Cognitive English Grammar

Cognitive Linguistics in Practice (CLiP)

A text book series which aims at introducing students of language and linguistics, and scholars from neighboring disciplines, to established and new fields in language research from a cognitive perspective. Titles in the series are written in an attractive, reader-friendly and self-explanatory style with assigments, and are tested for classroom use at university level.

Volume 2

Cognitive English Grammar
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Preface

Since the publication of Ron Langacker's monumental, two-volume *Foundations of Cognitive Grammar* in 1987 and 1991, the cognitive approach to grammar has established itself as a viable and attractive model of linguistic description. An increasing number of linguists from all over the world have become dissatisfied with the still widespread view of language as a separate module that is detached from all other cognitive faculties. Cognitive Grammar, by contrast, claims that language is part and parcel of our overall cognitive and human make-up. This book is an attempt at showing how Cognitive Grammar may help to better understand the grammar of English.

This book is intended to be used as a textbook in classes of English grammar and linguistics and in courses of general linguistics. The book should ideally be used with advanced undergraduate students or graduate students, i.e. with students who are familiar with the basic notions of linguistics and English grammar. It presents a balanced view of cognitive linguistic theory and selected problem areas of English grammar. Essentially, it seeks to give students a deeper insight into the nature of grammar as a human achievement and into the cognitive principles that motivate its structure. The traditional approach to grammar focuses on forms, structures and rules. Not surprisingly, this approach tends to have a deterrent effect on students. By contrast, the cognitive approach to grammar focuses on language as a tool of conceptualisation and hence on the meaningfulness of language. Students learn to see the study of language as a fascinating and challenging field of human experience.

Language, and grammar in particular, has by now been studied extensively by many cognitive linguists. However, it is also characterised by diverse strands of research. The authors of this book mainly adhere to the model of Cognitive Grammar developed by Ronald Langacker. This book is also indebted to George Lakoff's conceptual metaphor approach, Len Talmy's gestalt-oriented analyses, Gilles Fauconnier and Mark Turner's mental space theory, the cognitive-functional approach developed by John Haiman and Talmy Givón, and many other cognitive linguists as well as precursors of Cognitive Linguistics, such as Zeno Vendler. As a rule, these and other authors are not cited in the body of the text, but the many references in the further reading sections to each chapter will give hints as to the various sources used.

This book is the result of many years of planning and trials. The authors would like to express their gratitude to the colleagues who in the first pioneering stage were willing to cooperate in a multi-authorship and to the many people who read the manuscript and gave

us invaluable ideas, in particular Susannah Ewing Bölke, Elizabeth Matthis, Jane Oehlert, and Allan Turner. We would also like to thank Birgit Smieja, Evgenia Sokolinskaja, Angela Heidemann, and Lukasz Tabakowska, who embellished the book with illustrations. Our special thanks go to the instructors of many classes who worked with earlier versions of the book and gave us suggestions and constructive criticisms as well as tokens of empathy. We would especially like to express our thanks to the many students who toiled through the book manuscript at the universities of Hamburg, Kraków, Warsaw, Murcia, Budapest, Debrecen, and Bergen. The student input gave us the satisfying impression that the book was written and re-written with its future users looking over our shoulders and somehow writing the book with us.

Günter Radden and René Dirven

List of typographical conventions used in the book

Italics are used to show that a phrase is cited as a linguistic expression, e.g. the words *gold dust*.

An **asterisk** in front of a sentence is used to indicate an ungrammatical or non-existing sentence, e.g. **The book is had by Jennifer.*

A **question mark** in front of a sentence is used to indicate its doubtful grammaticality or acceptability, e.g. *?The book is liked by Jennifer.*

A **hash sign** in front of a sentence or sequence of sentences is used to indicate pragmatically inadequate utterances, e.g. *#When a cat ran in the yard, we were having lunch.*

Single quotation marks put around a word or phrase are used to indicate a concept or the meaning of a linguistic expression, e.g. *brain* 'intelligence'.

Bold print is used for important linguistic terms at their first occurrence. These key words are repeated in the summary of each chapter and defined in the glossary.

Introduction

It quickly becomes clear to any careful observer that the grammar of a language is not just a long list of formal rules. A grammar may be seen as a cognitive achievement: it is the solution that generations of speakers of a speech community have found to structure their thoughts with the intention to communicate them to other people. As human products, the words and grammatical structures of a language reflect the physical, psychological and social experiences of its human creators. The distinctions made by the lexicon of a language reflect important specific experiences of our lives, while the distinctions made by its grammar reflect recurrent and generalised experiences. Like the words of a language, the grammar of a language is meaningful, too. Part of the cognitive approach to grammar is to detect the motivation underlying grammatical structures.

The main functions of language are to enable people to symbolise their experiences in a perceptible form and to communicate them to others. In expressing their thoughts, speakers constantly need to decide which words and grammatical constructions to use. Both the inventories of words and constructions of a language provide a set of options which the speaker has to choose from in communicating her thoughts. A cognitive approach to grammar is therefore "usage-based": it looks at the structural choices available and the speaker's reasons for choosing one alternative over the other.

A Cognitive Grammar is based on the following assumptions, which will be elaborated in the course of this book:

- The grammar of a language is part of **human cognition** and interacts with other cognitive faculties, especially with perception, attention, and memory. For example, in the same way that we focus on a bird we see flying in the sky and not on the sky surrounding the bird, we describe the situation as *a bird in the sky* and not as *the sky around the bird.*
- The grammar of a language reflects and presents **generalisations** about phenomena in the world as its speakers experience them. For example, tense as a grammatical form is used to express general notions of time (present, past and future) but not specific notions such as years, hours or days, which are expressed by lexical material.
- Forms of grammar are, like lexical items, **meaningful** and never "empty" or meaningless, as often assumed in purely structural models of grammar. For example, the element *to* of a *to*-infinitive as in *I'd like to hear from you* indicates that my wishes are directed towards a goal.

- The grammar of a language represents the whole of a native speaker's **knowledge** of both the lexical categories and the grammatical structures of her language.
- The grammar of a language is **usage-based** in that it provides speakers with a variety of structural options to present their view of a given scene. For example, I might describe the same scene as *I'm running out of time* or *Time is running out.*

As a students' grammar, this Cognitive English Grammar seeks to provide students with insights into grammar as part of human cognition and to open up new avenues for further study and research. It does not intend to be a comprehensive reference grammar of English, but specifically addresses those areas of grammar that are relevant and interesting from a cognitive point of view and difficult for learners of English as a foreign language. It is therefore unavoidable that many areas of English grammar are not, or only cursorily, dealt with in this book. For example, for reasons of space, the authors had to dispense with the treatment of complement clauses and adverbial clauses.

As a textbook, *Cognitive English Grammar* aims at clarity and insightfulness as its guiding principles. For reasons of readability, each chapter starts with an overview introducing the topic of the chapter, and ends with a summary recapping the main ideas and key notions. Linguistic terminology is kept to a minimum. Important terms are printed in bold in the text and defined in the glossary. The authors are aware of the fact that each of the areas presented in the book deserves a deeper and more intensive discussion. The reference section at the end of each chapter gives selections of books and articles where more information on a given topic might be found. Along with the descriptive sections, the study questions are the most important part of each chapter, since they allow the user to test her understanding of the chapter and to apply the notions presented in it. The solutions to the study questions can be downloaded from the Benjamins website www.benjamins.com/.

The book is organised into twelve chapters, which are arranged into four larger parts.

Part I "The cognitive framework" presents the cognitive-linguistic theory which guides the approach to grammar adopted in this book. Chapter 1 introduces the basic units of thought and language, i.e. categories, and shows how these conceptual units relate to our experience and culture. Chapter 2 looks into a number of cognitive operations that are at work in producing and understanding language. It is shown that cognition, perception and language are closely interrelated. Chapter 3 demonstrates how conceptual units and their linguistic counterparts are combined, giving rise to complex ideas and grammar.

Part II "Things: nouns and noun phrases" deals with conceptual entities and their expression in language as nouns and noun phrases. In Cognitive Grammar, conceptual entities which typically have a certain stability in time are described as "things". Grammatically, things are coded as nouns. Chapter 4 distinguishes between different types of things and the corresponding subcategories of nouns, focusing on the distinction between "objects", which are coded as count nouns, and "substances", which are coded as mass nouns. We normally talk about particular instances of things, which are expressed as noun phrases. Chapter 5 deals with the ways instances of things are "grounded" in discourse in acts of reference. Chapter 6 is devoted to the quantification of things by means of quantifiers.

Chapter 7 looks at the qualification of things by means of modifiers. A major issue of the discussion of things and their instances will be to show how, in an act of communication, the speaker ensures that the hearer can call up the same instance of thing that the speaker has in mind.

Part III "Situations as temporal units: aspect, tense and modality" is concerned with temporal information which the speaker supplies to the hearer in describing a situation. Specifically, the speaker needs to provide information on the type of situation, its time of occurrence, and its reality status. Grammatically, this information is expressed in the verb complex as aspect, tense and modality. Chapter 8 distinguishes between basic situation types according to their internal temporal structure. Situation types may be viewed externally or internally and, accordingly, expressed by using the non-progressive or progressive aspect. Situations are, moreover, anchored with respect to time and potentiality. Chapter 9 investigates the ways situations are grounded in time by means of tense. Chapter 10 studies the grounding of situations in the world of potentiality, which is achieved in English by means of expressions of modality.

Part IV "Situations as relational units: sentence structure" is concerned with the conceptual structure of situations and their structure as sentences. The core of a situation consists of participants related to each other in a particular way. The participants perform certain "roles" like actors of a play. Configurations of central roles constitute meaningful "event schemas". Chapter 11 concentrates on basic event schemas like that of an action, which are encoded in language as simple sentences. Chapter 12 looks at roles that normally do not belong to the core of a situation. They relate to the domain of space and its metaphorical extensions into temporal, circumstantial and causal domains. They typically provide information needed in order to locate a situation in a setting.

The twelve chapters of the book provide a wealth of linguistic data and offer a balanced view of present-day Cognitive Linguistics. Each chapter is designed to be dealt with as a self-contained unit in a course. Depending on the level and duration of the course, the book may be used as a textbook in one term or in two consecutive terms. For a one-term course, a sensible goal might be to introduce the student to the methods and principles of Cognitive Grammar. In this case, we recommend concentrating on the general issues presented in the first section of each chapter and illustrating them by way of selected linguistic problems. For a two-term course, each chapter can be studied in-depth. In this case, Part I and Part II establish a coherent block to be covered in one term: they introduce the student to the cognitive framework and present various aspects of things and nouns. Part III and Part IV form another coherent block to tackle in the second term: they deal with situations and their expression in language.

The cognitive view of English grammar presented in this book may not meet with every reader's unconditional approval. The field of grammar is too burdened with centuries of theorising to satisfy everybody's taste. What we hope to have achieved with this book, however, is to show that taking a fresh look at grammar as a product of human conceptualisation may be worth the reader's time and effort.

Part I

The cognitive framework

A Cognitive Grammar is based on the insight that grammar is the product of human cognition. Therefore we must first understand the principles of cognition that determine grammar. This cognitive framework also requires a new terminology. The first three chapters are intended to introduce readers to the cognitive framework adopted in this book and familiarise them with notions, principles and methods necessary for an adequate description and understanding of the grammar of English.

Chapter 1 "Categories in thought and language" introduces the reader to the basic units of thought and language: categories. Categories are conceptual units, and those categories that are relevant to a community's culture are laid down in language as linguistic categories. Both words and forms of grammar are based on conceptual units. In order to make the cognitive approach to language easier to understand, we will illustrate some of the cognitive processes by using lexical examples. We will see that the inventory of linguistic categories is not sufficient to meet all our conceptual and communicative needs. The meanings of linguistic categories are therefore continually extended by conceptual shifts, in particular metonymy and metaphor.

Chapter 2 "Cognitive operations in thought and language" looks at the cognitive operations we perform in producing, communicating, and understanding language. There are a number of cognitive operations that shape the final product of our thought as it is expressed in language. Typically, the speaker can choose among many possible "construals", i.e. alternative ways of conceiving and expressing a situation. For example, we may describe a situation from our point of view or from that of the hearer. Another type of cognitive operation relates to the speaker's packaging of information as "mental spaces". As a rule, a considerable amount of information which the speaker intends to convey is not expressed explicitly. The hearer therefore needs to infer the meanings the speaker wants to communicate. The hearer is thus not just the recipient of a message but takes an active part in understanding an act of communication.

Chapter 3 "From thought to language: cognitive grammar" explores the ways thoughts are expressed in language. We need to identify the conceptual units and trace their expression as linguistic units. The basic conceptual units are "things" and "relations", which form the "conceptual core" of a situation. Situations and their participants need to be "grounded" in the speech situation so that the hearer can identify them. Furthermore, the speaker may want to provide background information about the situation, especially about the time,

the place and the circumstances surrounding a situation. In language, all these conceptual units are expressed as linguistic units within the grammatical structure of a sentence. Finally, the speaker is confronted with the task of combining situations into coherent discourse. In language, complex thoughts find expression in various kinds of complex sentence structure. At all these levels, the conceptual and linguistic units are shown to be inseparably intertwined.

Chapter 1

Categories in thought and language

1.0 Overview

Human thought and its expression in language are intimately interrelated. This chapter seeks to show how cognitive processes mediate between the world of concepts and their linguistic crystallisation in the lexicon and grammar of a language. Three types of cognitive processes will be dealt with in this chapter: the formation of **categories**, the conceptual grouping of categories, and the extension of conceptual and linguistic categories by means of **metonymy** and **metaphor**.

1.1 Categories and their internal structure

The practical world is not a world of clear-cut distinctions. (Bloomfield 1933)

1.1.1 Categories

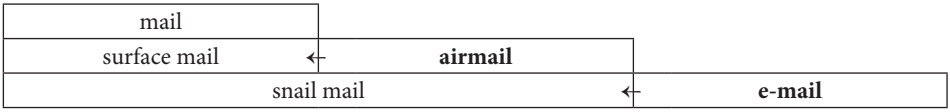
We can only make sense of the world of our experiences and communicate our thoughts by means of what philosophers and linguists call categories. A **category** is the conceptualisation of a collection of similar experiences that are meaningful and relevant to us, i.e. categories are formed for things that "matter" in a community. Categories are conceptual in nature, and many, but by no means all, of our conceptual categories are also laid down in language as linguistic categories. Let us think of an everyday situation that may give rise to a meaningful category for which we do not have a linguistic category.

Imagine the situation of driving to college or work every morning. Whenever you approach a particular junction, the road is clogged. The traffic situations you experience at this junction are, of course, different ones each day: the traffic jams occur at different times, the tailbacks are of different lengths, the cars and the drivers stuck in the jam are different, etc. Yet all these situations appear to be similar enough for you to group them together in one and the same collection of experiences. Since you need to get to college or work in time, these are also highly relevant situations to you. You have now, according to the above definition, formed a category, which may be described as 'prone to traffic jams', and whenever you come across a similar situation, you may subsume it under this category.

Categories which we have formed on the basis of our own individual experiences such as 'prone to traffic jams' are "private" conceptual categories. People who do not drive may never have experienced traffic jams and therefore not formed this category. If I want to communicate my thoughts to other people, I need linguistic signs symbolising these thoughts or conceptual categories. These are linguistic categories, whereby the exact relation between conceptual and linguistic categories is far from clear, but this will not concern us here. Most linguistic categories are shared by the members of a speech community: they are "public" categories. The most commonly found linguistic categories are lexical items, i.e. words. However, if I want to warn my friend that road junction 65 is 'prone to traffic jams', there is no simple word available in English to express this idea. However, English provides linguistic categories for parts of the idea: the compound word *traffic jam*, the adjective *prone*, and the preposition *to*. *Prone* followed by *to* is used in expressions such as *prone to infection* or *prone to error*, where the prepositional object (*infection*, *error*) describes something unpleasant which is likely to happen. The situation of traffic jams fits in with this familiar mode of expression, and I can now communicate my thoughts by means of a particular grammatical structure and three lexical categories: *prone*, *to*, and *traffic jam*.

Any category is part of an overall system of categories. Language is sometimes seen as an **ecological system** in which linguistic categories occupy an "ecological niche" like living beings in nature. The special meaning of a linguistic category is defined relative to its neighbouring categories and the system at large, and the introduction of a new category affects other categories. For example, in the old days we only had one word for 'posted items': *mail*. The introduction of airmail affected the system with the result that traditional postal deliveries came to be named *surface mail*. The new category 'surface mail' only makes sense in contrast to its opposite category 'airmail', and this is also brought out in its label *surface* (of the earth). The introduction of e-mail has given rise to a new ecological niche for its opposite category, non-electronic mail. Non-electronic mail comprises both surface mail and airmail and is informally described as *snail mail* — the label *snail mail* reflects its opposition to e-mail. These lexical developments are diagrammed in Table 1.1. The arrows point to an ecological niche which originated as a result of the introduction of a new lexical category.

Table 1.1. Ecological subsystem of 'mail'



The grammar of a language is also an ecological system whose constructions occupy ecological niches. For example, English, unlike many other European languages, has developed a progressive aspect. As a result, the ecological niche of the simple, or non-progressive, form is defined relative to the progressive aspect. Events that go on at present time are described in the present progressive, as in (1a), not in the simple present. The simple present tense can be used, as in (1b), but its ecological niche is restricted to describing habitual events (for aspect see Chapter 8).

(1) a. Howard is playing football in the yard. [*event in progress*]
b. Howard plays football. [*habit*]

The process of establishing categories within an ecological system is known as **categorisation**. Categorisation means drawing "conceptual boundaries" and giving structure to an unstructured world around us. The structure which our linguistic categories provide is, however, deceptive: linguistic categories only cover a very small fraction of our conceptual distinctions. Moreover, linguistic expressions are typically associated with more than one concept and hence tend to be vague or, to use the technical term, "fuzzy". In short, language can hardly be said to reflect reality. Different cultures often categorise the world differently and lay this down in their linguistic categories. Anybody who has ever studied a foreign language will have noticed that words in that language and the range of meanings associated with seemingly equivalent words are often different from those in one's own language.

Let us look at the way different cultures deal with the phenomenon of weather conditions of poor visibility. In the objective world, there is an undifferentiated gradual transition from dense fog caused by evaporation to dry haze. Languages, however, have only a few words which cut up this conceptual continuum at certain points and, moreover, the distinctions made by each language tend to be different. Table 1.2 illustrates lexical categories expressing weather conditions in the languages of three cultures. The English-speaking and Dutch-speaking cultures have three lexical categories for weather conditions, but make distinctions at different points on the weather continuum, while German only provides two categories.

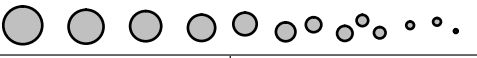
Table 1.2. Culture-specific lexical categorisations

weather continuum			
English culture	*fog*	*mist*	*haze*
Dutch culture	*mist*	*nevel*	*waas*
German culture	*Nebel*	*Dunst*	

We might speculate that the differences in the way the weather continuum is cut up relates to the prevailing climatic conditions and hence is meaningful to each of these three cultures. The predominantly maritime climate in Britain and the Netherlands may have favoured a more differentiated three-way distinction of weather conditions while the continental climate in Germany could be sufficiently described by a two-way distinction. Whatever the reason for the differences may be, we can state as a fact that, when talking about visibility and air moisture, speakers of English and Dutch have to place their experience under one of three lexical categories provided by their language, while speakers of German choose between two categories. In this sense, a language imposes its own conceptual grid upon our world of experience.

Just like lexical categories, grammatical categories are based on meaningful experiences of the world. Imagine the following situation. A gold digger who hits upon a sizeable piece of gold will think to himself that he has found a precious gold nugget. Most of the time, however, all he finds at the bottom of his pan after washing out the sand is, at most, minute flakes of gold, which he calls *gold dust*. His experience as a gold digger tells him that gold dust is pretty worthless. So the distinction between the categories 'gold nugget' and 'gold dust' is meaningful and relevant to the gold digger. He can tell the difference between gold nuggets and gold dust from the size and the shape of the pieces of gold: gold nuggets are bigger, have a distinct shape, are discrete particles and can therefore be counted; gold dust, by contrast, is composed of small particles which lack contours and cannot be counted or are not worth the trouble. We tend to take the existence of gold nuggets and gold dust for granted as if they were part of objective reality, but the distinction between them is, in fact, purely man-made. This becomes clear when two speakers find that their respective distinctions differ: one gold digger may become much more excited about a particular find than his companion. We mentally cut the continuum of sizes of pieces of gold at some point and mark the conceptual distinction both lexically and grammatically: lexically, larger-sized pieces are categorised as *nuggets* and smaller-sized pieces as *gold dust*; grammatically, larger-sized pieces are categorised as count nouns and smaller-sized pieces as mass nouns. Count nouns may be pluralised, as in *ten gold nuggets*, while mass nouns cannot be counted, as in **ten gold dusts*. A conceptual continuum may thus be split up both lexically and grammatically, as shown in Table 1.3.

Table 1.3. Lexical and grammatical categorisation

"gold" continuum		
lexical categories	*gold nugget(s)*	*gold dust*
grammatical categories	count noun	mass noun

The fundamental conceptual distinction between count nouns and mass nouns will be looked at more closely in Chapter 4. Here it is important to note that categories do not describe objective reality but that they are based on a community's experience and conception of reality. Our conception of reality makes us "see" the many different traffic situations

at a road junction as being sufficiently similar in nature so that we may categorise them together. The case of nuggets and gold dust, on the other hand, demonstrates that our conception of reality also makes us "see" similar entities as different and, consequently, makes us categorise them differently. To put it simply, we can only see reality in relation to us as part of it.

1.1.2 Internal structure of categories: Prototype and periphery

A category such as 'car' is composed of various similar members. For example, a sports car, an estate car (AmE. *station wagon*), a jeep and a saloon car (AmE. *sedan*) are completely different types of cars but are, nonetheless, understood as being similar enough to count as members of the same category 'car'. However, we intuitively feel that some of these types of cars fit the idea of the category 'car' better than others. Probably, for most people, a saloon car is the best type of car, and an estate car is a better type of car than a jeep. Thus, a saloon car would be considered a prototypical member, or **prototype**, of the car category, while other types of cars such as a jeep would be considered to be less prototypical members of this category. In English, a van and a lorry would be seen as peripheral members of the category 'car', or even not cars at all, because they are used to transport not people but goods. A motor cycle would be outside the category 'car' altogether because it only has two wheels.

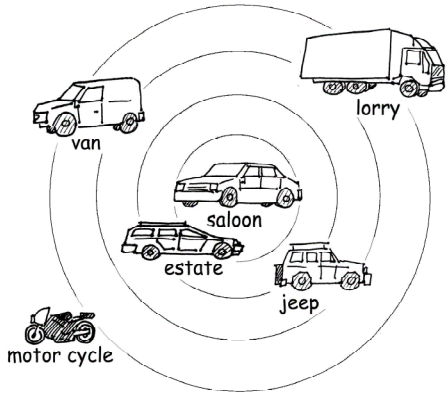


Figure 1.1. The category 'car'

In the same way that lexical categories have prototypical and peripheral members, grammatical categories display different degrees of membership. This holds true for any grammatical category such as 'noun', 'verb', 'transitive verb', 'passive', etc. For example, transitive verbs are usually characterised as taking a direct object, while intransitive verbs do not. But this is only part of the story. Within these two grammatical categories, some types of verbs are obviously better members of their category than others. This can be shown in their syntactic behaviour. For example, sentences with prototypical transitive verbs can be freely passivised as in (2a), sentences with less prototypical transitive verbs can only marginally form a passive (2b), and sentences with peripheral transitive verbs do not allow the passive at all (2c):

(2)	*Active*	*Passive*
a.	Sally *bought* the book.	a'. The book *was bought* by Sally.
b.	Sally *liked* the book.	b'. ?The book *was liked* by Sally.
c.	Sally *had* the book.	c'. * The book *was had* by Sally.

The issue of transitivity will be further explored in Chapter 11. At this point we may, however, already note the impact of prototype structure in grammar. An action verb like *buy* is obviously a better member of the category of transitive verbs than an emotion verb such as *like*; and *like* in its turn is a better transitive verb than a possession verb like *have*.

1.2 Conceptual groupings of categories

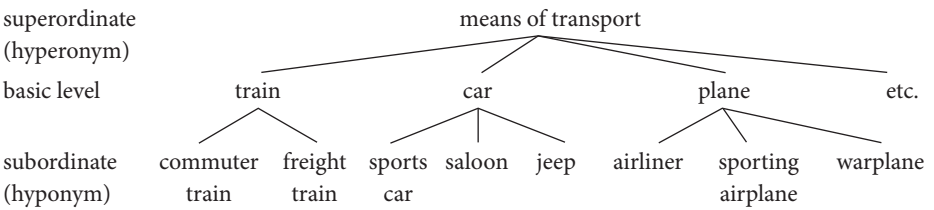
Categories form part of larger groupings of categories. In particular, categories

i. are included in a hierarchy, or *taxonomy*, of categories (e.g. 'car' is a member of the category 'means of transport');
ii. may be a part of another category, i.e. may be included in a *partonomy* (e.g. 'wheels' are parts of the category 'car'); and
iii. form part of a coherent area of conceptualisation, especially *frames* and *domains* (e.g. the 'car' frame and the domain of 'combustion').

1.2.1 Taxonomies

Categories are included in hierarchies of categories. They are normally included as members of a higher category and in their turn subsume members of a lower category. Such conceptual hierarchies are known as **taxonomies**. For example, the category 'car' — along with 'train', 'bike' and 'plane' — is a member of the higher category 'means of transport' and has as its members the categories 'sports car', 'jeep', 'saloon', 'estate car', etc. The members of a higher category are prototypically structured. Thus, 'car' or 'train' is a better member of the category 'means of transport' than 'bicycle' or 'plane'. We might arrange all these categories in a three-level hierarchy in which the lower categories are members, or kinds, of a higher category, as illustrated in Table 1.4. Thus a 'sports car' is a kind of 'car', and a 'car' is a kind of 'means of transport'. We express such *kind of*-relations by simply saying *is a*: *A train is a means of transport*. Note that a taxonomy is purely conceptual in nature: there is no such hierarchical order of categories in reality. Taxonomic hierarchies also apply to words and are known as *hyponymies*. The superordinate word is described as a *hyperonym*, the subordinate word as a *hyponym*.

Table 1.4. Taxonomy of the category 'means of transport'

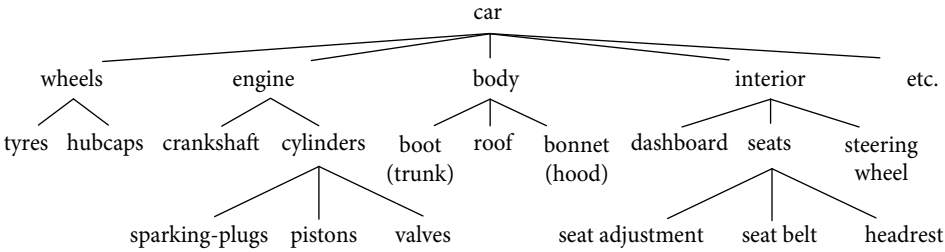


The types of category that come to our mind most readily in our daily interaction with the world belong to the middle, or **basic level**. Categories at the basic level such as 'car', 'train' and 'plane' are conceptually much more salient than either their superordinate category 'means of transport' or any of their subordinate categories. As a result, terms which denote basic-level categories, i.e. **basic-level terms**, have special properties: they are simple in form, are used frequently, are learned early by young children, and evoke rich images.

1.2.2 Partonomies

Taxonomic hierarchies have to be distinguished from part-whole hierarchies, in which categories are interrelated by *part of*-relations. Part-whole hierarchies are known as **partonomies**, or meronymies. Table 1.5 illustrates a partonomy of the category 'car' and some of its parts, which include the wheels, the engine, the body, and the interior. All of these main parts consist of further parts: the wheels have tyres and hubcaps, the engine has amongst others a crankshaft and cylinders, etc. A specialist would even be able to identify about 15,000 separate components that make up a car. All of these *part of*-relations are expressed by using *have*, as in *This engine has six cylinders.*

Table 1.5. Partonomy of the category 'car'



Partonomies refer to whole entities and parts of them in the real world as we conceive of them. Each part is unique in that it has its own place and function within the total structure.

1.2.3 Frames and domains

1.2.3.1 *Frames*

The parts of a thing are not just loosely put next to each other as Table 1.5. might suggest, but they are conceptually integrated within a structured whole. Thus, the body of a car provides the frame of the vehicle, the engine produces the energy to propel the car, the wheels allow its motion along a road, and its interior is designed to carry and protect its passengers. In thinking of a car, we activate knowledge of the functional uses of these parts; but we also think of cars within their taxonomy of means of transport, we see prototypical and peripheral cars, and we also visualise scenes involving cars such as 'driving', 'parking', 'accidents', etc. This coherent "package of knowledge" that surrounds a category and is

activated when we use or hear a word is known as a conceptual **frame**. As we will see in the following chapters, all our coherent bits of knowledge are structured in conceptual frames. Thus, we have a 'marriage' frame, a 'party' frame, a 'university' frame, etc. All the situations described so far involve frames: a 'traffic' frame, a 'mail' frame, a 'weather' frame, and a 'gold digging' frame. The 'gold digging' frame, for example, includes our encyclopaedic knowledge of the gold rush in 19th century America, fortune hunters looking for gold using a pan, etc.

Our knowledge of frames enables us to understand the coherent "nature" of things in which each part has its place and function within its global structure. For example, when the car won't start, our knowledge of the 'car' frame makes us look for problems in the battery or petrol supply. Our shared knowledge of frames also governs communication. For instance, in the sentences under (3) and pictured in Figure 1.2, we immediately "know" that a particular main part or parts of a car are meant, although only the car as a whole is named:

(3)	*Whole*	*Parts*
a.	Can you lubricate *the car*?	[*parts easing smooth motion*]
b.	Can you start *the car*?	[*engine of the car*]
c.	Can you wash *the car*?	[*body of the car*]
d.	Can you hoover *the car*?	[*interior of the car*]

Our knowledge of the 'car' frame tells us that the parts of a car that are lubricated are those that move such as the wheels, that we start a car by starting its engine, that the part of a car that gets washed is the body, and that the part of a car that is vacuumed is its interior. The wheels, the engine, the body and the interior are the parts of the car that are directly and crucially involved in each of the situations described under (3). Such parts of a whole are known as an entity's **active zone**. Speaking of a whole thing but meaning its active zone is

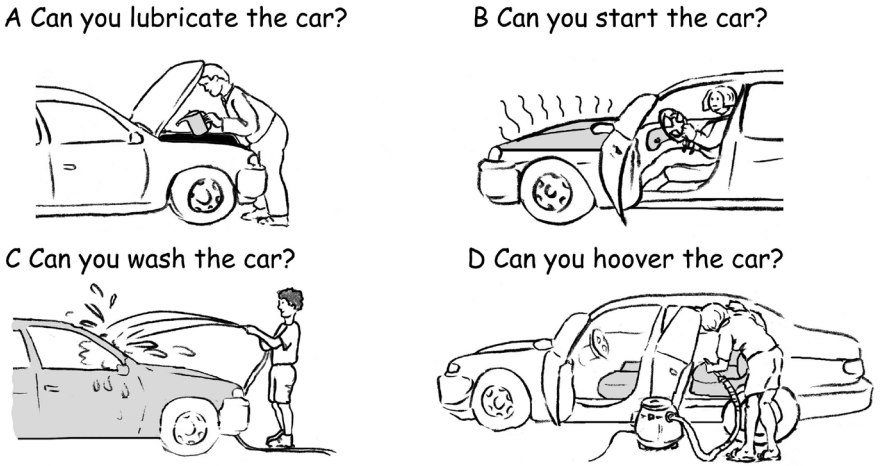


Figure 1.2. Active zone parts of a car

a very common phenomenon. In fact, this way of speaking comes to us so naturally that we have to think twice before we realise that we are not using the words at their face value. For example, we speak of "a printer running out of ink" when we mean its cartridge, or of "eating a banana" when we mean its pulp but not its peel. What these examples are meant to show is that recognising an active zone is a major cognitive achievement by the hearer. We can see this when we look up the word *car* in a dictionary: among its meanings listed there, we will not find the senses 'wheels', 'engine', 'body', and 'interior' of a car, which we so easily supply in our understanding. More generally, this phenomenon reveals an important aspect of language in use: we always understand acts of communication with respect to our knowledge of frames.

1.2.3.2 *Domains*

Categories relate not only to taxonomies, partonomies and frames, but also to conceptual domains. A conceptual **domain** is the general field to which a category or frame belongs in a given situation. For example, a knife belongs to the domain of 'eating' when used for cutting bread on the breakfast table, but to the domain of 'fighting' when used as a weapon. Whereas frames are specific knowledge structures surrounding categories, conceptual domains are very general areas of conceptualisation. Some typical domains are those of 'space', 'time', 'emotion', 'sports', 'travelling', etc. Conceptual domains crosscut with frames and thus allow us to link frames to one another. For example, the 'car' frame may be linked to the 'house' frame by means of the shared domain 'combustion': both the engine of a car and the heating system of a house use fossil energy. Such links may be represented as shown in Figure 1.3.

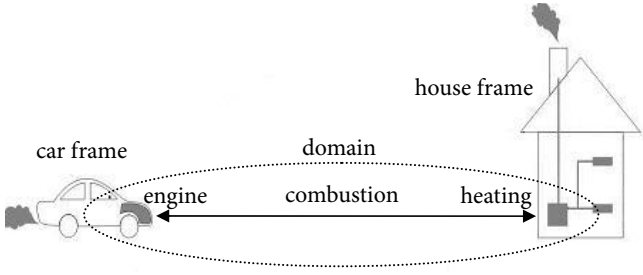


Figure 1.3. Interaction of frames and domains

The dotted ellipse in Figure 1.3 indicates the conceptual domain 'combustion', which is shared by the 'car' and 'house' frames. The domain 'combustion' may be further linked to the domain of environmental pollution, so that both combustion engines and combustion heating systems are seen as environmental polluters. The possible links of categories and frames by means of domains are myriad. For example, the 'traffic' domain links cars to other transport systems and allows us to compare different means of transport with respect to comfort, efficiency or costs of travelling.

1.3 Extension of categories by means of metonymy and metaphor

Our human ability to evoke frames and domains allows us to extend our inventory of conceptual and linguistic categories substantially. We are constantly being confronted with innovations and changes in the world, which we need to categorise conceptually and which we often express as linguistic categories. One way of dealing with these new experiences is to create new, especially compound words — something we do all the time. For instance, the heightened threat of terrorist attacks led to the introduction of security personnel on airliners, for which the new word *air marshal* has been coined. However, the sheer number of new words that would have to be coined would soon exceed the capacity of our memory and render communication impossible. A more elegant and efficient solution to deal with new experiences and innovations is to make use of our existing linguistic categories and extend their meanings, i.e. the conceptual categories associated with them. There are various means of extending the senses of a linguistic category; here we will only concentrate on the two most powerful conceptual shifts that lead to meaning extension: metonymy and metaphor.

1.3.1 Conceptual shifts

Extensions of the sense of a word are not just a matter of language, but a matter of cognition. Let us illustrate conceptual shifts of the word *brain*. According to a dictionary definition, the brain is 'the organ inside your head that controls how you think, feel, and move'. In the following examples, *brain* is obviously used in other senses:

(4) a. The company is hiring new *brains*.
b. The microprocessor is the *brain* of a computer.

Most people immediately understand *brains* in (4a) to mean 'intelligent persons' and *brain* in (4b) to mean 'microchip of a computer'. We thus need to account for the shift in meaning from 'organ inside your head' to 'intelligent person' on the one hand and to 'microchip' on the other hand. The cognitive process that relates literal meanings to extended meanings is known as mapping. **Mapping** is the projection of one set of conceptual entities onto another set of conceptual entities.

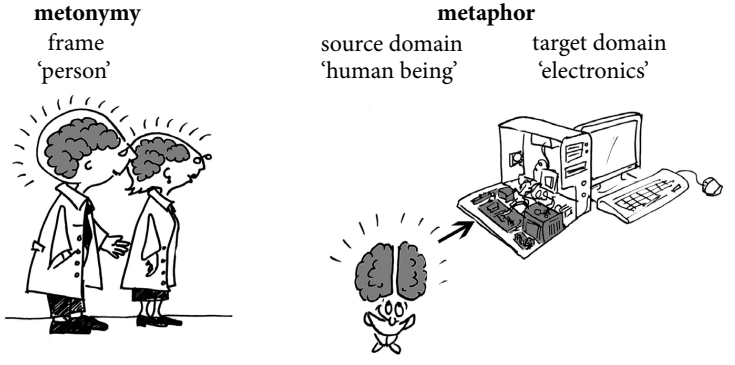
The conceptual shift in (4a) involves a mapping between 'brain' and 'intelligent person'. Since a brain is a body part of a person, both categories belong to the same frame. In using the word *brain*, we give prominence to this particular body part of a person. Moreover, we know that the brain is the seat of a person's intelligence and that we are obviously not talking about the brain as an organ but its prominent property of intelligence. Thus both the body part 'brain' and the property 'intelligence' are mapped onto 'person' so that we arrive at the interpretation of 'intelligent person' for *brain*. This kind of conceptual shift within the same frame or domain is an instance of **metonymy**.

The conceptual shift in sentence (4b), *The microprocessor is the brain of a computer*, is of a different kind. We are no longer talking about people but computers. People and their brains belong to the conceptual domain 'human being', which comprises human aspects

such as consciousness, rationality, emotions, etc. Microchips belong to the conceptual domain 'electronics', which comprises computer technology and other digital equipment such as mobile phones and DVD. The structure of the domain 'human being' is mapped onto the structure of the domain 'electronics' and, as part of the structures, the 'brain' as a body part is mapped onto 'microchip' as a part of a computer. Thus, the way a microprocessor functions in a computer is understood in terms of the way a brain functions in a human being. This kind of conceptual shift across domains is an instance of **metaphor**.

In cognitive linguistics, the two conceptual domains linked in a metaphorical mapping are known as **source domain** and **target domain**. In the *brains* metaphor, the 'human being' serves as the source domain and 'electronics' as the target domain.

Figure 1.4 illustrates the two types of conceptual shift: a metonymic shift, which operates within the same frame or domain, and a metaphorical shift, which operates across two different domains. Metonymy is therefore often said to involve contiguity, while metaphor is said to involve similarity.



(a) *(hire) new brains* (b) *the brain of a computer*

Figure 1.4. Metonymy and metaphor

In the metonymic mapping (a), the word *brains* is used to stand for persons, but we may also make use of other body parts within the 'person' frame. For example, the coach of a soccer team might say something like *We need fresh legs* when he wants to bring in a new player. In the metaphorical mapping (b), the brain of the human being is mapped onto the microchip of a computer; but we may also project other elements that belong to the human domain onto the domain of 'electronics'. For example, expressions such as *memory*, *virus* or *brood* in *The computer is brooding over the problem* describe the computer in terms of humans. We will now look more closely at metonymy and metaphor and the functions these two conceptual shifts have for thought and communication.

1.3.2 Conceptual metonymy

Let us look at an everyday expression of metonymy:

(5) *The Crown* never rejects a bill approved by Parliament.

The Crown in sentence (5) is used to stand for a 'monarch' in a frame which might be described as 'monarchy' frame. A crown is that part of a monarch's attire which most attracts our attention. If we were asked to draw a king, the part which we would certainly not leave out would be his crown: it is *the* distinguishing feature of a king. Its importance is reflected in the expressions *to crown someone king* and *uncrowned king*. The crown has also become the conventionalised symbol of its royal wearer and, more abstractly, of the monarchy.

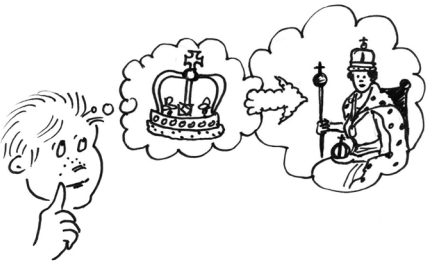


Figure 1.5. Metonymic reference point and target

We described metonymy as a conceptual shift, and we can now see what its conceptual impact is. We mentally trace a path from a conceptually salient conceptual entity, such as 'crown', to another conceptual entity, 'monarch'. The notion of *salient* or *salience* is understood here in the sense of 'conspicuously standing out conceptually'. Technically, we will refer to the salient entity in this conceptual shift as a **reference point**. Metonymy thus involves speaking about a salient reference point which allows us to access another conceptual entity, the target. In processing the PART FOR WHOLE metonymy in (5), we thus mentally access a whole ('monarch') via a salient part ('crown'). This situation is illustrated in Figure 1.5. We also find the reverse situation of a WHOLE FOR PART metonymy, in which a whole serves as a reference point for accessing one of its parts, as in sentence (6):

(6) *Our school* won the cup.

Here, *our school* refers to a team of our school. The school is a conceptually salient reference point in that it is a permanent institution, possibly has its own outfit and songs, and wins fame by winning the cup. The team is a fully independent part of the school. In this respect this WHOLE FOR PART metonymy is different from the active-zone examples discussed in Section 1.2.3.1 above.

Both the PART FOR WHOLE metonymy and WHOLE FOR PART metonymy are conceptual in nature because they have a very general application, i.e. many more instances of these metonymies can be found in language, and even outside language. There are many other types of conceptual metonymies, some of which are listed below (conceptual metonymies and metaphors are conventionally printed in small capitals):

(7)	*Conceptual metonymy*	*Metonymic expression*
a.	POSSESSION FOR OWNER	*The Porsche* left without paying.
b.	INSTITUTION FOR PERSON	She phoned *the hospital*.
c.	CONTAINER FOR CONTENTS	*The kettle* is boiling.
d.	ORGAN OF PERCEPTION FOR PERCEPTION	Our warning fell on deaf *ears*.

In all these cases, the metonymic expression highlights a facet of a frame that, for some reason or other, serves as the salient reference point. In (7a), a thing possessed, namely the car, serves as the reference point for accessing its owner, the driver, whom we do not know. In (7b), we need a doctor but do not know who will pick up the phone: the receptionist, a nurse or a doctor. In (7c), the kettle is visible while the water boiling in it is not. Similarly, in (7d), a person's ear is tangible but the person's hearing ability is not.

The cases of metonymy looked at so far have had to do with extensions of lexical categories. We will see later on that metonymy also operates in the grammar of a language. The following examples illustrate a few such instances of grammatical metonymy:

(8)	*Conceptual metonymy*	*Metonymic expression*
a.	OBJECT FOR SUBSTANCE	We had *octopus* for lunch.
b.	RESULT FOR ACTION	*Win* two weeks' vacation!

In (8a), the count noun *octopus*, which commonly refers to the invertebrate that inhabits the oceans, is used as a mass noun and describes the food substance acquired from an octopus (see Chapter 4.3.1.2). In (8b), the verb *win*, which normally describes a punctual event, is used to describe a preceding action, such as playing in the lottery, which may lead to winning two weeks' vacation as a result (see Chapter 8.5.1).

1.3.3 Conceptual metaphor

A good metaphor implies an intuitive perception of the similarity in dissimilars. (Aristotle, *Poetics)*

Many people, including literary critics, often assume that metaphor is a rhetorical device used by poets to achieve an aesthetic effect. While this may be true for highly imaginative metaphors, it is not true for the kinds of metaphor we commonly use. These metaphors are less striking and often described as "dead" because we are no longer aware of them as metaphors. Let us look at an example of what may be called a dead metaphor:

(9) Amanda was *overcome* by grief.

Sentence (9) may not appear to be metaphorical at first sight: the expression *be overcome* simply means 'be overwhelmed emotionally'. As its use in the famous song *We shall overcome* attests, the word *overcome* originally belongs to the domain of fighting and means 'come out on top in a contest or struggle', i.e. 'defeat someone'. Many emotions, particularly negative ones such as grief or anger, are metaphorically seen as physical opponents with which we have to struggle. Thus we use metaphorical expressions such as *wrestle with one's anger* or *struggle with one's conscience*. We may describe

this particular metaphor conceptually as EMOTIONS ARE OPPONENTS. The metaphor has developed because we have no direct way of understanding our emotions; it is almost impossible even to find literal expressions capable of describing such strong emotions. Metaphor thus provides a means of understanding abstract domains such as emotions by relating them to better-known domains and experiences in the physical world. Here are some more conceptual metaphors and their manifestations in language:

(10)	*Conceptual metaphor*	*Metaphorical expression*
a.	TIME IS MONEY	I've *invested* a lot of time in her.
b.	LOVE IS MADNESS	I am *crazy* about her.
c.	BELIEFS ARE POSSESSIONS	He *clings* to his beliefs.
d.	UNDERSTANDING IS SEEING	I don't *see* your point.

A particularly widespread and productive set of metaphors are "orientational metaphors". These metaphors have as their source domain spatial relations such as up–down or front–back. Such basic spatial structures are known as image schemas. **Image schemas** make particularly good source domains because they have developed from our earliest bodily and spatial experiences and hence are immediately meaningful to us. For example, we constantly experience up and down movements in the physical world: the force of gravity makes things like rain come down, while heat makes things like smoke go up. Hence we have developed a deeply entrenched UP–DOWN image schema. In exploring the world around us we grasp objects and develop a CONTACT schema. The fact that we interact in the world with the front of our bodies has given rise to the FRONT–BACK schema. Some objects have a hollow space which may be filled with other objects or substances, such as a bowl filled with milk. This experience gives rise to a CONTAINER schema, which is characterised by a boundary setting an interior apart from an exterior. The MOTION schema has developed from our perception of objects moving past our eyes and the experience of our own motor activities when we move around. All these embodied image schemas provide rich sources for conceptual metaphor:

(11)	*Conceptual metaphor*	*Metaphorical expression*
a.	MORE IS UP	Oil prices are *rising* again.
b.	CONNECTION IS CONTACT	Please *hold* on!
c.	THE FUTURE IS IN FRONT	I look *forward* to seeing you.
d.	STATES ARE CONTAINERS	He is *in* a mess.
e.	CHANGE IS MOTION	The telephone *went* dead.
f.	CAUSES ARE FORCES	His nagging *sent* me into a frenzy.

The above image schemas serve as source domains for our understanding of various abstract domains: the MORE IS UP schema in (11a) describes more in quantity, the CONTACT schema in sentence (11b), said on the phone, is used here to describe an action, the

FRONT-BACK schema in (11c) serves to describe future time, the CONTAINER schema in (11d) describes a state, the MOTION schema in (11e) describes a change of state, and the FORCE schema in (11f) makes us see a relation of cause and effect in terms of a human being deliberately setting an object in motion.

1.4 Summary

This chapter dealt with categories and the cognitive processes operating on categories. **Categories** are conceptual units; they represent collections of similar experiences that are meaningful and relevant to us. A comparatively small number of categories are crystallised in language as lexical and grammatical categories. Linguistic categories such as the new word *e-mail* occupy an ecological niche in the overall **ecological system** of a language. The cognitive process by means of which linguistic categories are established is known as **categorisation**. Categories have members. Some members are better instances of a category than others, the best instance being the **prototype**. Thus a 'saloon car' is a prototypical member of the category 'car'.

Categories are also part of conceptual groupings: they form parts of taxonomies, partonomies, frames and domains. **Taxonomies** are conceptual hierarchies whose categories are related by *kind of*-relations, as between 'car' and 'saloon'. The conceptually most salient level in a taxonomy is the middle, or **basic level**. **Basic-level terms** such as 'car' are simple in form, frequently used, acquired early, and evoke rich images. **Partonomies** are conceptual hierarchies whose categories are related by *part of*-relations, as between 'car' and 'engine'. Conceptual **frames** are larger coherent packages of knowledge that are prompted with every word. Our knowledge of the 'car' frame, for example, allows us to understand the use of *car* in *Can you start the car?* in the sense of its **active zone** 'engine of the car'. Conceptual **domains** are the general fields to which categories or frames belong in a given situation, such as that of 'combustion', which relates engines and heating systems.

Extensions of linguistic categories are made possible, amongst other things, through the conceptual shifts of metonymy and metaphor. These conceptual shifts involve projections of one set of conceptual entities onto another set of entities. Technically, these conceptual shifts are referred to as **mappings**. In **metonymy**, one conceptual entity is mapped onto another within the same frame or domain; e.g. *crown* may stand for 'monarch' within the frame 'monarchy'. Conceptually, 'crown' serves as a salient **reference point** for mentally accessing 'monarch'. In **metaphor**, we map the structure of one domain onto the structure of another domain; e.g. in *I am crazy about her*, the domain 'madness' is mapped onto the domain 'love'. 'Madness' is the metaphorical **source domain**, and 'love' the metaphorical **target domain**. The source domains of many metaphors are image-schematic. **Image schemas** are basic schematic structures that are directly meaningful, such as UP and DOWN or FRONT and BACK.

Further Reading

The foundations of cognitive linguistics are laid down in the important monographs by Lakoff (1987) and Langacker (1987a, 1991a, 2000). Introductions to cognitive linguistics are presented by Dirven & Verspoor, eds. ([2]2004), Ungerer & Schmid ([2]2006), Lee (2001), Croft & Cruse (2004), Taylor (2002), and Evans & Green (2006). A complete survey of cognitive linguistics is the handbook by Geeraerts & Cuyckens, eds. (2007). Readers are Geeraerts (2006) and Evans, Bergen & Zinken (2007), and fields of application are presented in Kristiansen et al., eds. (2006).

Cognitive issues of categorisation are dealt with in Rosch (1977, 1978, 1999), Lakoff (1987), Tsohatzidis (1990), Zerubavel (1991), and Taylor ([3]2004). The view of language as an ecological system is developed in Lakoff (1987), Taylor (2004) and Violi (2004).

The notion of 'frame' was introduced to linguistics by Fillmore (1982) and Fillmore & Atkins (1992). An extensive discussion of frames and related notions is found in Ungerer & Schmid ([2]2006). Recently the notion of 'frame' has been applied to the language of politics by Lakoff (2004). The concept of 'domain' is discussed by Langacker (1987a, 1991a) and Croft (1993), who applies it to the distinction between metaphor and metonymy. The notion of 'active zone' goes back to Langacker (2000).

Metonymy as a cognitive phenomenon is discussed in Croft (1993), Langacker (1993), Gibbs (1994), Panther & Radden, eds. (1999), Barcelona, ed. (2000), and Dirven & Pörings, eds. (2002).

The cognitive theory of metaphor has been developed by Lakoff & Johnson (1980) and elaborated in Lakoff (1987, 1993), Johnson (1987), Lakoff & Turner (1989), Kövecses (1990, 2002, 2005), Gibbs (1994), Gibbs & Steen (1997), Lakoff & Johnson (1999), Barcelona, ed. (2000), and Dirven & Pörings, eds. (2002).

The issue of image schemas is discussed in Lakoff (1987), Johnson (1987), Krzeszowski (1993), Gibbs & Colston (1995), and Hampe, ed. (2005).

Study questions

1. What do the following examples reveal about conceptual and linguistic categories and language as an ecological system?
   a. A reader puts a question to the Dr. Wordsmith column in *The Independent*:
      "Sometimes when we yawn it makes a very loud noise and sometimes it is totally silent. Does the English language have a pair of words that usefully distinguishes between the two?"
      Dr. Wordsmith writes: "If it ever did, it does not now."
   b. A boy tells his girl-friend:
      "I didn't want to be in love. I only wanted to be in like."

2. What do the linguistic categories (printed in italics) reveal about categorisation?
   a. Would you like your coffee *white* or *black*?
   b. Technically, *crayfish*, *jellyfish*, *starfish* and *shellfish* are not fish.

c. Some people call *graffiti* vandalism, others call it *art*.
d. I don't consider marijuana a *drug*. It's a *plant* like tea. Cocaine is a *drug*.

3. Which part of the house is meant as the active zone in the following examples?
   a. I'm having the house painted.
   b. Have you locked the house?
   c. He entered the house.
   d. I'm cleaning the house.
   e. They are having an open house today.

4. Identify the conceptual metonymies in the following italicised expressions.
   a. He drank the whole *bottle*.
   b. Arthur married *money*.
   c. Einstein was one of the most creative *minds* of the last century.
   d. There are too many *mouths* to feed.
   e. *Own* land in the great American West. (advertisement)
   f. *Brussels* has been negotiating with *Boeing* for months.
   g. *My wife* has been towed away.
   h. Where are *you* parked?

5. Identify the conceptual metaphors and indicate whether their source domain is image-schematic. The last three metaphors have not been dealt with in the chapter.
   a. Do you *see* my point?
   b. Socrates was reputed to *hold* knowledge in high esteem.
   c. *Budget* your time carefully.
   d. Sports car sales are *soaring*.
   e. It's *going* to rain.
   f. I've just *turned* thirty.
   g. I'll get in *touch* with you.
   h. These tiring exercises *sent* me to sleep.
   i. He is *boiling* with anger.
   j. This is *central* to the issue.
   k. Cognitive linguistics is linguistics with a *human face*.

Chapter 2

Cognitive operations in thought and language

2.0 Overview

A number of cognitive operations determine the way language is used. This chapter will present three types of cognitive operations: the construal of one's thoughts in speaking, the building of mental spaces in communication, and the drawing of inferences by the hearer. **Construals** are operations that help select the appropriate structural possibility among various alternatives. Construals are strikingly similar to principles of perceptual organisation. **Mental spaces** are packages of information that are built and evoked in the current discourse. Mental spaces draw upon our wider encyclopaedic knowledge about things in the world. **Inferences** are cognitive operations in which conclusions are drawn from a set of premises. The hearer's inferential process in arriving at the meaning of an utterance is known as **conversational implicature**.

2.1 Construals

But men may construe things, after their fashion,
Clean from the purpose of the things themselves.
(Shakespeare, *Julius Caesar*)

There is, as a rule, more than one way of thinking of a particular scene and describing it in language. In choosing one conceptual or linguistic alternative rather than another, the speaker "construes" her thoughts in a specific way. This is what is meant by the notion of

construal. Construals are cognitive operations which are often strikingly similar to principles of visual perception. For example, I may describe the contents of a bottle of whisky as being *half full* or *half empty*. In describing it as *half full*, I am looking at the drink that is (still) left in the bottle, and in describing it as *half empty*, I am thinking of the drink that is gone. The descriptions clearly differ with respect to the perspective adopted: from the perspective of a full bottle or from the perspective of an empty bottle. Adopting a particular perspective is one of many possible construal operations. Here we will look at nine dimensions of construal that are relevant in grammar. The first six relate to viewing operations: (i) viewing frame, (ii) generality vs specificity, (iii) viewpoint, (iv) objectivity vs subjectivity, (v) mental scanning, and (vi) fictive motion; the latter three relate to prominence: (vii) windowing of attention, (viii) figure and ground, and (ix) profiling.

2.1.1 Viewing frame

In viewing a scene I may take a more distant or a closer position giving me a wider or more restricted **viewing frame**. Imagine the scene of a train travelling from Norwich to Peterborough. An observer looking at the scene from an aeroplane has a *maximal viewing frame*: she has the whole train route in her view, including its termini in the two cities and the surroundings. We also have a maximal viewing frame of the train route when we study a map of the railway network and trace the connection between the two towns with our finger. When travelling on the train, however, the view from the window of our compartment only lets us see that part of the route which we are passing at any given moment. The endpoints of the section fall outside the viewing frame, even though of course we know that the train journey has a beginning and an end. We now have a *restricted viewing frame*. These two viewing situations are evoked by the grammatical structures used in sentences (1a) and (1b) and are sketched in Figure 2.1.

(1) a. This train *goes* from Norwich to Peterborough.
b. This train *is going* from Norwich to Peterborough.

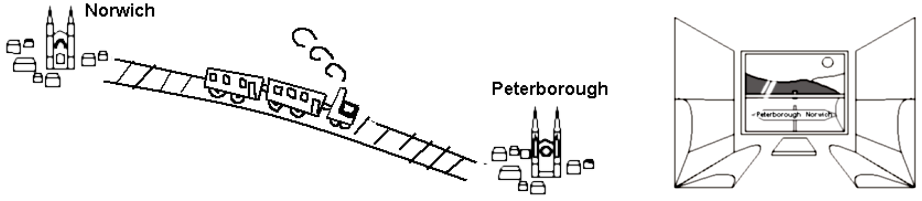


Figure 2.1. Maximal and restricted viewing frames

The use of the non-progressive in sentence (1a) makes us see in our mind the whole route and schedule of the train in the British railway network; it is a construal which provides a maximal viewing frame of a scene. The use of the progressive aspect in sentence (1b), by contrast, only lets us see part of the scene: it is a construal which provides a restricted

viewing frame. The issue of different viewing frames evoked by forms of aspect will be taken up in Chapter 8 on situation types.

2.1.2 Generality vs specificity

The notions of generality and specificity relate to the degree of precision with which a scene is viewed or conceived. A distant view normally gives us a general impression of a scene while a close view or the use of a microscope or binoculars enables us to discern in-depth details. In cognition and language, taxonomic hierarchies reflect different levels of generality and specificity (see Chapter 1.2.1). By using higher-level categories, the speaker construes a situation in a more general way; by using lower-level categories, the speaker construes the situation in a more specific way. We will describe these construals as **generality** and **specificity** (also called *granularity*). In the examples under (2), cars are referred to by means of the most general term *vehicle* in (2a), the basic-level term *car* in (2b), the more specific term *Mitsubishi* in (2c), the even more specific term *Ferrari 612* in (2d), and the still more specific term *VW Convertible* in (2e), in which the specification is achieved by using the adjective *yellow*:

(2) a. Several *vehicles* collided on High Street last night.
b. Most of the *cars* drove way too fast.
c. A *Mitsubishi* struck another car.
d. The *Ferrari 612* was driven by a drunk driver.
e. The *yellow VW Convertible* was sandwiched between two lorries.

As with all construals, each of the alternative ways of expression has its own contextual meaning. Thus, the superordinate term *vehicle* in (2a) might be used by the Department for Transport or found in traffic reports. Basic-level terms such as *car* are used to describe situations in the most usual and common way as in (2b). Subordinate terms like *Mitsubishi* or *Ferrari 612* might be used by automobile experts like mechanics or car fanatics. The same thing may thus be "seen" in different detail by different people and in different situations.

As already pointed out in the Introduction, lexical categories tend to be used to make specific distinctions, while grammatical categories tend to express very general, or schematic, notions, such as those of present, past and future time. But grammar also allows us to distinguish different levels of specificity. For example, in Chapter 1.1.1 we distinguished between two specific types of nouns, count nouns and mass nouns. We will see in Chapter 4.2 how a thing's level of generality or specificity may be relevant for its expression as a count or mass noun.

2.1.3 Viewpoint

In visual perception I necessarily look at a scene from my **viewpoint** or vantage point, i.e. from the point where I, the observer, am positioned. In cognition we may also adopt another person's point of view. For example, the same newly published book may be announced

as a *new release* or a *new arrival*. The difference between these two expressions resides in the different viewpoints adopted. In using the term *new release*, we take the publisher's point of view, whereas in using the term *new arrival* we take the bookseller's point of view. In this way, the publisher might say (3a), the bookseller (3b):

(3) a. *Publisher*: "Have we sent out the new *releases*?"
b. *Bookseller*: "Have we displayed the new *arrivals*?"

We typically look at the world and describe it from our viewpoint. A good illustration of this is found in arguments such as in the following example, in which two children give their own versions of the same event:

(4) a. *Bill*: "Mum! Joe tripped me up with his foot."
b. *Joe*: "No I didn't, Mum! Bill just tripped over my foot."

Some expressions have a built-in viewpoint on a situation. The motion verbs *come* and *go* as well as *bring* and *take* inherently adopt the speaker's viewpoint and designate motion towards or away from the speaker, respectively. Verbs like *come* and *go*, whose usage is dependent on the speech situation, are known as *deictic verbs* (Greek *deiktikos* from *deiknynai* 'show, point'; for deixis see Chapter 5.3.1). Compare the following sentences:

(5) a. My parents are *coming* to my graduation.
b. I'm *going* to my sister's graduation.

If the motion is directed towards the speaker as the goal as in (5a), the speaker's viewpoint is typically described by using the verb *come*. If the speaker is not the goal of motion as in (5b), where motion is directed away from the speaker's location, the verb *go* is used. These two sentences thus take the speaker's point of view, i.e. the speaker is the *deictic centre*.

If the hearer is mentioned, we have two options. In using *go* as in sentence (6a), the speaker keeps her own viewpoint relative to the hearer. This construal sounds neutral, or under certain circumstances almost threatening, for example when I am known for misbehaving at official celebrations. The speaker may, however, also mentally switch her viewpoint as in sentence (6b).

(6) a. I'm *going* to *your* graduation.
b. I'm *coming* to *your* graduation.

In using *come* in sentence (6b), the speaker takes the hearer's viewpoint, i.e. the hearer becomes the deictic centre. This is, of course, not possible in perception: we cannot take any other viewpoint but our own. In our conception of a scene and its expression in language, however, we may put ourselves into someone else's position, and we mainly do so because this has the effect of sounding sympathetic and polite.

The two construals of speaker-centred and hearer-centred viewpoints are sketched in Figure 2.2, where the circles printed in bold indicate the deictic centres and "S" and "H" speaker and hearer, respectively.

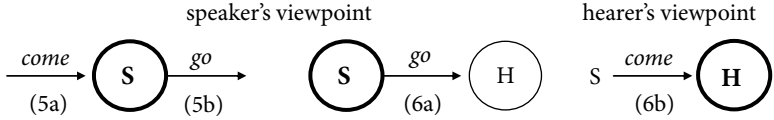


Figure 2.2. Construals of the deictic verbs *come* and *go*

Yet another type of viewpoint is typically found in authority relations such as between mother and child, doctor and patient, or policeman and driver. Parents, doctors or nurses often express their patronising sympathy towards their child or patient, and policemen may feign empathy with a traffic offender by identifying with her, i.e. by taking jointly their own and the hearer's viewpoint, as in the following examples:

(7) a. *Mother to child*: "And now *we*'re going to sleep."
b. *Nurse to patient*: "*We* must take our tablets again."
c. *Policeman to driver*: "*We* don't want to park here, do we?"

2.1.4 Objectivity vs subjectivity

We tend to believe that we see the world objectively as it is; at the same time, however, we are part of the world we perceive and inevitably bring in our own relation to the world. A speaker may also construe a scene more objectively or more subjectively. **Objectivity** refers to the construal of a scene as detached from the speaker, **subjectivity** refers to the construal of a scene in which the speaker is involved. Compare the following political statements:

(8) a. "The President is determined to fight a war on terrorism."
b. "I will hunt down the terrorists."
c. "There may still be weapons of mass destruction."

Sentence (8a) might be said by the spokesman of the White House, who describes the President's policy in objective terms: the speaker is not part of the scene described. The same wording might, however, also be used by the President in speaking of himself as *the President*. In doing so he gives an "objectified" view of himself as the institutionalised representative of the country. In using the speaker pronoun *I* in sentence (8b), the speaker includes himself as a participant of the scene described — in this respect the perspective is subjective. At the same time, however, the speaker describes his role like that of any other participant in the scene — in this respect the perspective is also objective. Sentence (8c) involves a maximally subjective perspective of the scene: the speaker gives his subjective view of the situation described without overtly mentioning himself. This is achieved by using the modal verb *may*, which expresses the speaker's assessment of the situation as being potential (see Chapter 10 for modality).