

4 Meaning and context

This chapter is relatively large. It deals with three phenomena which are normally not treated together in other textbooks on semantics or pragmatics: deixis¹, the determination of NPs and presuppositions. These three phenomena are, however, more closely connected than is commonly recognized. They all contribute to the indexicality of language and belong to the interface between expression meaning and utterance meaning. In addition, they are partially embedded into each other: deictic reference is a special case of definite NP determination; definite NPs are, in turn, a paradigm case of expressions carrying presuppositions.

Part 1: Deixis

We have already seen in 1.3.1 that a sentence taken as such does not tell what it refers to. It is only when a sentence is actually used in a concrete CoU that we establish its reference. You say, for example, ‘This sushi doesn’t taste good!’, referring at that very moment to a particular dish of sushi in front of you. It is only by concrete reference that the sentence expresses anything at all: one fixes the reference of the subject NP, and thereby the predicate of the sentence is applied to an object in the world and tells the recipient something about it. Fixing the reference is the basis for any verbal communication.

For efficient communication it is most important that speaker and addressee agree on what is being referred to. Therefore, the fixation of reference has to be based on givens that are equally apparent to all interlocutors. The most obvious at hand is the immediate context of utterance. It consists of things directly and automatically given for speaker and addressee: who it is who produces the utterance, to whom it is addressed, at which time and at which place it is produced. At least this is the case in the standard situation of face-to-face communication. All languages have means of directly referring to immediate elements of the CoU. Among these means are pronouns such as I and you or expressions like here and now. Linguists call such expressions deictic and the general phenomenon deixis.

The use of deictic expressions not only anchors an utterance in the world, it also imposes the perspective of the speaker on the utterance. The speaker forms the so-called **deictic centre**; the ‘I’; the one who decides who is being addressed; where the speaker is, is ‘here’; when they speak is ‘now’. In the first sections of this chapter, we will consider the three most important deictic relations: relation to the persons involved in the utterance (4.1), to the spatial situation (4.2) and to the time of utterance (4.3).

4.1 Person deixis

Person deixis is deixis based on the linguistic category of person. The category of person relates to the roles that the participants take in an individual utterance: In the singular, the ‘1st person’ is the **speaker**, or producer, of the utterance, **S** for short; the ‘2nd person’ is the addressee², or **A**; the term ‘3rd person’ subsumes everybody who is neither 1st nor 2nd person.³

1 Pronunciation [daɪksɪs], also [deɪksɪs]

2 You will often find the notions ‘hearer’ or ‘recipient’, but these are imprecise because what matters is who is addressed. Someone may hear or receive an utterance without being addressed.

3 For plural reference, e.g. with *we* and *you*, the correspondence between grammatical person and S and A is less direct (see the discussion of number at the end of 4.1.1).

These roles are called **discourse roles**. In most languages the discourse roles play a role in grammar; these are languages that have the category of ‘grammatical person’. English is one of these languages: grammatical person plays a role in the choice of personal pronouns and the forms of finite verbs (*she says*; *I am*, *you are*, etc.).

The most salient linguistic means of person deixis are systems of personal pronouns. They may differ in the grammatical categories of person, gender, number and formality. Table 4.1 displays the personal pronouns in German. They form a **paradigm**, i.e. a closed system in which each slot is filled with a particular form. It often happens that there is the same form for more than one slot (this is known as syncretism) as is the case for the form *sie/Sie* in the German paradigm: *sie* is both 3rd person feminine singular (‘she’) and 3rd person plural (‘they’); *Sie* (with capital *S*) is the 2nd person pronoun of formal address (recall the discussion in 2.3.1), in both singular and plural function. It is grammatically 3rd person plural, but semantically 2nd person, since it is a pronoun of address.

Person	Singular			Plural	Social meaning
	Masc.	Fem.	Neut.		
1	<i>ich</i>			<i>wir</i>	
2	<i>du</i>			<i>ihr</i>	informal
	<i>Sie</i>				formal
3	<i>er</i>	<i>sie</i>	<i>es</i>	<i>sie</i>	

Table 4.1 German paradigm of personal pronouns (nominative case)

4.1.1 The meaning of personal pronouns

The descriptive meaning of personal pronouns can be described in terms of definiteness, person, number and gender; in addition, personal pronouns may carry social meaning, like German *du*, *ihr* and *Sie*.

Definiteness. All personal pronouns are definite. Their referents are always uniquely determined in the given CoU. *I* refers to *the* speaker, *YOU_{sg}*⁴ to *the* unique addressee, not just to ›someone addressed‹. *HE*, *SHE* or *IT* is always used for someone or something certain. This is also the case with plural pronouns: *WE*, *THEY* and *YOU_{pl}* always jointly refer to a certain group of persons or things. In such cases, too, one talks of *one* referent.

Person. For 1st or 2nd person singular pronouns, the descriptive meaning is clear: they refer to S and A, respectively. For 3rd person pronouns, the only restriction is that their reference excludes S and A. Since 3rd person pronouns are definite, the uniqueness of reference relies on the CoU. They are mainly used anaphorically: they refer to something which has been mentioned before. As they do not provide much descriptive content (except as regards

⁴ I use italic capitals when I refer to words independent of a particular language. For example, *SHE* stands for English *she*, French *elle*, Japanese *kanojo*, and so on. The context will help to decide if *I* means 1st person singular pronoun in general, or the English one. For the distinction of singular and plural *YOU* we use *YOU_{sg}* and *YOU_{pl}*.

number and gender), the previous mention of their referent needs to be immediately before the utterance, if not in the same sentence. An anaphoric expression is called an **anaphor**, the kind of reference, **anaphora**. The so-called **antecedent** is the expression in the preceding discourse by which the referent was previously mentioned. Let us have a look at a sentence and two possible continuations. Both contain the pronoun *it* in anaphoric use. In (1a), the antecedent is *the video*, in (1b), it is *the big tsunami*.

- (1) a. The video shows the big tsunami.
A friend of mine took it himself.
- b. The video shows the big tsunami.
A friend of mine survived it when he was in Malaysia.

In both cases it would be impossible to determine the utterance meaning of the second sentence without the first. In this regard, 3rd person pronouns differ fundamentally from 1st and 2nd person pronouns: *I* and *YOU_{sg}* can be interpreted without any preceding text. One only needs to know the immediate context of the utterance that contains the pronouns. In order to construe an anaphoric 3rd person pronoun (or any other anaphor) one also needs to know the CoU of the preceding utterance that provides the antecedent. The only exception are sentences that contain the anaphor along with its antecedent as in (2):

- (2) If you watch this video [*antecedent*], you'll never forget it [*anaphor*].

Gender. English does not have the grammatical category of gender. The distinction between *he* and *she* relates to biological sex. In (3a) *she* refers to a female person, in (3b) *he* to a male one. In the interpretations that first come to mind, it is a female teacher, or male teacher, respectively, speaking of themselves.⁵

- (3) a. My teacher said she would be off for a week.
- b. My teacher said he would be off for a week.

The situation is different in gender languages such as Spanish, French, Russian or German. In German and Russian, every noun has one of three genders, masculine, feminine or neuter. For most nouns, there is no apparent semantic motivation for the gender. The only exception is person terms (and sex-specific terms for animals, like *Kater* ›tomcat‹ or *Stute* ›mare‹): nouns for females are feminine and nouns for males, masculine.⁶ The converse does not hold: masculine or feminine nouns for persons do not necessarily refer to male and female persons, respectively. If a noun that denotes persons is unspecific as to the sex of the person, it may carry any grammatical gender: *Gast* ›guest‹, *Nachkomme* ›descendant‹ are masculine, *Person* ›person‹, *Flasche* ›twerp‹ (epithet, lit. ›bottle‹) are feminine, *Kind* ›child‹ and *Mitglied* ›member‹ are neuter. These data show that grammatical gender as such does not have descriptive meaning in a gender language like German. If a person or animal term specifies the biological sex of a potential referent, this is part of the meaning of the noun. In such cases, grammatical gender will match with biological sex. This produces the illusive impression that grammatical gender carries the meaning of biological sex.

⁵ Actually, the situation in English is more complicated because there are remnants of grammatical gender from earlier stages of English, such as feminine pronouns being used for vessels, motor bikes, or nations.

⁶ The only exceptions are the neuter nouns *Mädchen* (›girl‹) and *Weib* (›woman‹ with an expressive meaning component). The neuter gender of *Mädchen* is due to the fact that the word is a diminutive. Diminutives formed with the suffixes *-chen* or *-lein* are neuter, independent of the gender of the noun they are derived from.

This also holds for personal pronouns in gender languages: gender does not carry descriptive meaning. When 3rd person pronouns are used anaphorically, their gender matches the gender of the antecedent NP. For this reason, the gender of a pronoun can be an important clue for determining the antecedent.

Number. Plural has a different meaning with 1st person pronouns than with nouns. When one talks of ‘children’, one means several instances of what is described by the singular form *child*. The plural multiplies, as it were, the reference of the singular. However, when you use *WE* instead of *I*, you do not refer to several I’s who would jointly produce the utterance. Rather, *WE* means: $\rangle S$ and those who belong to $S\langle$. Who it is that belongs to S depends on the given CoU. Those belonging to S may have the status of 2nd or of 3rd person. Similarly, plural 2nd person pronouns may refer to A and those belonging to A . Let us assume that Mary asks John:

(4) What are you doing tonight? We wanted to ask you out for a drink.

Using *we* she refers to herself plus 3rd persons belonging to her in the given context, maybe her husband; using *you*, she may refer to John alone, or to John plus 3rd persons belonging to him.

This special plural in the case of *WE* and *YOU_{pl}* is called **associative plural**. Plural 2nd person pronouns in addition have a normal plural reading which refers to a plurality of simultaneously addressed person. The plural of 3rd person pronouns is always the normal plural: *THEY* refers invariably to a set of persons that does not include the speaker or any addressees.

Social meaning. In addition to their descriptive meaning, personal pronouns may carry social meaning, for example the meaning of informal or formal interaction (see 2.3.1 and the next subsection).

4.1.2 Paradigms of personal pronouns compared

The languages of the world differ considerably in the structure of their systems of personal pronouns. The differences concern the categories of person, number, gender and social meaning.

Person. Some languages have fewer distinctions, some more. There are languages with only 1st and 2nd person pronouns. On the other hand, some languages distinguish between ‘exclusive’ and ‘inclusive’ *WE*: inclusive *WE* includes A in addition to S , while exclusive *WE* refers to S and 3rd persons, excluding A . In (4), Mary would have to use an exclusive *WE*; inclusive *WE* would have been adequate for a question like ‘What shall we do tonight?’.

Number. Almost all languages distinguish between singular and other grammatical numbers. English only has singular and plural; other languages have dual, for reference to two cases, or further numbers for small sets of referents (trial for reference to three, paucal for reference to a small number of cases).

Gender. Gender distinction is more frequent in the singular than in the plural and more frequent in the 3rd person than in the 2nd or even 1st person. There are languages like Hungarian which have no gender distinction at all in their personal pronoun system.

	One addressee	More than one
informal	2nd singular	2nd plural
Strategy 3	3rd singular	3rd plural
Strategy P	2nd plural	2nd plural
Strategy 3+P	3rd plural	3rd plural

Table 4.2 Strategies of pronominal formal address

Social meaning. Many languages have personal pronouns that carry social meaning. These are most commonly pronouns that distinguish between informal and formal address, such as German informal *du* and *ihr* vs. formal *Sie*. These pronouns often historically developed as special uses of other personal pronouns. For example, German *Sie* was originally a 3rd person plural pronoun (‘they’), which, over the course of history, also evolved a 2nd person usage. Therefore, in present usage the plural pronoun form *sie/Sie* has two functions: 3rd person plural without social meaning and 2nd person (both singular and plural) with the social meaning of formality. In general, there are three strategies for using existing pronouns in a special way for achieving a social meaning of formality:

- Strategy 3 3rd person pronouns for formal address, with 3rd person singular for a single addressee and 3rd person plural for more than one
- Strategy P 2nd person plural pronoun for formal address
- Strategy 3+P 3rd person plural pronoun for formal address.

Strategy 3 is applied in Hungarian and Italian; French and Russian apply Strategy P, German and Danish Strategy 3+P. Strategy P cannot distinguish between formal and informal pronominal address if more than one is addressed, since the formal pronoun of address coincides with the informal 2nd person plural pronoun. The 3+P strategy of German and Danish does not allow any distinction between formally addressing one or more people.

For a while, English made use of Strategy P: the language featured the informal 2nd singular *thou* as well as the formal *you*. In the course of time, the use of formal *you* was extended to more and more situations and finally became the appropriate pronoun of address for all occasions while *thou* dropped out of use except for certain religious contexts. The result is the present situation in which there is no distinction between formal and informal 2nd person pronouns and, concomitantly, no distinction between singular and plural 2nd person pronouns. Some varieties of English have developed new 2nd person plural pronouns, e.g. *you all* or *you guys* (Wales 1996: 73). In these varieties, the meaning of *you* is shifting to 2nd person singular.

Sometimes pronouns of formal address developed from expressions other than pronouns. For example, Spanish *usted* (formal 2nd person singular) is a contraction of the original *vuestra merced* (‘your mercy’). Being derived from a common noun, *usted* and its plural *ustedes* is grammatically 3rd person. Spanish can thus be considered a variant of strategy 3.

Languages without paradigms of personal pronouns. Some languages have expressions for indexical reference to discourse roles, but lack a rigidly structured paradigm with a single entry for each case. Typically, the personal pronouns are more like ordinary nouns. There are a large number of expressions for speaker and addressees, and these differ strongly in social

meaning. These languages include Japanese, Korean, Vietnamese, Thai and Burmese; Imperial Chinese, too, used to be among these. Thai speakers choose from about thirty expressions when referring to themselves. The choice depends on gender and status of the speakers themselves and of their addressees. For example, there is a special 1st person expression *khâa'phraphûd'thacâaw* to be used when addressing the king; the literal meaning is ›majesty's servant‹.

4.1.3 Person deixis in verb inflection

Person deixis is not only accomplished with personal pronouns. Often verbs are inflected for person and number and the verb forms form a similar paradigm to the personal pronouns. If the form of the verb agrees with the subject in number and person and if a pronoun subject can be omitted, person deixis is exerted by the verb form alone. This is the case in Spanish, as in many other languages (cf. Table 4.3).

<i>beb-o</i>	I drink	<i>beb-emos</i>	we drink
<i>beb-es</i>	you drink (sg, informal)	<i>beb-éis</i>	you drink (pl, informal)
<i>beb-e</i>	he/she/it drinks you drink (sg, formal)	<i>beb-en</i>	they drink you drink (pl, formal)

Table 4.3 Form paradigm of the Spanish verb (indicative present active)

4.1.4 Possessive pronouns

In most European languages there is a parallel paradigm of possessive pronouns (*MY, YOUR* etc.). Other languages do not have extra possessive pronouns; for example, Japanese uses the personal pronouns with the genitive particle instead, literally 'I's', 'you's', 'he's', etc. instead of *my, your, his*. Hungarian has a paradigm of noun suffixes instead of possessive pronouns (cf. Table 4.4).

<i>hajó-m</i>	my ship	<i>hajó-nk</i>	our ship
<i>hajó-d</i>	your (sg, informal) ship	<i>hajó-tok</i>	your (pl, informal) ship
<i>hajó-ja</i>	his/her ship your (sg, formal) ship	<i>hajó-ju</i>	their ship your (pl, formal) ship

Table 4.4 Possessive suffixes in Hungarian

Possessive pronouns and affixes extend person-deictic reference to other things than the discourse participants themselves. *I* can only refer to the speaker, but with *MY* plus noun one can refer to all sorts of things that belong to the speaker. For example, the descriptive meaning of *my ship* or *hajóm* combines the concept ›ship‹ with the deictic relation to S. The result is the concept ›ship that belongs to S‹.

The meaning of possessive pronouns⁷. Possessive pronouns express that the noun referent belongs to the person or thing indicated by the pronoun. This person or thing is called the

⁷ The following equally applies to possessive affixes.

possessor and the thing or person that belongs to the possessor, the **possessum** (Latin, ›pos-
sessed‹). In the case of *my ship*, the possessor is S and the possessum is S's ship. The meaning
of possessive pronouns has two aspects: the specification of the possessor, and the relation
between possessor and possessum.

Specification of the possessor. Possessive pronouns determine the possessor in the same
way as personal pronouns determine their referent. This meaning component is identical with
the meaning of the corresponding personal pronouns. Everything said in 4.1.2 carries over to
this part of the meaning of possessive pronouns. It may involve social meaning along with
descriptive meaning. For example, German *Sie* and French *votre* have the descriptive meaning
component of the possessor being the addressee(s) and the social meaning component of for-
mality toward the addressee(s).

Relation between possessor and possessum. Talking of 'possessor' and 'possession' and
of 'possessive pronouns' makes one think of ownership. However, the relation between pos-
sessor and possessum is by no means always of this kind. 'My son', 'my leg', 'my age', 'my
mistake', 'my name' are not things which I possess in the ordinary sense of the word; rather,
they are things which somehow can be *connected* to me. The meanings of these five nouns
describe the potential referents as standing in a certain connection to a possessor, but the re-
spective relations are very diverse. The son's relation to S is a kinship relation; the leg's re-
lation to S is a part-of relation; the age is a temporal measure of its possessor; S's mistake is
something S did; his name is what S is called by. For each of these nouns, a specific relation
between possessor and referent is directly written into its descriptive meaning. Such nouns are
therefore called **relational nouns**. They not only specify a relation between the referent and a
possessor, their referent also depends on the possessor: in order to determine the referent of a
relational noun, one needs to know the possessor to which it relates.

Of course, there are many nouns which do not specify a relation of their referent to some
possessor, e.g. terms for arbitrary sorts of things, such as *ship*, *dog*, *bicycle*, *chewing gum* or
stone. Most nouns are of this type. They are called **sortal nouns**. They describe their potential
referents in terms of what they are like. If one uses them with a possessive pronoun, this does
not necessarily express possession. As we have noted in 1.1.1, S can use *my bicycle* to refer to
a bicycle which is connected to S in one way or other: it may be the bicycle which S owns, or
uses all the time (without it belonging to S), it may be the bicycle which S was assigned in
some connection, or it may be the bicycle which S is notoriously talking of. If the noun de-
notes an article of daily use, there may be a privileged relation to a particular user. For exam-
ple, without a special context, one will assume that 'my bicycle' is the bicycle which S uses.
But this is not necessarily so. Ultimately, the relation to the possessor is a matter of the partic-
ular CoU.

We can summarize the meaning component of the relation to the possessor as follows: the
possessive pronoun indicates that the referent of the NP stands in some relation to the posses-
sor, but it does not indicate which kind of relation this is. If the possessive pronoun is com-
bined with a relational noun, the relation is provided by the meaning of the noun. If it is com-
bined with a sortal noun, the relation is a matter of the CoU.

These considerations concerning the relation between possessum and possessor not only
hold for possessive pronouns and affixes, but also for possessive constructions in general,
e.g., *Anna's studio* or *the meaning of possessive pronouns*.

4.2 Demonstratives and place deixis

Place deixis relates to the spatial situation in which an utterance takes place. The points of reference are the location of S and, in some cases, also the location of A. The immediate categories of place deixis are *HERE* and *THERE*. *HERE* serves as the reference to the location of S, *THERE* refers to where S is not. Place deixis is not restricted to reference to places. Arbitrary objects of reference can be determined by place deixis. The linguistic means for this purpose are **demonstratives** such as English *this* and *that*: *this* denotes something that is where S is (except S herself) and *that* refers to something that is where S is not.

When I use English *here* or *this*, I only give the information ›where I am‹ or ›thing that is where I am‹. This is a very vague localization: “where I am” can extend to a very different radius around myself (depending on context) and there may be several possible referents within this radius. That is why demonstratives are often accompanied by a gesture of pointing, meant to help the identification of the referent.⁸

4.2.1 Japanese demonstratives

Let us take a look at the Japanese system of demonstratives. It is richer than the English system (Table 4.5).

	Close to speaker	Close to addressee	Close to neither	
pronominal	<i>kore</i>	<i>sore</i>	<i>are</i>	‘this’
adnominal	<i>kono</i>	<i>sono</i>	<i>ano</i>	‘this’
place noun	<i>koko</i>	<i>soko</i>	<i>asoko</i>	‘this place’
adjective	<i>konna</i>	<i>sonna</i>	<i>anna</i>	‘such’
adverb	<i>kō</i>	<i>sō</i>	<i>ā</i>	‘so’

Table 4.5 Japanese demonstratives

Japanese demonstratives distinguish three deictic categories: close to speaker, close to addressee and close to neither speaker nor addressee. Thus, the deictic orientation is person deictic. The forms *kore*, *sore* and *are* are nouns; they can be used to refer to things, not to persons. For demonstrative reference to persons, one uses the forms *kono*, *sono* and *ano* combined with a noun meaning ›person‹ or some kind of person, e.g. *kono hito* ‘this person’. The *-no* forms are combined with nouns like articles; they are what is called determiners. Demonstratives like *kore* which can be used as full NPs are called **pronominal**, those combined with nouns, **adnominal**. *Koko*, *soko* and *asoko* are demonstrative place terms. They are nouns, unlike English *here* and *there* which are adverbs; Japanese *koko* means ‘this place’, not ›here/at this place‹. *Konna*, *sonna* and *anna* are adjectival demonstratives which combine with nouns. *Konna hon* means approximately “a book such as this one here, a book like this”. *Kō*, *sō* and *ā* are adverbs like English *so*; ‘*kō yatte*’ (*yatte* ‘do it’) would mean ‘do it this way’. The case of Japanese illustrates two dimensions of systems of demonstratives: the semantic

⁸ The terms *demonstrative* and *indexical* are of Latin origin, *deixis* is from ancient Greek. They all contain the meaning of ‘pointing’.

dimension of deictic relation (e.g. proximity to speaker) and the grammatical dimension of their function as noun, determiner, adjective or adverb.

4.2.2 Systems of demonstratives compared

Most languages distinguish two or three deictic categories of demonstratives. In cases where it is two, the distinction is between **proximal** (close to the deictic centre) and **distal** (not close to it). Since the deictic centre is defined as the location of S, ‘proximal’ and ‘distal’ can also be defined as ‘close/not close to S’. English is of this type: *here* and *this* are proximal, as opposed to distal *there* and *that*.

Spanish has a system with three levels of distance: proximal *este/esta*, medial (i.e. not in the deictic centre, but also not far from it) *ese/esa* and distal (far from the deictic centre) *aquel/aquella*. Thus, its organization is different from the Japanese system.

German is a rare exception. There are no deictic distinctions for pronominal or adnominal demonstratives; there is just one form *dies(er)*. This demonstrative can, however, be combined with demonstrative adverbials *hier* (proximal), *da* (distal) and *dort* (distal): *dieses Buch da* (>this book there<). French is quite similar.⁹

4.2.3 The meaning of demonstratives

Demonstratives have three semantic dimensions: deictic relation, type of reference, and definiteness. The deictic dimension has just been discussed. The type of reference concerns the function of the demonstratives. If they are used as full NPs, they refer by themselves. In adnominal use, the deictic information is combined with the descriptive meaning of the noun. For example, the referent of *this dog* is conceptually described as a dog by means of the noun, while the demonstrative adds the information that it is a certain something, close to S. In this way, it is possible to refer to a particular dog. The function of adnominal demonstratives is thus analogous to the function of possessive pronouns, where the descriptive meaning of the noun is combined with a person-deictic relation.

Adjectival demonstratives like *such* or Japanese *konna*, etc., add to the nominal concept a particular quality which is determined deictically. Demonstrative spatial adverbs or nouns refer to a place that is deictically determined.

Definiteness is a common component of all demonstratives. With *this book* we do not just refer to any book close to S, but to the specific book close to S, and likewise for pronominal and spatial demonstratives. Adjectival demonstratives, too, are definite in referring to *the* quality deictically indicated.

4.2.4 Anaphoric use of demonstratives

In most languages, demonstratives also have anaphoric uses, others have separate anaphoric pronouns. In the second sentence in (5), both *that* and *there* are used anaphorically.

- (5) I saw a hedgehog in Frank’s garden the other day. Do you think that hedgehog is living there?

In anaphoric use, the deictic distinction between proximal, distal or medial is not relevant in most cases. If a language has a system with two demonstratives, usually the distal one is used for anaphora; languages with a three-part system use the medium one. Anaphoric uses of demonstratives loosen the tie to the immediate CoU. By using anaphora one can refer to

⁹ The WALS survey on distance contrasts in demonstratives, which covers 234 languages, has only 7 with no contrast, among them German and French (Diessel, chapter 41 in WALS, <http://wals.info/chapter/41>).

things which are not immediately present, but were mentioned earlier on. Anaphors are bound to the given discourse; but they do, however, constitute an important first step towards a kind of reference which is purely definite. In fact, definite articles in most languages developed from demonstratives. For example, the definite articles in Spanish (*el/la*), Italian (*il/la*) and French (*le/la*) emerged from reductions of the Latin distal demonstrative *ille/illa*. English *the* and German *der/die/das*, too, derive from demonstratives.

4.3 Time deixis

Time deixis relates to the time when an utterance is produced, the 'time of utterance'. For a CoU, the time of utterance is the present: the time before it is the past, and the time after it, the future. There are two phenomena in the domain of time deixis: grammatical relation to time by means of verb tense, and temporal reference by lexical means such as temporal adverbs, specifications of time, etc. Many languages, for example Chinese, do not have a real tense system of verb forms; Chinese verbs need not carry tense, and temporal reference is mainly a matter of the given context.

Tense. The grammatical category of tense will be dealt with in chapter 6.4. Just for the sake of illustration, consider three examples from English:

- (6) a. *past tense*: She knew the e-mail address.
 b. *present tense*: She knows the e-mail address.
 c. *future tense*: She will know the e-mail address.

The past tense from *knew* of the verb *to know* expresses a state in the past: at a particular time before the time of utterance at which the state expressed obtained. The present tense relates the same predication to the 'present' time, i.e. the time of utterance, while the future tense relates to a particular time after the time of utterance. Frequently, the tense forms in a language have more than one use. For example, the past tense forms in English can also be used for counterfactual reference in present time, and the form *will* plus infinitive is alternatively used for expressing probability (of a present state).

Lexical means of time deixis. The central expression of time deixis is *NOW*. It refers to the time of utterance. Just as *HERE* may refer to a place of rather vague extension, *NOW* may refer to time intervals of very different length. English has another time-deictic adverb, *then*, which is distal and can refer to a certain time either in the past or in the future. There are a number of adverbs that enable more fine-grained temporal localization: *just*, *recently*, *formerly*, *once*, *at once*, *soon*, *later*, etc. Other adverbs refer to days: *today*, *tomorrow*, *yesterday*; 'today' is the day which contains the time of utterance, 'tomorrow' the day after today, etc. There are also adnominal expressions of time deixis, such as *next*, *last*, *former* or *future*. When combined with a noun, they add a temporal localization of the referent.

Stopover

We have taken a look at the central means of deixis. They serve to bring about reference by relating the utterance to immediate elements of the CoU. These elements are those things that are automatically given with any utterance in face-to-face communication: speaker, addressee(s), the time of utterance and the place where it is produced. Part of the deictic expressions serves the direct reference to these elements. These expressions are independent parts of the sentence with their own reference, e.g. pronouns or adverbs. Along with these independent expressions, there are adnominal deictic means. They allow us to combine the descriptive

Kind of deixis	Pronominal/adverbial	Adnominal
person deixis	<i>I, you, ...</i>	<i>my</i> ship
place deixis	<i>here, there</i> <i>this, that</i>	<i>this</i> ship
time deixis	<i>now, tomorrow</i>	the <i>next</i> ship

Table 4.6 Pronominal and adnominal deictic expressions

meaning of a noun with a deictic indication of the referent. Table 4.6 gives a short survey of pronominal/adverbial and adnominal deictic expressions.

If we were confined to deictic reference, we could only talk about things which are immediately given in the CoU. With anaphoric use of demonstratives, we can expand our radius of reference considerably. Still, in order to free ourselves from the limits of the given context of discourse, we need more general linguistic means of anchoring utterances. The most important one is general definite reference, for example marked by definite articles. As we shall see, definite reference still anchors the utterance in the CoU, but only in very general way. A definite article only conveys the message ‘the referent is uniquely determined in this context.’

We will proceed by further pursuing the adnominal track. In addition to the deictic adnominals – demonstratives and possessives – more general determiners will enter the stage: definite and indefinite articles and so-called quantifiers.

Part 2: Determination

If one wants to use a noun for reference, one has to form an NP with it. There are various ways to do this, and to indicate thereby the kind of reference intended. In many languages one can choose the grammatical number of the noun, e.g. singular or plural, expressing if one refers to one or more than one case. In many languages the noun can be combined with a definite or indefinite article to indicate whether the referent is something given beforehand or not. The noun can also be combined with other determiners: with demonstratives, possessive pronouns or elements such as *each, every, all, both* or *no*. It is also possible to use an NP without concretely referring to something given in the CoU. In all the examples we have considered so far, the NPs have referred concretely (to a particular dog, a skirt, a bicycle, etc.), but NPs can also be used for relating to general cases without talking about particular things given in the context. (7) is an example of this. The NP *books* does not refer to any particular books. This use of NPs is called **generic**.

(7) Books are getting cheaper and cheaper.

These aspects of NPs are subsumed under the notion of **determination**. The following sections discuss the core phenomena: definiteness and indefiniteness (4.4), quantification (4.5) and genericity (4.5.5).

4.4 Definiteness and indefiniteness

4.4.1 An example

Let us assume Sheila did not say (8a) to Mary, but (8b) instead:

- (8) a. The dog has ruined my blue skirt.
b. A dog has ruined my blue skirt.

When you compare the two sentences, it is easy to see the difference between the definite and the indefinite article. By using the definite article, Sheila indicates that she is referring to a particular dog given beforehand in the context of the utterance, to *the* dog. For both Sheila and Mary this is the only dog that comes into question in the context described, the family dog Ken. The definite article points to this context. It is indexical.

If Sheila had used the indefinite article, she would have expressed that she is not talking about a dog which is uniquely determined beforehand. The addition ‘‘beforehand’’ is crucial: objectively, the dog is uniquely determined by having ruined Sheila’s skirt; but what matters for the choice of the article is the fact that this dog comes into play between Sheila and Mary only with this very utterance. Before that, the creature did not belong to the common context of the two of them. After having said (8b), Sheila was able to talk anaphorically of ‘the dog’, continuing, for example, in the following way:

- (9) A dog has ruined my blue skirt. It happened when I was walking through the park. It suddenly came running from the back and snapped at me. I was really frightened. I had no idea who the dog belonged to.

The example illustrates a frequent interplay of indefinite and definite article: first a referent is introduced in the discourse with an indefinite article, later the same referent is taken up with a definite article. Correspondingly, it is often said that the function of the indefinite article is to introduce new referents in the discourse, and that the definite article serves to anaphorically refer back to referents already introduced. These descriptions of the functions of the articles are, however, much too narrow.

4.4.2 The meaning of the definite article

The combination of a noun with the definite article is called a **definite description**. A definite description can contain additional material such as adjectives or relative clauses attached to the noun: *the blue skirt*, *the skirt on the chair* or *the skirt that the dog has ruined*. In a definite description, the article is combined with material that provides semantic information about the referent: the referent is a skirt, it is blue, it is on the chair, it has been ruined by the dog, etc. What the definite article itself adds to the description of the referent is the information that the given description is **unique** in the given context: there can be only one thing it applies to.

The crucial question, then, is this: when does a definite NP constitute a unique description in the given context? There are essentially two possibilities: the uniqueness can be due to the very meaning of the NP, independently of the particular context, or it can be due to the special circumstances in the given CoU. In the first case, we have what is called **semantic uniqueness**, in the second, **pragmatic uniqueness**. The definite description *the dog* in the fifth sentence of (9) is pragmatically unique. The preceding sentences create a special context in which one particular dog is introduced and plays a prominent role. Without this context, the referent of *the dog* would not be uniquely determined.

DEFINITION 1 Semantic and pragmatic uniqueness

An NP is semantically unique if the description of its referent is unique independently of the given CoU.

An NP is pragmatically unique if the description of its referent is unique only in the special circumstances given in the CoU.

4.4.2.1 Semantic uniqueness

In order to illustrate the notion of semantic uniqueness, we will take a look at a newspaper text. The text is a translation of parts of a news article in the German daily *tageszeitung* from 17 October 2011. The article relates to the debate at that time about the succession of the king of Saudi Arabia.

- (10) [...] “The king is suffering from chronic back pain,” said one Western diplomat.
 [...] The monarch’s health and age recently gave rise to speculations about his succession. In Saudi Arabia, the entire ranks of the leadership are about eighty and are all ill, out of the country or unable to govern.

The noun *king* is relational, the possessor being the respective kingdom¹⁰. Since for a country, if it has a king at all, it has only one, the description *king* is semantically unique. Uniqueness of reference is built into the meaning of the noun *king*. One therefore says: the noun *king* is **inherently unique**. Since the news article is about Saudi Arabia and the country had a king when the article appeared, the possessor of the king (the kingdom) is uniquely determined and with it, the king at that time.

The noun *monarch*, however, though of a related meaning, is neither relational nor inherently unique, but plainly sortal. The concept ›monarch‹ comprises all queens, kings, empresses, tsars, pharaohs, etc. of all times and all countries under a sortal notion of a particular kind of person, namely one who solely rules a country (under certain conditions). The noun *monarch* is not relational because its potential referents can be determined without fixing a possessor. It is not inherently unique because in a given CoU there may be many monarchs (or, by chance, just one, or none at all). For this reason, the description *the monarch* in the text is not semantically unique, but pragmatically. In (10) the noun can be used with the definite article here only because in the given context a particular monarch, the king of Saudi Arabia, was established in the context of the article (and no other monarch).

Like *king*, the nouns *health* and *age* (in the meanings given here) are relational and inherently unique. Health and age are always health and age *of* some possessor, and a given possessor, at a given time necessarily has one health and one age only. If the possessor of *health* or *age* is uniquely determined, so is the single referent of the nouns. The last definite description in the article, *the entire ranks of the leadership*, is also semantically unique: for a given country or other institution, there is only one group of persons which forms the leadership ranks.

Most inherently unique nouns are relational. The most frequent sub-types are role terms, part terms and terms for all kinds of attributes. Role terms encompass nouns such as *king*, *president*, *director*, etc. They denote the head of some organizational unit which is their possessor – a country, a company, a university, etc. Other role terms include words like *mother* or *boss*: the possessor is a person, and for a given possessor the referent is a uniquely determined

¹⁰ Note that the possessor for a relational noun like *king* is what appears in the *of* phrase after the word: in *King of Saudi Arabia*, Saudi Arabia is the possessor of the king, in the grammatical sense, (rather than the king being the possessor of the country).

other person (usually a person has only one mother and at most one boss). Examples of inherently unique part terms are body-part terms for parts of which there is only one: *head, nose, mouth, throat, back*, etc., or terms for unique parts of objects: *mouthpiece, lid, bottom, surface* and so on. Terms for attributes denote various aspects, or dimensions, by which their possessor can be described: *size, weight, width, structure, shape, colour, meaning, price, name, content, character, age, profession, sex*, etc. Inherently unique relational nouns are called **functional nouns**. They are so called because there is a *function* in the mathematical sense which assigns a referent to every possible possessor: her mother, her back, her address, her height, etc. **Relational nouns**, in the narrow sense of the word, are the remaining relational nouns that are not inherently unique. Relational nouns, too, include role terms (*friend, neighbour*), part terms (*finger, tooth, side*) and attribute terms (*attribute, property, feature*), the crucial difference being that for one possessor there may be no, one or more referents.

There are also non-relational nouns that are inherently unique. They denote “institutions” in the world, in the broadest sense: things of which – in a given type of context – there is only one, playing a particular role in that context. Such nouns include *sun* (in the sense of *the sun* of Earth), *moon* (in the corresponding sense), *pope* (the head of the Catholic Church), *weather* (in a given CoU, which includes a particular place and time, there is only one weather), *date* (day, month and year), etc. Inherently unique non-relational nouns are called **individual nouns**.

The four types of nouns mentioned so far are arranged in Table 4.7. ‘Relational nouns’ are to be taken in the narrow sense of the word.

	not inherently unique	inherently unique
non-relational	sortal nouns <i>boy, dog, skirt, rock</i>	individual nouns <i>pope, sun, date, weather</i>
relational	relational nouns <i>son, foot, property</i>	functional nouns <i>father, head, size</i>

Table 4.7 Types of nouns

Sortal or relational nouns can be turned into inherently unique concepts by adding certain expressions, such as superlatives (*the fastest notebook*), ordinal numerals and similar expressions (*the third/next/last chapter*), or appositions that are themselves inherently unique (cf. *the year 1984, my daughter Emma, the word akimbo*). The nouns *notebook, chapter, year, daughter* and *word* are not inherently unique, but when complemented by these adjectives and appositions they represent semantically unique descriptions.

There are things or persons which are established in certain social contexts and play a unique role there. For these, often functional or individual terms exist: for ‘the dean’ of a faculty, ‘the driver’ in a bus, the ‘Mum’ in a family. But very often we use just sortal nouns in such cases, in particular if the social context is rather restricted: we talk about ‘the bus stop’, ‘the pizza shop’, ‘the playground’, ‘the pharmacy’ in a neighbourhood, ‘the kitchen’, ‘the mailbox’, ‘the dog’, ‘the car’ in a household, ‘the waitress’, ‘the menu’, ‘the meal’, ‘the bill’ when we visit a restaurant. In all these cases, the definite article can be used without establishing unique reference beforehand. The referent is established in the given type of context and identified by the function or role it plays.

When one uses an NP with an inherently unique noun or with a sortal noun in a context where it denotes something with a unique role, its referent is uniquely determined beforehand. The definite article only confirms this fact. Nevertheless, the definite article is not superfluous: it is indexical in that it points to the given type of context. It is the CoU that ultimately determines the respective referent of the definite description: ‘the pope’ is the pope in office at the time referred to, his ‘health’ is the state of health at that time, ‘the weather’ is the weather at the given time and place, ‘the dog’ is the dog presently kept in a household, ‘the playground’ is the kids’ playground in the neighbourhood where they live, etc.

4.4.2.2 Pragmatic uniqueness

Pragmatically unique definite NPs only refer uniquely due to the particular context they are used in. This uniqueness, too, is established in a social context – in the current discourse – but its lifespan is restricted to this situation. Once the discourse is over, or has moved on, the ground for unique reference is no longer given. One way to create pragmatic uniqueness is by deictic use of definite descriptions. Unlike adnominal demonstratives, the definite article does not carry a deictic differentiation, but it still indicates that the reference of the NP is determined by the CoU. For example, if you encounter somebody on a walk and there is a dog around, you can say to her:

(11) Is the dog yours?

You may accompany your utterance with a gesture pointing to the dog you mean. The dog may also be in the focus of attention of the interlocutors anyway, in which case a gesture is not necessary.

A further case of pragmatic uniqueness involves definite NPs in anaphoric use. An example is *the dog* in Sheila’s story in (9). Its antecedent is *a dog* in the first sentence. The three NPs *a dog*, *it* in the third sentence, and *the dog* all have the same referent; they are **coreferent**. Sheila sets up the referent as a character in her story and thereby establishes it in a unique role. In the news article in (10), *the monarch* is an anaphor with the antecedent *the king*. The referent of the anaphor and its antecedent was introduced previously in the specific context of the article.

4.4.2.3 A test for pragmatic vs. semantic uniqueness

There is a simple test for distinguishing between semantic and pragmatic uniqueness. In the case of pragmatic uniqueness, the definite article can be replaced by an adnominal demonstrative. This is due to the fact that the article in these uses has the demonstrative function of pointing to the immediate CoU. Replacement by a demonstrative is not possible with semantic definites. One would not say, ‘I’ll take this dog for a walk’ when just referring to the family dog, or, ‘This king of Saudi Arabia is already old and frail.’ At least, the use of the demonstrative would require a special context, or express a special attitude. By contrast, Sheila in her story in (9) could equally well say: ‘I had no idea who this dog belonged to,’ and the news article in (10) might have a demonstrative with *monarch*: ‘The health and the age of this monarch recently gave rise to speculations about his succession.’

4.4.2.4 The range of application of the definite article

As this test shows, the range of application of definite descriptions overlaps with the one of NPs with adnominal demonstratives. Both have deictic and anaphoric uses. In the case of deictic demonstratives, the deictic content and/or a gesture of pointing helps to uniquely identify the referent. Deictic and anaphoric uses essentially make up the range of pragmatic

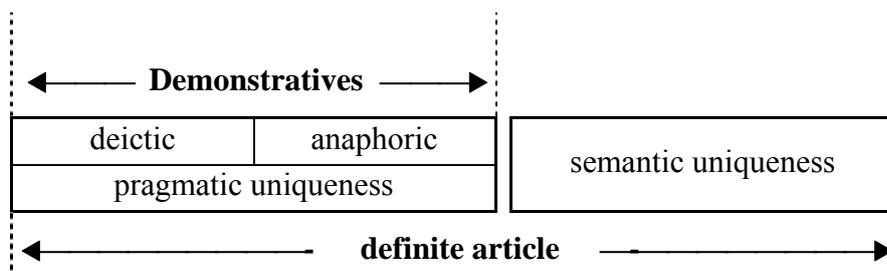


Figure 4.1: Uses of demonstratives and the definite article

uniqueness. In the domain of semantic uniqueness, however, only definite descriptions can be used (Figure 4.1). This is the basis for the test just described. For demonstratives, the anaphoric use is an extension of their original deictic use. Definite descriptions, in turn, extend unique determination to semantic uniqueness.

We can fix the following as the general function of the definite article:

DEFINITION 2 Function of the definite article

- (i) The definite article indicates that the NP refers to something uniquely determined in the given context, either in the particular or in a wider context.
- (ii) The definite article is indexical in relating to the relevant context in which the referent is uniquely determined.

4.4.3 Singular and plural, count and mass nouns

In order to better understand NP reference, we need to have a look at the function of singular and plural and the distinction between count nouns and mass nouns. These distinctions are not relevant for understanding definiteness, but they will play a central role for indefiniteness, which we will deal with next.

Singular and plural. Most English nouns can be used in the singular and in the plural. For a noun like *skirt*, the singular form *skirt* refers to a single object, the plural form *skirts* to more than one. These multiple cases form one referent; a statement like (12) refers to a complex referent consisting of several skirts:

- (12) These skirts have become too tight.

Consequently, the denotation of the singular noun *skirt* is different from the denotation of plural *skirts*. The denotation of *skirt* is the set of all single skirts, while the denotation of *skirts* is the set of all cases of more than one skirt. In formal semantics, such cases are called ‘sums’ or ‘groups’.

Count nouns and mass nouns. **Count nouns** are nouns which can be used in the plural, and in most cases, with numerals; apart from a few exceptions (e.g. *pants*), they can also be used in the singular. By contrast, **mass nouns** are used in the singular to refer to an unspecified quantity of something: *juice*, *flour*, *air*, *garbage*, *metal*, *clothing*, *furniture* are mass nouns, as are abstract nouns such as *anger*, *love*, *heat* or *grudge*. Several cases of ‘apple’ are referred to as ‘apples’, but several cases of ‘juice’ may form just one case of ‘juice’. One can therefore say, for example, that the guests at a party ate ‘many apples’ (plural) and consumed ‘much juice’ (singular). The denotation of a mass noun encompasses single cases of juice as well as collections of several such cases.

The difference between mass nouns and count nouns is due to the fact that their meanings are concepts of different type. The meaning of the count noun *skirt* is a concept which clearly

delineates its potential referents; it provides a criterion for what is one skirt: one skirt is a single, whole skirt. Neither does a part of a skirt constitute an instance of a skirt, nor do several skirts form a case of one skirt.

By contrast, a mass noun *juice* describes its potential referents in a way that is appropriate for distinguishing juice from other kinds of stuff, but does not yield a criterion for what would constitute one potential referent. It is not possible to decide if some quantity of juice is one case of ‘juice’, multiple cases or just part of one case. Mass nouns do not ‘individuate’ their potential referents.

A special sub-type of mass nouns, so-called **aggregate mass nouns** comprises nouns like *literature*, *furniture*, *equipment*, *staff*, etc. Aggregate mass nouns collect different kinds of items into one concept. For the single items there may be count noun terms, such as *chair*, *table* and *bed* for items of furniture. Aggregate mass nouns leave open how many items are referred to. You can add items to a referent of *furniture*, or remove items, and it still remains a possible referent of *furniture*. Often there are pairs of plural count nouns and aggregate mass nouns with roughly the same meaning: *clothes* and *clothing*, *shoes* and *footwear* or *employees* and *staff*.

Since count noun concepts define clearly delineated single cases, these cases can be counted, and count nouns can therefore be combined with numerals and used in the plural. Mass nouns lack the preconditions for these uses.

Actually, mass nouns are sometimes used in the plural, but then they take on the meaning of count nouns. ‘Juices’ are different kinds of juice (kinds are countable) and ‘beers’ are servings of beers, or kinds of beer. Without being reinterpreted as count nouns, mass nouns can only be used in the singular and not with numerals. They combine with vague quantity specifications such as *much*, *a little* or *more*. For a precise specification of quantity they must be combined with a measure unit word such as *litre*, *kilogram*, etc. Unit words form count expressions with mass nouns – *litre juice*, *kilogram flour* – which can be combined with numerals.

4.4.4 Indefinite NPs

English has an indefinite article *a(n)*, but only for singular count indefinites. No article is used for simple mass or plural indefinites. Sometimes they are said to contain a ‘zero article’, but where there is nothing there is also no zero article. Thus, one should prefer to talk of **bare mass nouns** and **bare plurals**. Consider the following example:

- (13) a. I had an apple and __ strawberries and __ orange juice.

In French, indefinite NPs with mass or plural nouns are marked explicitly, with a combination, or fusion, of the partitive particle *de* and the definite article forms *le/la/les*.¹¹ The French equivalent of (13a) is this:

- b. J’ai mangé une pomme et des fraises et j’ai bu du jus d’orange.
formally: ‘I have eaten an apple and of the strawberries and I have drunk of the orange juice.’

The French indefinite markings for mass and plural NPs contain the definite article, but this is not reflected by their meaning. The referent of the NPs need not be part of a quantity

¹¹ The respective forms are: *du* > *de le* (masculine), *de la* (feminine) and *des* > *de les* (plural).

given beforehand; *des fraises* does not mean ›some of the strawberries‹, but just ›(some) strawberries‹, as the formal one-to-one translation suggests.

In colloquial English, there may be an indefinite article for mass and plural nouns presently evolving: a reduced form of *some*, often described as *sm* in the semantic literature and pronounced [səm/sm̩]. It is to be distinguished from full *some* [sém], which constitutes a quantity specifier (see 4.4.5 and 4.5.2)

The meaning of indefinite NPs. The meaning of the indefinite article is the same as the lack of an article, or *sm*, with mass nouns and plurals: it indicates that the referent of the NP is not given beforehand. It is not uniquely determined, but only given a qualitative characterization.

4.4.5 Definite and indefinite NPs in general

Definiteness and indefiniteness are not tied to the presence of definite or indefinite articles; some of the cases have already been discussed. In English, the following are definite NPs:

DEFINITION 3 Definite NPs

- a. NPs with
 - a definite article (definite descriptions) – *the cup*
 - adnominal demonstratives – *that cup*
 - possessive pronouns – *her cup*
 - Saxon genitives – *Fred's cup*
- b. proper names
- c. pronominal demonstratives
- d. personal pronouns

NPs with a possessive pronoun or a Saxon genitive are only definite if they are not used predicatively. In (14a) *my brother* and *Kate's brother* are in predicative use; the NPs do not refer and are not definite. (14a) means the same as ›Ben is a brother of me / a brother of Kate‹. In (14b), the respective NPs are used referentially; here they mean the same as ›the brother of me/of Kate is coming for a visit‹.

- (14) a. Ben is my brother/Ben is Kate's brother.
 b. My brother/Kate's brother is coming for a visit.

Indefinite NPs, too, comprise more than the types just discussed:

DEFINITION 4 Indefinite NPs

- a. simple indefinite NPs: singular count nouns with indefinite article; bare mass nouns, bare plurals; mass nouns and plural nouns with *sm*.
- b. count nouns with quantity specifications: numerals, *no*, *many*, (*a*) *few*, *some* [sém], *any*, *several*, ...
- c. mass nouns with quantity specifications: measure specifications *3 litres of*, *no*, *much*, (*a*) *little*, *some* [sém], *any*, ...
- d. indefinite pronouns: *somebody/-one/-thing*, *no/-one/-thing*, *anybody/-one/-thing*, etc.]

4.4.6 Articles across languages

Definite or indefinite articles, or equivalent markings on nouns, do not exist in all languages. Some language only mark definiteness, some only indefiniteness, many do not mark either. Russian and most of the other Slavic languages have no articles, likewise Japanese. Turkish and Chinese mark only indefiniteness (in certain cases); Irish only definiteness. In addition, languages differ considerably in when they make use of the markings available. For example in Modern Greek and colloquial German, personal proper names are used with the definite article, but not so in English and written standard German. If a language does not mark definiteness, there will be other ways to indicate unique reference. The most important means is sentence structure. In Chinese, for example, a language with SVO word order, it is essentially assumed that the subject has definite reference while the object is indefinite. If these conditions are not given, special constructions are used.

4.5 Quantification

4.5.1 Quantifier, domain of quantification and quantified predication

In theoretical semantics, no NP phenomenon has been studied as deeply as so-called quantification. Some theories consider all types of determination as instances of quantification, including definite, indefinite and demonstrative determination. However, I consider it important to apply a more restricted notion of quantification, in order to properly understand the phenomenon. Let us have a look at an example; the sentences are to be construed coherently:

- (15) a. Next week there will be a big birthday party at John's place.
 b. Sue is going to invite nine kids.
 c. Each kid is to get a present.
 d. For some kids, John has not got anything yet.
 e. No kid will be disappointed.

In the second sentence, certain 'kids' are introduced in the discourse, those nine kids that Sue is going to invite. From this point on, one could refer anaphorically to these kids as 'the kids'. In (15c) these kids are referred to: each of them is to get a present. The reference to 'the kids' is implicit, though. But we might as well have the following in (15c, d, e):

- (16) c. Each of the kids is to get a present.
 d. For some of the kids, John has not got anything yet.
 e. None of the kids will be disappointed.

Such constructions with a pronoun and an *of* PP following are called **partitive constructions**. The fact that in (15c, d, e) the three NPs *each kid*, *some kids* and *no kid* can be replaced by partitive constructions reveals that they involve definite reference to 'the kids'. They relate to a given total of cases which could be referred to with a definite plural NP.

The three NPs mentioned are quantifying NPs. All quantifying NPs relate to a total of cases, the so-called domain of quantification (DoQ for short). In (15c, d, e), the domain of quantification is formed by the nine kids introduced in (15b).

A quantifying NP is combined with a predication (usually the rest of the sentence) about the single cases in the DoQ. If we use the variable *x* for the single cases in the DoQ, the predications in the three sentences are: '*x* is to get a present', 'for *x*, John has not got anything yet' and '*x* will be disappointed'. The predication is simply obtained by replacing the quantifying NP with a variable. Let us call the predication the quantified predication.

Now, the contribution of the determiners *each*, *some* and *no* is the following: they quantify the number of cases within the DoQ for which the predication is true. This is why they are called quantifiers. In the case of *each*, the predication is true without exception, in the case of *some* it applies to an unspecified part of the DoQ and for *no* it is not true for any case in the DoQ. Table 4.8 displays the three components – domain of quantification, quantified predication and the quantification expressed by the quantifier – for the examples in (15).

Domain of quantification (DoQ)	Quantified predication (QP)	Quantification: the QP is true ...
(17c) the nine kids	x is to get a present	for each x in the DoQ
(17d) the nine kids	for x, John has not got anything yet	for some x in the DoQ
(17e) the nine kids	x will be disappointed	for no x in the DoQ

Table 4.8 Components of quantification

What is at issue when quantification is applied is the fact that the quantified predication might be true for some cases within the DoQ and might be false for others. Using *each*, *every* or *all*, we exclude that the predication is false for any cases; by using *no*, we exclude that it is false for all cases; *some* expresses that there are cases within the DoQ for which the predication is true – leaving open whether there are also cases where it is false.

In English there are four determiners which are exclusively used as quantifiers: *each*, *every*, *all* and *both*. In addition, certain forms of NPs with other prenominal elements can be used for quantification, but only under certain conditions, as we will see below.

4.5.2 Quantification and indefinite NPs

Indefinite NPs sometimes are quantificational, sometimes they are not. There is a simple criterion to determine whether a given indefinite NP in a particular utterance is quantifying or not: it is quantifying iff it is explicitly or implicitly partitive. Let us return to the examples in (15). As we have seen, the three quantifying NPs in (15c, d, e) can be replaced by partitive constructions; they are therefore implicitly partitive. The five sentences in (15) also contain two indefinite NPs that do not quantify: *nine kids* in (15b) and *a present* in (15c). In the context assumed here, they cannot be interpreted as implicitly partitive and therefore they cannot be replaced by explicit partitive constructions (the sign § marks semantic inadequacy):

- (17) b. § Sue is going to invite nine of the kids.
 c. § Each kid is to get one of the presents.

In the case of (15c), a straightforward partitive paraphrase is not even grammatically possible; the indefinite article would have to be replaced by the numeral *one*.

It is not a coincidence that the quantifying NPs in (15) have partitive paraphrases, while the others do not. NPs which quantify over, and thereby refer to, a certain DoQ can always be paraphrased with a partitive construction. Conversely, a (referential) NP which can be construed as partitive always produces quantification. The definite NP within the partitive paraphrase explicitly refers to the DoQ. Selecting some of the cases out of the domain has the ef-

fect of quantification: the predication about the NP is true for as many cases in the DoQ as indicated, and may be false for the rest.

We can therefore tell precisely when an indefinite NP is quantificational. As we have seen, this is not merely a matter of the form of the NP, but crucially depends on the context.

DEFINITION 5 Quantificational indefinite NPs

An indefinite NPs is quantificational in a given utterance iff it can be construed as partitive. It can be construed as partitive iff it can be replaced by the corresponding partitive construction.

It remains to be stated that not all types of indefinite NPs are eligible for partitive interpretation – for some types there is no corresponding partitive construction. The partitive construction corresponding to an indefinite NP has a pronominal element which corresponds to an adnominal element of the NP. Usually the adnominal elements have identical pronominal forms, but sometimes they do not; for example, *none* is the pronoun corresponding to adnominal *no*. In order to have a corresponding partitive construction, an indefinite NP needs to contain an adnominal element with a pronominal counterpart. Bare mass nouns and bare plurals lack such an element, and the indefinite article, too, has no pronominal counterpart. The same holds for *sm* with mass nouns and plurals. The weak form *sm* has no pronominal use. Pronominal *some* [sém] is the counterpart of adnominal *some* [sém], not of *sm*. Therefore, simple indefinite NPs lack a corresponding partitive construction – and cannot, therefore, be used for quantification. Only indefinite NPs with a quantity specification (cf. Definition 4 b and c) are eligible for quantificational use.

(18) **Indefinite NPs with corresponding partitive constructions**

Only indefinite NPs with a quantity specification have a corresponding partitive construction.

When indefinite NPs are not implicitly partitive, they simply refer to something not yet uniquely determined in the given CoU; if the NP contains a quantity specification, the latter adds information about the quantity of the referent (cf. *nine kids* in the example above).

Indefinite mass NPs are analogous to count NPs. They can be used for quantification iff they contain a specification of quantity and the context allows for a partitive interpretation. An example would be:

- (19) Mary: ‘Did you have enough cake?’
John: ‘Oh yes, there’s even some cake left.’

The indefinite pronouns *somebody*, *none*, etc. are like indefinite NPs with a quantity specification (in fact their form tells that they originated from such NPs). They can be used in a partitive construction and therefore for quantification if the context allows for this interpretation, for example as *someone of us*, *none of the cake*, etc. They also have, of course, non-quantificational uses as in *There’s somebody at the door*.

4.5.3 Quantification and definite NPs

Unlike indefinite NPs, definite NPs never quantify. This is obvious with singular count definites:

- (20) The kid will be brought.

The definite subject NP refers to a single case and the predication – in this case ‘x will be brought’ – applies directly to this single case.

Very similar are so-called collective plurals. Actually, collective plurals are not a special variant of plural, but a variant of predication; I therefore prefer the term **collective predica-**

tion. A collective predication is applied to a complex object; it can be applied only to the whole as such, not to the elements that make it up. Examples are (21a, b) with plural NPs and (21c) with a mass NP:

- (21) a. The kids know each other.
 b. The kids gather in front of the school.
 c. The literature on the topic is very diverse.

A single kid cannot gather, or know each other, a single item of literature cannot be diverse. These are predications which can apply only to complex things. Thus, such sentences, too, are predications about just one case, the complex referent of the definite plural or mass NP.

The case of plural and mass definites is less obvious with **distributive predication**. Distributive predication, too, applies to a complex object. However, it is ‘distributed’ over the individual parts that make it up; if it is true, it is true for every single part, and thereby for the whole in general. (22a,b) are examples:

- (22) a. The kids will be brought.
 b. The literature on the topic is in Russian.

(22a) is true if for each of the kids the predication ‘x will be brought’ is true. Some, or all of them may be brought together, but this is left open here, and does not matter. Likewise, (22b) says that every single item of literature on the topic is written in Russian.

Crucially, distributive predication, though about a multitude of single cases, is essentially one predication about the complex object. This can be seen if one considers such sentences together with their respective negation. There is a simple method for determining the negation of a sentence: Transform the sentence into a yes-no question, answer it with No and form the sentence which exactly expresses what the negative answer says. Applied to (22a, b), this yields the following:

- (23) a. ‘Will the kids be brought?’ – ‘No.’
Negation: The kids will not be brought.
 b. ‘Is the literature on the topic in Russian?’ – ‘No.’
Negation: The literature on the topic is not in Russian.

Obviously, the negation is achieved by negating the VP, i.e. the predication of the sentence. Now, if you look at the negation, you realize that it constitutes the same kind of predication: distributing down to the single parts that make up the whole. The point of distributive predication is therefore whether or not it applies *uniformly* to all parts of the whole. Therefore, distributive predication and its negation form an all-or-nothing contrast: either the kids will all be equally brought, or all equally not, analogously for the Russian or non-Russian literature. Treating all elements of the complex referent uniformly makes them form a unit, a single complex case. If the parts of the whole are not uniform, distributive predication does not make sense. If, for example, some of the kids will be brought and some will not, we can say neither (22a) nor its negation (23b).

To sum up, sentences with predications about the referent of a definite NP always constitute a predication about just one case. The case is complex if the definite NP is mass or plural, but it is still just one case. Distributive predication carries down to the elements of the complex referent, but it carries down uniformly and therefore, too, it treats the complex referent as one uniform whole. For this reason, predications about the referent of a definite NP are never quantifications.

If the definite NP is mass or plural, and the predication distributive, the sentence shares with instances of quantification the reference to a complex domain. But it differs crucially from quantification in that it excludes the possibility of positive *and* negative cases in the domain. This very possibility, however, is what quantification is all about. Every single case in the domain is to be considered individually; quantification always involves parallel predications with potentially different outcomes.

Table 4.9 summarizes the results of the discussion of quantifying, indefinite and definite NPs.

4.5.4 Quantification and negation

NPs of the form ...	quantify ...
<i>every, each, all, both</i> N (genuine quantifying NPs)	... always
indefinite NPs with quantity specification	... if construed as partitive
simple indefinite NP (<i>a(n)</i> N, bare mass N, bare plural)	... never
definite NP	... never

Table 4.9 Quantificational and non-quantificational NPs

With quantifying NPs, negation yields a different picture than with definite NPs. The negation of (24a) is (24b):

- (24) a. Each kid will be brought.
 b. *Negation*: Will each kid be brought? – No. Not each kid will be brought.

The negation is not placed at the verb, but at the quantifying determiner (at least it can be placed there).¹² The result is an all-or-not-all contrast. Unlike the all-or-nothing contrast we observed with (22), it covers all possibilities. The kids in the DoQ are either all brought (24a) or not all (24b); the mixed case of some kids being brought and some not is also covered by the negation. Remember that it is covered neither by (22a) – *the kids will be brought* – nor by its negation (22b) if quantification is absent.

The quantifiers *every, all, and both* behave the same way as *each*. With quantifying indefinite NPs, we also get a contrast that covers all possibilities. For example, the negation of a quantifying NP of the form ‘*some* N’ is formed by replacing *some* with *no*:

- (25) a. Some kids will be brought.
 b. *Negation*: No kids will be brought.

¹² There is also the syntactic variant *EACH kid will NOT be brought*, with a special intonation contour on *each* and *not*, which serves to indicate that the negation relates to *each* rather than to the verb, where it is syntactically placed.

negative cases only	mixed cases	positive cases only
<i>the N not</i>		<i>the N</i>
<i>not every N</i>		<i>every N</i>
<i>no Ns</i>	<i>some Ns</i>	

Figure 4.2 Negation contrasts for definite and quantifying NPs

Here, the mixed case is covered by the positive sentence. Figure 4.2 displays the different contrasts under negation for sentences with definite NPs and quantifying NPs. Quantifying sentences and their negations together cover the whole range of possibilities, while sentences with a definite plural or mass NP leave a gap, due to the all-or-nothing contrast between global truth and global falsity. These observations explain the function of quantification: it serves to fill this gap which arises with simple predication over complex referents.

For sentences with a definite subject NP, negation is formed by negating the VP, as you saw in (22) and (23) above. For sentences with a quantifying subject NP, VP negation yields not the negation of the sentence, but what is called **internal negation** as opposed to **external negation** in (24b) and (25b).

- (26) a. Each kid will not be brought. (= No kid will be brought.)
 b. Some kids will not be brought. (= Not all kids will be brought.)

Sentences with a definite subject NP do not offer the possibility of two ways of negation. VP negation is the only negation available and it yields the negation of the sentence as a whole.

4.5.5 The nominal onion

The discussion of determination shows that an NP may have several layers of structure; it forms an onion, metaphorically speaking. The core is formed by the noun; next to the core are adjectives. The next layer consists of quantity specifications such as numerals, *several*, *many*, *few*, etc. To these, determination is added next; this layer comprises definite and indefinite articles, demonstratives and possessive determiners. The outermost layer is constituted by quantifiers such as *all*, *every*, *each* and *both*. Most quantifiers do not combine with an article; *all* is an exception which shows that quantification supersedes determination. Figure 4.3 displays the nominal onion with an example and with the elements belonging to the different layers.

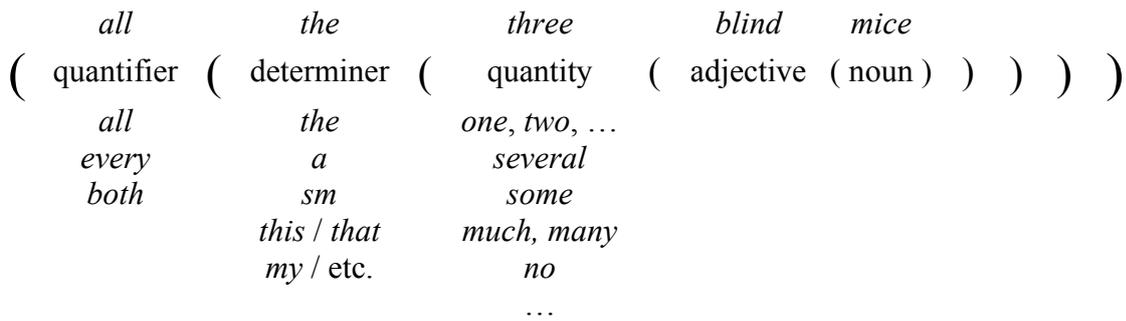


Figure 4.3 The nominal onion

4.6 Generic NPs

4.6.1 Generic sentences with simple indefinites

There is a special use of NPs, where they do not serve concrete reference, but the expression of general conditions. Examples would be the simple indefinite NPs in sentences like these:

- (27) a. A millipede has a thousand legs.
 b. An icosahedron consists of twenty triangles.
 c. Catholic priests are not allowed to marry.
 d. Bare mass nouns are indefinite.
 e. Money does not buy happiness.

Using such sentences, one does not refer to things in a concrete CoU, but one talks in general terms about, for example, millipedes, icosahedrons, catholic priests, bare mass nouns or money. Because of their ‘general’ character, such sentences, and the NPs in them, are called **generic**. Non-generic Sentences are called **episodic**, or **particular**. Let us consider the following dialogue between Mary and John about their neighbour Gerald, a catholic priest; (28a) is episodic, (28b) generic.

- (28) a. Mary: ‘Just imagine, Gerald is going to get married in October.’
 b. John: ‘Catholic priests aren’t allowed to marry, are they?’

John replies with this generic sentence, because it states a general condition relevant for Gerald in the given CoU. But using this sentence he is not explicitly referring to Gerald, as he would if he said, for example, ‘As a catholic priest, Gerald isn’t allowed to marry, is he?’

Talking in generic sentences is best understood as a special mode of speech in which elements of a sentence are used without concrete reference in the CoU. By doing so, a certain ‘general’ quality of the sentence is accomplished. For generic elements in a sentence, utterance meaning does not depend on the CoU – unlike the utterance meaning of referring NPs. There may be something like concrete cases in the CoU to which a generic statement applies, but these cases are not directly referred to. The possible cases of application are all treated alike. This is what leads to the blanket character of generic sentences.

In the semantic literature, generic indefinite NPs are mostly analysed as universal quantifiers. According to this analysis, *Millipedes have a thousand legs* would essentially mean ›all millipedes have a thousand legs‹. As with plural definites, this analysis is not correct. You can see this, again, by considering the contrast between a generic sentence and its negation. The negation of sentences with generic indefinites is formed by negating the VP of the sentence.

The sentences (29a, b, d) are the negations of the respective sentences in (27), while the negative sentences (27c, e) are the negations of (29c, e):

- (29) a. A millipede does not have a thousand legs.
 b. An icosahedron does not consist of twenty triangles.
 c. Catholic priests are allowed to marry.
 d. Bare mass nouns are not indefinite.
 e. Money buys happiness.

Again, the sentences and their respective negations form an all-or-nothing contrast. Consequently, generic indefinites cannot be considered universal quantifiers since universal quantifiers would yield an all-or-not-all contrast. Thus, the statement in Table 3.9, that simple indefinite NPs do not quantify, carries over to simple indefinite NPs in generic use. [NegGen]

4.6.2 Generic quantification

Quantification is also possible in generic sentences – if one uses explicit quantifiers. The quantification in generic sentences does not refer to a domain of concrete cases given in the CoU, but to this kind of case in general. Examples would be sentences like:

- (30) a. Some think money does not buy happiness.
 b. No millipede really has a thousand legs.
 c. Every catholic priest can marry.

The respective negations are:

- (31) a. Nobody thinks money does not buy happiness.
 b. Some millipedes really have a thousand legs.
 c. Not every catholic priest can marry.

In each case, the contrast between the positive and the negative is not all-or-nothing, but covers all possibilities. Like with episodic quantification, there is the possibility of internal and external negation.

Indefinite NPs with a quantity specification usually do not yield quantification in generic use:

- (32) a. Two heads are better than one.
 b. Two's a company, three's a crowd.
 c. Too many cooks spoil the broth.
 d. Many children only have one parent.

The first three sentences are not construed as quantifications (over heads, people or cooks), but as generic statements about cases of two heads vs. one head, of two people, or three, and of too many cooks working on the same broth. Only generic indefinite NPs with vague quantity specifications such as *many*, *much*, *more*, *most*, *only a few*, etc. may have a quantifying reading. (Note that *many* in (32d) is quantificational, while *too many* in (32c) is not.) The quantificational readings concern the relative frequency of the cases described, among the totality of cases of the kind. Therefore, such statements can equivalently be made using adverbs of frequency:

- (33) *Adverbial generic quantification:*
 Children often/rarely/frequently/mostly/always/never have one parent.

In principle, the possibility of expressing quantification by means of adverbs instead of quantificational NPs is also given for episodic quantification. For example, the quantificational sentence in (15c) can be equivalently phrased with quantifiers in adverb position:

(34) Adverbial episodic quantification:

The kids are each to get a present. (= Each kid is to get a present.)
 The kids are all to get a present. (= All the kids is to get a present.)

The adverbial variants of quantification in (33) and (34) display two points of difference between episodic and generic quantification. First, only episodic quantification involves reference to the totality of cases, namely the DoQ. Note that the DoQ is directly referred to with a definite NP (*the kids*) in (34), while for generic quantification the kind of cases related to is denoted by a generic plural NP (*children*) in (33). Second, the choice of relevant adverbs shows that only generic quantification is in terms of the frequency of relevant cases among the kind of cases related to.

Stopover

The determination of an NP determines the way in which the NP refers (if it refers). The central phenomenon is definiteness. NPs can be definite or indefinite or quantifying. Quantifying NPs represent a semantically complex mode of expression: episodic NP quantification combines definite reference to the DoQ with information about the proportion, or number, of cases within it for which the predication is true. If you like, episodic NP quantification can be considered a combination of simultaneous definite reference to the DoQ and indefinite reference to the positive cases within it.

By no means all languages have quantifying determiners like English *every*. The majority of languages use adverbial quantifiers for the expression of quantification.

Generic NPs cannot be straightforwardly aligned with indefinite or definite reference. All the English examples we discussed above are indefinite NPs, but the expression of genericity by indefinite NPs is not representative across languages. Many, if not most, languages would use definite NPs for this purpose. Chinese, for example, which does not mark definiteness explicitly, uses the same construction for generic NPs as for definite NPs. The heterogeneity of the grammatical determination of generic NPs can be explained by the fact that generic NPs exhibit traits of both definite and indefinite reference. They share with definite reference that what they relate to is given independently of the CoU; with indefinite reference they have in common that they are not about a particular single case.

Part 3: Presuppositions

4.7 Presuppositions

We will now turn to the announced third part of the phenomenon of indexicality–presuppositions. It concerns indexical relation to the *facts* that make up the CoU. The facts that are potentially relevant in a given CoU are much more manifold and complex than the other components of a CoU (i.e. speaker, addressee(s), time and place). Correspondingly, the relevant linguistic means are much richer. There is a connection to the matter of determination: we will once again have to deal with definite NPs.

4.7.1 An example

By way of illustration, let us consider the following short text to be read coherently:

- (35) a. Tony rose from the breakfast table.
 b. He went into his room and opened the window.
 c. He was sorry that he had not replied to Lucy.

Not only are we able to construe these sentences coherently, we also construct a possible CoU that this passage would fit into. We will assume that in this context there are two persons named Tony and Lucy, respectively. Tony has a room; the room has a window; the window was closed until Tony entered the room to open it, and so on. How are we led to these assumptions? This will become clearer if we take a closer look at the wording of the text.

a. *Tony rose from the breakfast table.*

The sentence contains the name *Tony* as subject NP. As definite NPs express unique reference, there must be a uniquely determined something called ‘Tony’ in the CoU. There are many things which can bear the name *Tony* – male and female persons, pets, cuddly toys, boats or songs; however, in this first sentence, it must be a person, since only people are capable of ‘rising from the breakfast table’. Later we are led to assume that Tony is a male person because we will relate the anaphoric masculine pronoun *he* to Tony; but from the sentence given we cannot tell the sex of the bearer of the name. Turning to the VP *rose from the breakfast table*, it conveys more information about the CoU. The definite NP *the breakfast table* informs us that there is a uniquely determined table where people had breakfast; this, in turn, provides information about the time of the day. Also, Tony must have been sitting at the table; otherwise he could not be said to have *risen* from it.

All this information is not made explicit in the sentence. It does not state: ‘There is somebody with the name of ‘Tony’; it is morning; there is a table for breakfast; Tony has been sitting at that table.’ The statement proper only states that Tony rose from the breakfast table. The information about the CoU which we can read off (or reconstruct from) the sentence is conveyed subliminally, as it were, by certain elements of the sentence. They presuppose conditions that must be given beforehand. With these implicit presuppositions, the sentence inconspicuously links to the conditions in the given CoU. If these conditions were not given, uttering the sentence would not make sense; it would be pointless. These presuppositions are also technically termed thus:

DEFINITION 6 **Presuppositions**

Presuppositions of a sentence are those conditions pertaining to the CoU which it must meet in order for an utterance of the sentence to make sense in that CoU.

Presuppositions are part of the meaning of a sentence. When a proper name is used as the subject or object of a sentence, the sentence presupposes that in the given CoU there is a uniquely determined something which carries this name; *to rise*, related to persons, presupposes that the person was not standing before, etc. The following two sentences contain more cases of presuppositions.

b. *He went into his room and opened the window.*

The personal pronoun *he* is definite and therefore presupposes that it refers to a male person, uniquely determined by this description. Analogously, the possessive pronoun *his* presupposes that it refers to a male possessor uniquely determined by using *his*. The NP *his room* is used referentially here and is therefore construed as definite; thus it presupposes that the

description *his room* uniquely singles out a particular room as its referent. It is said that ‘he’ went into his room. This presupposes that ‘he’ was not in this room before. *Opened the window* contributes two more presuppositions: the NP *the window* must uniquely refer to a particular window, and this window was not open before.

One will construe the text automatically in the way that ‘he’ is Tony, that ‘his’ room is Tony’s room, and that the window he opened is in that room. This interpretation suggests itself if we interpret the second sentence in the context of the first. It is, however, not semantically cogent. For example, if we knew that Tony is a woman, we would not interpret *he* as coreferent with *Tony*; also the owner of the room could be different from the one who is said to enter it. Similarly, the sentence does not *say* that the window is in the room mentioned. We establish these connections within the sentence and between the sentences by following general strategies of creating coherence. Such **coherence relations** do not derive from the presuppositions of the sentences. Presuppositions are general conditions that arise from the *expression* meaning of the sentence. They cannot comprise conditions that are only given in special CoUs.

c. *He was sorry that he had not replied to Lucy.*

The two occurrences of *he* make the same semantic contribution. Again, they need not cogently be referring to the same person. The construction ‘*be sorry that*’ presupposes that what is described in the *that* clause is a fact: one cannot be sorry about things that did not really happen. Therefore, the construction presupposes that ‘he’ had not replied to Lucy. This in turn presupposes that there is something uniquely determined by the name *Lucy*; this Lucy must have taken some action ‘he’ could have replied to, e.g. asked a question. For the sake of simplicity, we will assume that this, together with the requirements of the verb *reply to*, amounts to the presupposition that Lucy is a person.

4.7.2 Presupposition carriers

The expressions and constructions that carry presuppositions, can be grouped.¹³ It would take us too far afield if we were to discuss all known kinds of presupposition carriers. We will confine ourselves here to definite NPs and certain classes of verbs.

4.7.2.1 Definite NPs

When definite NPs are used for reference, they generally carry the presupposition that the description of the referent thereby given is unique. That means first of all that a referent exists in the given CoU (**existential presupposition**), but in addition also that the given description is unique (**uniqueness presupposition**). This holds for definite descriptions as well as for all other types of definite NPs: proper names, personal pronouns, NPs with adnominal demonstratives and referential possessive NPs; Table 4.10 lists the different types of definite NPs and the presuppositions they carry.

Analogous presuppositions can be stated for the pronouns *you* (plural) and *they*, as well as for the other possessive pronouns besides *my*.

¹³ In the literature you will often find the term *presupposition trigger* for what is here called *presupposition carrier*. The notion of a ‘trigger’ of presuppositions derives from the idea that presuppositions are some kind of inference drawn when certain utterances are produced and interpreted. This is not the understanding of presuppositions taken here. Presuppositions are just part of the meaning of the respective expressions or constructions, not anything to be derived by inference.

Definite NP	Presupposition
proper name	There is somebody or something which is uniquely determined by carrying this name.
<i>the dog</i>	There is a dog and it is uniquely determined which dog is referred to.
<i>this apple</i>	There is an apple which is referred to and it is uniquely determined by deixis which apple is referred to.
<i>my skirt</i>	There is a skirt which belongs to the speaker and it is uniquely determined which of the speaker's skirts is referred to.
<i>I</i>	There is somebody who produces this utterance and it is uniquely determined who it is.
<i>you</i> (singular reading)	There is a person to whom this utterance is addressed and it is uniquely determined who it is.
<i>he</i>	There is a male person referred to and it is uniquely determined who it is.
<i>we</i>	There are persons referred to, among them the speaker, and it is uniquely determined who they are.

Table 4.10 Definite NPs and their presuppositions

Episodic quantifying NPs carry the same presuppositions as a definite NP referring to the DoQ (cf.4.5.2); thus, *each child* has the same presupposition as *the children*.

4.7.2.2 Verbs

The example in (35) contained several verbs that carry presuppositions of different types. For one, every verb imposes certain conditions on the things and persons it predicates about. We saw in the examples that Tony must be a person; otherwise he could not be said to 'rise from the breakfast table'. At closer inspection, every verb comes with this kind of conditions for the referents of its subject, object and other complements. The verb *reply* is restricted to persons; *go* is rather unspecific as to the kind of referent it requires for the subject, but in the construction 'go to one's room', it is restricted to persons, too. This kind of presupposition is called **selectional restrictions**. They will be discussed in more depth in 5.7.

The verb *open* is representative for a large number of verbs used to express that a certain state comes about. "To open the 'window' means to do something which leads to the result that the window is open. Thus, on the part of the window the verb denotes a transition from the window not being open to its being open. All such **verbs of change** presuppose that the resulting state did not apply before. You cannot open something which is already open, and so on. Table 4.11 lists examples.

Some verbs with a *that* clause complement presuppose what is said in the *that* clause. An example occurred in (35): *He was sorry that he had not replied to Lucy*. Such verbs are called **factive verbs**. They include among many others *regret*, *admit*, *report*, *recognize* and *know*.

Verb	Presupposition
<i>she <u>opened</u> the door</i>	before, the door was not open
<i>she <u>left</u> the kitchen</i>	before, she was in the kitchen
<i>she <u>went into</u> her room</i>	before, she was not in her room
<i>she <u>lay down</u></i>	before, she was not lying down
<i>she <u>became</u> calmer</i>	before, she was less calm
<i>she <u>stopped</u> musing</i>	before, she was musing
<i>she <u>picked up</u> her guitar</i>	before, she was not holding her guitar
<i>she <u>had</u> a glass of water</i>	before, she had not had this water

Table 4.11 Verbs and their presuppositions

- (36) Tony regrets/admits/recognizes/knows that Lucy does not want to see him.
presupposes: Lucy does not want to see him.

By presupposing the content of the *that* clause, constructions with factive verbs also presuppose whatever the *that* clause itself presupposes.

By far not all verbs with a *that* clause complement presuppose its content. For example, *say, think, hope, expect, fear, claim, plan, request*, etc. do not:

- (37) Tony says/believes/expects/fears/claims that Lucy does not want to see him.
does not presuppose: Lucy does not want to see him.

There is a further condition, which we already encountered in connection with distributive predication in 4.5.3, namely the condition that the parts of the whole to which a distributive predication is applied form a uniform whole – i.e. that the predication is either uniformly true or uniformly false for all parts. Since the character of a predication in most cases depends on the verb, we may mention this presupposition here. It is called the presupposition of indivisibility and it requires that the object of a distributive predication is uniform, or homogenous, with respect to what the predication says about it. For collective predications or simple predications about just one case, this condition holds anyway. It can therefore be considered a general presupposition of any predication whatsoever. The formulation uses the technical term *argument* (see Chap. 7) for the object of a predication:

DEFINITION 7 **Presupposition of Indivisibility**

The argument of a predication is indivisible with respect to the predication; a predication is true or false of its argument as a whole.

As we have seen in the discussion of (22) and (23) above, it is this condition which is responsible for the fact that a distributive predication and its negation form an all-or-nothing contrast.

4.7.3 **Presuppositions and truth conditions**

Presuppositions immediately bear on the issue if a sentence is true or false. As we already stated in 1.1.2, this question arises only when a sentence is actually uttered in a CoU. When uttered, the presuppositions must be given in the CoU. Otherwise the question as to whether the sentence is true or false cannot be answered. Let us consider a simple example to illustrate the point:

(38) a. The dog stopped barking.

The sentence carries the presupposition of existence and uniqueness of the referent of *the dog*. If there is no dog in the given context, or if there are several dogs and the dog referred to is not uniquely determined, it cannot be decided whether the sentence is true or false. One just would not know which dog is being talked about. If we assume that the presuppositions for *the dog* are fulfilled, there remains the presupposition contributed by *stopped barking*: the dog has been barking. If the dog had not been barking, the question as to whether it had stopped doing so or not would not arise, i.e. whether the sentence is true or false.

The same holds for the negation of the sentence:

(38) b. The dog did not stop barking.

The negation of the sentence carries the same presuppositions: the sentence refers to a uniquely determined dog, and this dog has been barking. For if it had not been barking, there would be no point in saying that it did not stop barking.

The same presuppositions also hold for the corresponding yes-no question:

(38) c. Did the dog stop barking?

Only if (38a) is true, the question can be answered ‘Yes’, only if (38b) is true, it can be answered ‘No’.

This shows that for declarative sentences presuppositions are necessary conditions for the sentence having a truth value at all in a given CoU. We have, therefore, to modify the definition of truth conditions we gave in 2.2.2 in order to take account of presuppositions.

DEFINITION 8 **Truth conditions (revised)**

The truth conditions of a sentence are the general conditions under which it is true, provided that all presuppositions of the sentence are fulfilled.

The presuppositions are not themselves part of the truth conditions, but exist prior to them. This is clear from the fact that they also hold when the sentence is false.

In the literature, presuppositions are often treated as some sort of inference, similar to logical entailment (see 5.3.1) or to so-called conversational implicatures.¹⁴ However, this is a confusion of cause and effect. Presuppositions are conditions on the CoU. If someone utters a sentence in a concrete CoU, his interlocutors will assume that the utterance is meant to make sense in the given CoU and that the presuppositions therefore are to be taken as given. Unless there is evidence to the contrary, the addressee(s) will assume that this is the case. Thus, the presuppositions of a sentence will normally cause an inference to the effect that they are fulfilled in the given CoU.

4.7.4 **Presupposition tests**

These considerations lead to two tests for deciding whether a condition is a presupposition or not. The **negation test** can be used to check whether the condition also holds for the negated (or un-negated sentence). The **question test** checks if the same condition holds for the corresponding yes-no question. If the result is positive, the condition is a presupposition. The three

¹⁴ Conversational implicatures are a central notion in Grice’s theory of language use (mentioned in 1.1.2). According to Grice, people engaged in a conversation will normally assume that their interlocutors adhere to basic social rules of conversation, such as telling the truth, being relevant, being economical etc. Conversational implicatures are inferences drawn on the basis of this assumption. For instance, we will normally believe what a speaker says because we assume he or she tells the truth.

sentences in (38a, b, c) illustrate the two tests for the sentence *the dog stopped barking*. Let us return for the last time to the examples in (35).

- (35) a. *sentence*: Tony rose from the breakfast table.
 negation: Tony did not rise from the breakfast table.
 question: Did Tony rise from the breakfast table?

Obviously the negation and the question carry the same presuppositions as we stated for the original sentence.

In the case of the second sentence – *he went to his room and opened the window* – the tests would be applied separately to the two sub-statements it contains: *he went to his room*, and *he opened the window*. Again, it turns out that the negations and corresponding questions carry the same presuppositions as were stated above for the positive sentence.

For the third sentence, one needs to observe that forming the negation and the question leaves the *that* clause untouched:

- (35) c. *sentence*: He was sorry that he had not replied to Lucy.
 negation: He was not sorry that he had not replied to Lucy.
 question: Was he sorry that he had not replied to Lucy?

The negation text and the question test can both only be used for declarative sentences. But this is sufficient for identifying most presupposition carriers.

4.7.5 Presuppositions and the Principle of Consistent Interpretation

The Principle of Consistent Interpretation (3.4.4) requires that an utterance fit its context. Part of this requirement is that the presuppositions of an utterance be fulfilled in the given CoU because otherwise the utterance would not make sense. The Principle has two consequences concerning presuppositions. First, it may happen that the context as it has been understood up to the time when a sentence is uttered did not positively support its presuppositions. In this case, very often so-called **accommodation** takes place: the context is adapted to the utterance in order to do justice to the presuppositions. Second, the requirement that certain presuppositions be fulfilled may trigger meaning shifts.

Accommodation occurs all the time. It is such a common thing to do that we often exploit the mechanism in conversation. For example, assume Sheila is just about to leave home for town and Sarah asks her, “Would you post my letter?” Sheila will accept the presupposition that her mother has a letter to be posted, even if she had not known about that letter; otherwise she would have to assume that her mother’s request is pointless. Sarah would have relied on this inference by Sheila, which saves her an explanation.

To see the key role of presuppositions in triggering meaning shifts, have a second look at the examples for metaphor, metonymy and differentiation that we considered in 3.4.3. Let me give just three examples:

- (39) a. Metonymy: Moscow declared the Chechen rebels defeated.
 b. Differentiation: She had forgotten to charge her **card**.
 c. Metaphor: His courage **evaporated**

The selectional restrictions of the verb *declare* for its subject referent ask for a human being. In addition, the whole VP *declared the Chechen rebels defeated* requires some authority. This triggers the metonymic shift from the original meaning ›(city of) Moscow‹ to ›Russian government (residing in Moscow)‹. In the second sentence, the verb requires a chargeable type of card as the object referent, whence the general meaning of *card* will be shifted to a

differentiated meaning, say ›SIM card‹ or ›money card‹. In (39c), too, there is a mismatch between the type of subject referent and the selectional restrictions of the verb. In this case however, the mismatch is dissolved by giving the verb a metaphorical reading, approximately ›vanish‹ with selectional restrictions that fit the given type of referent.

4.8 Summary

We have come a long way in this chapter, starting from deixis and demonstratives, visiting definiteness, quantification and genericity to finally arrive at presuppositions. What unites all these phenomena is that they belong to the interface between sentence meaning and utterance meaning. The deictic means relate to the immediate context of utterance for establishing reference out of it. The most important linguistic means of reference are NPs. NPs are subject to determination; in most cases, they are either definite or indefinite. Definite NPs are indexical in that they depend on the given context for determining their reference. Likewise all episodic quantifying NPs are indexical in referring to a uniquely determined domain of quantification. In turn, definite NPs are a special case of presupposition carriers. Presuppositions in general are indicative of the context of the utterance. By imposing conditions on the CoU, they indicate what kind of context is required for the sentence to make sense at all. Presupposition carriers not only serve to establish reference; more generally they serve to integrate the content of a sentence into the context where it is used in.

Exercises

On deixis

1. Consult a Spanish grammar or textbook for the system of personal pronouns. Set up a table like Table 4.1.
2. What do personal and possessive pronouns have in common, and what is the difference between them?
3. Use WALS (<http://wals.info/>) in order to find three languages on different continents which distinguish inclusive and exclusive WE. Use the Ethnologue website (<http://www.ethnologue.com/>) to classify the three languages; for example the classification for English is: Indo-European, Germanic, West.
4. Consult Siewierska (2004) to find two languages which do not have 3rd person pronouns. Use Ethnologue to classify them.
5. Try to find out if there are formal pronouns of address in Finnish and, if so, determine which of the strategies mentioned in 4.1.2 is used in Finnish. Try to find out what the rules are for using the formal type of address (interview a native speaker, if possible).
6. Use the Oxford online English dictionary (<http://oxforddictionaries.com/>) to determine if, according to the definitions given there, the following nouns are relational or not: *spouse*, *bed*, *frog*. If more than one definition is given, answer the question for each of them separately; the answers may differ.
7. Discuss with fellow students the space deictic quality of the verbs *bring* and *fetch*. Give a tentative written description.
8.
 - a. It is very rare to find different feminine and masculine first person singular pronouns, while a difference in gender for second person singular pronouns is more frequent. What might be a reason for the difference?
 - b. In languages with first person pronouns that differ in social meaning, there may be first person pronouns exclusively used by women. Think of a possible reason.

On determination

9. Explain the function of the definite article in your own words.
10. Consult WALS to find two languages, each from different continents, which
 - a. have definite articles but no indefinite articles,
 - b. vice versa.
 Use Ethnologue to classify them.
11. In the following text
 - a. Determine which NPs are definite
 - b. For the definite descriptions among them, which are pragmatically unique, and which semantically unique?

The Mole had been working very hard all the morning, spring-cleaning his little home. First with brooms, then with dusters; then on ladders and steps and chairs, with a brush and a pail of whitewash; till he had dust in his throat and eyes, and splashes of whitewash all over his black fur, and an aching back and weary arms. Spring was moving in the air above and in the earth below [...] (from: Kenneth Grahame: 'The Wind in the Willows')
12.
 - a. Determine all the indefinite NPs in the previous text. Are there quantifying NPs among them?

- b. Identify all the nouns in the text and determine whether they are count nouns or mass nouns.
13. Determine which NPs in the following text (a passage from chapter 10.1) are indefinite. Decide which ones are quantificational and which ones are not.
English has a count noun wood₁ and a mass noun wood₂. A wood₁ consists of trees, while wood₂ is the substance trees largely consist of. Hence, the two meanings can be clearly distinguished on linguistic grounds. Likewise, the Japanese meanings of ki₁ ›tree‹ and ki₂ ›wood‹ are clearly different. It follows that neither of the two English expressions matches with either of the two Japanese words. They only match in one meaning variant, respectively.
14. In the following text (a passage from chapter 3), determine which indefinite NPs are generic and which are not.
In dealing with different aspects of meaning in the previous two chapters, expressions were treated as though they had only one meaning (though possibly composed of different parts). This is, of course, not the case. Many words have more than one meaning and even complete sentences may allow for several readings.

On presuppositions

15. Consider the sentence *Nicola left her bike in front of the supermarket*. Which among the sentences a. to e. state a presupposition of the sentence in a.?
- There is a uniquely determined person called ‘Nicola’.
 - There is a uniquely determined bike which belongs to a uniquely determined female person.
 - The bike belongs to Nicola.
 - The owner of the bike had been riding on it before it was left at the supermarket.
 - After Nicola left it there, the bike was in front of the supermarket.
16. Try to identify the presuppositions involved in the following three sentences:
 a. *The father got back to the hospital after midnight.* b. *The wife was sitting in the chair by the bed.* c. *She looked up at the husband and then she looked back at the child.*
 (from: Raymond Carver, *The Bath*, in *What we talk about when we talk about love*, p.41, London: Vintage, 2003).
17. What does the presupposition of homogeneity mean for the following sentence?
The eggs are raw.

Further reading

Deixis: Anderson & Keenan (1985) and Diessel (to appear) provide cross-linguistic surveys. On deixis and anaphora in English see chapter 17 by Lesley Stirling and Rodney Huddleston in Huddleston & Pullum (2002).

4.1 Siewierska (2004) is a comprehensive survey on the topic of grammatical person: ch. 3 on person deictic systems, ch. 6 from the perspective of social meaning ('social deixis'). Cooke (1968) on terms of address in Thai, Burmese and Vietnamese. In the *World Atlas of Language Structures online* (WALS) you will find surveys on systems of personal pronouns in several hundred languages: ch. 44 (Siewierska) on gender distinctions, ch. 35 (Daniel) on plurality; ch. 39 (Cysouw) on the inclusive/exclusive distinction. ch. 45 (Helmbrecht) on politeness distinctions, ch. 43 (Bhat) on 3rd person pronouns and demonstratives. For the more general aspects: ch. 36 (Daniel, Moravcsik) on associative plural, ch. 31, 32 (Corbett) on gender systems, ch. 33 (Dryer) and ch. 34 (Haspelmath) on plural marking; on inalienable possession see ch. 58 (Bickel & Nichols) and 59 (Nichols & Bickel).

4.2 Diessel (1999) is a general typological overview on demonstratives; there are chapters in WALS by the same author on distance contrasts in demonstratives (ch. 41) and on pronominal and adnominal demonstratives (ch. 42). On place deixis, see Levinson (1983: 2.2.3)

4.3 Levinson (1983: 2.2.2) on time deixis.

Determination: For determination and NPs in English, in particular definiteness, quantification, the mass/count distinction, genericity, number and gender see the elaborative account provided in ch. 5 by John Payne and Rodney Huddleston in Huddleston & Pullum (2002).

4.4 Löbner (1985) on definiteness. WALS ch. 37 and 38 (both by Dryer) on definite and indefinite articles.

4.5 There is a lot of literature from the field of formal semantics on quantification (see ch. 14). Most of the literature adopts the approach of Generalized Quantifier Theory which subsumes indefinite and definite NPs under quantifiers.

4.5.5 Carlson (2012) on genericity.

Presuppositions: Seuren (1990) on presuppositions, Levinson (1983: 4.2) on presupposition 'triggers' (= carriers).