

Key to Study Questions

Chapter 1

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.”

The reader has formed a pair of conceptual categories, ‘loud yawning’ and ‘silent yawning’, for which English apparently lacks terms. The reader feels that the conceptual distinction between the two types of yawning might be reflected in the ecological system of the language, i.e. the lexical category *yawn* might have simple words for the two subordinate categories ‘loud yawning’ and ‘silent yawning’.

- (b) A boy tells his girl-friend:
 “I didn’t want to be in love. I only wanted to be in like.”

The boy-friend has formed a conceptual category ‘be in like’, for which there is no expression in English. Since *in love* exists, there is an ecological niche to be filled with similar expressions of emotional states. Due to her knowledge of the ecological system of English, the girl-friend will easily understand the meaning of *be in like* as well as its humorous effect.

2. What do the linguistic categories (printed in italics) reveal about categorisation?

- (a) Would you like your coffee *white* or *black*?

White *coffee* is not white. It is contrasted to darker coffee, which is called *black*. *White* and *black* are used as opposite term (antonyms) for ‘lighter in color’ and ‘darker in color’. More generally, these terms show that we tend to think in terms of clear-cut and opposing categories.

- (b) Technically, *crayfish*, *jellyfish*, *starfish* and *shellfish* are not fish.

As the label *fish* with these words reveals, we naively categorise certain animals whose habitat is the sea together with real fish. The word *technically* indicates that this categorisation is, properly speaking, not correct. In scholarly biological categorisations, crayfish and shellfish belong to the class of crustaceans, jellyfish to that of coelenterates, and starfish to that of echinoderms.

- (c) Some people call *graffiti* vandalism, others call it *art*.

Graffiti is placed under different superordinate categories, that of ‘vandalism’ and that of ‘art’.

- (d) I don't consider marijuana a *drug*. It's a *plant* like tea. Cocaine is a *drug*.

Different people may, and often do, categorise the same thing differently. This speaker distinguishes between two mutually exclusive taxonomies, that of 'plants' and that of 'drugs'. Marijuana falls under the plant-category, while cocaine falls under the drug-category.

3. Which part of the house is meant as the active zone in the following examples?
- | | |
|--|---|
| (a) I'm having the house painted. | = walls outside or entire inside |
| (b) Have you locked the house? | = front door, more specifically
the lock |
| (c) He entered the house. | = door |
| (d) I'm cleaning the house. | = interior |
| (e) They are having an open house today. | = rooms open to visitors |
4. Identify the conceptual metonymies in the following italicised expressions.
- (a) He drank the whole *bottle*.
CONTAINER FOR CONTAINED
- (b) Arthur married *money*.
POSSESSED OBJECT FOR POSSESSOR
- (c) Einstein was one of the most creative *minds* of the last century.
BODY PART FOR PERSON
- (d) There are too many *mouths* to feed.
BODY PART FOR PERSON
- (e) *Own* land in the great American West. (advertisement)
RESULT FOR ACTION
- (g) *Brussels* has been negotiating with *Boeing* for months.
Brussels: PLACE FOR INSTITUTION (in all likelihood the European Commission is meant). Both *Brussels* and *Boeing* are also used metonymically to stand for the representatives who carry out the negotiations, i.e. COMPANY FOR REPRESENTATIVES OF THE COMPANY.
- (h) *My wife* has been towed away.
POSSESSOR FOR OBJECT POSSESSED (my wife's car)
- (i) Where are *you* parked?
POSSESSOR FOR OBJECT POSSESSED (your car)
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?
UNDERSTANDING IS SEEING
- (b) Socrates was reputed to *hold* knowledge in high esteem.
BELIEFS ARE POSSESSIONS
- (c) *Budget* your time carefully.
TIME IS MONEY

- (d) Sports car sales are *soaring*.
MORE IS UP (image schema UP-DOWN)
- (e) It's *going* to rain.
THE FUTURE IS IN FRONT (image schema FRONT-BACK) and CHANGE IS MOTION (motion schema)
- (f) I've just *turned* thirty.
CHANGE IS MOTION (image schema MOTION)
- (g) I'll get in *touch* with you.
CONNECTION IS CONTACT (image schema CONTACT)
- (h) These tiring exercises *sent* me to sleep.
CAUSES ARE FORCES
- (i) He is *boiling* with anger.
ANGER IS HEAT, more specifically: ANGER IS HOT FLUID IN A CONTAINER (image schema CONTAINER)
- (j) This is *central* to the issue.
IMPORTANT IS CENTRAL (image schema CENTRE-PERIPHERY)
- (k) Cognitive linguistics is linguistics with a *human face*.
THINGS ARE HUMANS (This type of metaphor is known as personification.)

Chapter 2

1. Identify the dimensions of construal in the following sentences.

- (a) *The Eiffel Tower is in front of you.*
Figure/ground alignment: the ground (*you*) is smaller than the figure (*the Eiffel Tower*) due to the salience of humans.
- (b) *Europe is no longer cut off thanks to the Channel Tunnel.*
Europe is seen from England as the viewpoint (England is of course part of Europe).
- (c) *The Rocky Mountains flew by.*
Reversal of normal figure/ground alignment: we, the travellers, are moving, not the mountains.
- (d) *Mother to son: "Don't lie to your mother!"*
Objectivity; the subjective construal would have been "Don't lie to me!"
- (e) *The sun disappeared behind the clouds.*
Perceptual illusion due to figure and ground: the smaller sun appears to move while the larger clouds appear to be stationary.
- (f) *I'm coming with you.*
Viewpoint: the speaker takes the hearer's point of view.
- (g) *Doctor to patient: "Now we're taking these pink tablets for the night."*
Viewpoint: the doctor is taking both his own and the patient's viewpoint.
- (h) *The road runs past the factory, continues through the tunnel and goes on to London.*
Fictive motion: a static scene is described as moving.
- (i) *A pedestrian hit me and went under my car.*
Figure and ground: the driver presents the accident in such a way that the pedestrian appears to be the moving figure and his car the stable ground so that the pedestrian is to blame for the accident.
- (j) Sign in public buses in New York City: "If you see something, do something."
Generality: The expressions *something* and *do something* are at the highest possible level of generality and could almost mean anything. What are we supposed to see and what are we to do? Yet most Americans will probably interpret this highly underspecified message in precisely the way it was meant to be understood. Their knowledge of the scenarios surrounding September 11, 2001 will tell American language users to be on guard. In this context, *see something* specifically means 'see abandoned luggage' and *do something* means 'inform the bus-driver' or 'call the police'.

2. Explain the following joke in terms of conceptual blending. It is important to know that Descartes' philosophy is based on the rationalist principle *Cogito, ergo sum* 'I think, therefore I exist.'

- (a) Descartes walks into a bar, orders a martini. He drinks it down.
The bartender says, "Another?"
Descartes replies, "I think not," and disappears.

The description of the bar and the bartender's question activate the mental space of men drinking in a bar. The name of the philosopher Descartes is most commonly associated with his famous statement *cogito ergo sum* so that his reply conceptually

integrates the 'drinking' space and the 'philosophy' space. In the emergent blended space the ordering of beer is seen as a philosophical issue.

- (b) Two goats are out behind a movie studio eating old movie film.

One goat says to the other, "Pretty good, huh?"

The second goat says, "Yeah, but it's not as good as the book."

The three input spaces of goats eating trash and talking and the common comment on films that they are not as good as the book they are based on is blended in the absurd situation of goats eating film and talking about it.

- (c) Two Inuit fishermen sitting in a kayak were chilly; but when they lit a fire in the craft, it sank, proving that you can't have your kayak and heat it.

This joke too makes use of a common saying, *you can't have your cake and eat it*, which is blended with an absurd situation.

3. What conversational implicatures do the following utterances invite?

- (a) *"Where can I wash my hands?"*

This question is normally understood in the sense of a conventionalised implicature: 'Where is the bathroom?' The implicature is based on metonymic reasoning: washing one's hands is the final activity that stands for more urgent activities which are normally performed in a bathroom. The motivation for its use is the social taboo associated with matters of excretion. The euphemistic expression fulfills the communicative intentions but, as an implicature, may also be cancelled. For example, I may in fact only want to wash my hands and, as it occurred to one of the authors of this book, instead of letting me do this in the kitchen over the sink, am shown the bathroom.

- (b) *A caller asking a child answering the phone: "Is your daddy there?"*

The question is meant as a directive in the sense of 'if your father is there, fetch him'. Young children may not yet be able to draw this inference, which shows that implicatures are complex cognitive operations. The question may, of course, have been intended in the literal sense and its implicature be cancelled by, e.g., adding: "I just wanted to make sure that he is at home."

- (c) *"The tea burnt my tongue."*

The utterance invites the implicature that the tea was hot. It is not impossible to imagine a situation in which cold tea might burn your tongue. For example, the tea may contain hot spices or my tongue may be sore.

- (d) *"What academic degree do you have?" - "I have an MA."*

Due to the principle of relevance, the implicature invited is that the MA is my highest academic degree, i.e. that I don't, for example, have a PhD. The implicature may be cancelled by saying, for example: "I have an MA, but I also have a PhD."

- (e) *If you come home late, the front door will be locked.*

The implicature normally drawn is that, if I come home early, the front door will not be locked.

- (f) *"Are you going to Chomsky's lecture?" - "I have to finish my paper."*

I will not go to Chomsky's lecture.

- (g) *"I ate some of the biscuits."*

Some invites the implicature of 'not all', i.e. I did not eat all of the biscuits. The implicature may be cancelled by saying "I ate some of the biscuits – in fact I ate all of them."

4. Explain the following dialogue in terms of implicature:

(a) Cessna: "Jones tower, Cessna 12345, student pilot, I am out of fuel."

Tower: "Roger Cessna 12345, reduce airspeed to best glide!! Do you have the airfield in sight??!!"

Cessna: "Uh ... tower, I am on the south ramp. I just want to know where the fuel truck is."

According to the principle of relevance, an adequate contextual effect for the student pilot's call is an emergency situation—there is no other obvious context for telling the tower that one is out of fuel. The tower therefore implicates that the pilot needs instructions to land safely. In his reply, the Cessna pilot cancels this implicature.

(b) Farmer Joe's cow is ill. He asks his neighbour, "What did you give your cow when she was sick?" - "Soda water."

Farmer Joe gives his cow soda water, and after three days, the cow dies. He says to his neighbour, "The cow died after three days," and the neighbour says, "Mine too."

The implicature invited from the neighbour's response is that his "recipe" helped and was therefore meant as a piece of advice.

Chapter 03

1. Analyse the following humorous observation in terms of ground entities and frames:

I just realised how old I am: People stopped telling me *I look good* and started telling me *I look good for my age*.

The statement *I look good* does not contain an explicit ground entity for ‘good’. It is, however, understood to be above a norm on a scale of ‘healthy complexion’ within the frame of ‘human person (in general)’. The statement *I look good for my age*, by contrast, explicitly mentions the frame of ‘age’, i.e. ‘old age’, and the norm of this scale is, accordingly, adjusted. The reason for mentioning the ‘age’ frame is, of course, that my appearance would be rated considerably below the norm if I was rated according to the general ‘human person’ frame.

2. Identify the meanings associated with the noun *thing* in the following sentences (see the examples under (1) in Section 2.2):

(a) A *thing* of beauty is a joy forever. (Keats)

Concrete or abstract object

(b) The first *thing* I want to say is this.

Thought

(c) I’m afraid we can’t change *things*.

State of affairs

(d) Our car broke down, and to make *things* worse, we had run out of money.

State of affairs

(e) That was a nice *thing* to do.

Action

(f) I don’t have a single *thing* to wear.

Concrete object

3. Supply one or more ground entities that do not show up in the following sentences (as a participant and/or a domain or frame):

(a) *Harry Potter is really good*.

‘Good’ evokes an evaluative scale as a ground entity and is understood to have higher value than a ‘norm’ within the domain of reading; its evaluation is relative to a particular frame, e.g. the ‘children’s books’ frame, the ‘entertainment’ frame, the ‘literary criticism’ frame, etc. In the ‘children’s books’ frame, *Harry Potter* would probably rank higher than in the ‘literary criticism’ frame.

(b) *The fish is really good*.

Here too, ‘good’ is understood to be higher on an evaluative scale than a ‘norm’ within the domain of taste; the frames might be the ‘canteen’ frame, the ‘home’ frame, the ‘restaurant’ frame, etc.

(c) *The fish smells*.

‘Smell’ evokes an evaluative scale as a ground entity and, without further specification, is understood as describing a low value on the scale. *The fish smells* is equivalent in meaning to *The fish smells bad*, so that ‘bad’ might be understood to be the second conceptual entity. The evaluative scale relates to

the domain of food and might apply to the ‘home’ frame, the ‘shopping’ frame, the ‘fishing’ frame, etc.

(d) *Our children behave.*

Like ‘smell’, ‘behave’ evokes an evaluative scale as a ground but, without further specification, is understood as describing a high value on the scale. Thus, *Our children behave* is equivalent in meaning to *Our children behave well*, so that ‘well’ might be understood as the second conceptual entity. The domain involves ‘behaviour’, and the frame might be that of a ‘family’, the ‘school’, a ‘visit’, etc.

(e) *I exercise every day.* (two conceptual entities)

(i) In its intransitive usage, the verb *exercise* evokes a second participant as a ground, which in all likelihood is ‘one’s body’. (ii) The simple present evokes ‘habitual behaviour’ as the ground for the figure ‘I exercise my body’.

(f) *Francis was reading.* (two conceptual entities)

(i) Like the verb *exercise*, the verb *read* evokes a second participant as a ground, such as ‘book’, ‘paper’ or ‘magazine’. (ii) The past progressive focuses on the progression of the event relative to another event in the past that occurred during its progression, e.g. *Francis was reading when the telephone rang*.

4. Identify the conceptual core, the grammatical core, the grounding elements and the setting elements for each of the following sentences:

(a) *My husband left his glasses on the train.*

The conceptual core consists of the relation ‘leave’ linking the two participants ‘husband’ and ‘glasses’. The grammatical core consists of the subject *my husband*, the predicate *left*, and the direct object *his glasses*. The determiners *my* and *his* ground *husband* and *glasses* as identifiable in the current discourse. The past tense in *left* grounds the situation in past time and factual reality. The adjunct *on the train* expresses the spatial setting, the definite determiner *the* grounds *the train* as identifiable.

(b) *Tomorrow he may lose his wedding ring.*

The conceptual core consists of the relation ‘lose’ linking the two participants ‘he’ and ‘wedding ring’. The grammatical core consists of the subject *he*, the predicate *may lose*, and the direct object *his wedding ring*. The determiner *his* grounds *wedding rings* as identifiable in the current discourse; the pronoun *he* is identifiable as the speaker’s husband. The modal verb *may* grounds the situation in potential reality. The adjunct *tomorrow* expresses the spatial setting.

5. Which iconic principles operate in the first sentences of the following pairs of sentences as opposed to the second sentences?

(a) I heard Sue come home. *versus* I heard Sue when she came home.

In *I heard Sue come home*, Sue’s coming home is the object of my auditory perception and no longer seen as an independent event of its own. Following the principle of proximity, it is therefore very tightly integrated into the main clause as a complement clause and lacks the grounding element of tense.

In *I heard Sue when she came home*, by contrast, the *when*-clause is less tightly integrated into the main clause and preserves its independent status by means of tense.

- (b) The ambulance came and rescued the child. *versus* ?The ambulance rescued the child and came.

The principle of sequential order mirrors the sequence of the two events. The description of the events in the first sentence is in accordance with our knowledge of the 'rescue' frame. The reversal of the sequence of events in the second sentence runs against it.

6. Young children tend to understand sentence (a) correctly, but not sentences (b) and (c). How would they interpret them and why?
- (a) John played before Mary sang.
 - (b) John played after Mary sang.
 - (c) Before Mary sang, John played.

Children interpret the clauses of complex sentences iconically in their order of mentioning irrespective of the conjunctions (see Eve V. Clark. 1979. *The Ontogenesis of Meaning*. Wiesbaden: Athenaion, pp. 110-147). Sentence (a) iconically reflects the order of the events described, and hence is understood correctly, while sentences (b) and (c) display the reversed order, and hence are misinterpreted. Sentence (b) is interpreted in the sense of 'John played and Mary sang', and sentence (c) is interpreted in the sense of 'Mary sang and John played'.

Chapter 04

1. Decide whether the following nouns are primarily used as count nouns or mass nouns and illustrate their usages by way of example. When in doubt, check the word in a dictionary.
 - (a) *literature*: Normally used as a mass noun as in *to study literature*; rarely used as a count noun as in *American literatures*, which may include Native American Literature, Asian American Literature, Gay and Lesbian Literature, etc., all of which are different kinds or “varieties” of American literature.
 - (b) *champagne*: Normally used as a mass noun as in *Rich people have been enjoying champagne for centuries*; as a count noun it describes a brand of champagne as in *This is a champagne of quality*.
 - (c) *character*: As a count noun, *character* typically refers to a person of a particular quality as in *He is a strange character*; as a mass noun, *character* refers to a combination of certain qualities in a person as in *She is a woman of great character*.
 - (d) *show*: Normally used as a count noun in the sense of ‘public event’ as in *to train a dog for a show* or *to put on a show*; rarely used as a mass noun as in *She is fond of show*.
 - (e) *love*: Normally used as a mass noun in the sense of ‘strong feeling of affection’, as in *I’m in love with Jennifer*; as a count noun, *love* refers to the person who is the object of such an affection, as in *I’ve had two great loves in my life*. This sense is motivated by metonymy: EMOTION FOR THE PERSON/OBJECT OF EMOTION.
 - (f) *position*: Normally used as a count noun as in *I am in a very awkward position*, rarely used as a mass noun as in *The cars are now in position*.

2. Give the collective nouns for the following collections of “things”.
 - (a) soldiers: *army*
 - (b) sheep: *flock*
 - (c) stars: *constellation*
 - (d) the common people in the court of law judging the defendant’s guilt: *jury*
 - (e) believers in church: *congregation*
 - (f) rulers of the country: *government*
 - (g) ministers of the church: *clergy*
 - (h) people of nobility: *aristocracy* or *nobility*
 - (i) organisation of workers: *trade union*

3. Provide the missing count noun in the following sentences.
 - (a) *A sudden of wind came up.* [gust of wind]
 - (b) *We were greeted with a of applause.* [round of applause]
 - (c) *It’s your turn to shuffle the of cards and deal.* [deck of cards]
 - (d) *There is a of fish over here at this side of the boat.* [shoal or school of fish]
 - (e) *I felt a sudden of guilt.* [pang or stab of guilt]
 - (f) *Do you want a good of advice?* [piece of advice]

- (g) *There was no of evidence of his murder.* [piece or shred of evidence]

4. Analyse the meaning of the final *-s* in the following nouns provided its meaning as a morpheme can be identified.

- (a) *books*: several books (plural)
- (b) *fruits*: different kinds of fruit (varieties)
- (c) *physics*: rendering of Latin plural *physica*. The present-day plural form relates to the different fields of physics such as mechanics, electricity, etc. and physical properties and phenomena.
- (d) *scissors*: consisting of two symmetrical parts
- (e) *draughts*: consisting of several single pieces
- (f) *sugars*: technical term meaning ‘sweet substances in plants’ (varieties)
- (g) *ashes*: several tiny particles (amassed things)
- (h) *wines*: different varieties of wine
- (i) *summons*: not a plural, but a singular form: *a summons*; the word derives from Old French *somonce*.
- (j) *weathers*: different kinds as in *The jogger is out in all weathers*.
- (k) *DTs (delirium tremens)*: disease seen as multiplex due to the trembling; cf. the diseases *mumps* and *measles*
- (l) *brains*: the brain seen as a “dual object” due to its two hemispheres.

5. Comment upon the usages of the italicized nouns in the following sentences.

- (a) *I am campaigning against early retirement for married men. It appears to me that it means twice as much husband on half as much money.*
The count noun *husband* is used here as a mass noun just like the word *money*, i.e. an object is viewed as a substance. As a result, the essence of a husband is restricted to one domain. The domain is probably that of ‘house-keeping’, and *husband* as a mass noun might mean that, after his retirement, the husband will be more at home and thus give rise to more household expenses.
- (b) *Northern Ireland will have a little sunshine, a little cloud and a number of showers.*
The count noun *cloud* is used as a mass noun and parallels *sunshine*. The metonymic shift is the same as that in (a) and makes us interpret *cloud* in the sense of ‘overcast’.
- (c) *Heineken refreshes the parts other beers cannot reach.*
In this advertising slogan, the plural form *beers* suggests the sense of varieties, brands or qualities of beer.
- (d) *His work as a reporter gave him a detailed knowledge of London and its inhabitants.*
The abstract noun *knowledge* normally denotes a steady state and is therefore used as a mass noun. Its use as a count noun in this example suggests a sense of a particular variety, namely a specific area in which a person is knowledgeable.

Chapter 05

1. Which types of reference (definite, specific, non-specific, generic) do the italicised noun phrases in the following joke illustrate?

A man giving a talk to a multinational audience tells a joke about the Irish. Someone at the back of the hall jumps up and protests angrily: "I'm Irish!" "OK", says the speaker, "I'll say it again—slowly."

A man, a talk, a multinational audience and a joke are specific referents newly introduced into the discourse.

the Irish is a generic referent in the definite plural.

someone is another new specific referent, which is made unique by descriptive qualification (*at the back of the hall*); *the hall* is a uniquely inferred definite referent by virtue of the 'lecturing' frame evoked by *a talk* and *audience*, and *the back* is unique as an inferred referent in the 'hall' frame.

I is a deictic pronoun (person deixis) that refers to the speaker in the joke.

the speaker is a definite referent that anaphorically refers back to *a man giving a talk*.

it is an anaphoric pronoun that refers back to what the speaker said before.

2. Which types of reference are involved in the italicised referring expressions and what meanings do they suggest?

- (a) *My husband* and I don't get along very well any more.

Definite reference by means of qualified uniqueness (via the speaker *I* as the reference point). All referring expressions in the following examples refer back to *my husband*, and hence are anaphoric and definite.

- (b) *He* has changed so much.

Anaphoric reference by means of a pronoun.

- (c) *Gerald* has become so utterly conceited.

Unique reference by means of the proper name *Gerald*.

- (d) *This Gerald* is not the same man that I married.

Deictic reference: the demonstrative determiner *this* in conjunction with the proper name *Gerald* refers to the person at the present time as opposed to the way he was previously. It may convey greater immediacy.

- (e) But *this bloke* can still be so nice sometimes.

The deictic demonstrative *this* in conjunction with *bloke* has an expressive function in that it conveys emotional immediacy which nevertheless carries a very slight negative connotation.

- (f) *The little bastard* even buys me flowers every week.

The anaphoric referent *the little bastard* is another expressive form; the original literal sense of 'illegitimate child' has receded into the background and has been extended to the generalised sense of 'obnoxious, unpleasant person'.

This sense has in its turn been attenuated, just like *bloke*, into an expressive use with a humorous and affectionate tone.

3. Which of the following proper names take the definite article and why?

- (a) *Mississippi* (state)

State names do, as a rule, not require the definite article because states have well-defined political boundaries.

- (b) *Mississippi* (river)

Most river names take the definite article because rivers are seen as lacking clear contours; hence: *the Mississippi*.

- (c) *Everglades* (swamps in Florida)

Most landscapes take the definite article because they are seen as lacking clear boundaries; hence: *the Everglades*.

- (d) *Deep South*

The Deep South is a vaguely defined geographical area and hence needs the definite article in its name: *the Deep South*.

- (e) *British Museum*

The adjectives in adjective plus noun compounds are normally felt to be qualifying modifiers; the proper name is therefore seen as less unique so that it requires the definite article; hence: *the British Museum*.

- (f) *Waterloo Station*

Noun plus noun compounds are normally seen as denoting well-defined unique things so that the proper name does not require a definite article; hence: *Waterloo Station*.

- (g) *Balkans*

The Balkans refers to a collection of more or less independent political units. The proper name therefore requires the plural and the definite article to mark the uniqueness of the collection.

4. Choose the most appropriate type of generic reference (indefinite singular/plural, definite singular/plural) for the following generic statements and justify your choice. Note that elements other than the referring expression and the verb may need to be adjusted.

- (a) ... *Italian* (be) quite different from ... *German*.

The Italians are quite different from the Germans.

The statement contrasts two well-established human groups, for which the definite plural generic is the most appropriate generic form, since it allows for exceptions. But because the predicate (*be different*) is so general, all the four generic patterns are possible here, each of which, however, conveys a slightly different meaning.

- (b) ... *car* (have) changed our lives.

The car has changed our lives.

The car is understood here in the sense of a “species” setting it off from another “species” of transportation such as the train or the bus, hence the definite singular is the appropriate form of generic reference.

- (c) ... *cat (like) fish.*
Cats like fish.

The observation is based on so many members of the class of cats that we assume this to be a characteristic of cats in general.

- (d) ... *dog is the oldest domesticated animal.*
The dog is the oldest domesticated animal.

The statement is about *the dog* as a species.

- (e) ... *New Yorker (drop) ... r's.*
New Yorkers drop their r's.

“r-dropping” is a characteristic feature of speakers from New York so that the indefinite plural would be the most natural generic form to use. We may, however, also use the definite plural, suggesting that there are so many r-less speakers in New York that they determine our perception of New York speech.

- (f) ... *ostrich (be) the largest bird in the world.*
The ostrich is the largest bird in the world.

Like (d): the generalisation refers to the ostrich as a species.

- (g) ... *Italian (eat) spaghetti.*
Italians eat spaghetti.

An indefinite number of Italians are known to eat spaghetti so that we feel justified to generalise on the class of Italians. We may, however, also see this as a national characteristic and use the definite plural *the Italians*.

- (h) ... *rolling stone (gather) no moss.*
A rolling stone gathers no moss.

It is inherent in the “essence” of a stone that, if it rolls, it does not gather moss; hence any stone whatsoever has this property. Proverbs typically refer to the “essence” of things in generalising about human traits of character. Compare for instance *A new broom sweeps clean* or *A watched pot never boils*. The indefinite plural generic is, of course, also possible here (*Rolling stones gather no moss*), but the generalisation would not focus on the essence of the thing.

- (i) ... *customer (be) always right.*
The customer is always right.

This is one of the situations where a group of humans, the customers, is seen as a “species”. The definite singular is therefore the most appropriate form to use.

- (j) ... *cat (sleep) most of the day.*
Cats sleep most of the day.

The daily naps cats take is probably not an essential attribute of cats but only characteristic for many of them. Hence the indefinite plural is the most appropriate generic form.

used, it would mean that every piece of the puzzle fits all and each of the other pieces; such puzzles are no longer puzzling and are therefore not made.

- (b) The selective quantifier *any* suggests that any of the pieces of the puzzle has the chance to be put in last, but they cannot all do so together. That is why *all* cannot replace *any* here.

3. Why can we say sentence (a), but not sentence (b)?

- (a) All children gathered in the school yard.
 (b) *Every child gathered in the school yard.

The verb *gather* requires a subject with collective meaning.

Sentence (a) is grammatical because the collective quantifier *all* denotes the individual members of a set collectively.

Sentence (b) is ungrammatical because the distributive quantifier *every* denotes each single member of the set.

4. Is there any reason for the soccer coach to use different set quantifiers in the following sentences?

- (a) *Every* player must push himself to the utmost.
 (b) *Each* player has to stick to his assignment.

(a) With his use of *every*, the coach addresses the team as a whole, calling upon the individual players' responsibility to work for a collective goal: the team's victory. *Every* is thus close in meaning to the collective quantifier *all* as in *All players must push themselves to the utmost* but, as indicated by the singular form *every player*, also the individual members are focused upon with the distributive quantifier *every*.

(b) The distributive quantifier *each* is even more strongly oriented towards the notion of individual members. With his use of *each*, the coach addresses each member possibly reminding them of the individual duties they were assigned during their training sessions.

5. Fill in *every* or *each* or either of them and justify your choice.

- (a) *E..... child likes ice-cream.*

Every child likes ice-cream. The statement is probably meant to have general validity for all children and does not focus on each single child. The distributive quantifier *every* involves the notion of individuals establishing a collective set, and is the appropriate quantifier to describe this situation.

- (b) *E.... theory is open to objection.* (Explain the different meanings.)

Every theory is open to objection. Every theory in general that may exist in whatever discipline is open to objection, i.e. *all* theories.

Each theory is open to objection. Each theory in a given discipline, e.g. each of the theories on evolution, is open to objection when these theories are being examined individually one after the other.

- (c) *The robber held a gun in e..... hand.*

The robber held a gun in each hand. Since the robber only has two hands, only *each hand* makes sense.

- (d) *E.... sow produces around six piglets.*

Each sow produces around six piglets. If the focus is on the individual sows, as in the restricted set of sows of a small farmer, *each* is preferable.

Every sow produces around six piglets. If we think of the number of piglets born by sows in general terms, such as in EU instructions, *every* would be chosen.

- (e) *E.... man for himself!* (said in a shipwreck)

Every man for himself! *Every* is justified here by looking at the whole crew; there is no point in focusing on each individual man.

- (f) *E..... player gets three cards.*

Each player gets three cards. *Each* individual player gets three cards. *Every* player is less appropriate because we do not think of the players as a collective group.

- (g) *E.... king in a deck of playing cards represents a great king from history: Spades: King David, Hearts: Charlemagne, Clubs: Alexander the Great, Diamonds: Julius Caesar.*

Each king in a deck of playing cards represents a great king from history. The focus is on the individual card and the kings represented on them: therefore the distributive quantifier *each* is appropriate.

6. Analyse the quantifiers in the following joke:

I told my psychiatrist that *everyone* hates me.

He said I was being ridiculous—*everyone* hasn't seen me yet.

My use of the set quantifier *everyone* was obviously meant in a loose interpretation; the psychiatrist's interpretation of *everyone* was in the collective sense of the set—otherwise he would have said that not everyone has seen me yet.

Chapter 07

1. Characterise the italicised modifiers in the following sentence with respect to (i) restrictiveness/non-restrictiveness, (ii) thing or instance qualification, and (iii) type of qualification (qualifying property, relation, situation).
 - (a) The Japanese are *industrious* and *disciplined* workers.
 - (i) Both *industrious* and *disciplined* are restrictive modifiers; (ii) they qualify a thing, expressed as a predicate noun; and (iii) they describe scalar, characteristic properties.
 - (b) Let's go to "L'Escargot" in *Greek Street*. Have you ever been to that *marvellous* restaurant?
 - (i) The prepositional phrase *in Greek Street* is non-restrictive because the pub is unique due to its proper name; also the adjective *marvellous* is non-restrictive because of the deictic uniqueness of this pub. (ii) Both modifiers qualify an instance, which is referential. (iii) The prepositional phrase *in Greek Street* describes a schematic qualifying relation, the adjective *marvellous* a characteristic property.
 - (c) We should help these *innocent* victims, *who have lost everything they had*.
 - (i) The adjective *innocent* is non-restrictive, or epithetical, since there are no "guilty victims"; the relative clause *who have lost everything they had* is also non-restrictive—all the victims have lost everything; however, the relative clause modifying *everything*, i.e. *they had*, is restrictive. (ii) All three modifiers qualify instances; also *everything* describes an instance. (iii) *Innocent* describes a property, the two relative clauses describe temporal situations.

2. Point out the difference in meaning conveyed by the following types of qualification:
 - (a) Jack is a *rich* man.
 - (b) Jack is a man *with a lot of money*.
 - (c) Jack is a man *who is rolling in money*.

Rich in sentence (a) describes Jack by means of a premodifier adjective which is seen as characterising a type of man: we may visualise a tycoon who has a huge income, shares, property, a luxury car and a yacht. The prepositional phrase in (b) and the relative clause in (c) focus on only one particular aspect of wealth: money. Moreover, possessing all this money at this point in time does not necessarily mean that he will own the money permanently. This is even less so with the situation described in the relative clause. The characteristic adjective combined with its head *man* in (a) establishes a subcategory, as can be seen from answers to a question like *What sort of man is Jack?* - *Oh, he is a rich man* is a possible answer, while *Oh, he is a man with a lot of money* or *Oh, he is a man who is rolling in money* are less likely to be given as answers.

3. What do the following recommendations on politically correct language reveal about different types of qualification?

(a) Negative phrase: *the blind*

Affirmative phrases: *person who is blind*, *person with visual impairment* or *person who has low vision*

The nominal *the blind* categorises a group of people by means of their property. This construal highlights their infliction and therefore evokes negative connotations. The politically correct terms make use of postnominal qualifications: relative clauses and a prepositional phrase. These constructions express permanent or temporary qualities and hence give the impression that the infliction may only be occasional and temporary.

(b) Negative expressions: *cripple*, *lame*, *handicapped*, *deformed*, *physically challenged*

Affirmative phrases: *person with a physical disability*, *person with a mobility impairment*

The noun *cripple* describes a category, i.e. it categorises a person or a group of people by their handicap; hence its negative connotations. The same applies to adjectives used as group nouns: *the lame*, *the handicapped*, *the deformed* and *the physically handicapped*. The postnominal position of the qualifiers in the prepositional phrases *with a physical disability* and *with a mobility impairment* makes the impairment sound more occasional and temporary and hence less “characteristic”.

4. What kinds of adjective (scalar, deadverbial, denominal, determining) are used in the following examples?

(a) There is no friend like an *old* friend.

Deadverbial adjective: *old* refers to a long-standing relationship.

(b) The *first* months of a baby’s life are the most important ones.

Determining adjective: *first* grounds the referent months as definite; it specifies its uniqueness with respect to a series (of months).

(c) The brain is divided into two *cerebral* hemispheres.

Denominal adjective derived from *cerebrum*; the cerebrum represents the whole of which the hemispheres are parts.

(d) The gardener is the *alleged* killer.

Deadverbial adjective: *He is allegedly the killer*.

(e) The *only* thing to do is to file for divorce.

Determining adjective: *only* grounds its head noun.

(f) He is a *distant* relative of mine.

Deadverbial adjective: *He is distantly related*.

5. Specify the role relation that is associated with the premodifier adjectives in the following phrases. Use names for roles such as agent, subject area, means, manner, material, source, goal, etc.

All premodifier adjectives are denominal and can normally not be used in predicative position.

- (a) *doctoral* dissertation

Doctoral may be seen as characterising the larger subject area of the thesis (a doctoral dissertation goes much more into depth than e.g. an MA thesis) or as characterising the goal of one's studies (to gain a PhD).

- (b) *plastic* bottle

Plastic describes the material the bottle is made of. Here we can also use *plastic* in predicative position: *The bottle is plastic.*

- (c) *Polish* rug

Polish refers to the provenance or source of the rug.

- (d) *financial* support

Financial refers to the means or instrument used in an action of supporting a person.

- (e) *parliamentary* decision

Parliamentary describes the agent that made a decision, i.e. the members of Parliament.

- (f) *electronic* file versus *electronic* surveillance

Electronic in *electronic file* refers to the means of coding a file; in *electronic surveillance* it refers to the means as well as to the manner of surveillance.

6. Show that the schematic relations in the following expressions (i) are understood within a given frame and/or domain and (ii) evoke stereotypical scenes.

- (a) *the man on crutches*

Frame: aid in walking; domain: handicap.

Stereotypical scene: We see a man being supported by a pair of crutches rather than sitting on crutches or leaning against them.

- (b) *a queue for the toilet*

Frame: queuing; domain: public convenience.

Stereotypical scene: We visualise a scene of many people desperately waiting in line in order to use a public toilet and not, for instance, to take a look at the toilet, to rent it, or to take a photo of it.

- (c) *a letter to the editor*

Frame: readers' letters; domain: newspapers.

Stereotypical scene: We think of a letter addressed to one of the editors of a newspaper or magazine in which a reader expresses his or her, often critical, opinion about the contents of an article recently published in the paper or magazine. The letter is, or is to be, published in the paper, and is of course not a personal letter, and *the editor* is not understood as a unique referent but in his or her role at a newspaper.

- (d) *the flowers in the vase*

Frame: cut flowers; domain: decoration.

Stereotypical scene: We imagine a scene of a flower vase standing upright and nearly wholly filled with water; the flowers have the lower parts of their stems in the water.

- (e) *the water in the bathtub*

Frame: taking a bath; domain: personal hygiene.

Stereotypical scene: We think of a bathtub filled to about two-thirds with warm water of about 35 degrees celsius which is or will be used for taking a bath.

7. Specify the kind of qualifying relation in each of the following phrases.

- (a) *the President of the United States*

intrinsic relation with the relational noun *president*

- (b) *the danger of combustion*

intrinsic identifying relation: the danger is combustion

- (c) *the barking of the dogs*

intrinsic relation with the abstract relational noun *barking*, which describes the situation 'the dog barks' reified as a thing.

- (d) *her defence of the thesis*

intrinsic relation with the abstract relation noun *defence*

- (e) *the hub of the wheel*

intrinsic part/whole relation

Chapter 08

1. Analyse the following sentences with respect to (i) the basic aspectual class (bounded event, unbounded event, state) and (ii) the type of situation (e.g. accomplishment) they belong to. Justify your decision by using one of the diagnostic tests (e.g. type of question, preposition, or *stop* vs *finish*).

(a) *Beethoven composed the Moonlight sonata.*

Bounded event; accomplishment: We can ask a question with *how long did ... take* (*How long did Mozart take to compose the Moonlight sonata?*), use the time-span preposition *in* (*Mozart composed the Moonshine sonata in three days*), and use *finish* (*Beethoven finished composing the Moonlight sonata after three days*).

(b) *Mozart received musical training from his father.*

Bounded event; bounded activity: We can ask a question with *how long* (*How long did Mozart receive musical training?*) and use the time-stretch preposition *for* (*Mozart received musical training for three years*).

(c) *Mozart's death occurred while he was composing his Requiem.* (two situations)

Mozart's death occurred...: Bounded event; act: We can use neither the time-span nor a time-stretch question or preposition; the expression *Mozart's death occurred* in this context does not invoke a preceding culminating phase, i.e. we are more likely to ask a question with *when exactly* (*did his death occur?*) rather than with *when finally* (*did his death occur?*).

... while he was composing his Requiem

Unbounded event; accomplishing activity

(d) *Mozart is played all over the world.*

State; habitual state

(e) *Verdi achieved his first real success with Nabucco in 1842.*

Bounded event; achievement

(f) *Traditional opera consists of two modes of singing: recitative and aria.*

State; indefinitely lasting state

2. What type of activity (culminating, etc.) or state does the progressive aspect express in the following sentences?

(a) *The picture is hanging on the wall.*

Temporary state

(b) *We are losing the game.*

Culminating activity: The focus is on the culminating phase preceding an achievement; therefore the losing team may ultimately win the game.

(c) *The phone is ringing.*

Iterative activity: iteration of punctual acts

(d) *The sun is shining.*

Unbounded activity; process. As with all activities, its boundaries are still implicitly present, i.e. the event will come to an end sometime.

(e) *I'm sitting right over there.* (pointing to my seat at the bar)

Temporary state. As pointed out in 8.1.2, the situation described in the progressive need not occur at the present moment. In this case, the speaker sat on a particular seat before he went to the bar and wants to resume his seat.

(f) *Where are you living?*

Temporary state.

(g) *I am missing you more and more.*

Temporary psychological state: The context of “increase”, i.e. ongoing change and intensity of involvement, warrants the use of the progressive.

3. What is the difference in meaning between the following pairs of sentences?

(a) *I hope someone can help me.* (a') *I am hoping someone can help me.*

(a) describes an indefinitely lasting state in a neutral way; (a') suggests intensity of my hopes.

(b) *I feel pain.* (b') *I am feeling pain.*

(b) describes my experience of a sensation; (b') focuses on my current awareness of the sensation, i.e. my bodily condition.

(c) *The plane took off.* (c') *The plane was taking off.*

(c) describes an achievement, i.e. the moment the plane is airborne; (c') refers to the culminating phase of maximum runway speed just before take-off, i.e. the phase when the plane still touches the ground.

(d) *You are silly.* (d') *You are being silly.*

(d) describes an indefinitely lasting state or a person's behaviour; (d') only refers to a person's temporary behaviour, i.e. it is an activity.

(e) *I constantly receive junk mail.* (e') *I'm constantly receiving junk mail.*

(e) describes a habitual state in a neutral way; (e') suggests irritation.

(f) *What did you say?* (f') *What were you saying?*

(f) describes a bounded activity: the speaker asks about a conversation in the past in which s/he was not present; (f') describes an unbounded activity: the speaker probably inquires about the previous topic of an ongoing conversation after an interruption.

(g) *I wrote my term paper.* (g') *I was writing my term paper.*

(g) describes an accomplishment and implies that the paper is finished; (g') describes an accomplishing activity and invites the implicature that the term paper is not finished.

Chapter 9

1. Supply the appropriate tense form in the following sentences and justify your decision.

- (a) I hereby (renounce) all responsibility.

I hereby renounce all responsibility.

The *adverbial hereby* indicates that the sentence is meant as a performative speech act. The temporal boundaries of the present event described coincide with the time of uttering the sentence so that the use of the simple present tense is justified.

- (b) I've bought you a little present. I (think) you might like it.

I thought you might like it.

The sentence is probably meant in reference to the speaker's present thoughts. Expressing one's thoughts about the person talked to is potentially face-threatening and should be mitigated. The use of the present tense (*I think you might like it*) therefore sounds very direct and rude. For reasons of politeness a deictic shift to the past is advisable: it has a distancing effect and therefore sounds less imposing.

- (c) In March 1923 Lenin suffers his third stroke, loses the power of speech. In January 1924 Lenin (die).

In January 1924 Lenin died / dies.

The event happened in the past and is therefore adequately described in the past tense. Historical events in the form of a chronicle, however, tend to be presented in the historic present. The parataxis in the first sentences also signals the chronicle genre.

- (d) Professor Alpers (note) the tendency of modern critics to treat metaphors as primary data in understanding Shakespeare's plays.

Professor Alpers noted / notes the tendency of modern critics to treat metaphors as primary data in understanding Shakespeare's plays.

The event occurred in the past time and may therefore be described in the past tense. Professor Alpers' observation is then understood as a final statement on this issue. His position is, however, still discussed today. In general, academic debates tend to be seen as ongoing and timeless and hence are normally presented in the simple present tense.

- (e) **Oil tanker (sink) off French coast.** A Maltese-registered tanker (sink) in stormy seas off north-western France last night. (newspaper article)

Oil tanker sinks off French coast. A Maltese-registered tanker sank in stormy seas off north-western France last night.

The events occurred in the past time. The first sentence is the headline, which forms an abstract of the story. Newspapers usually use the summary present for headlines and shift to the past tense in the body of the article.

2. Supply the appropriate tense and aspect forms in the following sentences, describe the use of the forms, and justify your decision:

- (a) I only (know) him for a minute and already (hate) him.

I have only known him for a minute and already hate him.

The first sentence describes a state (know) which began a minute ago and stretches up to the present time and beyond. The beginning phase of the state is anterior to the present moment, hence it is expressed in the present perfect, even if has only lasted for a minute. It has current relevance for the ensuing state of hating him. This indefinitely lasting state is expressed in the present tense. It can only be expressed in the present perfect if its duration is specified, as in *and have hated him ever since*.

- (b) I (sit) at the computer all day. My eyes are burning and my neck is stiff.

I have been sitting at the computer all day.

The appropriate tense to choose is the continuative present perfect progressive, which describes a temporary state reaching up to the present. The focus is on the duration of the state, which gives rise to currently relevant inferences: the burning of my eyes and my stiff neck.

- (c) When the phone (ring), I (sip) coffee and (watch) TV.

When the phone rang, I was sipping coffee and watching TV.

The temporal clause describes a bounded event in the past, the main clause describes two unbounded events in the past progressive. The bounded event functions as the figure, the unbounded events as the ground. The two unbounded events occur simultaneously; they cannot occur sequentially.

- (d) I (be) away all week on a conference and (not arrive) home until late on Friday night. (four possibilities)

(i) *I had been away ... and didn't arrive home until late on Friday night.*

(ii) *I was away ... and didn't arrive home until late on Friday night.*

(iii) *I have been away ... and will not arrive home until late on Friday night.*

(iv) *I will be away ... and will not arrive home until late on Friday night.*

(i) My being away on a conference occurred anterior to my arriving home, hence the earlier event may be described in the past perfect and the second event in the simple past.

(ii) The events may be seen as occurring sequentially within the narrative so that both can also be expressed in the past tense.

(iii) The first event may also have occurred anterior to the present moment and the second event in the future.

(iv) The events may be seen as occurring sequentially within the future and both described in the future tense.

- (e) It (be predicted) that, by 2025, the number of vehicles on the road (increase) by over 100 per cent.

It has been predicted that, by 2025, the number of vehicles on the road will have increased by over 100 per cent.

The prediction was probably made some time ago before speech time and is still currently relevant, hence it is expressed in the present perfect. The prediction is about a future state (increased by over 100 per cent) which is anterior to a future reference time (2025). The prepositional *by*-phrase describes the state stretching from the turning point at which a 100% increase is reached to 2025.

3. Comment on the differences in meaning implied by the future tense forms in the following examples and explain which of them sounds better in a given context.

- (a) Who *will* / *is going to* volunteer to clean the kitchen? – I'll do it. / I'm going to do it.

In the context of kitchen duties, the use of the future tense form *will* is most likely to mean volition, i.e. 'I am volunteering to do the work'. The use of the present prospective form *be going to* is understood in the sense of intention, i.e. 'I intend to do it'. The contingent sense of *be going to* is ruled out in the given context.

- (b) I feel miserable. I'll be sick. / I'm going to be sick.

The future tense form *will* suggests a neutral, projected state in the future. The contingent *be going to*-future relates the future to the present. People normally feel a coming sickness, hence the *be going to*-future sounds more natural.

- (c) The graduation ceremony *is* on August 1. / *will be* on August 1.

In its future reference, the present tense describes a scheduled event. Graduation ceremonies are fixed events and hence appropriately described in the present tense. The neutral *will*-future would suggest variable dates of the graduation ceremonies.

- (d) Susan, *will* you pass by the post office? / *will you be passing* ...

The future non-progressive suggests projected future. A more appropriate future tense form to use is the matter-of-course progressive, which portrays the future activity as one among other routine activities such as doing some shopping, taking the kids to school, etc.

- (e) I'm *getting* married / I'm *going to* get married.

The present progressive in reference to a future event suggests that it is planned, probably to happen within the near future. The use of the *be going to*-future may be understood in the sense of intention—I want to get married, or in the sense of contingency—my future husband may already have popped the question.

- (f) The English Theatre *presents* four plays during the coming season. / *will present* ... / *will be presenting* ...

The present tense describes the plays as being scheduled, which sounds inappropriate for a theatre programme. It could, however, be used as a performative, perhaps at the beginning of the evening or on the printed programme: The English Theatre presents *The Tempest* by William Shakespeare. The *will*-future makes us see the programme as being set up volitionally or as neutrally projected. The most appropriate future form to use is the future progressive, which makes us see the plays as a matter of course within the regular performances of the theatre.

Chapter 10

1. Point out the difference in meaning between the following pairs of sentences:

- (a) (i) Sue *is* at home. Her car is parked in front of the house.
 (ii) Sue *must be* at home. Her car is parked in front of the house.

The sentences under (i) describe strong, or categorical, assertions, i.e. the speaker commits himself to the truth of both statements. He may have gained his confidence about Sue's being at home from seeing her car parked in front of her house, but this is immaterial for his assertion. The speaker cannot, for example, doubt his assertion by continuing, *#but I may be wrong*.

The first sentence of (ii) describes a weak, or modalised, assertion, i.e. the speaker does not commit himself to the truth of his statement. The second sentence describes an assertion, i.e. the speaker claims its truth because he may have seen the car, i.e. it forms part of past or present reality. The epistemic necessity expressed in the modal sentence comes close to reality, but it still presents the speaker's subjective assessment as a potentiality inferred from evidence presented in the second sentence. The modal assertion may therefore be said to be wrong.

- (b) (i) Tom *is perhaps* in Washington.
 (ii) Jerry *may be* in Buffalo.

The modal adverb *perhaps* in sentence (i) is used to describe an objective modal assessment based on external circumstances. Since the speaker does not necessarily identify with the assessment, he may ask for confirmation by using a tag question (*?Tom is perhaps in New York, isn't he?*).

Sentence (ii) presents the speaker's subjective assessment, for which he would not ask the hearer's confirmation. The tag question with *may* is not even used. Thus *Jerry may be in Buffalo, mayn't he?* would not be said, and *Jerry may be in Buffalo, isn't he?* sounds odd.

- (c) (i) I heard that Jennifer is walking on crutches and has her head all bandaged up.
 (ii) Jennifer *must have had* an accident.

The description under (i) presents pieces of evidence (from hearsay) which make us think, amongst other things, of a potential cause of Jennifer's deplorable condition, her present state of health or lasting impairments. These are implicatures drawn from the evidence and could be expressed in terms of modal assessments, as in sentence (ii). The modal assessments, in their turn, may invite implicatures about the evidence they are based on. That is, on hearing sentence (ii), I assume that the speaker has compelling evidence for his modal statement such as described in (i).

- (d) (i) My son *may go* to America.
 (ii) My daughter *may be going* to Australia.
 (iii) My cousins *may have gone* to New Zealand.

Sentence (i) is ambiguous between an epistemic and deontic reading. In its epistemic reading, it expresses the possibility of a future event, in its deontic reading, it expresses the permission to do something, which can also only occur in the future. Sentence (ii) can only be interpreted epistemically: it refers to a present assessment of a present or future event. The progressive form includes the present moment and hence would be incompatible with the future orientation of deontic modality. Sentence (iii) is also only understood epistemically. The assessment of the past event is also made at the present moment.

- (e) (i) Yes, I *permit* you to store my personal data.
 (ii) Yes, you *may* store my personal data.

Sentence (i) is a directive performative speech act of permission-granting: the verb *permit* explicitly names the speech act, and the performative function of the speech act can be made explicit by adding *hereby*: *I hereby permit you to store my personal data*. Sentence (ii) describes a deontic act of permission-granting and is thus also performative. Both performative speech acts and expressions of deontic modality are tied to the present moment of speaking and concern events in the future. However, the directive speech act purely focuses on the action permitted, while the modal *may* also invokes the force-dynamic constellation underlying an act of permission, i.e. the speaker's enablement in granting permission, which he would also have the power to refuse. As a result, the permission expressed by the performative speech act sounds confident and irrevocable, while the permission expressed by the deontic modality sounds less confident and potentially revocable.

- (f) (i) You *must* take a right turn now.
 (ii) You've *got to* take a right turn now.
 (iii) You *have to* take a right turn now
 (iv) You *need to* take a right turn now.
 (v) You *should* take a right turn now.

The sentences express different strengths of obligation. The strongest obligation is expressed in (i), which might be said by a passenger at the point when the driver was just about to miss the right turn. *Must* conveys personally felt urgency. *Have got to* in (ii) also expresses strong urgency, but is less subjective. It might be said when giving directions from a map. *Have to* in (iii) suggests an even more objective, or "democratic", obligation. The passenger might study the map and navigate the driver through the city. *Need to* in (iv) suggests a weak obligation: the obligation derives from some intrinsic attribute of a thing. The sentence might be said by a passenger who knows the area very well and can tell the shortest way. *Should* in (v) expresses a still weaker form of external obligation. From studying the map, the navigator may assume that it would be best if the driver took a right turn now, but it would probably be no harm if he missed it and took the right turn later on.

2. Identify and discuss the type(s) of modality in the following sentences.

- (a) This car *can* run on water, alcohol or cow dung.

The modal *can* describes a general ability of the car, which strongly invites the implicature of an intrinsic possibility: ‘it is possible for the car to run on water’. Even if cars are not, as a rule, powered by water, alcohol or cow dung, these petrol substitutes are within the range of potential sources of energy of a car and hence can be seen as attributes. Abilities and intrinsic possibilities are expressed by *can*; the use of *may* is excluded in the sense of ability and rarely used in the sense of intrinsic possibility. If *may* was used instead of *can*, the sentence would be expressed as *This car may be run on water*. It suggests that the driver may choose the kind of petrol substitute to use, i.e. it might be paraphrased as ‘it is possible for drivers to run this car on water’. This sentence may also be interpreted in the sense of an epistemic possibility, and is the only interpretation with the progressive form: *This car may be running on water*.

- (b) The consumption of alcohol *may* cause you to think you *can* sing.

May describes an epistemic possibility; the sentence can be paraphrased as ‘it is possible that the consumption of alcohol causes...’, where the assessment is based on the speaker’s subjective judgement. However, *can* both denotes an ability and invites the implicature of an intrinsic possibility: ‘it is possible for you to sing’.

- (c) I *must* warn you that I am quite stubborn.

Literally, *must* in this sentence expresses an obligation: ‘I am obliged to warn you’. The meaning of the utterance is, however, not intended to be potential but much rather actual: it expresses the performative speech act of a warning: ‘I hereby warn you that I am quite stubborn’. The relation between the literal and the intended meaning is metonymic: POTENTIALITY FOR ACTUALITY. The use of *must* in such directive utterances is known as hedged performative.

- (d) I *can* see Venus in the evening sky.

As in the preceding example, the intended meaning of this sentence is not to convey a potentiality but an actual experience. The relation between the literal and intended meaning of *can* also involves the metonymy POTENTIALITY FOR ACTUALITY. In this use, however, *can* is not a hedged performative because the utterance is not directive but describes an intrinsic possibility: ‘it is possible for me to see Venus’. The meaning of potentiality is not lost but still present in its association with a potentially rare experience.

- (e) A group of American tourists were being guided through an ancient castle in Europe.

“This place,” the guide told them, “is 600 years old. Not a stone in it has been touched, nothing altered, nothing replaced in all those years.”

“Wow,” said one woman dryly, “they *must* have the same landlord as I have.”

The modal *must* describes epistemic necessity. It nicely illustrates that epistemic modality as expressed by *must* involves a subjective deduc-

tive process and differs from categorical assertions. The essence of the joke would have been lost if the punchline was: *They have the same landlord I have.*

3. Detect the modal ambiguity in the following sentences:

- (a) The table *should* be laid.

The sentence is ambiguous between a deontic and an epistemic reading. In the deontic reading, the speaker lays a weak obligation on some unnamed person or persons to lay the table, implicitly invoking some external rules such as household duties. The situation is an event to be performed in the future, i.e. the table is not yet laid. In the epistemic reading, the speaker makes an assessment of the potentiality of a present state of affairs, which he considers weakly necessary, i.e. the speaker assumes that the table is laid, possibly because at this time of the day the table is normally laid or because he heard the clinking of dishes in the dining room.

- (b) Your son *must* be at school.

The sentence is also ambiguous between a deontic and an epistemic reading. In the deontic reading, the speaker lays a strong obligation on the hearer to send her son to school. The use of *must* makes the obligation sound more urgent than if it was expressed by *have to*. The sentence literally describes a state but is clearly understood in a directive sense of asking the person to perform some action as a result of which the young man will be at school, i.e. it involves the metonymy RESULT FOR ACTION. In the epistemic reading, the speaker assesses a proposition ('your son be at school now') as necessarily being the case.

4. Analyse the negated modals in the following sentences by paraphrasing them and discuss differences in meaning resulting from the modal verb and the scope of negation.

- (a) (i) You *mustn't* play with these children.
 (ii) You *don't have to* play with these children.

Sentence (i) can be paraphrased as 'you are obliged not to play with the children', i.e. the proposition is negated. Sentence (ii) can be paraphrased as 'you are not obliged to play with the children', i.e. the modality is negated. Sentence (i) describes an obligation not to act, i.e. a prohibition; sentence (ii) describes an exemption from an obligation to act. The latter meaning is less compelling because it gives the options to comply or not to comply.

- (b) (i) You *mustn't* open the door.
(ii) You *may not* open the door.
(iii) You *can't* open the door.

All three sentences convey the sense of a prohibition but express it in different ways. Sentence (i) can be paraphrased as 'you are obliged not to open the door', i.e., as in the sentence *You mustn't play with these children*, the proposition is negated. In sentences (ii) and (iii) the modality is negated: 'you are not permitted to open the door'. The use of *mustn't* in (i) conveys the highest degree of imposition on the hearer, namely an obligation to refrain from performing an action. The speaker either imposes the prohibition himself or assumes it as an irresistible external force such as a general rule. As such, the compelling force is absolute. Such strong obligations may be found in a fairy tale, where they will, of course, eventually be violated. The use of *may not* in (ii) conveys a lower degree of imposition. A refusal of permission is not given in absolute terms but only when there is, or may be, someone's potential desire or intention to do the forbidden thing, and it is only then that the person in authority can exert his power and bar the other person from having his will. The use of *can't* in (iii) conveys the lowest degree of imposition. Here, the refusal of permission is based on external circumstances and hence is felt to be less imposing.

Chapter 11

1. Which event schema and which thematic role(s) occur in the following sentence? Also try to spell out the specific subschema each time. Wherever possible, use linguistic tests to justify your decision.

- (a) *The suspect was an undercover CIA agent.*

Occurrence schema, state: category inclusion; thematic roles: theme – including category. The sentence can be reversed if the focus is shifted from end focus to initial focus, with stress on *undercover*: *An undercover CIA agent was the suspect.*

- (b) *Chess is the only game without an element of chance.*

Occurrence schema, state: identification; thematic roles: theme – identifying participant. The sentence is reversible: *The only game without an element of chance is chess.*

- (c) *The car went dead in the middle of the motorway.*

Occurrence schema: change of state, metaphorically expressed by the motion verb *go* (CHANGE IS MOTION). *Go* tends to convey unexpected changes. Thematic role: theme.

- (d) *The door opened.*

Occurrence schema: process: change of state with *open* as an inchoative verb; thematic role: theme

- (e) *This really bugs me.*

Emotion schema; thematic roles: cause – experiencer.

- (f) *The burglars opened the safe.*

Action schema; thematic roles: agent – theme. Tests for the action schema are: (i) the *do to*-test: *What did the burglars do to the safe?*; (ii) the possibility of using an instrument adjunct: *The burglars opened the safe with a sledgehammer* or *The burglars used a sledgehammer to open the safe*; (iii) the possibility of using a purpose adjunct: *The burglars opened the safe in order to help the needy.*

- (g) *The President lied to us.*

Action schema; thematic roles: agent – theme. The phrase *to us* is a prepositional object; hence the sentence is transitive.

- (h) *He rang the money into the till.*

Caused-motion schema; thematic roles: agent – theme – location. The caused-motion construction is used here with the non-motional verb *ring*: the ringing sound is produced by the cash register and accompanies its opening. The sound metonymically stands for the motion of opening the cash drawer.

- (i) *This gives me the creeps.*

Transfer schema; thematic roles: agent – recipient – theme. The transfer is, however, metaphorical: TRIGGERING EMOTIONS IS TRANSFER. The sentence means something like ‘He annoys me’, i.e. it involves only two roles, a cause and an experiencer.

2. Identify the sentence pattern (transitive, intransitive, etc) and the event schema of the following sentences and point out what is “special” about the sentences by contrasting them to similar sentences with prepositional phrases.

- (a) *In the evening I always surf the net.*

Transitive sentence pattern, action schema. The verb *surf* is normally used as an intransitive verb and may take a locative adjunct, as in *surf on the Pacific Ocean*. In its modern usage of internet surfing, the adjunct is usually promoted to the position of a direct object, and *the net* is therefore seen as being somehow affected in my search for interesting information. Its locative meaning is fused with that of an affected theme.

- (b) *I don't like the way the dog is sniffing me.*

Transitive sentence pattern, action schema. The verb *sniff* may be used with an object-complement and the preposition *at*, as in *The dog is sniffing at me*, or with a direct object, as in this example. Its use with a direct object makes us see the dog's sniffing as more intense.

- (c) *Mrs Walker would read us an instructive passage from the Bible.*

Ditransitive sentence pattern; transfer schema: beneficial transfer. *Read* is not a verb of transfer; its use in the ditransitive construction imposes the interpretation that the passages from the Bible is read to our benefit.

3. Identify the thematic role played by the subject referent in the sentences, turn the sentences into the passive voice so that the role is expressed as a prepositional phrase, and indicate the impact the grammatical structure has on the meanings of the original sentence. Would you describe these situations differently in your own or another language?

- (a) *The FBI tapped our telephones.*

Agent: *the FBI* stands for the secret agents working for the Federal Bureau of Investigation. In the passive voice, the agent is expressed as a *by*-phrase: *Our telephones were tapped by the FBI*. In the transitive sentence, the FBI is coded as the primary participant, which befits an energetic agent. In the passive voice, the FBI is coded as a peripheral participant; here our focus is on the objects affected: our telephone.

- (b) *A dagger killed Julius Caesar.*

Instrument. In the passive voice *Caesar was killed with a dagger*, the instrument is expressed by a *with*-phrase. By promoting an instrument to the subject of a transitive sentence it is seen as having a certain degree of independence from the agent and is acting on its own. The role of the agent Brutus, who is responsible for Caesar's murder, is downplayed in this structure.

- (c) *The typhoon uprooted trees.*

Cause: natural force: *The trees were uprooted by the typhoon*. Natural forces are human-like in taking the same *by*-phrase as agents; however, they cannot be combined with instruments. The subject position of *the typhoon* highlights its energetic force.

- (d) *This car seats five passengers.*

Location: *Five passengers can be seated in this car.* The subject participant *this car* is not causal itself but describes an enabling condition: its capacity to seat five people. In the passive sentence the notion of ‘ability’ is expressed by the modal auxiliary *can*. This construction is known as the middle construction.

- (e) *Indian baskets never leak a drop.*

Source: The sentence may be paraphrased as *A drop never leaks from Indian baskets.* Like the subject participant in the preceding example, the subject *Indian baskets* describes an enabling condition: their extraordinary composition enables the baskets to prevent fluids from leaking out. It is expressed as a middle construction.

- (f) *A survey of college students found that drug use is still widespread.*

Means. It is of course not the survey that finds certain results but researchers; hence *a survey* metonymically stands for ‘researchers’. The sentence may therefore be paraphrased as *Researchers found in a survey that ...* or, by using the passive voice and extraposition, *It was found in a survey that ...* The preposition *in* suggests a locative meaning, but the notion of means can also be brought out as in *Researchers found by means of a survey that*

- (g) *My guitar broke a string.*

Whole: *My guitar* describes a whole entity and *a string* one of its parts. The whole does not generate energy; it represents no more than an enabling condition and ranks very low on the scale of transitivity. The construction is the middle construction.

4. Identify the type of construction (ditransitive, caused-motion) in the following examples and explain why the sentences under (a), (c) and (e) can be said, but the ones under (b), (d) and (f) much less so.

- (a) *Jennifer sent a bunch of flowers to David's office.*

Caused-motion construction, in which the *to*-phrase expresses the goal of the thing's motion.

- (b) [?]*Jennifer sent David's office a bunch of flowers.*

Ditransitive construction, which requires a human recipient as the indirect object. The sentence is only acceptable if *David's office* is metonymically understood to stand for a human recipient, probably the employees working in David's office.

- (c) *Bernstein played us a wonderful sonata.*

Ditransitive construction with a beneficiary as the indirect object. In playing the sonata Bernstein “creates” the music.

- (d) [?]*Bernstein played us the piano.*

Ditransitive construction with a beneficiary as the indirect object. Unlike a piece of music created while playing the piano, the piano itself is not created. The sentence would only make sense if *the piano* is interpreted metonymically as standing for music played on it, e.g. as a demonstration of the quality of the piano by a sales person.

- (e) *The dressmaker designed me a lovely dress.*

Ditransitive construction with the indirect object *me* as the beneficiary. Designing something is a creative act.

- (f) *²The dressmaker shortened me the dress.*

Ditransitive construction. Shortening a dress is not seen as a creative and hence beneficial act—even if objectively speaking it may be done for the benefit of me.

Chapter 12

1. Which active zones of the landmarks define the spatial region in the examples below and how are they motivated? (see Section 12.2.2). The first three examples are adopted from Herskovits (1985).

(a) *the child in the back of the car*

The car stands for the interior of a car that holds the passengers as its active-zone part; this area of containment is also the spatial region. The only other potential larger area of containment in the back of a car would be the boot, which, as an unusual container for humans, would have to be explicitly mentioned.

(b) *the house above the building*

Both *the house* and *the building* stand for their bases as their active zones. Buildings are accessed and entered through their bases; thus we start interacting with the ground floor of a building but not with its basement or top. The base of the house is thus higher than that of the building but not right over it.

(c) *the key under the rug*

The rug stands for the bottom surface of the rug as its active zone. Only the bottom surface of the rug is in contact and “interacts” with the key. In order to find the key, we would have to turn up the rug, which as a whole specifies the spatial region on the floor.

(d) *the submarine under the water*

The water stands for the top surface of the water as its active zone. The surface of a body of water is visible, deeper levels are not. A submarine that is “under the water” is thus no longer visible and conceptualised as “hidden” under the visible water surface. The spatial region specified by *under the water* is thus any level in the water under its surface so that the trajectory is fully contained in the water and typically no longer visible.

(e) *the roots of the tree under the earth*

The earth stands for the top surface of the earth as its active zone. The same motivation applies as in (d). The spatial region is thus the earth, which fully covers the trajectory.

2. Supply the appropriate preposition and analyse the spatial relation.

(a) *There is a huge spider... the ceiling.*

on the ceiling. The spatial relation is static and describes the spider’s location. The prepositional phrase can be asked about by a *where*-question. The dimensional preposition *on* denotes contact between the trajectory *spider* and the landmark *ceiling*. Spiders can stick to walls or ceilings due to specially shaped hairs on their legs that slip into nooks and crannies of a ceiling.

- (b) *The heart of England stretches ... the Midlands ... the North West.*

from the Midlands to the North West. The spatial relation describes an extent in terms of the distance between two points. The distance would be asked about by a *how far*-question. The distance is specified by means of construing a static extent as dynamic. The directional prepositions *from* and *to* make us see the distance as fictive motion. The verb *stretch* does not refer to prototypical motion in the sense of a whole entity's change of position (see Chapter 11) but to the extension of one's body or limbs. In stretching one's arm out in order to reach something this body part moves and involves directionality.

- (c) *Can you get me a bottle of beer ... the fridge?*

from the fridge. Although the situation describes the motion of a trajector from the interior of a landmark, it is seen as involving less intensity and hence described with the zero-dimensional preposition *from*. The use of the emergence preposition *out of* tends to suggest greater effort: the bottle might be stored deep down in the fridge.

- (d) *I work in New York but live ... the river in New Jersey.*

over the river or *across the river.* The prepositional phrase describes a location at the endpoint of an imaginary path (*over the river*), seen from an implicit deictic position at the New York side of the river. The path metonymically stands for its end-point. The spatial relation itself is static but, unless we imagine a static situation of living on a bridge over the Hudson River, involves mental scanning and directionality. We mentally trace an imaginary route from Manhattan across the river to New Jersey on the other side. This spatial location may also be described as *by the river*, which, of course, does not evoke mental scanning.

3. Which orientational arrangements do the following sentences involve and how do they affect the region where the trajector is to be found?

- (a) *There are burglars behind the house.*

Houses typically have an intrinsic orientation, normally marked by the front door and a back door. The region defined by *behind* therefore extends from the rear side.

- (b) *The treasure chest is hidden behind the tree.*

Trees do not, as a rule, have an intrinsic front and back. If the spatial information is given in a deictic situation with the tree in sight, the region where the treasure chest is to be found would be behind the tree on an orientational line as seen from the observer's viewpoint. In a non-deictic situation, the region may be determined by some other landmark, such as a house with its intrinsic orientation so that the region would be determined by an orientational line from the front of a house to its back to the tree and behind.

- (c) *The left arm of our armchair has come off.*

Places to sit or lie on like chairs, couches, beds, etc. adopt our intrinsic bodily orientation. The left arm of an armchair is intrinsically defined as the one on the left side as an extension of our normal position in an armchair.

- (d) *Your love letters are in the left drawer of my desk.*

Desks and cupboards have an intrinsic front and back. Their front is that part which we interact with: it has doors or drawers. Unlike cars and chairs, their left and right sides are not determined relative to their intrinsic front/back orientation, but by the way we interact with them. Their left and right sides are extensions from our normal position in front of them. Thus, the left drawer of a desk is to our, not its, left

- (e) *Watch out, there are children in front of the car.* (3 possibilities)

(i) The orientational arrangement may be seen deictically from the observer's viewpoint: irrespective of whether the observer is looking at the front or back of the car, the region described by *in front of* would be between the observer's position and the car.

(ii) The orientational arrangement may be determined by the car's inherent front/back orientation. The children are in a region extending forward from the front of the car. If the orientational arrangement includes an observer, the children may be at two possible locations: If the car faces the observer, the children would be in a region between the observer's position and the car; if it faces away from the children, the children would be in a region extending behind the car from the observer's point of view.

(iii) The orientational arrangement may be determined by the car's motion. If the car moves in its normal forward direction, the children would be in a region extending forward from the front of the car. If the car is backing up, the region would extend forward from the back of the car; however, this unusual arrangement would be in conflict with the inherent orientation of the car and, since it is ambiguous, orientation specification would be avoided altogether. One might, for example, express the warning by saying *Watch out, there are children on the road*. The choice of the orientational arrangement also depends on whether the car referred to is one in which the observer is sitting or another one parked on the side of the road.

4. (a) *Jack got married ... a Saturday morning.*

on a Saturday morning. This sentence means 'the day Jack got married was a Saturday and the part of the day was the morning'. *Saturday morning* really refers to a day and days as fixed location times take the preposition *on*. We cannot, for example, say **Jack got married in a Saturday morning*.

- (b) *Phil got married ... the early morning.*

in the early morning. This sentence means 'the part of the day in which Phil got married was the early morning'. *The early morning* describes a fixed location time other than a day. These time units are conceptualised as time spans and take the preposition *in*. We cannot, for example, say **Phil got married on a morning*, but say *Phil got married on a spring morning*.

- (c) *The shops will be open ... 9 pm.* (at least two possibilities)

until 9 pm or *at 9 pm*. Time expressions with *until* describe the end of the duration of an unbounded situation. The opening hours of shops are unbounded situations. *At 9 pm* could be used if the shops are open until, say, 10 pm. Also *about*, *around* and *by* may be used.

- (d) *The shops will open ... 9 am.* (two possibilities)

at 9 am or *by 9 am*. The preposition *at* refers to a point in time and is therefore compatible with the punctual event of the shop's opening. The preposition *by* refers to a time point preceded by a period. With the verb *open*, the sentence describes an achievement; with the predicate *be open*, the sentence describes a state. In both descriptions, the shops are expected to open at the point in time at the very latest, and probably before.

5. (a) *Mozart may have died ... eating undercooked pork.*

from eating undercooked pork. Eating spoiled food is an indirect cause of a person's death; hence it is to be expressed by *from*.

- (b) *Shakespeare probably died ... cancer.*

of cancer. Cancer as a disease is seen as a direct cause of people's death; hence it is expressed by *of*. The distinction between indirect and direct causes relates to our folk understanding of causes. Thus, we also consider as fatal causes a broken heart or loneliness, which we can die *of*.

- (c) *He smashed the computer ... anger.*

in anger. Anger is very intense emotion and triggers reactions which are beyond a person's control. This situation is expressed by the containment preposition *in*.

- (d) *His heart fluttered ... fright.*

with fright. Fright has as one of its typical physiological reactions the fluttering of one's heart, and the emotion and its reaction are seen as co-occurring. Such cause-effect situations are metaphorically conceptualised as accompaniment.

- (e) *He cried ... pride when hearing the Star-Spangled Banner.*

out of pride. A person's demonstration of pride is active and controlled behaviour. Such situations are metaphorically conceptualised as emergence.

- (f) *I couldn't sleep ... fear that this could be my last course in linguistics.*

for fear. The sentence describes a hypothetical situation based on reasoning. Such situations are expressed by the orientational preposition *for*, which is also used for 'reason'.