence & Sentence which queries, asserts, or denies a state or condition of the verb of another sentence. & \[
\begin{aligned}
& \text { 17., } \\
& 18 .
\end{aligned}
\] \\
\hline Adversative & Transitive or intransitive sentence or verb which acts to the disadvantage of a beneficiary. & 10. \\
\hline Adversity & Disadvantage or misfortune arising to a beneficiary. \{benefit\} & \[
\begin{aligned}
& \text { 10., } \\
& \text { 12., } \\
& \text { 15. }
\end{aligned}
\] \\
\hline Agent & Noun which both intends and effects an action. \{agent\} & \[
\begin{aligned}
& \text { 6.-11., } \\
& 15 .
\end{aligned}
\] \\
\hline Agential & Sentence or verb for which the subject is the agent. & 6.-11. \\
\hline Alternative & Discourse element which indicates that a statement is true for one of two or more entities, or a negative statement is true for one of two or more definite entities, or a question or hypothesis is meaningful for one of two or more definite entities. \{or\} & 14. \\
\hline Aorist & Dynamic sentence or verb whose action is completed without subsequent effect. \{aorist \}. & 5., 14. \\
\hline Appliance & Artefact which is intended for a particular human application. & 6., 12. \\
\hline Apposition & Qualification of a noun by an identification. & 6. \\
\hline Article & Grammatical word attached to a noun, to indicate whether it is definite, indefinite, or indefinable. & 2.,4. \\
\hline Aspect & Feature of a verb which relates its occurrence to the occurrence of another verb or participle. \{state\} \{imperfect\} \{perfect\} \{prospective\} \{aorist\} & 5., 14. \\
\hline Attribute & Word describing the state or condition of a noun, as either a qualification or predicate. \{attribute\} & \[
\begin{aligned}
& \text { 2.,6., } \\
& 15 .
\end{aligned}
\] \\
\hline Attributive & Sentence or verb which expresses the state or condition of its subject. & 6.,7.,8. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Attributive noun & Noun which refers to the quality of an attribute. & 12. \\
\hline Auxiliary word & Grammatical word which extends the grammatical functions of a concept word (verb, noun, or attribute). & 4., 14. \\
\hline Base & Point from which a measurement or comparison is made. \{base\} & 15. \\
\hline Benefactive & Sentence or verb which acts to the advantage of a beneficiary. & 10. \\
\hline Beneficiary & Person to whose advantage or disadvantage an action takes place. \{beneficiary\} & \[
\begin{aligned}
& \text { 10., } \\
& 15 .
\end{aligned}
\] \\
\hline Benefit & Advantage or opportunity arising to a beneficiary. \{benefit\} & \[
\begin{aligned}
& \text { 10., } \\
& \text { 12., } \\
& \text { 15. }
\end{aligned}
\] \\
\hline Branching, left/right & Rule of word order of a restrictive qualifier, by which it is located preceding or following the noun. & 2. \\
\hline Burden & External cause of an effect which is removed by a freedom action. \{burden\} & \(6 ., 15\). \\
\hline Causative/causation & Sentence or verb in which a causer induces an action of which it is not the direct agent or instrument. Characteristic of such a verb. \{causer\} & \[
\begin{aligned}
& 11 ., \\
& 15 .
\end{aligned}
\] \\
\hline Cessative/cessation & Sentence or verb which induces its object to desist in an action or state. Characteristic of such a verb. \{inchoate\} & \[
\begin{aligned}
& 11 ., \\
& 15 .
\end{aligned}
\] \\
\hline Circumstance & Restrictive qualifier which identifies an indefinite noun or verb from a class of unidentified nouns or verbs. \{circumstance\} & \[
\begin{aligned}
& \text { 13., } \\
& 16 .
\end{aligned}
\] \\
\hline Clause & An expression in the form of a sentence which is connected to another expression in the form of a sentence, as a relative clause, gerund, or adverbial. & \[
\begin{aligned}
& 2 ., 14 ., \\
& 17 .
\end{aligned}
\] \\
\hline Comitative link & Expression which identifies a recipient though his/her possession of an object, or an object through its constituents. & 12. \\
\hline Comment & That part of a sentence which conveys new information concerning a topic. & 1. \\
\hline Communication & Utterance by an agent to a recipient of new information concerning an object. \{communicate\} action of so uttering. & 8., 15. \\
\hline Comparison & Relative characteristic of two known objects. \{compare\} & 3., 15. \\
\hline Complement & State, relationship, or identification into which a sentence places an object. \{complement\} & 16. \\
\hline Complementary sentence & Sentence which queries, asserts, or denies that a sentence places an object in a state or condition. & 18. \\
\hline Component & The subject, verb, object, complement, and adverbial elements of a sentence. \(\{\) subject \(\}\), \(\{\) verb \(\}\), \(\{\) object \(\},\{\) complement \(\}\), \{adverbial\}. & 16. \\
\hline Compound sentence & Sentence comprising more than one sentence which have the same topic or comment. & 14. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Concept word & Word which refers to a person, thing, action, or state. & 4. \\
\hline Concession, definite/indefinite & Definite or indefinable action or state which fails to cause or prevent a concessional. & 17. \\
\hline Concessional & Action or state which occurs notwithstanding the occurrence of a concession. & \[
\begin{aligned}
& \text { 14., } \\
& 17 .
\end{aligned}
\] \\
\hline Conditional & Action or state whose occurrence is dependent on a condition, whether real, hypothetical, or unreal. & \[
\begin{aligned}
& \text { 3., 14., } \\
& 17 .
\end{aligned}
\] \\
\hline Conjunction & Word connecting two sentences. & 5. \\
\hline Constituent & Constituent part or dimension of an entity. \{constitute\} & 6., 15. \\
\hline Converse link & Grammatical word or equivalent inflexion which connects a head word to a noun in order to realise the syntax of that noun. & \[
\begin{aligned}
& \text { 4., } 12 ., \\
& 16 .
\end{aligned}
\] \\
\hline Creation & Sentence or verb which creates an entity which did not previously exist out of constituents. \{create\} action of so creating. \{creation\} entity so created. & 6., 15. \\
\hline Dative & Sentence or verb whose subject is the agent, instrument, or object of a transfer. & 8. \\
\hline Deficiency & Need felt by a recipient for an object. \{lack\} deficiency so felt. & 15. \\
\hline Definite & Entity whose identity is known. \{definite\} & 2., 13. \\
\hline Dependency & Risk from an external source to an object or person. \{depend\} state of such risk. & \(6 ., 15\). \\
\hline Difference & Lack of identification between the identification or characteristic of two nouns; sentence which expresses this. & 6. \\
\hline Directive & Direction of movement towards a location. & \[
\begin{aligned}
& \text { 6., } 7 ., \\
& 15 .
\end{aligned}
\] \\
\hline Discourse & Narrative or dialogue which provides the context for a sentence. & 3., 13. \\
\hline Discourse structure/ analysis & Structure of a sentence in response to its discourse requirements. Analysis of that structure. & 13. \\
\hline Dynamic & Sentence or verb which describes an action or process of change. & 5. \\
\hline Effect & Involuntary state or action arising from an external cause. \{effect \} & 6., 15. \\
\hline Element & Class of words having a particular function in discourse or functional structure. & \[
\begin{aligned}
& \text { 13., } \\
& 15 .
\end{aligned}
\] \\
\hline Embedding & Construction of a communication, perception, interrogation, or volition sentence in which the object is placed in topic position. & 8. \\
\hline Enquiry & That part of a question which requests information. \{enquiry\} & \[
\begin{aligned}
& 1 ., 3 ., \\
& 8 ., 15 .
\end{aligned}
\] \\
\hline Enquiry word & An enquiry which is expressed with a single word. & 3., 18. \\
\hline Ergative & Inflection to indicate an agent in topic position. & 6. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Error & An action contrary to the intention or expectation of the agent or \{causer\}; a possession contrary to the intention or expectation of the recipient. \{error\} & 15. \\
\hline Event noun & Noun which expresses a specific action or state. & 12. \\
\hline Existential & Sentence or verb which introduces an object, or which denies that an object exists, in a particular circumstance. & 1., 13. \\
\hline Exchange & Transfer sentence or verb which exchanges a benefit and a compensation. & 8. \\
\hline Facilitative & Transfer sentence or verb which transfers or removes from its recipient the means, opportunity, compulsion, or desire to carry out an action. & 11. \\
\hline Focus & The principal new information which is conveyed in a predicate or comment. & 1. \\
\hline Freedom & Action which frees a patient from a burden. \{free\} state of being so freed. & \(6 ., 15\). \\
\hline Function & The action or state that a sentence describes. & 15. \\
\hline Functional noun & Noun which refers to a function. A term covering both a verbal noun and an attributive noun. & 12. \\
\hline Functional structure/ analysis & Structure of a sentence to express its function. Analysis of that structure. & 15. \\
\hline General & Class of entities whose individual members are not identified. \{general\} & \[
\begin{aligned}
& \text { 2., 5., } \\
& 14 .
\end{aligned}
\] \\
\hline General sentence & Sentence which contains at least one generic entity. & 2. \\
\hline Generic & General entity whose limits are known in relation to other generic entities. & 2., 14. \\
\hline Genitive link & Expression which identifies an object though its possession by a definite recipient. & 12. \\
\hline Gerund & Non-restrictive attribute of the subject of a sentence which describes its state or condition relative to the verb. \{gerund\} & 5. \\
\hline Gerundial sentence & Sentence which queries, asserts, or denies a state or condition of the subject of an action at the time that the action occurs. & 18. \\
\hline Grammar & Rules of word usage and word order which enable a sentence to express meaning. & 4. \\
\hline Grammatical word & Word which connects concept words to convey their meaning in a sentence. & 4. \\
\hline Head word & Concept word which is subject to the syntax of another word or is the verb of a sentence, and which is linked to a noun. & 4. \\
\hline Hypothesis & State or action whose occurrence is supposed but has not been established. & 3., 13. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Identification & Sentence which states that a definite noun is the same as another definite noun or a nonspecific noun. & \(6 ., 15\). \\
\hline Identity & Quality of a concept word, that its existence has been established and it has been identified. Quality of a class of entities, that its existence has been established and its limits with respect to other classes are known. & \[
\begin{aligned}
& \text { 2., 13., } \\
& 14 .
\end{aligned}
\] \\
\hline Imperative & Communication of a wish or desire concerning a topic. & 3., 8. \\
\hline Imperfective & Dynamic sentence or verb whose action is not completed when another action takes place. \{imperfect\} & 5., 14. \\
\hline Inceptive & Sentence or verb which expresses an involuntary change without any external cause. & 7. \\
\hline Inchoative/inchoation & Sentence or verb which induces its object to engage or continue in an action or state. Characteristic of such a verb. \{inchoate\} & \[
\begin{aligned}
& 11 ., \\
& 15 .
\end{aligned}
\] \\
\hline Indefinable & Entity whose existence or identity has not been established. \{indefinable\} & 3., 13. \\
\hline Indefinite & Entity whose identity is not known, but can be established. \{indefinite\} & 2., 13. \\
\hline Indicative & Verb whose occurrence is a fact or expected fact. & 3. \\
\hline Individual & Definite entity of which only one instance exists. & 2. \\
\hline Inference & The logical consequence or lack of consequence of one statement or question upon another. \{infer\} & 14. \\
\hline Infinitive & Subjectless form of a verb which occurs in some languages. & 8., 11. \\
\hline Inflection & Combination of a concept word with a grammatical word. & 4. \\
\hline Instrument & Noun which effects an action but does not possess any intention. \{instrument\} & \(6 ., 15\). \\
\hline Instrumental & Sentence or verb for which the subject is the instrument. & 6. \\
\hline Interrogation & Communication of an enquiry. & 8. \\
\hline Intransitive & Dynamic sentence or verb which alters or affects its subject. & 7., 16. \\
\hline Intransitive, agential & Sentence or verb whose subject intentionally acts on him/herself. & 7. \\
\hline Intransitive, instrumental & Sentence or verb whose subject unintentionally acts on itself. & 7. \\
\hline Link & Grammatical word or equivalent inflexion which connects two concept words in order to realise the syntax of the head word. & 4., 16. \\
\hline Locative & Sentence or attribute which connects an object with a location in space. \{locative\} \{location\} & \[
\begin{aligned}
& \text { 6., } 7 ., \\
& 15 .
\end{aligned}
\] \\
\hline Main clause & Clause to which a relative clause, gerund, or adverbial is connected. & \[
\begin{aligned}
& 2 ., 14 ., \\
& 17 .
\end{aligned}
\] \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Modal & Sentence or verb which expresses the ability, necessity or responsibility of a person to fulfil a hypothetical action. See also ability, necessity, and responsibility. & \[
\begin{aligned}
& 11 ., \\
& 15 .
\end{aligned}
\] \\
\hline Movement & Action to alter the location of an object. \{move\} & \[
\begin{aligned}
& \text { 6., } 7 ., \\
& 15 .
\end{aligned}
\] \\
\hline Necessity & Compulsion upon a person to fulfil an action. \(\{\) not - able - not \(\}\) & 15. \\
\hline Negative, definite & Sentence which denies a connection between a definite entity and the subject or topic. \{not\} & 3., 13. \\
\hline Negative, indefinite & Sentence which denies that an entity exists which has a connection with the subject or topic. \{not\} & 3., 13. \\
\hline Nominal sentence & Sentence which queries, asserts, or denies the application of a particular action or state to an entity. & 18. \\
\hline Nonspecific & General entity whose limits are not known. & 2., 14. \\
\hline Noun & Word which expresses a person or thing in a sentence, which is not a verb, and which completes the meaning of the sentence. \{noun\} & 1., 16. \\
\hline Object & Entity placed by a sentence in a state or relationship, and which is not a beneficiary or recipient. \{object\} & \(1 ., 16\). \\
\hline Object, direct & Object which is connected to a verb without an intervening link. & 4. \\
\hline Object, indirect & Object which is connected to a verb by an intervening link. & 4. \\
\hline Object-verb (OV) & Rule of word order in which a verb follows its object. & 4. \\
\hline Occurrence & The period over which the action or state of a verb occurs. & 5. \\
\hline Opinion & Mental reaction to known information concerning an object. \{opinion\} & 8., 15. \\
\hline Participation & Sentence or verb which directs an action towards a target but without altering or affecting it. \{participate\} action of so participating. \{participants\} those so participating. & \[
\begin{aligned}
& 7 ., 12 ., \\
& 15 .
\end{aligned}
\] \\
\hline Participle & Attribute derived from a verb and showing the aspect of that verb (perfective, imperfective, stative, prospective, general, recipient, possession, or beneficiary). & 5., 8. \\
\hline Passive & Transitive sentence or verb whose subject is the patient; dative sentence or verb whose subject is the object. & 6., 8. \\
\hline Patient & Object which is altered or affected by an action. & \[
\text { 6., } 7 .,
\] \\
\hline Perception & Mental observation of new information. \{perceive\} state of so perceiving. & 8., 15. \\
\hline Perfective & Dynamic sentence or verb whose action is completed and whose effect is still present. \{perfect\} & 5., 14. \\
\hline Possession & Sentence, verb, or noun which expresses a connection between a recipient and an object. \{possession\} & \[
\begin{aligned}
& 8 ., 12 . \\
& 15 .
\end{aligned}
\] \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Predicate & That part of a sentence, including the verb, which is not the subject. & 1. \\
\hline Preference, definite & Preference of fact whose object is definite. & 3. \\
\hline Preference, indefinite & Hypothetical preference whose object is indefinite or negative. & 3. \\
\hline Preposition/postposition & Link word, locative, or directive which respectively precedes or follows its noun. & 4. \\
\hline Preventive/prevention & Sentence or verb in which a causer induces an agent or instrument not to engage in an action. Characteristic of such a verb. \{causer\} & 15. \\
\hline Pronoun & Word substituting for a noun, and indicating whether it is definite, indefinite, or indefinable. & 1.,4. \\
\hline Proposal & Communication of a hypothesis. \{propose\} action of so proposing. & 15. \\
\hline Prospective & Dynamic verb whose action is about to occur. \{prospect\} & 5., 14 \\
\hline Provision & Goods or services supplied by a transfer sentence. & 8. \\
\hline Qualifier & Information added to a noun or verb. & 2. \\
\hline Qualifier, non-restrictive. & Qualifier to a noun or verb which provides information additional to the sentence in which they appear. & 2., 16 \\
\hline Qualifier, restrictive & Qualifier which identifies its noun or verb. & 2., 16 \\
\hline Quantity & Attribute which counts a unit. \{attribute\} & 2., 15 \\
\hline Question, definite & Sentence which asks whether a connection exists between a definite entity and a topic. \{query\} & 3., 13 \\
\hline Question, indefinite & Sentence which asks whether an entity exists which has a connection with a topic. \{query\} & 3., 13 \\
\hline Receptive & Sentence or verb whose topic is the recipient of a transfer. & 9. \\
\hline Receptive, benefactive/ adversative & Sentence or verb whose subject is the beneficiary of an action to his/her advantage or disadvantage. & 10. \\
\hline Recipient & Person who has a connection with an external object, expressed by a possession. \{recipient\} & \[
\begin{aligned}
& \text { 8., } 9 ., \\
& 13 .
\end{aligned}
\] \\
\hline Recipient, direct & Recipient which is connected to a verb without an intervening link. & 8.,9 \\
\hline Recipient, indirect & Recipient which is connected to a verb by an intervening link. & 8.,9. \\
\hline Reflexive & Agential or instrumental sentence or verb which alters or affects its subject. & 6. \\
\hline Reflexive, dative & Dative sentence or verb which transfer an object to its subject. & 8.,9. \\
\hline Relative clause & Sentence qualifying a noun or pronoun, in accordance with the grammar of the relative clause. & \(2 ., 4\). \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Relative pronoun & Grammatical word connecting a relative clause with the noun that it qualifies. & 2.,4. \\
\hline Relief & Relief of a risk to an object or person. \{relief\} & 15. \\
\hline Representation & Image or transformation of an object for the purpose of communication. \{representation\} & 8., 15. \\
\hline Response & The comment in a reply to question, which responds to the enquiry. & 3. \\
\hline Responsibility & Obligation of a person to fulfil an action. \{ought \} & \[
\begin{aligned}
& \text { 11., } \\
& 15 .
\end{aligned}
\] \\
\hline Resultant & Altered state of a patient after operation of an action. \{resultant \} & \[
\begin{aligned}
& \text { 6.-11., } \\
& 15 .
\end{aligned}
\] \\
\hline Resultant sentence & Sentence which expresses the result of the action of a dynamic sentence. & 6.-11. \\
\hline \begin{tabular}{l}
Reversal/ \\
Reversal sentence
\end{tabular} & State or condition of an object which is reversed. Sentence which performs such a reversal. & 18. \\
\hline Role & A function in human society which is a person fulfils. \{role\}. \{competence\} competence whereby the role is exercised. & \[
\begin{aligned}
& \text { 12., } \\
& 15 ., \\
& 16 .
\end{aligned}
\] \\
\hline Selection, definite & Sentence which identifies one entity in preference to another. \{select\} entity so selected. & 3., 13. \\
\hline Selection, indefinite & Sentence which states that one entity exists in preference to another. & 3. \\
\hline Sentence & Unit of meaning providing new information, or making an enquiry, or expressing a hypothesis, with regard to a topic. & 1. \\
\hline Sentence type & Description of a sentence, consisting of all those elements required for the sentence to be meaningful. & \[
\begin{aligned}
& 13 ., \\
& 15 .
\end{aligned}
\] \\
\hline Sequence & Sequence of an occurrence in time. \{sequence\} & 15. \\
\hline Similarity & Characteristic of a definite noun which is the same as that of another noun; a sentence which expresses this. & 6. \\
\hline Specific & Entity which can be identified, and is therefore definite or indefinite. & 2. \\
\hline Specific sentence & Sentence which does not contain a generic entity. & 2. \\
\hline Statement & Sentence containing only elements whose existence is established or asserted. & 2., 3. \\
\hline Statement, circumstance & Statement whose comment identifies an indefinite element. & 13. \\
\hline Statement, selection & Statement not containing an indefinite element. & 13. \\
\hline Stative & Sentence or verb which describes a stable state, condition, possession, or relationship. \{state\} & 5., 14. \\
\hline Style & Quality shown by a person in performing a known activity. \{style\} & 15. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Subject & Word concerning which a verb expresses a dynamic process or stative condition. \{subject\} & 1., 16. \\
\hline Subjunctive & Verb whose occurrence is a hypothesis. & 3. \\
\hline \begin{tabular}{l}
Substitution/ \\
Substitution sentence
\end{tabular} & Action to replace an original with an identified entity. \{substitute\}. Sentence which performs such a replacement. & 15. \\
\hline Superlative & Comparison between an entity and more than one entity, according to the measure of a constituent. & 3. \\
\hline Supposition & Mental impression of a hypothesis. \{suppose\} possession of such a mental impression. & 15. \\
\hline SV (subject-verb) & Rule of word order in which a subject precedes its verb. & 4. \\
\hline Syntax & The function of each concept word in sentence construction. & 4., 14. \\
\hline Target & Person or thing towards which an action is directed without placing it in any state or relationship; participle or sentence describing such a function. \{target\} & 7., 15. \\
\hline Tense & Feature of a verb which describes its detachment in time from the speaker, whether past, present, or future. & 5. \\
\hline Time & Unit of an occurrence, specified by its sequence. \{time\} & 15. \\
\hline Topic & That part of a sentence whose identity is known, and concerning which a comment conveys new information or an enquiry requests information. & 1. \\
\hline Transfer & Sentence or verb which alters the relation of its object with a recipient. & 8., 9. \\
\hline Transitive & Dynamic sentence or verb which alters or affects its object (called its patient). & 6., 16. \\
\hline Transformation & Sentence which transforms a patient to a new form, called its resultant. \{transform\} action of so transforming. & \[
\begin{aligned}
& 6 ., 7 ., \\
& 15 .
\end{aligned}
\] \\
\hline Unit & An entity which is capable of being counted by a quantity. & 2., 15. \\
\hline Verb & Word which expresses the unique action or state of a sentence, either as a distinct word or as an auxiliary in combination with an attribute, noun, or another verb. \{verb\} & 1., 16. \\
\hline Verbal noun & Noun which refers to the action or state of a verb. & 12. \\
\hline Verbal sentence & Sentence which queries, asserts, or denies an action or state. & 18. \\
\hline Verb-object (VO) & Rule of word order in which a verb precedes its object. & 4. \\
\hline Verb-subject (VS) & Rule of word order in which a verb precedes its subject. & 4. \\
\hline Viewpoint & The speaker relative to whom a tense is expressed. & 5. \\
\hline Volition & Possession of a wish or desire. & 3.,8. \\
\hline
\end{tabular}

\section*{Discourse and Function: References}
J.M. Anderson: A Notional Theory of Syntactic Categories (Cambridge, 1997).
E. Badawi, M.G. Carter, and A Gully: Modern Written Arabic - A Comprehensive Grammar
(Routledge 2004).
J.T. Bowen and T.J. Rhys-Jones: Welsh (Teach Yourself Books, London, 1960).
J. Butt and C. Benjamin: A New Reference Grammar of Modern Spanish (Edward Arnold, London, 1992).

Collins German Dictionary (Glasgow, 1995).
Collins Robert Concise English French Dictionary (Glasgow, 1981).
Collins English-Malay Malay-English Dictionary (Glasgow 2005).
B. Comrie: The Languages of the Soviet Union (Cambridge, 1981).
D. Crystal: A Dictionary of Linguistics and Phonetics (Basil Blackwell, Oxford, 1985).
M. Dillon and D. Ó Cróinín: Irish (Teach Yourself Books, London, 1961).
R.M.W. Dixon: Ergativity (Cambridge, 1998).
R.W. Dodds: Malay (Teach Yourself Books, London, 1977).
M.S. Dryer: The Greenbergian Word Order Correlations (Language, The Linguistics Society of America, March 2002).
M. Durrell: Using German - A Guide to Contemporary Usage (Cambridge, 1996).
H.F. Eggeling: A Dictionary of Modern German Prose Usage (Oxford, 1961).
S. Folomkina and H. Weiser: The Learner's English-Russian Dictionary (Moscow, 1962).
M. Fortescue: West Greenlandic (Croom Helm Descriptive Grammars, 1984).
J. Foster: Ngā Kири Whakamārama (Reed Publishing, Auckland, 1997).
B.W. Fortson: Indo-European Language and Culture (Blackwell, 2004).
W.H. Fraser and J. Squair: Heath's Practical French Grammar (Harrap, 1962)
L. Hammond: Serbian - An Essential Grammar (Routledge, 2005).

Harrap's Concise Spanish and English Dictionary (London, 1991).
M. Haspelmath: Indefinite Pronouns (Oxford, 1997).
D. Holton, P. Mackridge, and I. Philippaki-Warburton: Greek - A Comprehensive Grammar of the Modern Language (Routledge, 2002).
J. Huehnegard \& C. Woods: Akkadian and Eblaite, in The World's Ancient Languages, ed. R.D. Woodard (Cambridge, 2004).
F. Johnson (ed.): Standard English-Swahili and Swahili-English Dictionary (Oxford, 1948).
F. Karlsson: Finnish - An Essential Grammar (Routledge, 2000).
A.R. King \& B.O. Elordi: Colloquial Basque (Routledge 2004).
G. King: Pocket Modern Welsh Dictionary (Oxford, 2000).
C.H. Kraft \& A.H.M. Kirk-Greene: Hausa (Teach Yourself Books, 1973).
A.K.S. Lambton: Persian Grammar (Cambridge, 1963).

Langenscheidt's Pocket Japanese Dictionary.
G.S. Lewis: Turkish Grammar (Oxford, 1985).
W.B. Lockwood: German Today - The Advanced Learner's Guide (Clarendon Press, Oxford, 1987).
J. Lyons: Semantics (Cambridge, 1994).
M. Maiden \& C. Robustelli: A Reference Grammar of Modern Italian (Arnold, 2000).
S. Makino and M. Tsutsui: A Dictionary of Basic Japanese Grammar (The Japan Times, 2002).
C.C. Marsack: Samoan (Teach Yourself Books, London 1962).
P. H. Matthews: Concise Dictionary of Linguistics (Oxford, 1997).
R.S. McGregor: Outline of Hindi Grammar (Clarendon Press, Oxford, 1987).
D.V. Perrott: Swahili (Teach Yourself Books, London, 1951).
Z. Pontifex: Hungarian (Teach Yourself Books, London 1993).
R. Quirk and S. Greenbaum: A University Grammar of English (Longman, 1973).
C. Rounds: Hungarian: An Essential Grammar (Routledge, 2003).
P. Schachter: Tagalog, in The World's Major Languages, ed. B. Comrie (Croom Helm, 1987).
D.N. Stavropoulos and A.S. Hornby: Oxford English-Greek Learner's Dictionary (Oxford, 2004).
J.N. Sneddon: Indonesian - A Comprehensive Grammar (Routledge, 2000).
R. Snell: Hindi Dictionary (Hodder \& Stoughton, 2004).
K. Speight: Teach Yourself Italian (EUP, London, 1950).
D.N. Stavropoulos and A.S. Hornby: Oxford English-Greek Learner's Dictionary (Oxford, 1998).
M. Tanimori: Handbook of Japanese Grammar (Charles E. Tuttle, Rutland, Vermont, 1994).
M. Törkenczy: Hungarian Verbs and Essentials of Grammar (Passport Books, Chicago, 1997).
A.H. Whitney: Finnish (Teach Yourself Books, London, 1968).
P.M. Wilson: Simplified Swahili (Longman, 1991).

Yip Po-Ching and Don Rimmington: Chinese - An Essential Grammar (Routledge, 2003).
Boping Yuan and Sally K. Church: Oxford Chinese Minidictionary (Oxford, 2001).```


[^0]:    ${ }^{1}$ Lyons, 469.
    ${ }^{2}$ The 20 languages are English, French, Spanish, Italian, German, Russian, Welsh, Irish, Finnish, Hungarian, Modern Greek, Turkish, Written Arabic, Persian, Hindi, Malay/Indonesian, Chinese, Japanese, Swahili, and Inuit (West Greenlandic). The 9 other languages are Serbian, Tagalog, Maori, Samoan, Hausa, Basque, Avar, Latin, and Akkadian. References to quotations from all these languages are given in Chapters 13. to 17 .

[^1]:    ${ }^{3}$ Anderson, 173, 295.
    ${ }^{4}$ Dixon, 6, 127.

[^2]:    ${ }^{5}$ This is so even for languages classed as ergative, in which the subject may be an agent which is marked.

[^3]:    ${ }^{6}$ Elements are sometimes called "arguments", a term in mathematics with the sense "a variable in a functional expression", where the functional expression is a verb (see Matthews, 24-5). However, in our methodology the verb itself is an element, which is therefore broader than "argument" as conventionally defined.

[^4]:    ${ }^{7}$ For reasons hinted at in the introduction and developed in Chapters 13. and 16., an existential sentence does not have a subject; we say that introduces an object.

[^5]:    ${ }^{8}$ Schachter, 941.

[^6]:    ${ }^{9}$ Lockwood, 345.
    ${ }^{10}$ Fortson, 144.

[^7]:    ${ }^{11}$ Lewis, 117.
    ${ }^{12}$ McGregor, 18-9.
    ${ }^{13}$ Yip \& Rimmington, 111.

[^8]:    ${ }^{14}$ Schachter, 948.
    ${ }^{15}$ Foster, 65, 72, 98.

[^9]:    ${ }^{16}$ Foster, 51.
    ${ }^{17}$ Discussed in detail in Dryer (2002).

[^10]:    ${ }^{18}$ Foster, 69.

[^11]:    ${ }^{19}$ Comrie, 223.

[^12]:    ${ }^{20}$ See for instance Maiden \& Robustelli, 110.

[^13]:    ${ }^{21}$ See for example Yip \& Rimmington, 129.

[^14]:    ${ }^{22}$ See also Lyons, 787.

[^15]:    ${ }^{23}$ Makino \& Tsutsui, 525.
    ${ }^{24}$ King \& Elordi, 114.
    ${ }^{25}$ McGregor, 71.
    ${ }^{26}$ Fortescue, 210.

[^16]:    ${ }^{27}$ Badawi et al, 542 .
    ${ }^{28}$ Lewis, 97.
    ${ }^{29}$ Sneddon, 178.
    ${ }^{30}$ Yuan \& Church, 570.
    ${ }^{31}$ Badawi et al, 312
    ${ }^{32}$ Sneddon, 233.
    ${ }^{33}$ Huenergard \& Woods, 246.

[^17]:    ${ }^{34}$ Foster, 82.
    ${ }^{35}$ Marsack, 122.

[^18]:    "The meeting took place in a conference room" can reformulated existentially as
    "There was a conference room in which the meeting took place."
    "I saw an article in the paper on linguistics" can be reformulated as
    "There was an article I saw in the paper on linguistics."

[^19]:    ${ }^{36}$ Whitney, 255.
    ${ }^{37}$ Bowen \& Rhys Jones, 40.
    ${ }^{38}$ Dillon \& Ó Cróinín, 42.
    ${ }^{39}$ Badawi et al, 349.
    ${ }^{40}$ Yip \& Rimmington, 140.
    ${ }^{41}$ McGregor, 4.
    ${ }^{42}$ Wade, 523.
    ${ }^{43}$ Foster, 90. Maori is verb-initial.
    ${ }^{44}$ Durrell, 204.

[^20]:    ${ }^{45}$ Harrap, 258.
    ${ }^{46}$ Lewis, 142.
    ${ }^{47}$ Dodds, 67.
    ${ }^{48}$ Yip \& Rimmington, 62.
    ${ }^{49}$ Makino \& Tsutsui, 153.
    ${ }^{50}$ Private information.

[^21]:    ${ }_{51}^{51}$ Yip \& Rimmington, 10, 97, 110.
    ${ }^{52}$ Durrell, 478.
    ${ }^{53}$ Butt \& Benjamin, 395.

[^22]:    ${ }_{55}^{54}$ Bowen \& Rhys-Jones, 134.
    ${ }^{55}$ Törkenczy, 104.
    ${ }^{56}$ Yip \& Rimmington, 132.

[^23]:    ${ }^{57}$ Durrell, 237.
    ${ }^{58}$ Lockwood, 217.
    ${ }^{59}$ Bowen \& Rhys Jones, 25,43.
    ${ }^{60}$ Folomkina \& Weiser, 333.
    ${ }^{61}$ Badawi et al, 465, 473.

[^24]:    ${ }^{62}$ Yuan \& Church, 14, 113.
    ${ }^{63}$ Lockwood, 276.
    ${ }^{64}$ Speight, 152.
    ${ }^{65}$ Rounds, 44.
    ${ }^{66}$ Wade, 338.

[^25]:    ${ }^{67}$ Fraser \& Squair, 192.
    ${ }^{68}$ Speight, 225.
    ${ }^{69}$ Butt \& Benjamin, 240.
    ${ }^{70}$ Fraser \& Squair, 194.
    ${ }^{71}$ Butt \& Benjamin, 292
    ${ }^{72}$ Lockwood, 263.

[^26]:    ${ }^{73}$ Speight, 157.
    ${ }_{75}^{74}$ Dillon \& Ó Cróinín, 93.
    ${ }^{75}$ Holton at al, 460.
    ${ }^{76}$ Folomkina \& Weiser, 230.
    ${ }^{77}$ Lambton, 152.

[^27]:    ${ }^{78}$ Makino \& Tsutsui, 22.
    ${ }^{79}$ Fraser \& Squair, 281.
    ${ }^{80}$ Dillon \& Ó Crónín, 59, 149
    ${ }^{81}$ Lewis, 109.

[^28]:    ${ }^{82}$ Fortescue, 192.
    ${ }^{83}$ Fortescue, 181.
    ${ }^{84}$ Karlsson, 229.
    ${ }^{85}$ Dodds, 130.
    ${ }^{86}$ Yip \& Rimmington, 133.
    ${ }^{87}$ Schachter, 941.
    ${ }^{88}$ Makino \& Tsutsui, 339.
    ${ }^{89}$ Badawi et al, 690.
    ${ }^{90}$ Lambton, 5.
    ${ }^{91}$ Speight, 157.

[^29]:    ${ }^{92}$ Folomkina \& Weiser, 230.
    ${ }^{93}$ Hammond, 204.
    ${ }_{94}$ Lewis, 36.
    ${ }^{95}$ Yip \& Rimmington, 120.
    ${ }^{96}$ Fortescue, 249.

[^30]:    ${ }^{97}$ Badawi et al, 489 .
    ${ }^{98}$ Lambton, 76.
    ${ }^{99}$ Sneddon, 287.
    ${ }^{100}$ Perrott, 59.
    ${ }^{101}$ Törkenczy, 79.
    ${ }^{102}$ Rounds, 101.
    ${ }^{103}$ Folomkina \& Weiser, 475.
    ${ }^{104}$ Sneddon, 301.
    ${ }^{105}$ Makino \& Tsutsui, 317.
    ${ }^{106}$ Perrott, 38.

[^31]:    ${ }^{107}$ Lewis, 97.
    ${ }^{108}$ Badawi et al, 312.
    ${ }^{109}$ Wade, 126.
    ${ }^{110}$ Lambton, 43.
    ${ }^{111}$ Pontifex, 257.

[^32]:    ${ }_{113}^{113}$ Bowen \& Rhys Jones, 38.
    ${ }^{113}$ Dillon \& Ó Cróinín, 167.
    ${ }^{114}$ Wade, 378.

[^33]:    ${ }^{115}$ Dillon \& Ó Cróinín, 44, 59.
    ${ }^{116}$ Lewis, 155.
    ${ }_{118}^{117}$ McGregor, 56, 101.
    ${ }^{118}$ Makino \& Tsutsui, 429, 433.

[^34]:    ${ }^{119}$ Hammond, 208.
    ${ }^{120}$ Butt \& Benjamin, 263.
    ${ }^{121}$ Lewis, 177.

[^35]:    ${ }^{122}$ Butt \& Benjamin, 210, 216.
    ${ }^{123}$ Dillon \& Ó Cróinín, 41, 151.
    ${ }^{124}$ Badawi et al, 368, 370.
    ${ }^{125}$ McGregor, 71.
    ${ }^{126}$ Sneddon, 200.

[^36]:    ${ }^{127}$ Yip \& Rimmington, 43, 45, 61.
    ${ }^{128}$ Rounds, 43.
    ${ }^{129}$ Lambton, 151.

[^37]:    ${ }^{130}$ Butt \& Benjamin, 26.
    ${ }^{131}$ Lockwood, 184.
    ${ }^{132}$ Rounds, 83, 91.
    ${ }^{133}$ Butt \& Benjamin, 310, 312.

[^38]:    ${ }^{134}$ Bowen \& Rhys Jones, 113, 132.
    ${ }^{135}$ McGregor, 18, 73.
    ${ }^{136}$ Perrott, 56.
    ${ }^{137}$ Fortescue, 302.

[^39]:    ${ }^{138}$ Makino \& Tsutsui, 101, 173, 305.
    ${ }^{139}$ Fortescue, 293-4.

[^40]:    ${ }^{140}$ Lyons, 502, 511.

[^41]:    ${ }^{141}$ Durrell, 194.
    ${ }^{142}$ Maiden \& Robustelli, 166.
    ${ }^{143}$ Dillon \& Ó Crónín, 83.
    ${ }^{144}$ Makino \& Tsutsui, 33.
    ${ }^{145}$ Maiden \& Robustelli, 179.

[^42]:    ${ }^{146}$ Durrell, 194.

[^43]:    ${ }^{147}$ Butt \& Benjamin, 76.
    ${ }^{148}$ Maiden \& Robustelli, 166.

[^44]:    ${ }^{149}$ Speight, 81.

[^45]:    ${ }^{150}$ Marsack, 49.
    ${ }^{151}$ Maiden \& Robustelli, 159.

[^46]:    ${ }^{152}$ Butt \& Benjamin, 310.
    ${ }^{153}$ Dillon \& Ó Cróinín, 53-4.
    ${ }^{154}$ Yip \& Rimmington, 33.
    ${ }^{155}$ Makino \& Tsutsui, 522.
    ${ }_{157}^{156}$ Badawi et al, 310.
    ${ }^{157}$ Foster, 48.
    ${ }^{158}$ Fortescue, 70.

[^47]:    ${ }^{159}$ Badawi et al, 251-2.
    ${ }^{160}$ Maiden \& Robustelli, 323.

[^48]:    ${ }^{161}$ Wade, 498.
    ${ }^{162}$ McGregor, 131.
    ${ }^{163}$ Harrap, 357
    ${ }^{164}$ Folomkina \& Weiser, 46.

[^49]:    ${ }^{165}$ Badawi et al, 220.
    ${ }^{166}$ Lambton, 115.
    ${ }^{167}$ Sneddon, 88.
    ${ }^{168}$ Fraser \& Squair, 218-9.
    ${ }^{169}$ Maiden \& Robustelli, 280.
    ${ }^{170}$ Lambton, 113, 115.
    ${ }^{171}$ Snell, 94 .

[^50]:    ${ }^{172}$ Folomkina \& Weiser, 210, 506.
    ${ }^{173}$ Wade, 120.
    ${ }_{175}^{174}$ Pontifex, 165, 257.
    ${ }^{175}$ Bowen \& Rhys Jones, 38.
    ${ }^{176}$ Dillon \& Ó Cróinín, 42.
    ${ }^{177}$ Holton et al, 263.

[^51]:    ${ }^{178}$ Lewis, 143.
    ${ }^{179}$ Badawi et al, 190-3.
    ${ }^{180}$ McGregor, 51, 118, 133; Snell, 148.
    ${ }^{181}$ Dodds, 21.
    ${ }^{182}$ Yip \& Rimmington, 35, 113.
    ${ }_{184}^{183}$ Makino \& Tsutsui, 188, 244.
    ${ }^{184}$ Perrott, 79.
    ${ }^{185}$ Fortescue, 171, 321.

[^52]:    ${ }^{186}$ King, 238.
    ${ }^{187}$ Badawi et al, 605.

[^53]:    ${ }^{188}$ Fraser \& Squair, 178.
    ${ }^{189}$ Miaden \& Robustelli, 264, 356
    ${ }^{190}$ Folomkina \& Weiser, 326.
    ${ }^{191}$ Bowen \& Rhys Jones, 115.

[^54]:    ${ }^{192}$ McGregor, 77.
    ${ }^{193}$ Fraser \& Squair, 264.
    ${ }^{194}$ Sneddon, 251.
    ${ }^{195}$ Perrott, 111.
    ${ }^{196}$ Makino \& Tsutsui, 263.

[^55]:    ${ }^{197}$ Maiden \& Robustelli, 311.

[^56]:    ${ }^{198}$ Maiden \& Robustelli, 401.
    ${ }^{199}$ Speight, 151.

[^57]:    ${ }^{200}$ Collins (1981), 324.
    ${ }^{201}$ Harrap, 23.
    ${ }^{202}$ Maiden \& Robustelli, 264.

[^58]:    ${ }^{203}$ Bowen \& Rhys Jones, 115-6.
    ${ }^{204}$ Holton et al, 263.
    ${ }^{205}$ Folomkina \& Weiser, 477.
    ${ }^{206}$ Wade, 120.
    ${ }^{207}$ Lambton, 131.
    ${ }^{208}$ Snell, 177, 213.

[^59]:    ${ }^{209}$ Maiden \& Robustelli, 112.
    ${ }^{210}$ Holton et al, 217.
    ${ }^{211}$ Folomkina \& Weiser, 25, 242, 386.
    ${ }^{212}$ Badawi et al, 352.

[^60]:    ${ }^{213}$ Speight, 152.
    ${ }^{214}$ Butt \& Benjamin, 240.
    ${ }^{215}$ Butt \& Benjamin, 278.
    ${ }^{216}$ Holton et al, 221.
    ${ }^{217}$ Lambton, 151, 153.
    ${ }^{218}$ McGregor, 130.
    ${ }^{219}$ Perrott, Suppl. 21.

[^61]:    ${ }^{220}$ Dillon \& Ó Crónín, 181.
    ${ }^{221}$ McGregor, 77.
    ${ }^{222}$ Holton et al, 452.
    ${ }^{223}$ Stavropoulos \& Hornby, 768.
    ${ }^{224}$ Folomkina \& Weiser, 225, 232.
    ${ }^{225}$ Badawi et al, 649.

[^62]:    ${ }^{226}$ Speight, 157.
    ${ }^{227}$ Lockwood, 276.
    ${ }^{228}$ Rounds, 43.
    ${ }^{229}$ Lambton, 151.

[^63]:    ${ }^{230}$ Maiden \& Robustelli, 311.

[^64]:    ${ }^{231}$ Maiden \& Robustelli, 328.

[^65]:    ${ }^{232}$ Fraser \& Squair, 190.
    ${ }^{233}$ Maiden \& Robustelli, 329.
    ${ }^{234}$ Butt \& Benjamin, 228.

[^66]:    ${ }^{235}$ Speight, 150.
    ${ }^{236}$ Stavropoulos \& Hornby, 136.
    ${ }^{237}$ Rounds, 42.
    ${ }^{238}$ Badawi et al, 591.
    ${ }^{239}$ Lambton, 151.

[^67]:    ${ }^{240}$ Perrott, 49.
    ${ }^{241}$ Perrott, 48-9.

