Connecting conditionals: a corpus-based approach to conditional constructions in Dutch

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CHAPTER 3

Classifications of conditionals

3.1 Introduction

In the previous chapter, I argued for the unassertiveness of and connectedness in conditionals. Although both notions were characterised as conventional, non-truth-conditional meanings, I argued their specification, i.e., the more specific types of unassertiveness and connectedness, to be conversational implicatures. In this chapter, I will provide an overview of the literature that classifies conditionals in relation to these two implicatures.

The aim of this chapter is to provide the necessary preliminaries for answering the two research questions in discussed in section 2.7. With respect to the first question, namely what specific implicatures are licensed through the unassertiveness of and the connectedness in conditionals, this chapter provides an overview of classifications of conditionals based on the specifications of unassertiveness, and of connections between antecedents and consequents of conditionals. With respect to the second question, namely to what extent the grammatical form of conditionals determine the specific implicatures they license, the overview aims to serve as an inventory of grammatical features related to different types of conditionals in the literature. In relation to consequent chapters, these features will serve as input for the main corpus study, which aims to answer the question to what extent the non-truth-conditional meaning aspects of conditionals are tied to the grammatical features of conditionals in Dutch, and to what extent these can be viewed as pairings of form and meaning, i.e., as constructions in the sense of construction grammar (see previous chapters, and chapter 6).

Starting with implicatures connected to unassertiveness in section 3.2, I will review classifications of conditionals geared towards what we have characterised as epistemic stances in section 2.5. In section 3.3, I will discuss classifications based on the connectedness in conditionals, i.e., those accounts which distinguish types on the basis of connections between antecedents and consequents of conditionals. In both sections, attention is given to the grammatical features discussed in those accounts, as they form the ingredients for the remainder of this study, in which these features will serve as variables for several cluster analyses, which test combinations of features on their status as grammatical constructions (see chapter 6). Before moving on to the data collection and preparation in chapter 4, I will offer preliminary conclusions in section 3.4.

3.2 Types of unassertiveness

3.2.1 Introduction

In this section, I discuss classifications that are based on the more specific implicatures resulting from the unassertiveness of conditionals. Before doing so, I deem it necessary to remark that the accounts discussed here do not start from unassertiveness as characterised in the previous chapter, and they do not all discuss the meaning aspects they distinguish in terms of implicatures. Instead, unassertiveness is a non-truth-conditional meaning aspect of conditionals used here to group accounts that provide insights to the more specific implicatures arising from this meaning aspect.

The aim of this section is to provide an overview of both the types of stances towards the propositions expressed by using a conditional, and to identify which grammatical features are suggested to be related to these stances. In sections 3.2.2 to 3.2.10 I will systematically discuss these accounts, before summarising the findings in section 3.2.11, and moving on to classifications of the different types of connections in section 3.3.

3.2.2 Present, past and future conditions

Goodwin (1879, pp. 88–102) classifies Greek conditionals in terms of *time*, resulting in two types: *present and past conditions* on the one hand, and *future conditions* on the other (see also Smyth, 1920, pp. 516–537).

Present and *past conditions* can be divided into conditions that imply either no degree of fulfilment, as in (1), and those that imply its non-fulfilment, as in (2). The former sub-type has the indicative mood in the antecedent and (commonly) also in the consequent of Greek conditionals. This type is described by Smyth (1920, p. 516) as stating 'a supposition with no implication as to its reality or probability'.

(1) If he is doing this, it is well. (Goodwin, 1879, p. 90)

(2) If he had done this, it would have been well. (Goodwin, 1879, p. 90)

Two more sub-types are defined; those with a particular supposition, referring to one or more definite acts, as in (3), and those with a general supposition, referring 'indefinitely to any act or acts [...] which may be supposed to occur or to have occurred at any time' (Goodwin, 1879, pp. 88–89), as in (4).

(3) If he was able to do this, he did it. (Goodwin, 1879, p. 89)

(4) If he is (ever) able to do this, he (always) does it.(Goodwin, 1879, p. 89)

Goodwin (1879, pp. 91–92) shows how general conditionals are expressed using present tense or past tense in both clauses, as in his examples in (5) and (6).

(5) If any one (ever) drinks of this, he dies. (Goodwin, 1879, p. 91)

(6) If any one (ever) drank of this, he died. (Goodwin, 1879, p. 91)

This distinction between particular and general conditionals resembles the difference between regular *predictive* conditionals and *generic conditionals* (cf. Dancygier and Sweetser, 2005; see section 3.3.7) and between *hypothetical* and *course-of-events condititionals* (cf. Athanasiadou and Dirven, 1996; see section 3.3.9).

Future conditions are divided into future conditions with 'more vivid form', with an antecedent in subjunctive or future indicative mood and a consequent in any future mood, as in (7), and future conditions with 'less vivid form', which have the optative mood (expressing wish or hope) in both the antecedent and consequent, as in (8), although English has no morphological optative mood, as opposed to Greek, which is the focus in Goodwin's (1879) account.

(7) If I (shall) receive anything, I will give it to you.(Goodwin, 1879, p. 102)

(8) If he should go, he would see all. (Goodwin, 1879, p. 105)

Smyth (1920, p. 523) argues the first type is used when 'the speaker clearly desires to be graphic, impressive, emphatic, and to anticipate a future result with the distinctness of the present', while the second type may express the same probability or possibility, but with less 'temperament'.

With respect to exhaustiveness, Goodwin mentions that the verb patterns of antecedents and consequents discussed include most, but not all conditionals found. What follows is a set of mixed constructions that have non-identical tenses in the antecedent and consequent and which cannot be placed into the classification discussed. Smyth (1920, pp. 517, 527–537) mentions the same: 'There are many possible combinations of present and past conditions with different forms of the protasis and apodosis'. For instance, when the indicative is used in the antecedent, the optative mood may be used in the consequent, as in (9), or when subjunctive or future indicative mood in the antecedent is combined with the optative mood in the consequent, as in (10).[1]

[1]Again, remember, as mentioned above, that the moods in Goodwin's Greek examples cannot be directly translated into English.

(9) If this is so, he would not justly be punished. (Goodwin, 1879, p. 105)

(10) If I should do this, it would be well. (Goodwin, 1879, p. 105)

Criticism on Goodwin's classification has focused on the use of *time* as main parameter, the difference between particular and general and the implications of the parameter of *fulfilment*. Elliott (1981, p. 18) elaborates that the verb form underspecifies time, for which context is needed and therefore is interpretational (as we will see in section 3.3.7, this criticism also applies to Dancygier's main parameter of *backshift*). Elliott (1981, p. 15) also argues that the distinction between *general* and *particular* conditions is sometimes difficult to establish, as exemplified in his examples in (11) and (12).

(11) ... but if (whenever) we walk in the light... we have (in such cases) fellowship. (Elliott, 1981, p. 15)

(12) Lord, if you are willing you are able to cleanse me. (Elliott, 1981, p. 15)

Elliott (1981, p. 15) argues that (11) 'states a general situation that is presently true for all believers', whereas (12) is 'considered a particular one'. It is this 'interpretative [...] nature' that is seen as problematic in Goodwin's classification.

With respect to grammatical features influencing the stance towards the propositions of the conditional, this classification is built around time reference as expressed by verb tense, not only in distinguishing between conditionals with and without implication of fulfilment, as in 'future conditions', but also as a characteristic of particular and general conditionals.

3.2.3 Logical, anticipatory, ideal and unreal conditionals

Gildersleeve (1882) classifies conditionals in the odes of Greek lyric poet Pindar (c. 518-438 BC). As he uses manifest moods and tenses in Greek to determine types of conditionals, and these features are not directly translatable into determinate features in English (or Dutch), the examples in this section are taken from the King James Version of the New Testament, following references provided by Robertson (1919) and Elliott (1981).

Gildersleeve (1882) distinguishes four main types of conditionals: *logical*, *anticipatory*, *ideal* and *unreal conditionals*. *Determined-fulfilled conditions*, as in (13), are called *logical conditions*, which are used to reason from a premise to a conclusion: the proposition in the antecedent is accepted as true and, therefore, the proposition in the consequent must also be accepted.

(13) And they asked him, and said unto him, Why baptizest thou then, if thou be not that Christ, nor Elias, neither that prophet? (John 1:25)

Gildersleeve (1882, pp. 435, 445) notes that this type is Pindar's 'favourite condition in argument' and is the predominant type of condition in Pindar's odes. It can be both *particular* and *general* and according to Gildersleeve, the

only assertion made is the connection between 'two members of the sentence', but none of the individual members (i.e., the antecedent and consequent) is asserted, which is in line with the analysis presented in sections 2.5 and 2.6. Gildersleeve (1882, p. 438) mentions that, in his corpus of Pindar texts, 'logical conditions far outnumber, indeed almost double, all the others put together'.

Determined conditions can be either *fulfilled*, as in (13) above, or *unfulfilled*, as in (14) below.

(14) Now when the Pharisee which had bidden him saw it, he spake within himself, saying, This man, if he were a prophet, would have known who and what manner of woman this is that toucheth him: for she is a sinner. (Luke 7:39)

This determined-unfulfilled type is called *unreal* and presents the antecedent as 'contrary to fact' (Gildersleeve, 1882, p. 437).

Undetermined conditionals can either have a prospect of determination, expressing a probability, as in (15), or a remote prospect of determination, expressing a possibility ('less likelihood of determination', cf. Robertson, 1919, p. 1020), as in (16).

(15) Jesus answered, Are there not twelve hours in the day? If any man walk in the day, he stumbleth not, because he seeth the light of this world. (undetermined with prospect of determination) (John 11:9)

(16) And who is he that will harm you, if ye be followers of that which is good? But and if ye suffer for righteousness' sake, happy are ye: and be not afraid of their terror, neither be troubled. (undetermined with remote prospect of determination[2]) (1 Peter 3: 13-14)

The undetermined-prospective condition in (15) is called *anticipatory* and expresses the antecedent as expected to become true (a probability), while the undetermined-remotely prospective condition in (16) is called *ideal* and is 'a fusion of the true optative and the potential optative' (Robertson, 1919, p. 1020). It expresses wishes that are not asserted as being contrary to fact, but are less likely to be fulfilled than anticipatory conditions.

Gildersleeve (1882, p. 435) opts for a further distinction of types into *particular* and *general* conditions: 'the logical condition, like every other form of the conditional sentence, is particular or generic according to the character of the apodosis', as we also saw in Goodwin's account in the previous section.[3]. When the antecedent has present-verb tense, as in (17), it has 'a double meaning', pointing either to a definite or indefinite subject.

(17) He gets angry if I leave the house.

[2]Gildersleeve's classification is based on Pindar's poetry, which is in ancient Greek, while Robertson's and Elliott's accounts focus on the New Testament in Koine Greek, which does not have a special form for this fourth type of condition. This is also true for English. See Elliott (1981, p. 24) Robertson (1919, p. 1020).

[3]See also Dancygier and Sweetser's (2005, p. 95) 'generic conditionals' in section 3.3.7.

Here, both the particular reading 'If I leave the house now, he gets angry' and the generic reading 'Every time I leave the house, he gets angry' are available.

To sum up, Gildersleeve (1882) divides conditionals into those expressing *determined* and *undetermined* conditions, which are expressed using different verb forms. As his classification concerns classic Greek, the verb forms cannot be directly applied to present-day English or Dutch, but we can clearly see a parallel to the importance of verb tense in most classifications in this section.

3.2.4 Implicative and non-implicative conditionals

Whereas *fulfilment* is a secondary parameter in both Goodwin's and Gildersleeve's accounts, it is the primary parameter in Sonnenschein's (1892) account. He distinguishes conditionals that imply no degree of fulfilment, as in (18), from those that imply a degree of non-fulfilment, as in (19).

(18) If he is doing this, he's sinning. (Sonnenschein, 1892, p. 192)

(19) If he were doing this, he would be sinning. (Sonnenschein, 1892, p. 192)

As can be seen, this distinction coincides with the indicative-subjunctive distinction discussed in section 2.5.4. Both types of conditionals are further divided into *present time*, as in (18) and (19), *past time*, as in (20) and (21), and *future time*, as in (22) and (23).

(20) If he was doing this, he was wrong. (Sonnenschein, 1892, p. 192)

(21) If he had done this, he would have sinned. (Sonnenschein, 1892, p. 193)

(22) If he does this/shall do this, he will be wrong. (Sonnenschein, 1892, p. 192)

(23) If he were to do this, he would sin. (Sonnenschein, 1892, p. 193)

Sonnenschein (1892, pp. 192–193) also distinguishes 'general conditions' from particular conditions in the class of non-implying conditionals, which express 'an habitual action or a general truth' and occur both in present and past tense, as in his examples in (24) and (25) respectively.[4]

(24) If anyone steals, he is punished/will be punished. (Sonnenschein, 1892, p. 193)

(25) If anyone stole, he was punished. (Sonnenschein, 1892, p. 193)

The main parameter of *fulfilment* has received considerable criticism. Chambers (1895, p. 294) objects to this parameter, because, according to him, it provides an imbalance in (pedagogical) grammars: 'conditions implying non-fulfilment are relatively rare in the language and should not be the basis of

[4]See Gazzo Castañeda and Knauff (2021) for a recent experimental study showing that people accept conclusions from particular ('specific') conditionals more strongly than those from generic ('unspecific') conditionals.

classification'. As such, he argues, it leaves a large and heterogeneous group of conditionals that do not imply fulfilment. Although the distinction between implicative and non-implicative conditionals is defended by Donovan (1895) in his review of Sonnenschein's grammar, the way of operationalising this distinction is criticised. Sonnenschein (1892, p. 191) argues conditionals with implication to have a consequent in Greek marked by means of the adverb *ἄν*, which is 'expressed in English by a "should" or "would" (or equivalent subjunctive)', and the antecedent by subjunctive *were*, which, instead of 'denoting what *was*, have come to denote what *is not*'. Donovan (1895, p. 64) argues that conditionals should be classified 'according to the universal canon of fulfilment or non-fulfilment [of the condition]' and not according to the occurrence of 'would be' or 'would have been'. Chambers (1895) also objects to the terminology used and the non-objective way of classifying it provides, as fulfilment is context-dependent in some cases.

As Sonnenschein's grammar is of educational nature, his focus on form is understandable, and for present purposes it illustrates a choice between a latent characteristic (implication) and a manifest characteristic (occurrence of *would*). Sonnenschein (1892) chooses to use occurrence of *should* or *would* to discriminate between *indicative* and *subjunctive* conditionals, and accordingly he makes the distinction between conditionals with and without implication, whereas Donovan (1895, p. 63) favours to explain the latent characteristic itself, as he argues that 'to convey a grammatical [the presence or absence of *what would be*] notion applicable to all languages and of very wide extension, is bound to be misleading'. This brief overview of Sonnenschein's grammar reinforces the importance of verb tense and modal auxiliaries as grammatical features that are related to licensing implicatures of hypotheticality and counterfactuality.

3.2.5 Real, unreal, potential and future conditionals

Kaegi (1905, pp. 143–146) distinguishes four types of conditionals: those expressing *conditioned reality*, as in (26), *unreality*, as in (27), *potentiality*, as in (28) and *single future or repeated occurrence*, as in (29).

(26) If you wish, you can. (Kaegi, 1905, p. 144)

(27) If you wished, you could (but you do not wish). (Kaegi, 1905, p. 144)

(28) If you should wish (=Suppose you were to wish), you would be able. (Kaegi, 1905, p. 145)

(29) If you wish, you will be able. (Kaegi, 1905, p. 145)

The *conditioned reality* type in (26) presents a conclusion 'as real, if the condition be real, but implies nothing as to the latter' (Kaegi, 1905, p. 144), through the means of the indicative (simple present or simple past) in both clauses. In (27), both the antecedent and consequent are presented as 'unreal or contrary to fact', either referring to present time using simple past, as in (27), to a past time using past perfect tense, as in (30), or in mixed form.

(30) If you had wished, you could have (but you did not wish). (Kaegi, 1905, p. 144)

In the type in (28), both the antecedent and consequent are presented as 'purely imaginable', i.e., suppositions, only conceivable situations. According to Kaegi (1905, p. 145), this type is expressed by means of using the optative mood (see section 3.2.2), which in English is expressed by *should* and *would*. Finally, the fourth type of conditional, in (29), presents the condition as 'objectively possible, or even as anticipated under certain circumstances' and the conclusion as 'positively certain' (Kaegi, 1905, p. 145). The antecedent can either refer to a single future occurrence, as in (29), or implicate repeated occurrence in the present, as in (31), or in the past, as in (32).

(31) If (=whenever) you wish, you (always) can. (Kaegi, 1905, p. 145)

(32) If (=as often as) you (had) wished, you (always) could. (Kaegi, 1905, p. 146)

As we have seen in the accounts previously discussed, it takes context to determine between these two uses.

In Kaegi's account, mood, reflected by verb tense and modals in English, is used to distinguish between four types of conditionals. We see the basic distinction between neutral and distanced conditionals, a class of mere supposition, and the type which can refer to either a single future occurrence indicated by the modal verb *will* in the consequent, or repeated occurrence without this modal. The importance of tense and modality as features influencing the specific implicature based on unassertiveness is thus again reinforced by this account.

3.2.6 Open and closed conditionals

Funk's (1985) 'semantic typology of conditionals' focuses on direct conditionals and dismisses indirect conditionals (or '"non-effectual" [and "non-consequential"] conditional sentences'), as was seen also in the formal accounts discussed in sections 2.2, and he remarks that these uses are 'more or less restricted to the simplest (i.e., unmarked) pattern of conditional sentences'. Funk (1985, p. 372) argues that the difference between *neutral* and *unreal conditionals* (i.e., indicative and subjunctive conditionals) 'clearly dominates the whole scene of conditionals' and he criticises combining the parameters *reality* and *time reference* to determine conditional types, which would lead to *real past*, *real non-past*, *unreal past* and *unreal non-past* conditionals, as in (33) to (36) respectively, because time reference is marked morphologically, but 'bears no peculiar significance to conditionals beyond the temporal relation it establishes' (Funk, 1985, p. 381).

(33) If she has changed her mind, he must be/will be/is happy. (Funk, 1985, p. 374)

(34) If she is in time/if she changes her mind, he will be happy. (Funk, 1985, p. 374)

(35) If she had been in time/if she had changed her mind, he would be/have been happy. (Funk, 1985, p. 374)

(36) If she was/were in time/if she changed her mind, he would be happy. (Funk, 1985, p. 374)

Funk's argument to include a third parameter is that neither (*would*) modals nor tense are stable indicators of reality or time (see the discussions in the previous sections). Based on Haiman's (1974, p. 359) observations, he suggests the additional parameter of *posteriority*, which determines whether a conditional is 'closed' or 'open' (see also Nieuwint's *now* and *not-now conditionals* discussed in section 3.3.6). In *closed conditions*, the situation expressed in the antecedent precedes the speech event ('non-posterior') and is manifested and verifiable, as in (33) and (35). This type entails that the situation in the antecedent took place before the moment of speaking. The condition can either be neutral, i.e., 'without implication', as in (33) and (37)-(38) below, or *hypothetical* or *marked*, as in (35) and (39)-(40), i.e., with a 'contrary to fact' implication.

(37) If you used proper grammar, she understood. (Funk, 1985, p. 381)

(38) If you really love me, you will not talk that way. (Funk, 1985, p. 380)

(39) If you had used proper grammar, she would have understood. (Funk, 1985, p. 381)

(40) If you really loved me, you would not talk that way. (Funk, 1985, p. 380)

Open conditions on the other hand do not precede the speech event and are neither manifested, nor verifiable, as in (34) and (36). Because situations posterior to the moment of speaking are, per definition, open, in the sense of being non-manifested and (thus) non-verifiable, anteriority does not play a role. Within open conditionals too, *neutral* and *hypothetical (marked)* conditionals are distinguished, as exemplified in (41) and (42) respectively.

(41) If she is in time, he will be happy. (Funk, 1985, p. 373)

(42) If she was/were in time, he would be happy. (Funk, 1985, p. 373)

Note that (36) and (42) should be understood in a non-counterfactual sense, i.e., the event of being in time in (42) is posterior to the moment of speaking and the speaker expresses epistemic distance, not counterfactuality, towards the fulfilment of the condition.

According to Funk, what we have called the unassertiveness of conditionals in the previous chapter, can be paraphrased as 'if it happens that' for open conditionals, and as 'if it is true that' for closed conditionals (Funk, 1985,

p. 377), and he concludes that English grammar does not mark this distinction. For instance, the antecedent of (41) may refer to the moment of speaking ('if it is true that she is here') or to some time in the future ('if it happens that she is here'). Thus, in the closed type, the situations expressed in the antecedent (such as using proper grammar in (39) or loving someone in (40)) are presented as having taken place or still taking place at the moment of speaking (i.e., non-posterior), while in the open conditionals in (41) and (42) the situation in the antecedent is presented as taking place after speaking. In (37) and (38), the epistemic stance is neutral, because the use of proper grammar has taken place in (37), but the speaker is agnostic about the situation, i.e., it is manifested, but not verified. In (38), the loving holds (or does not hold) at the moment of speaking and is not fully manifested, and not verified. In (39) and (40), the epistemic stance is non-neutral, i.e., distant. For (39) the using of proper grammar has taken place, and while the speaker is agnostic about the situation (i.e., the situation is manifested, but not verified), she expresses negative belief. In (40) the loving takes places during the moment of speaking and is not fully manifested and not verified, but the speaker expresses negative belief towards p expressed in the antecedent.

With respect to features, Funk's (1985) account is explicit, albeit not particularly useful for the current purposes. Funk (1985, p. 381) argues that the *+/- real* distinction is unmarked in English conditionals and although the *+/- anterior* distinction is marked by tense, it 'bears no peculiar significance to conditionals beyond the temporal relation it establishes'. The *+/- posterior* distinction, on the other hand, indicates whether a conditional is *closed* or *open*, but is unmarked. Funk (1985) argues for the *semantic* categories of *open* and *closed* conditionals on basis of time.[5] *Open* or *future conditionals*, of which the conditions are still subject to manifestation, and *non-future conditionals*, of which the conditions are manifested. As this is an unmarked, semantic distinction, it does not clearly select a feature to be added or reinforced in this overview, although Funk's (1985) disagreement with the *neutral-unreal* distinction does, as he himself discusses at length, shows the impact on the implicatures licensed by tense and modality.[6]

[5]Funk (1985, p. 381) argues as follows for this *semantic* typology: 'In the more precise terms of its (negative) truth-commitment, however, the semantic nature of a hypothetical conditional depends on the existence in time (not in fact) of the conditioning event (content of the protasis). In other words, it depends on what has been described above as the category of "manifestation" – a distinct property of propositional structures that enter into the conditional frame. These and some other considerations, [...] in my opinion, fully justify the acceptance of such a semantic category – even in the System of English, where it is not represented by an overt morphosyntactic distinction'.

[6]Funk (1985, pp. 367, 378) also mentions conditionals with imperative consequents as deviations from 'regular' conditionals by adding the meaning of the imperative, and he notes the ambiguity between specific and generic conditionals we have already seen in the previous sections.

3.2.7 Factual, future and imaginative conditionals

Celce-Murcia and Larsen-Freeman (1999) include a chapter on conditionals in their book aimed at second-language acquisition of English, because they note that 'conditionals sentences ranked fifth' on a survey of the most serious teaching problems by ESL teachers (see also e.g., Jacobsen, 2015; Dolgova Jacobsen, 2016; see Schwarz & Smitterberg, 2020, on *if* + *would have* in English as a Foreing Language textbooks as compared to corpus data; and see Burton, 2021, for a discussion and a expansion of the common ELT categorisation of conditionals to include, the 'less central' types of conditionals, such as the 'speech-act' or 'biscuit' conditionals discussed previously in section 2.2).[7] This makes their account relevant, as it is aimed specifically at the form of conditionals and its relation to different uses. Celce-Murcia and Larsen-Freeman provide a classification of conditionals (partly based on results of Hwang, 1979), which distinguishes 'three different kinds of semantic relationships', namely *factual*, *future* and *imaginative* conditionals.

Although Celce-Murcia and Larsen-Freeman do not actually define *factual conditionals*, their further division and the examples show that they express a neutral stance towards the truth of p, whereas *future* and *imaginative conditionals* express a stance that departs from the present and the real respectively. Although *factual* does suggest a type of conditional implicating the truth of its propositions (as in the determined-fulfilled conditionals in Gildersleeve's classification), this is not how the term is used by Celce-Murcia and Larsen-Freeman (1999). Rather, generic factual conditionals express a relationship that is 'true and unchanging' (i.e., not time-dependent), as in (43), by means most frequently of the simple present tense in both clauses, whereas in *habitual factual conditionals* this 'physical law' like relation is substituted for habitual behaviour, as in (44), which is reflected in tense, as this sub-type can refer to past habits by the simple past in both clauses. Both types express a relation that can be express by *when(ever)*.

(43) If you boil water, it vaporizes. (Celce-Murcia & Larsen-Freeman, 1999, p. 548)

(44) If I wash the dishes, Sally dries them. (Celce-Murcia & Larsen-Freeman, 1999, p. 549)

(45) If Nancy said, "Jump!" Bob jumped. (Celce-Murcia & Larsen-Freeman, 1999, p. 549)

The main difference here lies in volition. The generic type in (43) is law-like, whereas the habitual type in (44) involves a volitional habit. According to Celce-Murcia and Larsen-Freeman (1999, p. 341), habituals can express present or past habits while remaining 'timeless', hence the possibility of a simple

[7] *ESL* stands for 'English as a Second Language', *ELT* stands for 'English Language Teaching'.

past in (45). Next to generics and habituals Celce-Murcia and Larsen-Freeman distinguish *implicit* and *explicit inference factuals*. Implicit inference factuals express an inference about a specific (i.e., time-bound) relationship, as in (46).

(46) If it's Tuesday, it's Sam's birthday. (Celce-Murcia & Larsen-Freeman, 1999, p. 549)

As with *generics* and *habituals*, implicit inference factuals 'tend to maintain the same tense, [grammatical] aspect or the same modal in both clauses', but they are not limited to the simple tenses mentioned. This is not the case with *explicit* inference factuals, which have a 'less strict parallelism of tense, aspect or modal in both clauses' and are explicitly marked for inferential processes, typically by modals such as or *should* or *must*, as in (47).

(47) If someone's at the door, it must be Peter. (Celce-Murcia & Larsen-Freeman, 1999, p. 549)

Contrary to generic and habitual factual conditionals, inference factuals cannot be paraphrased using *when* or *whenever*.

Future conditionals express 'future plans or contingencies', as in (48).

(48) If it rains, I'll stay home. (Celce-Murcia & Larsen-Freeman, 1999, p. 550)

Mostly, the simple present is used in the antecedent and 'some explicit indication of future time (e.g., *will* or *be going to*' in the consequent, as in (48)). Celce-Murcia and Larsen-Freeman (1999, p. 550) call conditionals with the modal verb *will* in the consequent *strong conditions*, whereas modals like *may* or *should* result in *weakened conditions*, as in their example in (49), and cases in which the condition itself, i.e., the antecedent, is 'weakened', as in (50).

(49) If you finish your vegetables, I *may* buy you an icecream. (Celce-Murcia & Larsen-Freeman, 1999, p. 550)

(50) If it {should/happens to/should happen to} rain, I'll stay home. (Celce-Murcia & Larsen-Freeman, 1999, p. 550)

The reason for including such cases is that learners of English will 'regularly be encountering the "weakened" versions' of conditionals, not just those using *will* (Celce-Murcia & Larsen-Freeman, 1999, p. 550).

As with Dancygier's (1998) use of backshift to distinguish between predictive and non-predictive conditionals (see section 3.3.7), and parallel to Funk's remarks in the previous section, Celce-Murcia and Larsen-Freeman's distinction between factual and future conditionals is underspecified by linguistic form. For instance, in (48), two interpretations are valid. If it is undetermined whether or not it rains at the present moment, (48) is not a future conditional. Rather, it would be a factual conditional, as exemplified in (51).

(51) A: Do you want to come over to have a coffee?
B: If it rains, I'll stay home. (Let me have a look outside.)

When, however, the verb *rains* is backshifted, the conditional becomes a future conditional, as in (52).

(52) A: What are you going to do tomorrow?
B: If it rains, I'll stay home. (So let's wait for the weather forecast.)

This again points to the importance of treating specifications of the conventional meaning of unassertiveness as *conversational* implicatures, as the context must, to some degree, be involved in the analysis.

The last type of conditional is the *imaginative conditional*, which is further divided into *hypothetical* and *counterfactual* conditionals, each with a time-distinction (present-future and present-past respectively). Hypothetical conditionals 'express unlikely yet possible events or states', as in (53), by means of the simple past. In such conditionals, the 'negative quality' of the antecedent can be weakened too, as in (54).

(53) If Joe had the time, he would go to Mexico. (Celce-Murcia & Larsen-Freeman, 1999, p. 551)

(54) If Joe {should have/happened to have/should happen to have} time, he would go to Mexico. (Celce-Murcia & Larsen-Freeman, 1999, p. 551)

This is not possible in counterfactual conditionals, which, according to Celce-Murcia and Larsen-Freeman (1999, p. 551), express 'impossible events or states' in the antecedent by means of the past perfect tense, as in their example in (55) below.

(55) If my grandfather had still been alive in 1996, he would experience a very different world. (Celce-Murcia & Larsen-Freeman, 1999, p. 551)

A further difference between *hypotheticals* and *counterfactuals* is that the former can refer to present and future situations, as in (53) and (56) respectively, while the latter can refer to present and past situations, as in (55) and (57) respectively.

(56) If Joe were to have time, he would go to Mexico. (Celce-Murcia and Larsen-Freeman, 1999, p. 551)

(57) If my grandfather had still been alive in 1996, he would have been 100 years old. (Celce-Murcia & Larsen-Freeman, 1999, p. 551)

In line with what we have discussed at length in section 2.5.4, Celce-Murcia and Larsen-Freeman (1999, p. 551) remark that 'the problem with imaginative conditionals arises in the tense used', as the the past tense, as in (53), 'refers to the present time', and the past perfect tense, as in (55), 'refers to past time'. Although in their schematic summary, all *imaginative conditionals* receive the modal *would* in the consequent (and 'would have' in case of past counterfactuals), and all their examples of this type indeed feature *would* in the consequent, in their discussion no mention of this is made.

Celce-Murcia and Larsen-Freeman's (1999, p. 556) comparison of the classification with Hwang's (1979) data shows factuals to be 'by far the most frequent type': 19.2% in spoken data and 16.5% in written data, followed by future conditionals (13.5% and 18.6% respectively) and present imaginative conditionals (18.8% and 16.0%). For classifying purposes, little to no definitions or criteria of the main types are supplied, making it hard to explain what exactly constitutes the difference between, for instance, implicit inference and future conditionals. Furthermore, there is no (explicit) principled argument to define three classes, i.e., future and imaginative conditionals could also have been sub-types of non-factual conditionals, which would make factuality the main parameter for classification. This is, however, not the aim of Celce-Murcia and Larsen-Freeman (1999), and the main benefit of this account for second-language acquisition is that learners of English are provided with clear grammatical descriptions of when to use which tense and modal marking, which, again, reinforce the importance of these features for licensing of the more specific implicatures of unassertiveness of conditionals.

3.2.8 Factual and theoretical conditionals

Next to the distinction of *case-specifying* and *non-case-specifying conditionals*, which will be discussed in section 3.3.11, Declerck and Reed (2001, p. 50) offer another account, which is based on possible-world theory and distinguishes *factual* from *theoretical conditionals*.

Factual-P conditionals carry an implicature of the truth of p in the real world, which is 'not very common' according to Declerck and Reed (2001, p. 67). Declerck and Reed's 'factual conditionals' are different from 'factual conditionals' in Celce-Murcia and Larsen-Freeman's account. In the latter account, they are neutral, while in Declerck and Reed's account they carry an implicature of truth. Four sub-types are distinguished: *past repetitive habits*, *performative P*, *factuality indirectly following from counterfactuality* and *non-case specifying factual-P*, as exemplified in (58) to (61) respectively.

(58) If I had a problem, I always went to my grandmother.(Declerck & Reed, 2001, p. 67)

(59) ["May I invite you for a drink?"] – Excuse me, please, if I decline. [I have some urgent business to attend to.] (Declerck & Reed, 2001, p. 68)

(60) If she had been honest, she would have told us about it. (Declerck & Reed, 2001, p. 69)

(61) I enjoyed the party, even if I did get red wine all over my new sweater. (Declerck & Reed, 2001, p. 71)

In (58), a recurring pattern based on 'a number of past instances (actualizations)' is expressed, which, according to Declerck and Reed (2001, p. 67), are 'taken for granted in interpretation', as we saw for the habitual conditionals

in the previous sections, and as we will see also in Athanasiadou and Dirven's account discussed in section 3.3.9.[8] In (59) the antecedent is performative and the actualisation of the proposition in the antecedent is not *asserted*, but *performed*: the uttering of 'if I decline' amounts to the actual declination of the offer made. In (60), presenting the antecedent using a past perfect implies the contrary to be fact, i.e., 'she was not honest', which, for Declerck and Reed, make this type 'factual'. Counterfactual 'ad absurdum' conditionals also fall into this class, which is in agreement with Quirk et al.'s (1985, p. 1094) remark that this type resembles open or neutral conditionals, they seem to be assertive, as can be seen in the famous 'dracula conditional' in (62)

(62) If Confucius was born in Texas, I'm Dracula. (Smullyan, 1978, p. 101; cited by Akatsuka, 1991, p. 25)

In this type, not the form of the antecedent, but the falsehood of the consequent licenses the inference that p must be false as well, as with q being false, p could not be true according to the truth table of material implication (see Table 2.1 in section 2.3). In (61), the concessive clause implies factuality, but no further analysis is given by Declerck and Reed in light of their *factual* type.

These four types of 'factual-P conditionals' are used as an argument to disprove Dancygier and Sweetser's (1997, p. 114) claim that *if* marks 'non-assertion of the *if*-clause', for which I also argued in section 2.5. However, while Declerck and Reed take care of distinguishing between characteristics of antecedents and consequents, I argue again that none of the examples provided of this category actually assert p. Rather, they express the relation between p and q and they may implicate that this relation has occurred at least once. This implicature, however, can be cancelled, as is the case with other conditionals in each of the examples provided.

(63) If I had a problem, I went to my grandmother, but I never had a problem.

Although (63) does not amount to a very natural discourse, this is mainly due to the universal quantification of *always*. Declerck and Reed (2001, p. 68) argue that 'in this type of conditional it seems that just before each actualisation of Q, there has been an affirmative answer to a question version of P', here 'Did you go to your grandmother?'. To clarify matters, I find it useful to compare this to Goodwin's (1879) notion of 'implying fulfilment' (see section 3.2), which is compatible both with the implication of occurrence in the examples above and the unassertiveness of conditionals. Indeed, even Declerck and Reed's own characterisation of actualisation as '*taken for granted* [emphasis added] in interpretation' would fit more with an act of implicating, than with an act of asserting. An insightful case is the point Gabrielatos (2010, p. 184) makes. He discusses the following example to preliminary distinguish between factual and non-factual conditionals.

[8] Note here that the connectedness of the antecedent and consequent is conventionally expressed, and further specified as one of co-occurrence. The unassertiveness of conditionals thus still holds, as it concerns the individual propositions in the antecedent and consequent.

(64) (context: the speaker sees the milkman at the door)
∗ If the milkman is here, give him his money. (Declerck & Reed, 2001, p. 2)

According to Declerck and Reed, the inferential link between the antecedent and the consequent is unacceptable, because the presupposition licensed by the antecedent is overridden by the context, i.e., seeing the milkman. The 'rejection [...] seems justified only if the speaker seriously presents it as an inference', according Gabrielatos (2010, p. 184), but becomes unwarranted when 'we consider that the speaker's actual knowledge, or reality for that matter, may well be irrelevant in this case; what matters is the notion that the speaker wants to communicate'. Gabrielatos (2010) continues by constructing a context in which the presence of the milkman at the door is a fact; the speaker has seen the milkman and utters (64) in a humorous way to 'bring the postman's arrival to the hearer's attention, and at the same time instruct him/her to pay the milkman'. The example in (64) would then be acceptable without being inferential, but being more of a speech-act conditional (cf. Gabrielatos, 2010, p. 184). However, here the difference between knowledge and information becomes relevant again (cf. Akatsuka, 1986, see section 2.5). When the speaker sees the milkman at the door, the speaker has direct knowledge of the situation. Presenting that knowledge by means of the antecedent of a conditional conflicts with its unassertiveness and violates the maxim of Quantity (cf. Grice, 1989), because the speaker has evidence for a stronger claim than she makes. When the situation has the status of information, rather than knowledge, as in Declerck and Reed's (2001, p. 2) example in (65), the evidence is indirect and not stronger than the implication of the antecedent.

(65) ["Mummy, the milkman's here."] – "If the milkman is here, give him his money."

In (64) the antecedent is factual (i.e., known), while in (65) it is assumed. The former is incompatible with a conditional, while the latter is not, leaving in tact both the unassertiveness and the 'factualness' of the conditional (see also 2.5). In (63) too, the factuality of the antecedents is implicated, but in this instance, by other means, namely that of recurrence. As such a conditional is presumably based on multiple co-occurrences of the events expressed, one may infer that these events have taken place at least once, but this is, indeed, an implicature, not an assertion.

Theoretical-P conditionals 'refer to situations that only exist in the mind of the speaker' (Declerck & Reed, 2001, p. 50) and are either neutral or non-neutral, which comes down to whether or not a relation between the possible world (i.e., theoretical) and the actual world is expressed. Neutral theoretical-*P* conditionals do not imply any relation between the theoretical and actual world. They are non-specifically referential, universal or habitual, as in (66) to (68) respectively.

(66) If a woman has a history of cancer in her family, she should have herself checked at least once a year. (Declerck & Reed, 2001, p. 73)

(67) If water boils, it changes into steam. (Declerck & Reed, 2001, p. 74)

(68) If I go into town, I take the bus. (Declerck & Reed, 2001, p. 75)

In case of universal or habitual conditionals, the consequent usually features simple present or past tense or modal *will* or *would* 'expressing characteristic behaviour' (Declerck & Reed, 2001, p. 75). Other sub-types are *set-identifying conditionals* (metalinguistic conditionals in the accounts by Dancygier & Sweetser, 2005, p. 126, and Athanasiadou & Dirven, 1997a; see next section) *'if you say so' conditionals*, *anchoring-P conditionals* (anchoring the Q-clause to the current discourse) and *imaginary conditionals*, as in (69) to (72) respectively.

(69) Children are orphans if their parents are dead. (Declerck & Reed, 2001, p. 76)

(70) ["He's charming when you get to know him."] – "If you say so." (Declerck & Reed, 2001, p. 78)

(71) If he noticed Brand, he didn't comment. (Declerck & Reed, 2001, p. 78)

(72) In your place I wouldn't react if he wrote me a threatening letter. [...] (Declerck & Reed, 2001, p. 80)

Set-identifying conditionals have antecedents with noun phrases referring to 'a set or mass without specifying the boundaries of the set or mass' (Declerck, 1988, p. 153; Declerck & Reed, 2001, p. 75). Imaginary conditionals, as in (72), are 'not formally distinguishable from counterfactual conditionals' (Declerck & Reed, 2001, p. 80), meaning that they share the same tense pattern.

Contrary to neutral conditionals, according to Declerck and Reed, *non-neutral theoretical-P* conditionals implicate a degree of fulfilment, and as such they carry an implication about the extent to which the theoretical would is likely to resemble the real world. The implication can be that the 'P-world' is closed, meaning that p is accepted to be true (not known, as in factuals), as in (73), where the antecedent is echoic. Several sub-types are distinguished, most notably *inferentials*, which are, contrary to Dancygier and Sweetser's (2005) framework we will discuss in section 3.3.7, strictly 'truth-inferential', as in (74). In this type, the antecedent or the consequent (or both) is frequently marked for epistemic modality by auxiliaries (*must*, *might*) or adverbs like *probably* and *possibly* (cf. Declerck & Reed, 2001, p. 88).

(73) ["I didn't do it." – "I believe you.] But if you didn't do it, it must have been Fred." (Declerck & Reed, 2001, p. 81)

(74) ["This one was painted by Renoir."] – "If this is a Renoir, it must be worth a fortune!" (Declerck & Reed, 2001, p. 85)

Another type is the *open-P conditional*, of which the speaker is not sure whether or not the situation in the antecedent turns out to correspond to the actual world, as in (75) below. Declerck and Reed (2001, pp. 91–92) argue that the antecedent is repetitive in the discourse surrounding the conditional, making it a topic which licenses a prediction.

(75) If the train is late, we will miss our connection in London. (Declerck & Reed, 2001, p. 91)

The position of this type in the typology is somewhat ambiguous, because, especially with future reference, open-*P* conditionals would much more likely be labelled 'neutral'. Declerck and Reed (2001, pp. 91–93) do, albeit indirectly, comment on this problem: 'an open-*P* conditional about the future implies that the speaker does more than just make a guess (supposition): she also assumes that the course of events selected is a real possibility'. It remains unclear how to interpret this comment with respect to the typology, as, for instance, the aforementioned 'non-specific reference type' of neutral-P conditionals would also seem to fall into this characterisation. In open-*P* conditionals, antecedents often refer to the future and imply that *p* is more than a guess.

Tentative P-conditionals carry the implicature that *p* is unlikely, as in (76), and *counterfactuals*, which in Declerck and Reed's (2001, pp. 54, 99) classification are the only true *irrealis conditionals*, indicate that *p* 'might correspond with the actual world, but that this possibility is considered as rather unlikely', as in (77).

(76) If he did/were to do that, he would be in real trouble. (Declerck & Reed, 2001, p. 93)

(77) If he had not tampered with the machine, it would not have broken down. (Declerck & Reed, 2001, p. 99)

Counteridenticals-P conditionals and *interrogative Q conditionals* are distinguished as sub-types, as in (78) and (79) respectively.

(78) If I were you, I wouldn't do it. (Declerck & Reed, 2001, p. 102)

(79) If Oswald didn't kill Kennedy, who did? (Declerck & Reed, 2001, p. 103)

In tentative conditionals, the speaker uses backshift (simple past, past perfect) to express she deems it unlikely that *p* is the case (Declerck and Reed, 2001, p. 93; see also 'future less vivid conditionals' in Iatridou, 2000, p. 234). This epistemic distancing can also be used to express tentativeness of a different type, such as modesty, tact, or politeness (Declerck & Reed, 2001, p. 95). Because of the unlikely-implicature, the antecedent cannot refer to the past, which would shift from tentativeness to counterfactuality. In counterfactuals, the antecedent is assumed to be contrary to fact. While Declerck and Reed (2001, p. 99) argue the counterfactuality of *p* to be a presupposition, I will treat it as treat it as a (strong yet defeasible) conversational implicature, as argued for in section 2.5.4.

As already mentioned at the beginning of this section, Declerck and Reed (2001) remark that *factual-P conditionals* are not very common, whereas *theoretical-P conditionals* are much more common and have numerous subtypes, which reflect previously discussed accounts, most notably the distinction between *neutral-P* and *non-neutral-P* conditionals, which resemble the difference between Sonnenschein's (1892) *implicative* and *non-implicative* conditionals. This distinction was also found in the accounts of Goodwin (1879) and Gildersleeve (1882). These different implicatures of unassertiveness (see previous chapter), in Declerck and Reed's classification of conditionals termed *factual* and *theoretical conditionals*, are linked to modal marking and to tense patterns, which again are highlighted as relevant features for researching the relation between grammatical form and the implicatures of conditionals.[9]

3.2.9 Open and remote conditionals

Huddleston and Pullum (2002, pp. 738–766) distinguish between *open conditionals*, as in (80), and *remote conditionals*, as in (81).

(80) If Ed is here he can come too. (Huddleston & Pullum, 2002, p. 739)

(81) If Ed was/were here he could come too. (Huddleston & Pullum, 2002, p. 739)

The main parameter used to distinguish (80) from (81) is 'satisfaction of the condition', i.e., whether or not the statement in the antecedent is presented as being true. The *open-remote* distinction thus does not coincide with for instance Funk's (1985) *open-closed* distinction. Funk's example of a hypothetical open conditional, repeated below as (82), would be a remote conditional in Huddleston and Pullum's (2002) account.

(82) If she was/were in time, he would be happy. (Funk, 1985, p. 373)

Furthermore, Huddleston and Pullum (2002, p. 738) argue against using *time* as main parameter (see e.g., Goodwin's classification in section 3.2.2), because 'the time sphere does have some limited bearing on the interpretation, but the basic meaning [present, past and future] is the same in all three cases'. Huddleston and Pullum (2002, p. 739) consider the *open conditional* to be the default conditional and, as in Sonnenschein's classification, the criterion for a conditional to be *remote* is having a modal auxiliary in the consequent (usually *would, should, could*, or *might*) and a modal past tense or 'irrealis *were*' in the antecedent.[10] As discussed above (see the discussion of Sonnenschein's classification at the end of section 3.2.3), this makes the criterion objective

[9] For an elaborate discussion of tense patterns in all the different sub-types of conditionals discussed, see Declerck and Reed (2001, Chapter 5).

[10] As we will see below, in Huddleston and Pullum's account too, the past tense may be ambiguous between expressing remoteness (i.e., *epistemic distance* and past time or *temporal distance*).

on the one hand, as the class of remote conditionals is defined on the basis of a manifest characteristic, while on the other hand this might make it less applicable to other languages. Consequently, they argue against the general or universal term *counterfactuals*.

According to Huddleston and Pullum (2002, p. 739), *open conditionals* exclude the combination of a true antecedent and a false consequent. In this sense, they are material conditionals (see section 2.3). Furthermore, they remark, open conditionals license the implicature that the situation in the consequent is a consequence of the situation in the antecedent, which we discussed in detail in terms of connectedness in section 2.6, and that negation of p implies the negation of q, i.e., conditional perfection (see section 2.6.5). As we have already discussed, this implicature can be cancelled, and Huddleston and Pullum provide an example, adapted in (83) below, showing this to be the case.

(83) If it's fine this week-end I'm going to the beach, and in fact I'll probably go even if it's wet. (Huddleston & Pullum, 2002, p. 741)

Huddleston and Pullum (2002) argue for a 'consequence implicature' between antecedent and consequent, which can be causal, as in (84) or inferential, as in (85).

(84) If it rains tomorrow it *will/may* make things very difficult for us. [future] (Huddleston & Pullum, 2002, p. 744)

(85) If he is not at work he *will/may* be watching the cricket. [present] (Huddleston & Pullum, 2002, p. 744)

According to Huddleston and Pullum (2002, pp. 740–743) the causal relationship occurs 'very often' and can also apply to non-present tense, as in (87), in which case it seems to trigger a 'multiple situations' reading, as in (87) and (88), which coincides with the general-particular distiction by Gildersleeve (1882) discussed in section 3.2.3.[11]

(86) If the key is not in my pocket, I have left it in the door. (Huddleston & Pullum, 2002, p. 740)

(87) If they touched the wire they (invariably) got an electric shock. (Huddleston & Pullum, 2002, p. 739)

(88) She cycled to work if she got up early enough. (Huddleston & Pullum, 2002, p. 743)

In an inferential relationship, as in (86), the truth of q follows from p, as in Gildersleeve's (1882) 'ideal condition' (see also Johnson-Laird's 'completely determinate' conditionals, which will be discussed in section 3.3.5). Huddleston

[11] See also Dancygier and Sweetser's 'generic-predictive conditionals' and Athanasiadou and Dirven's 'course-of-event conditionals' in sections 3.3.7 and 3.3.9 respectively.

and Pullum (2002, p. 740) treat the consequence implicature explicitly as an implicature rather than an entailment, providing examples like (89) that clearly do not express a relation of consequence between antecedent and consequent.

(89) If our house was spacious, the place next door was immense.[12] (Huddleston & Pullum, 2002, p. 740)

Although I agree with Huddleston and Pullum's (2002, p. 740) assessment that there is no direct consequential relation expressed in (89), I believe some kind of inferential relation is at play here, and this example shows again the importance of positing the connectedness in conditionals in more general terms. Taking into consideration that the example in (89) is a case of what we will discuss as a 'metatextual conditional' (cf. Dancygier & Sweetser, 2005) in section 3.3.7, the consequent must be related to the antecedent on the metalinguistic level of the utterance, rendering (89) into (90).

(90) If the word *spacious* is suitable for our house, the word *immense* is suitable for the place next door.

Characteristic for this use of open conditionals is the ascription of a scalar property to entities in the antecedent and consequent, and in this view, there still is a clear connection between antecedent and consequent, i.e., the description of our house as *spacious* enables the description of the place next door as *immense*.

The last type of open conditional is the speech-act conditional, discussed by Huddleston and Pullum (2002, p. 740) as featuring a 'relevance protasis' in which 'q is true independently of whether p is true', as in the example in (91).

(91) If you need some help, Helen is willing to lend a hand. (Huddleston & Pullum, 2002, p. 740)

Moving on to *remote conditionals*, Huddleston and Pullum (2002) argue that they express a condition that is satisfied in 'a world which is potentially different from the actual world', as can be seen in the difference between the open conditional in (92) and the remote conditional in (93).

(92) If he tells her she will be furious. (open) (Huddleston & Pullum, 2002, p. 748)

(93) If he told her she would be furious. (remote) (Huddleston & Pullum, 2002, p. 748)

There is 'an implication of non-fulfilment', comparable to Quirk et al.'s (1985) *hypothetical conditionals*. Like open conditionals, remote conditionals implicate exclusion of cases in which p is true and q is false and they license the

[12] As was the case with Quirk et al.'s (1985) second type of rhetorical conditional, this scalar type of relation between antecedent and consequent does not seem to appear in Dutch conditionals, although including the adverb *al*, as in 'Als ons huis *al* groot was, het huis ernaast was immens', does improve the translation of (89), especially in a V1-conditional with accentuated *ons*, as in 'Was óns huis al groot, het huis ernaast was immens'.

consequence implicature (p causes q) and conditional perfection. Remoteness is implicated, as in Huddleston and Pullum's (2002, p. 749) example in (94), as it can be cancelled (see section 2.5 for a more detailed discussion).

(94) I don't know whether he broke it or not, but I doubt it; if he had done he would probably have told her about it. (Huddleston & Pullum, 2002, p. 749)

Remote conditionals license implicatures concerning the degree of likelihood or actuality of the situation in the antecedent. The past tense verb in remote conditionals express 'modal remoteness, not past time'. Antecedents of remote conditionals in this account must contain past tense (or 'irrealis *were*'), whereas the consequent must have a modal auxiliary like *would*, *should*, *could* or *might*. As discussed in the previous sections, there is no formal distinction coinciding with the unlikely-counterfactual distinction. Huddleston and Pullum (2002, p. 754) show the ambiguity between expressing remoteness and past time by past tense, as in (95) below (see also Funk, 1985).

(95) If we weren't home by ten o'clock the landlady would lock us out. (Huddleston & Pullum, 2002, p. 754)

This example has two clear but different possible interpretations: it can be both an iterative open conditional (whenever we weren't home by ten o'clock) and a remote, future-oriented conditional (if we weren't home by ten o'clock tonight).

Huddleston and Pullum (2002) offer a classification of conditionals in English based on *fulfilment*, i.e., *open conditionals* which do not implicate a degree of fulfilment of the condition and *remote conditionals*, which implicate a degree of non-fulfilment. As in the accounts previously discussed, the degree of fulfilment is reflected in *verb tense* and *modal marking*. Epistemic modals are, according to Huddleston and Pullum (2002, p. 744), not frequently used in conditional antecedents, while they are highly frequent in conditional consequents to implicate degree of fulfilment, irrespective of the time expressed.

3.2.10 Conditionals, hypotheticals and counterfactuals

Wierzbicka (1997, p. 52) discusses existing definitions of conditionals (see also section 2.2) and proposes to consider the prototypical conditional conjunction *if* as a 'conceptual primitive', i.e., a concept that cannot be defined in terms of more basic concepts, such as hypotheticality, knowledge or inference: 'instead, we must conclude that the IF-relation is fundamental, irreducible to anything else' (Wierzbicka, 1997, p. 19). She continues by distinguishing not types of conditionals, but types of *if*-sentences: *counterfactuals*, *hypotheticals* and *conditionals*.

The *counterfactual* type of *if*-sentence is discussed by Wierzbicka (1997, pp. 28–30) in terms of Barwise's (1986, p. 22) characterisation of a counterfactual statement being a statement that 'presupposes that the antecedent is false'

(see section 2.5 for arguments against counterfactuality as presupposition). In counterfactuals, the antecedent is marked by *had* and a past participle in the antecedent, and *would* in the consequent, as in (96).

(96) If X had happened, Y would have happened. (Wierzbicka, 1997, p. 50)

Next to this 'affirmative' type, Wierzbicka distinguishes a second, negative type, as in (97).

(97) If X hadn't happened, Y would not have happened. (Wierzbicka, 1997, p. 26)

It might be questioned why this licenses two sub-types of counterfactuals, as negative counterfactuals merely include negation, but Wierzbicka makes a point of this by arguing that English does not, as Comrie (1986, p. 887) argues, 'lack counterfactual conditionals'.[13] While, according to Comrie, the examples in (98) and (99) may be interpreted as non-counterfactual in case context overrides the counterfactual implicature, Wierzbicka (1997, pp. 29–30) found no native English speakers 'who wouldn't regard sentences such as [(98) or (99)] as counterfactual'.

(98) If the butler had done it, we would have found just these clues. (Comrie, 1986, p. 90)

(99) But if the footman had done it, we would have found exactly the same clues. So we really can't tell which one of them did it. (Wierzbicka, 1997, p. 28)

Although Wierzbicka argues that (98) and (99) also elicit varying response of native speakers, (100) and (101) were consistently rejected by her informants.

(100) $*$ If they hadn't found that water, they would have died; so let's hope they found it. (Wierzbicka, 1997, p. 30)

(101) $*$ If they hadn't found that water, they would have died; and it's unlikely that they found it. (Wierzbicka, 1997, p. 30)

Consequently, Wierzbicka (1997, p. 31) argues the 'negative counterfactual' to be a truly counterfactual construction and she hypothesises that the 'negative' element (i.e., epistemic distance) encoded by the past perfect tense is the 'hard core' of counterfactuals across linguistic and cultural contexts. This view, is, as one might imagine, incompatible with the analysis presented in section 2.5, in which counterfactuality was analysed as a conversational implicature. So (98) can be followed by (99) without being resulting in infelicitous discourse, as Comrie would have it. Although I agree with Wierzbicka (1997, p. 28) that the 'normal reading' may be counterfactual, a view she attributes to Davies (1979, p. 158), who indeed argues that 'when used in isolation, even in circumstances

[13] We will come back to this point in section 3.3.9.

where common knowledge cannot be assumed, [counterfactuals] usually have a contrary to fact meaning', I uphold that this is *usually*, but not *necessarily* the case. Davies argues as follows.

> If I say, as a conversation opener, "If it hadn't rained the match would have been played", you would understand me to mean that it had rained, and that the match hadn't been played. It is generally the "open" sense which requires a disambiguating context to make it clear. (Davies, 1979, p. 158)

This suggests, as was discussed before in section 2.5.4, that counterfactuality is an implicature, as it can be cancelled. It may very well be a strongly generalised implicature which, as Davies mentions above, requires specific cancellation contexts (i.e., 'the "open" sense which requires a disambiguating context to make it clear'), but nevertheless, it can be cancelled. Therefore I suggest here that the judgements of Wierzbicka's informants are, at least partly, the result of the specifics of the examples, such as present time reference, and the continuations in (100) and (101), because a continuation as in (102) seems less problematic.

(102) If they hadn't found that water, they would have died, which was exactly what happened.

Again, I do not wish to claim here that the cancellation of counterfactuality such as in (102) is a frequent phenomenon, but this can be said of many generalised implicatures. Rather than hypothesising about frequencies and perhaps non-occurrence, we will take up this point later on in discussing the results of the corpus study in chapters 5 and 6.

Continuing with *hypotheticals*, Wierzbicka (1997, p. 48) characterise this type as an '*if-would* construction which does not include a pluperfect *had* and which refers to the future' (i.e., *if* without *had* or *were* in the antecedent and *would* in the consequent), as in (103) and (104).

(103) If this (X) happened, something else (Y) would happen. (Wierzbicka, 1997, p. 48)

(104) If he married X, I would disinherit him. (Wierzbicka, 1997, p. 48)

(105) If this (X) happens, something else (Y) will happen. (Wierzbicka, 1997, p. 48)

As I discussed before, Wierzbicka (1997, p. 35) argues against Comrie's (1986, pp. 88–89) 'hypotheticality continuum' and argues that it is unclear how certainty that something happened on one end and certainty that something did not happen can be ends on this continuum. Instead, she argues that open conditionals, hypotheticals and counterfactuals constitute different constructions with distinct, non-truth-conditional meanings. According to Wierzbicka (1997, p. 48), the difference between the hypothetical in (104), the conditional in (105), and the counterfactual in (97) is what we analysed before as the more specific

implicature arising from the unassertiveness of conditionals, namely that the hypothetical version is a combination of an *if*-sentence ('of "real possibility"') and 'a kind of hedge or "disclaimer of thought": "I don't say I think this will happen"'. As the difference between this 'hedge' and that of a counterfactual ('I don't say I think this has happened') is a qualitative difference, Wierzbicka (1997, p. 49) denies hypotheticality as a continuum. Rather, she argues that the three types represent 'strictly matchable universals: the conditionals of "real possibility" and the imaginary, non-real, "impossible" "counterfactuals". With this, Wierzbicka's account seems to reflect the same kind of tripartite structure as argued for by earlier grammarians, as was be discussed in previous sections in terms of, for instance, real, potential and unreal conditionals (cf. Kaegi, 1905; see section 3.2.5).

The *conditional* type of *if*-sentence is defined on a negative formal characteristic, i.e., the lack of *had* and a past participle in the antecedent and the lack of *would* in the consequent, as in (105) above. In this type, there is no marking of epistemic distance. Where hypotheticals combine real possibility with the hedge 'I don't say I think this will happen' counterfactuals with 'I say I don't think this happened' , conditionals 'only' express possibility. In terms of Wierzbicka (1997, p. 51), it lacks 'the disclaimer "I don't say: I think: this will happen"'. According to Wierzbicka (1997, pp. 52–53), the difference between conditionals and counterfactuals is that the former allow imagining things that can happen, whereas the latter allow imagining things we think cannot happen. Hypotheticals, in contrast, are less of a 'universal feature of human language and human thought', but 'situated half-way between the conditionals of real possibility and counterfactuals'.[14]

In Wierzbicka's account, we have seen again the importance of tense and modality. Counterfactuals have a past perfect in the antecedent and *would have* in the consequent, and a further subdivision is made into affirmative and negative counterfactuals based on negation in the antecedent, which adds to our inventory the feature *negation*. Hypotheticals in Wierzbicka's account have a simple past in the antecedent and *would* in the consequent. Conditionals, finally, are then those *if*-clauses without any of the aforementioned patterns of tense and modality.

3.2.11 Conclusion

The accounts discussed in this section distinguish different types of conditionals, foremost with respect to the degree of fulfilment of the antecedent. In most accounts, neutral conditionals are distinguished from conditionals that

[14]This phrasing presents conditionals, hypotheticals and counterfactuals on a continuum. Wierzbicka criticised Comrie's account for presenting hypotheticality as a continuum, but this must be seen explicitly in light of the proposed ends in Comrie's (Comrie, 1986, pp. 88–89) continuum: 'a factual sentence would represent the lowest degree of hypotheticality, while a counterfactual clause would represent the highest degree', whereas the lowest degree in Wierzbicka's account would, I believe, not be factuality, but possibility.

implicate a degree of epistemic distance towards p in the antecedent, presenting the situation referred to as, for instance, 'ideal' or 'unreal' (cf. Gildersleeve, 1882), 'potential' or 'futurate' (cf. Kaegi, 1905), 'open' or 'closed' ('remote') (cf. Funk, 1985; Huddleston & Pullum, 2002), or even 'factual' and 'theoretical' (cf. Declerck & Reed, 2001). In light of the previous chapter, we are now able to understand these degrees of fulfilment as conversational implicatures licensed, in part, by the unassertiveness of conditionals.

Analysing the implicatures licensed by the unassertiveness of conditionals as conversational implicatures, i.e., context-dependent and cancellable aspects of the non-truth-conditional meaning of conditionals, does not mean the more specific implicatures are wholly context dependent. We have seen that the literature discusses them in close relation to a number of grammatical aspects of the clauses connected by the conjunction *if* in a conditional construction. These grammatical aspects will serve as features in the corpus study, as they embody the form-side of potential form-meaning pairings or constructions, consequently providing the input for the cluster analyses in the following chapters, which will test combinations of features (i.e., 'clusters') for their status as constructions. All classifications in this section state the importance of *verb tense* to express epistemic distance towards p in the antecedent, and the ambiguity between expression of temporal and epistemic distance provides an argument for a probabilistic approach to the implicatures of conditionals. Related to verb tense is modal marking, most notably of the epistemic kind, with *will* marking single-future occurrence, *would* marking epistemic distance, and verbs like *must* marking inferential processes. With respect to subjunctive conditionals, negation was proposed most strongly by Wierzbicka (1997) as being related to counterfactual interpretation, suggesting this is a feature to be included in the analysis too.

In conclusion, we have seen that most accounts of conditionals dealing with implicatures of unassertiveness distinguish between two major types, namely those conditionals that do not implicate a stance towards the truth of p, and those that do, almost invariably in the negative sense, i.e., implications of low likelihood, improbability or as contrasting with expectations. Before systematically investigating the related grammatical features of verb tense, modal marking and negation, we will discuss accounts dealing with the second type of implicatures argued for in the previous chapter, namely those licensed by the connectedness of conditionals.

3.3 Types of connection

3.3.1 Introduction

As discussed in chapter 2, the material analysis of conditionals deals with conditionals in terms of truth conditions exclusively. In natural language, the use of a conditional conventionally expresses unassertiveness and connected-

ness, and from these conventional meanings, language users derive inferences, among which a more specific connection between antecedent and consequent. We analysed this more specific connection as a conversational implicature in section 2.6, and in the current section, I will discuss classifications of these connections.

The aim of this section is to provide an overview of specific implicatures licensed by the connectedness in conditionals. As in the previous section, I focus on both the specific implicatures, or types of connection, and on the grammatical features that are suggested to play a role in licensing these implicatures, because they form the input for the corpus-based, bottom-up approach to conditional constructions introduced in the next chapter. In sections 3.3.3 to 3.3.11 I will discuss classifications of conditional connections. In section 3.3.12 I briefly summarise the findings, after which I will move on to drawing the conclusions of this chapter in section 3.4. Before doing so, however, a remark concerning so-called 'biscuit conditionals' is in order, which is the topic of the next section.

3.3.2 A note on 'biscuit conditionals'

The accounts discussed in the following sections include a type of conditional that was largely absent from the classifications discussed so far. Austin provides the example in (106), which led to the term 'biscuit conditional'.[15]

(106) There are biscuits on the sideboard if you want them. (Austin, 1970, p. 212)

Austin (1970, p. 213), in discussing *if* and *can*, remarks that while (106) can be expanded into (107), '*if* is still the *if* of doubt or hesitation, not the *if* of condition'.[16]

(107) There are biscuits on the sideboard which you can (or may) take if you want them.

Geach (1976) discusses 'hypotheticals' and equates them with 'sentences joined together with an "if"'. He then excludes cases like (108) and (109) as 'odd cases'.

(108) I paid you back that fiver, if you remember. (Geach, 1976, p. 89)

(109) There's whisky in the decanter if you want a drink. (Geach, 1976, p. 89)

The exclusion of such conditionals is understandable from the focus on hypotheticals in a study of reasoning, or, for that matter, in the truth-conditional analysis of conditionals, as their antecedents do not introduce conditions or hypothetical situations in the classical sense.

[15] Austin (1970, p. 213) credits the example 'I paid you back yesterday, if you remember.' to P.T. Geach.

[16] By this, Austin (1970, p. 210) means that the effect of the *if*-clause in (106) is not the same as in 'I can squeeze through if I am thin enough', 'which *does* imply that "If I cannot squeeze through I am not thin enough", and of course does *not* imply that "I can squeeze through"'. Instead, it is comparable to 'I can if I choose', which, according to Austin, 'is precisely different' from the aforementioned implications.

In the following sections, it can be seen that the type explicitly excluded by Austin as not being 'conditional' finds its way in many (more recent) classifications. As we saw in section 2.2, cases such as (108) and (109) are usually omitted in formal-semantic analyses, because they 'do not state in any sense conditions under which the consequent is true, rather they seem to somehow operate on a higher speech act level' (cf. von Fintel, 2011, p. 1517). As already discussed in the aforementioned section, in this study I do consider these cases conditionals. The argument for doing so, is the starting point discussed in chapter 2. In that chapter, we analysed conditionals not in terms of only the truth conditions of the individual propositions p and q and their logical combination using the connective $\supset$, but the meaning expressed beyond their truth-conditional meaning, i.e., non-truth-conditional aspects of meaning expressed by using conditional constructions. As discussed, from a constructional point of view, the fact that examples such as (106) share constructional properties with 'more central cases' of conditionals enables analysing 'biscuit conditionals' and other pragmatic conditionals (cf. Sanford, 1989, p. 5) in relation to what are mostly considered those central cases, instead of disqualifying them *a priori* on what seem to be largely intuitive grounds.

Although much more can be said about biscuit conditionals, and several analyses have indeed been proposed (see references provided in section 2.2), it is not needed to do so here, as we will encounter various more pragmatic types of connections between antecedents and consequents of conditionals in the following sections. With the remark above in place, therefore, we are ready to discuss the first account specifically aimed at types of connections in conditionals.

3.3.3 Telling, decision, performance and knowledge connections

Davies (1979, p. 146) distinguishes four types of connections, which result from a more general framework of semantic analysis of grammatical constructions. The types do not result from lower-level (grammatical, semantic) features, but from the theoretical framework of 'secondary roles', namely 'teller', 'knower', 'decider' and 'performer'.[17] The main types of conditionals are *telling*, *decision*, *performance* and *knowledge* conditionals correspondingly, as in the examples in (110) to (113) respectively.

(110) If you like watching tennis, Wimbledon's being televised this afternoon. (Davies, 1979, p. 146)

(111) If John comes, phone Mary. (Davies, 1979, p. 148)

(112) If the weather's wet, the roads will be treacherous.(Davies, 1979, p. 152)

[17] Primary roles being speaker and addressee.

(113) If he's a local man, he must know about the old mine workings. (Davies, 1979, p. 162)

As can be seen, the first type is similar to the biscuit conditional discussed in the previous section. The antecedent provides the 'reason for the full telling (saying) of the main clause' (Davies, 1979, p. 146). The antecedent in the second type in (111) introduces a condition for the decision in the main clause. The performance conditional in (112) presents the antecedent as the cause of the effect in the consequent.[18] The final type, in (113), is, according to Davies (1979, p. 162), the only type of conditional that 'realise[s] truth functional relations between propositions, and a deductive conclusion in its main clause'. In other words, the antecedent presents an argument which serves as the basis for the conclusion in the consequent.

Telling conditionals are sub-divided into *open* and *closed telling* conditionals, as in (114) and (110) (repeated below) respectively. In both cases, the antecedent provides the reason for uttering the consequent. The difference between the sub-types is that (110) presents the antecedent as knowledge accepted by the speaker – she knows the addressee likes watching tennis, while the antecedent in (114) the antecedent presents a lack of knowledge on the speakers part – she does not know whether the addressee has a want for biscuits.

(114) There are biscuits on the sideboard if you want them. (Davies, 1979, p. 146)

(110) If you like watching tennis, Wimbledon's being televised this afternoon.

In general, telling conditionals present a 'chain of thought' on the level of discourse to motivate the uttering of the consequent.

In decision conditionals, the consequent presents a decision contingent on the antecedent. The antecedent can, but does not have to present another decision. This feature divides this type into single and double decision conditionals, as in (115) and (116) respectively.

(115) If John comes, phone Mary. (Davies, 1979, p. 148)

(116) If you'll just take this bag, I'll pay the taxi. (Davies, 1979, p. 148)

The antecedents of double decision conditionals contain a 'decision modal' and this type is used mostly for making polite requests. According to Davies (1979, p. 151), decision conditionals do not present forms of argument and do not present a conclusion in the consequent, as the antecedent and consequent are not presented as affecting each other. Apart from this distinction, Davies (1979, p. 148) divides decision conditionals 'according to the value of *if* which they realise'. This 'value of *if*' is either temporal (i.e., *when(ever)*), as in (115), question- or query-like, as in (116), or refers to 'accepted knowledge' (i.e., *as* or *since*), as in (117).

[18]Davies (1979, p. 152) remarks that the terms *cause* and *effect* are used here 'as they are used in ordinary language, rather than as philosophically defined concepts'.

(117) If John plays tennis, let's ask him to make up a doubles. (Davies, 1979, p. 148)

What distinguishes telling and decision conditionals from performance and knowledge conditionals (see below) in terms of grammatical features, is that the former types 'may have a modal verb in the dependent clause' (such as *will*, *can* and *must*) and 'may have a non-declarative main clause' (Davies, 1979, p. 149). Note, however, that modal verbs in the antecedent are not a necessary feature.

Performance conditionals present the antecedent as the cause of the effect presented in the consequent. Three sub-types are distinguished. First, the *open prediction* conditional, in which the antecedent presents a situation as one that the speaker is agnostic of, and the consequent is the effect of the occurrence of that situation, as in (118). Second, the *induction* type, in which the antecedent is closed, i.e., the knowledge is accepted and from that knowledge, a conclusion is drawn, as in (119). Note, however, that that no formal features which may distinguish between the 'open' and 'closed' nature of the antecedent are discussed by Davies. Third, there is the *counterfactual conditional*, of which Davies argues that it does not necessarily express a situation as 'contrary to fact', but rather as distanced (see section 2.5.4), as in (120).[19]

(118) If the weather's wet, the roads will be treacherous. (Davies, 1979, p. 152)

(119) If this plane has flown a thousand times without an accident, it won't crash now. (Davies, 1979, p. 157)

(120) If the Germans had invaded England in 1940, they would have won the war. (Davies, 1979, p. 157)

As can be seen in the examples, in most cases of performance conditionals, the consequent features a form of the modal verb *will* or *may*.

Knowledge conditionals are, according to Davies (1979, p. 162), 'the only type of English conditional which does realise truth functional relations between propositions, and a deductive conclusion in its main clause'. They can either be *independent knowledge* conditionals, as in (121), or *non-independent knowledge* conditionals, as in (113), repeated below.

(121) If whales are warmblooded then whales are mammals. (Davies, 1979, p. 162)

(113) If he's a local man, he must know about the old mine workings. (Davies, 1979, p. 162)

The feature that distinguishes the two sub-types is the presence of a modal verb in the consequent. Only in the type in (121), including the modal verb (*must*) in the consequent that highlights the reasoning process, the antecedent

[19]Davies (1979, p. 157) remarks that non-counterfactual subjunctive conditionals 'occur frequently in learned argument and in detective fiction'.

is presented as closed. A last type of knowledge conditionals is, as is the case in other classifications, presented as 'a somewhat peripheral group' of conditionals (Davies, 1979, p. 167) in which common knowledge is expressed in the consequent to indicate either the truth or falsity of the antecedent, as in the examples below.

(122) She's fifty if she's a day. (Davies, 1979, p. 167)

(123) If that's really gold I'm a Dutchman. (Davies, 1979, p. 167)

In (122), modus ponens ('If p, then q. p, therefore q.') is used to derive the truth of the antecedent on basis of the obvious truth of the consequent ('she's (at least) a day old'). In (123), by modus tollens ('If p, then q. Not q, therefore not p.'), the falsity of q is used to express that p is also false.

Davies' classification has not been widely used after publication. This may have to do with the way in which Davies attributes her semantics to 'literal meaning' (Davies, 1979, Chapter 2). Davies argues, as Huddleston (1981, p. 121) notes, 'that there is a correspondence in the area of mood between literal meaning and surface grammar – that one specification of literal mood meaning will attach to one specification of surface grammar'. Huddleston argues that Davies does not appropriately distinguish between the meaning of forms and situational factors. He provides the following example.

> [Davies] says that a sentence like *It may be raining* expresses the assumption that 'neither you nor I know [whether it is] (but someone else perhaps does)' [...]. But such assumptions are not attributable to the meaning of *may*. If a student asks whether there is a question on modality in an examination I have set, and I reply *There may be*, I am not implying that I don't know [...]. (Huddleston, 1981, p. 122)

I agree with Huddleston (1981) that it is problematic that Davies (1979) assigns literal meaning to context-less sentences, i.e., to form only, while, as Huddleston's example above shows, context may distinguish between multiple meanings of utterances. This can be seen in Davies' own examples too. For instance, the knowledge status of the antecedent distinguishes between sub-types of performance conditionals, but is highly context dependent. Although Davies' framework has not been used much after publication, the characterisation of some types of conditionals can be found in subsequent classifications, such as the main difference between telling conditionals, performance conditionals and knowledge conditionals, which find their counterparts in, for instance, the respective speech-act, predictive and epistemic conditionals in Dancygier and Sweetser's (2005) classification (see section 3.3.7).

With respect to grammatical features of importance to the connection implicatures, from this classification, we see the importance of modal marking in the antecedent and, to a larger extent, the consequent for determining types of connections between antecedents and consequents. We will see this repeated in various classifications discussed in the following sections.

3.3.4 Direct, indirect and rhetorical conditionals

Quirk et al. (1985) propose two main main types of conditionals based on the connection between antecedent and consequent, namely those expressing *direct*, and those expressing *indirect* conditions, largely coinciding with Austin's aforementioned distinction between conditional and non-conditional *if*.

The direct type expresses the contingency of the consequent on the fulfilment of the condition in the antecedent, as in (124) and (125) below.

(124) If you put the baby down, she'll scream. (Quirk et al., 1985, p. 1088)

(125) If he changed his opinions, he'd be a more likeable person. (Quirk et al., 1985, p. 1088)

In the more peripheral indirect type of conditionals, the antecedent presents a situation that is not directly related to the situation in the consequent, as in (126).

(126) She's far too considerate, if I may say so. (Quirk et al., 1985, p. 1089)

The condition in this type is taken to be dependent on the speech act in the consequent, i.e., the assertion 'she's far too considerate'. The speaker here uses an *if*-clause as a hedge 'on the force of the speech act' in the consequent, amounting to a politeness strategy by asking for permission (see Brown & Levinson, 1987, p. 272), but she can also address the correct understanding of an utterance, as in (127).

(127) She and I are just good friends, if you understand me. (Quirk et al., 1985, p. 1089)

The last type is the *rhetorical conditional*, in which one of the propositions is 'patently absurd' – comparable to Davies' (1979) examples in (122) and (123) above. In a likewise fashion, the falsity of q is carried over to p, as in the example in (128) below.

(128) If they're Irish, I'm the Pope. (Since I'm obviously not the pope, they're certainly not Irish.) (Quirk et al., 1985, p. 1094)

Conditionals expressing direct conditions are divided into *open conditions* and *hypothetical conditions*, a distinction based on the feature of 'backshift', which indicates that the time marked by the verb form precedes the time referred to. Backshift can be used to express epistemic distance, as discussed in section 2.5 (see, among others, Leech, 1971, pp. 99–105; Dancygier, 1998, p. 37), resulting in, in Quirk et al.'s (1985) terms, a 'hypothetical conditional'. The distinction does not have an effect on the type of relation between the antecedent and consequent, but rather on the expressed belief in fulfilment of the condition in the antecedent, reminiscent of the accounts discussed in section 3.2. Open conditions are 'neutral', meaning that they do not express an

epistemic stance towards the fulfilment of the condition, as in (129), while hypothetical conditions do express epistemic stance towards what is expressed, as in (130) to (132) (examples adapted from Quirk et al., 1985, p. 1091).

(129) If Colin is in London, he is undoubtedly staying at the Hilton. (Quirk et al., 1985, p. 1091)

(130) If he changed his opinions, he'd be a more likeable person. (Quirk et al., 1985, p. 1091)

(131) They would be here with us if they had the time. (Quirk et al., 1985, p. 1091)

(132) If you had listened to me, you wouldn't have made so many mistakes. (Quirk et al., 1985, p. 1091)

Future conditions express that the condition will likely not be fulfilled, as in (130), *present conditions* express that the condition is not fulfilled, as in (131), and *past conditions* express that the condition was not fulfilled, as in (132). Tense marks the antecedent for these modalities, which are carried over to the main clause. The tense used in the consequents of (130) to (132) marks the speaker's belief: for future reference this is said to be 'contrary to expectation', for present reference 'contrary to assumption' and for past reference 'contrary to fact' (or *counterfactual*; Quirk et al., 1985, p. 1092). Although this classification is widely used and highly acclaimed (see e.g., Aarts, 1988), Quirk et al.'s (1985, p. 1902) statement that hypothetical conditionals with past time reference 'conveys the speaker's belief that the condition [...] was not fulfilled' has attracted criticism. Huddleston (1988, p. 353) argues that 'this view is widespread among grammarians, though philosophers have often pointed out that it is erroneous'. This ties in with the discussion in section 2.5.4 on the difference between subjunctive conditionals and counterfactuals. Whereas Quirk et al. (1985, p. 1092) argue that past hypothetical conditionals, as in (132), express a condition that is contrary to fact, it would have been more precise to speak of *implicating* instead of *conveying*. Huddleston (1988, p. 353) also argues that Quirk et al. ignore 'the use of the past perfect with present time reference', as in (133).

(133) If your father had been alive today, he would have disowned you. (Huddleston, 1988, p. 353)

Indirect conditionals are classified as open conditions, 'that are dependent on an implicit speech act of the utterance (Quirk et al., 1985, p. 1095).[20] They are introduced mainly by *if*, but also by 'in case', 'assuming (that)', 'in the event (that)', and 'supposing (that)'. Four sub-types are distinguished. In the first sub-type, the antecedent expresses a request for permission for the speech

[20]Open conditions are neutral conditions, i.e., those antecedents that leave 'unresolved the question of the fulfilment or nonfulfilment of the condition' (Quirk et al., 1985, p. 1091).

act in the consequent, making it a suitable device for politeness strategies, as in (134). The antecedent in the second sub-type expresses a metalinguistic comment on the wording of the consequent, as in (135). In the third sub-type, the antecedent addresses 'extralinguistic uncertainty' on the part of the speaker or hearer about what is expressed in the main clause, as in (136) (also called 'non-committal conditionals', cf. Puente-Castelo, 2021, p. 192). The last sub-type has an antecedent in which is expressed on what condition the indirect speech act in the consequent is uttered, such as the request in (137) and the offer in (138).

(134) If I may be quite frank with you, I don't approve of any concessions to ignorance. (Quirk et al., 1985, p. 1095)

(135) His style is florid, if that's the right word. [...] (Quirk et al., 1985, p. 1096)

(136) Chomsky's views cannot be reconciled with Piaget's, if I understand both correctly. (Quirk et al., 1985, p. 1096)

(137) If you're going my way, I need a lift back. (Quirk et al. 1985: 1096) (Quirk et al., 1985, p. 1096)

(138) If you want to borrow a shoe brush, there's one in the bathroom. (Quirk et al., 1985, p. 1096)

There seems to be much similarity between the first (permission) and last sub-type. The description 'the conditional clause expresses the condition under which the speaker makes the utterance' (Quirk et al., 1985, p. 1096) seems somewhat general in such a detailed account of indirect conditionals. The difference between the first and the last sub-type is that the first sub-type addresses a felicity condition contingent on the illocutionary force of the main clause (the act of approving in (134)), while the last sub-type addresses a felicity condition contingent on the propositional contents of the main clause ('there's one in the bathroom' in (138)). Gabrielatos (2010, p. 246) argues that Quirk et al.'s (1985, p. 1095) remark that the speech act expressed in the consequent is necessarily implicit is incorrect, as he encounters examples like (139) in his corpus.

(139) 'I would like to have your permission to extend my stay, Mr Connon'
'Do I have a choice?' asked Connon. 'If I do, which I doubt where Jenny's concerned, then I unhesitatingly offer you my hospitality for as long as you care to accept it.' [GUD 1335] (Gabrielatos, 2010, p. 246)

Gabrielatos redefines Quirk et al.'s (1985) indirect conditionals, based on Funk's (1985, p. 368; see section 3.2.6), as conditionals in which the uttering of the consequent ('or aspects of it') is contingent on the antecedent. He distinguishes two sub-types, *relevance* and *comment* conditionals, as in (140) and (141) respectively.

(140) It was never like this, and my father was an Old Bastard if you must know. [EDJ 2007] (Gabrielatos, 2010, p. 25)

(141) Which are the sectors where you feel, if you had a new settlement, er there would be potential er problems if that's the right word, for the implementation of your regeneration policies in Leeds. [J9S 15] (Gabrielatos, 2010, p. 252)

The difference between the two is that the antecedent of relevance conditionals comments on the *contents* of the consequent, while comment conditionals are metalinguistic in nature and comment on the *form* of the consequent. The reason for Gabrielatos' (2010, p. 246) rejection of the general label of 'speech-act conditional' (cf. Sweetser, 1990) is that 'every utterance is a potential speech act [...], that is, every utterance can be intended, or contextually interpreted, as a speech act'. However, as is made clear by Dancygier (1998, p. 103) in a discussion of Horn (1985, 1989), the label 'speech-act conditionals' or 'biscuit conditional', as discussed in section 3.3.2, refers to conditionals in which the consequent is constituted by a speech act other than the assertive type (see also section 5.8). For direct conditionals, it is the truth of the proposition in the assertive speech act in the consequent that is contingent on that of the antecedent, while for other types, this is not the case. While the argument that every utterance is a potential speech act holds, I hold the label 'speech-act conditional' here to reflect that the relation between the antecedent and consequent resides on the utterance or speech-act level, not on the propositional level.

The final category is the rhetorical conditional, which appears to present an open, direct condition, but makes 'a strong assertion' either by projecting the absurd level of falsity of proposition q in the consequent onto proposition p in the antecedent, in turn rendering it false, as in (128) above or (142) below, or by projecting the apparent truth of p onto q, showing it to be true, as in (143), mostly in situations where scalarity is involved (see also Davies' examples of knowledge conditionals in the previous section).

(142) If you believe that, you'll believe anything. ('You certainly can't believe that.') (Quirk et al., 1985, p. 1095)

(143) The package weighed ten pounds if it weighted an ounce. (The package certainly weighted ten pounds.) (Quirk et al., 1985, p. 1095)

Quirk et al. (1985, p. 1094) argue that, while they share the appearance of conditionals expressing an open condition, rhetorical conditionals are (strongly) assertive, a characteristic opposed to the non-assertiveness of open conditions.

The simplicity of Quirk et al.'s (1985) distinction into direct and indirect conditions is not only grammatically plausible, but Gabrielatos' (2010, pp. 155–158) results show that the distinction also holds up in a corpus study of written English. He argues that this is mainly because of the respective syntactic differences between the consequent as an adjunct in *direct*, and the consequent

as a disjunct in indirect conditionals. This supports the corpus-based approach introduced in the next chapter to investigate the relation between grammatical features and implicatures of conditionals. Therefore, from this classification, we take *sentence type*, for the distinction between direct and indirect conditionals, *verb tense*, and *modal marking*, for the distinction between open and closed conditionals as relevant features.[21]

3.3.5 Complete, partial and non-determinate conditionals

In reaction to logic-oriented accounts (see section 2.3), Johnson-Laird (1986) aims at developing a psychologically plausible theory of conditionals. He argues that 'we can make sense of certain conditionals only by bearing in mind that they are invariably taken to mean that some sort of relation is intended to hold between antecedent and consequent' (Johnson-Laird, 1986, p. 67). Johnson-Laird's account is the result of a number of psychological studies into people's reasoning with conditionals. Its foundation is, therefore, mainly empirical. Johnson-Laird (1986, p. 73) found that people normally do not use (formal) rules of inference, but use the information in the antecedent enriched by existing beliefs and context to interpret the conditional and search for counterexamples. A connection is needed for a theory of mental models (for an introduction to mental models, see Johnson-Laird, 2012), in which a conditional allows for a deduction about a finite domain in the two steps presented in (144) below.

(144) Step 1. Construct a mental model based on the superficial linguistic representation of the antecedent and on those beliefs triggered during this process.
Step 2. Interpret the consequent in the context of the model and general knowledge. (Johnson-Laird, 1986, p. 65)

As step 1 in (144) shows, the mental model of a conditional constructed by a language user is determined by the antecedent. The notion of 'finite domain' is important with respect to the notion of 'possible worlds' as used by Stalnaker (1968) (see also section 2.5). Johnson-Laird (1982, p. 31; 1986, p. 63) argues that the infinity of the set of possible worlds makes the theory less psychologically plausible, as 'it cannot fit directly into an individual's mind'. A mental model is more restricted to the content and context of the utterance under evaluation.

The nature of the connection between antecedent and consequent can be temporal-conditional, as in (145), in which case the consequent of a conditional can refer to an event that occurred before, during or after the event in the antecedent. The nature can also be causal (see also Miller & Johnson-Laird, 1976), as in (146), logical, as in (147) or deontic, as in (148).

[21] The distinction between *open* and *closed* conditionals, based on tense and modal marking, however, does not show to be a discriminating feature in Gabrielatos' quantitative corpus study. This point will be taken up further in chapter 6.

(145) If it is hot now, then it {was hot yesterday/is hot now/will be hot tomorrow}. (Johnson-Laird, 1986, p. 67)

(146) If the match had been struck, it would have lit. (Johnson-Laird, 1986, p. 68)

(147) If a woman has a husband, then she is married. (Johnson-Laird, 1986, p. 73)

(148) If you take the cake, I'll smack you. (Johnson-Laird, 1986, p. 64)

Although these different types of connections between antecedent and consequent are of importance to the mental model, they are not described in further detail. Rather, Johnson-Laird determines the main categories by the degree of determination in which the antecedent determines the situation in the consequent.

Johnson-Laird (1986, pp. 69–71) distinguishes between antecedents that completely determine the consequent, as in (149), those that partially determine the consequent, as in (150) and those that do not determine the consequent, but 'stipulate[s] the relevance of the information conveyed by the consequent', as in (151).

(149) If someone is in a room, there is a room that is not empty. (Johnson-Laird, 1986, p. 70)

(150) If the accused was on a train when the murder occurred, then he (sic [JL]) must be innocent. (Johnson-Laird, 1986, p. 71)

(151) If you've run out of petrol, there's a garage down the road. (Johnson-Laird, 1986, p. 69)

As can be seen, the last type, in (151), is comparable to Quirk et al.'s (1985) indirect conditional as discussed in the previous section, in which the antecedent is not a condition for the consequent directly, but a condition on the speech act made in the consequent. The complete and partial types are comparable to Quirk et al.'s (1985) direct conditions, although the two types do not coincide with further sub-types by Quirk et al. (1985). According to Johnson-Laird (1986), the partial-type exemplified in (150) is the most frequent, and most problematic category. The problematic nature of this type is due to the fact that the antecedent provides only part of the state of affairs in which the consequent must be evaluated, i.e., one has to 'enrich' the antecedent in (150) (by a connecting premise or topos, see e.g., Ducrot, 1996) to arrive at a mental model that completely predicts the consequent, as in (152).

(152) If the accused was on a train when the murder occurred, and a person cannot be in two places at once, and there are no cinemas on trains, and ..., then the accused is innocent. (Johnson-Laird, 1986, p. 71)

Because conditionals can be either of these three types, corresponding to three mental models, Johnson-Laird (1986, p. 72) argues that there 'is no guarantee of the validity of many everyday inferences', explaining why people generally perform poorly on formal reasoning tasks with conditionals (see e.g., Wason, 1968). Furthermore, as Johnson-Laird argues that the partial type in (150) is most frequent, many conditionals in language use are require background knowledge and context to be evaluated.

As Johnson-Laird's (1986) account is psychological in nature, no grammatical features are described in relation to the types discussed. Furthermore, it remains somewhat unclear whether and how the two parameters (nature and degree) interact. For instance, it seems that in cases in which the antecedent does not determine the consequent (comparable to Quirk et al.'s indirect conditions) the connection cannot be described in terms of a temporal, causal, logical nature, but seems restricted to a connection on the speech-act level. Although no grammatical features can be distilled from this classification, we can see modal marking in the consequents of the examples provided playing a role comparable to its role in the previously discussed classifications. I therefore believe this brief discussion of Johnson-Laird's (1986) account is relevant for the current purpose, as it is an alternative to the strictly logical analysis of conditionals discussed in section 2.3.2 and highlights the importance of not only contextual factors such as world knowledge beyond the propositions expressed in antecedents and consequents of conditionals, but also of the connection between these two clauses in everyday use of conditionals.

3.3.6 Now and not-now conditionals

Nieuwint (1992) discusses the distinction between indicative conditionals (i.e., *real, open conditionals*), as in (153), and subjunctive conditionals (i.e., *hypothetical, unreal conditionals*), as in (154).

(153) If Hitler invades England Germany will win the war. (Nieuwint, 1992, p. 5)

(154) If Hitler had invaded England Germany would have won the war. (Nieuwint, 1992, p. 5)

Nieuwint's main point of departure is the problem already discussed in section 2.5.4, namely that the term *counterfactual* should be avoided, because what is traditionally labelled as such does, according to Nieuwint (1992, p. 177), 'not itself make any claim about matters in the real world'. Instead, a conditional as in (154) makes a claim about an imaginary world (i.e., a possible world in terms of Stalnaker, 1968) which bears no necessary relation to the real world. Nieuwint's (1992, pp. 175–176) main parameter is *time* manifested in *tense*, separating 'conditionals whose meaning is "now"' (in the sense of 'non-past') from 'conditionals whose meaning is "not-now"', in the sense of either 'past', or

"'imaginary" [...] whose fulfilment is 'closed' with respect to "now"'.[22] Although the main parameter does not distinguish between different connections between antecedent and consequent, the reason for discussing this account here is that the sub-types distinguished by Nieuwint are in fact based on the connection.

The domain of *now conditionals* is the real world and they are capable of 'materializing in the non-past real world of the present or the future' (Nieuwint, 1992, p. 175). In this category, a further division is made on basis of the connection between the antecedent and the consequent. This connection can be either *free* or *unfree*. *Free conditionals* are 'stochastic' if they have no direct causal or logical relation and can be either specific and uncertain, as in (155), or generic, as in (156).

(155) If the hotel is full we'll go to a campsite. (Nieuwint, 1992, p. 180)

(156) If the hotel is full we always go to a campsite. (Nieuwint, 1992, p. 180)

If a *now conditional* is not *free*, it is *unfree* and bound to either causality, in which case the antecedent causes the consequent, as in (157) and (158), or to logic, in which case the antecedent implies the consequent, as in (159). The type of *unfree now conditionals* is, according to Nieuwint (1992, p. 180), the only type that can be judged true or false.

(157) If you drop that vase it will break. (Nieuwint, 1992, p. 180)

(158) If you heat ice it will melt. (Nieuwint, 1992, p. 180)

(159) If you're a bachelor you're unmarried. (Nieuwint, 1992, p. 180)

As can be seen, the differences between (155) and (156) on one hand and (157) and (158) on the other correspond to the difference between a specific and a generic reading. In the case of a specific claim, the fulfilment of the antecedent must be uncertain at the time of speaking (Nieuwint, 1992, p. 175), which is not the case for generic claims (but see the discussion in section 2.5.3).

Contrary to *now conditionals*, the domain of *not-now conditionals* is either the past or the imaginary (Nieuwint, 1992, p. 176), a distinction we have discussed at length in section 3.2. In the former, its fulfilment is open in the (real) past and in the latter it is open in the imaginary. Not-now conditionals situated in the past of the real world can be either reported speech with a backshifted verb in the antecedent, as in (160), or concern a past event in the antecedent. In the latter case, it can, again, be free, as in (161) and (162) or unfree, as in (163) and (164), each with its respective specific and generic sub-types.

(160) He said that if the hotel was full they'd go to a campsite. (Nieuwint, 1992, p. 180)

(161) If I did that, I (will have) apologized. (Nieuwint, 1992, p. 180)

[22] These types are comparable to Funk's (1985) *open* and *closed* conditions discussed in section 3.2.6.

(162) If she played the Schubert as an encore she left out the repeats. (Nieuwint, 1992, p. 180)

(163) If he told you that, he was lying. (Nieuwint, 1992, p. 180)

(164) If it rained the streets got wet. (Nieuwint, 1992, p. 180)

These *not-now conditionals* all concern the real world and as such are still indicative conditionals. *Not-now conditionals* can either be used as an invitation for an interlocutor to take on the imaginary perspective (i.e., in which the imaginary world is real) or an invitation to 'apply contraposition', which shows that the indicative version of the antecedent is untenable (in the real world), to speculate about the present or future (Nieuwint, 1992, pp. 178–179). For *imaginative conditionals*, the same distinction between free and unfree conditionals holds. *Free imaginative conditionals* can only make specific claims, as in (165), and no generic claims, as seen in (166), while *unfree imaginative conditionals* can express both, as in Nieuwint's examples in (167) and (168) respectively.

(165) If that were water, it would freeze at 0° C. (Nieuwint, 1992, p. 178)

(166) * If something were water, it would freeze at 0° C. (Nieuwint, 1992, p. 178)

(167) If you dropped that vase, it would break. (Nieuwint, 1992, p. 180)

(168) If you were invisible, no one would be able to see you. (Nieuwint, 1992, p. 180)

As Nieuwint (1992, pp. 154–155) makes explicit, verb tense is an important feature of conditionals. He argues that the use of *if* and a simple past or past perfect tense in a 'present tense context' licenses the listener to 'automatically assume that a switch to an imaginary [...] world is being made by the speaker, whereas this is not the case in a "past context"'. In case of a specific prediction in the consequent, a modal auxiliary and an infinitive is used in the consequent, whereas a simple present or past is used in case of a non-specific (i.e., generic, habitual) prediction. While Nieuwint explicitly mentions the problems connected to using the term 'counterfactual', his class of *imaginary conditionals*, marked by tense and modal auxiliaries, leaves the problem somewhat unresolved, as imaginary conditionals are not connected to the real world, and thus could be in accordance with it, but do not have to. As discussed before, modal marking by tense can be ambiguous. With respect to implicatures of connectedness, Nieuwint's distinction between *free* and *unfree conditionals* resembles Johnson-Laird's distinction between complete and partially determined conditionals discussed in section 3.3.5, and the distinction between *specific* and *generic conditionals* is reminiscent of a number of accounts discussed in section 3.2, as is the distinction between *causal* and *logical connections*. Except for the occurrence of the modal auxiliary *will* in antecedents (see Nieuwint, 1992, Chapter 3), and the role of *will* and *would* in consequents in distinguishing

(to some degree) between causal and logical connections between antecedents and consequents of *now* and *not-now conditionals*, with respect to the current purpose, this account mainly reinforces the importance of modal marking by tense and auxiliaries in conditionals with respect to the connection between antecedents and consequents.

3.3.7 Content, epistemic and speech-act conditionals

Sweetser (1990) and Dancygier (1998) have both offered a classification of connections between antecedents and consequents of conditionals. Dancygier and Sweetser (2005) offer a unified approach in terms of 'Mental Spaces Theory' (cf. Fauconnier, 1994; see also section 2.5.4). I will focus on their most recent approach here mainly, but I will briefly comment on differences with respect to their earlier accounts.

Dancygier and Mioduszewska (1984, pp. 121–125) argue for two main types of conditionals: *consequential* and *non-consequential* conditionals, as in (169) and (170)-(171) respectively.

(169) If I catch the train, I will come on time. (Dancygier & Mioduszewska, 1984, p. 122)

(170) If Susie is listening at the door, she is breathing quietly. (Dancygier & Mioduszewska, 1984, p. 122)

(171) If she called yesterday, I was out. (Dancygier & Mioduszewska, 1984, p. 125)

In consequential conditionals, the situation expressed in the antecedent causes that in the consequent, while in the non-consequential conditional in (170) the situation in the antecedent is an argument for the conclusion expressed in the consequent. Non-consequential conditionals can also express more pragmatic connections, as in (171). For Sweetser (1990), the relation between antecedent and consequent in all the examples above is one of causality, even in what Dancygier and Mioduszewska (1984) call 'non-consequentials'. The approaches are not incompatible, however, as Sweetser (1990, p. 127) extends causality into different domains. Conditionality for Sweetser is best captured in von Wright's (1973) idea of 'a possible causal intervention', in which the antecedent introduces a hypothetical world which differs in only one respect from the real world and this difference is caused by the possible intervention, as in the mental models of Johnson-Laird discussed in section 3.3.5. Sweetser (1990, pp. 113–114) argues that the type of connection is pragmatically inferred, while van der Auwera's (1986) 'Sufficient Conditionality Thesis' (a term used by Sweetser, whereas it is called the 'Sufficiency Hypothesis' by van der Auwera, 1986, p. 200), in which the antecedent is interpreted as a sufficient condition for the 'realisation' of the consequent, is constant, akin the approach argued for in chapter 2, albeit in different terms. Sweetser (1990, pp. 113–119) classifies

conditionals in three main domains. The connection *if* introduces is either a *content sequence*, as in (169), an *epistemic sequence*, as in (170) or a *speech-act sequence*, as in (171) above. Sweetser also discusses antecedents that express metalinguistic comments, as in (172).

(172) OK, I'll have a *tomahto*, if that's how you pronounce it. (Sweetser, 1990, p. 140)

From a diachronic perspective, Sweetser (1990, p. 141) argues that 'the kind of causal priority which is evidently important in our interpretation of natural language conditional sentences has its roots in the content world'. The more specific implicatures of connectedness are thus, in Sweetser's view, directly causal, or have been pragmatically extended from this type into the domains of reasoning and speech acts.

In Dancygier's (1998) classification, Sweetser's (1990) non-content domains function as sub-types of *non-predictive conditionals*. Dancygier (1998) criticises earlier accounts, such as those discussed in section 3.3.4, in which *open* or *neutral conditionals* are distinguished from *hypothetical* or *remote* conditionals as main types. She argues that this main distinction does not clearly separate temporal reference from epistemic modality, both expressed by means of verb forms in English. For instance, Dudman's example in (173) (cited in Dancygier, 1998, p. 36) would be classified as *open* (i.e., direct and neutral) in Quirk et al.'s (1985) classification, while contextual assumptions about deceased people mark the impossibility, or at least the high improbability, of the situation.

(173) If Grannie attends the rally, it will [...] be as a ghost. (Dudman, 1984, p. 153)

Mainly because of the ambiguous role of tense in indicating time or epistemic distance, as discussed in previous sections already, Dancygier (1998, pp. 37–38) proposes the main parameter *backshift*, which refers to 'every case of language use such that the time marked in the verb phrase is earlier than the time actually referred to'. Backshift by means of verb tense in *predictive conditionals* must then interpreted in epistemic terms (cf. the discussions in section 3.2), in contrast to tense in *non-predictive conditionals*, which express an indirect connection between antecedent and consequent. Outside the predictive and non-predictive distinction, Dancygier (1998, pp. 46, 63) places 'generic constructions' of the type in her example in (174), which is used to express general statements and 'seem[s] to share some features of both of the classes'.

(174) If I drink too much milk, I get a rash. (Dancygier, 1998, p. 63)

It shares with predictive conditionals its construal of the consequent as the result of the antecedent, as both introduce assumptions used in prediction. In this type, *if* can be paraphrased as *when* or *whenever* (see Dancygier, 1998, p. 64). What generic conditionals share with non-predictive conditionals is that the use of verb forms is similar as their use outside conditionals – mainly indicative

of time, and less similar to their use within predictive conditionals. The link to predictive conditionals seems to prevail, however, because in Dancygier and Sweetser (2005, p. 95) this type is classified as a predictive conditional.

Within the main type of predictive conditionals, Dancygier (1998) distinguishes between two sub-types of backshift, namely *if-backshift*, in which only the antecedent is affected, as in (175), and *hypothetical backshift*, in which the whole conditional is affected, as in (176) and (177).

(175) If it rains, the match will be cancelled. (Dancygier, 1998, p. 26)

(176) If it rained, the match would be cancelled. (Dancygier, 1998, p. 26)

(177) If it had rained, the match would have been cancelled. (Dancygier, 1998, p. 26)

This distinction reflects the distinction between *open* and *closed* conditionals discussed earlier (see section 3.2). Backshift in (176) creates what could be called a 'counterfactual to the present' meaning, whereas in (177), it creates a 'counterfactual to the past' meaning. This backshift is, however, not directly observable, and I find it important to discuss this problem in somewhat more detail here, because Dancygier's account depends partly on this distinction. The *if*-clause in (175) has a present-tense verb and can be interpreted as uncertainty ('Does it rain now?'), prediction ('Will it rain in the future?') or generic ('Whenever it rains [...]'). Modal and temporal interpretation of verb tense are hard to distinguish and require context, or, as Dancygier (1998, p. 43) mentions, 'in the absence of time adverbials the context often remains as the sole source of information'. Although backshift is presented as criterion for the characteristic of 'predictivity', it is itself a latent feature indirectly distinguishing between temporal reference and epistemic distance. The distinction between *latent* and *manifest characteristics* (cf. Lazarsfeld, 1966, p. 162) is important for the bottom-up approach introduced in the next chapter, because latent characteristics are not directly perceivable through observation and their parameters must be derived through manifest observations (cf. Sandri, 1969, p. 102). Lazarsfeld argues latent characteristics to have only a probabilistic relation to the underlying characteristics, which makes annotation in corpora indirect as well. The degree of backshift correlates with the epistemic distance marked by the speaker towards what is expressed, from no or weak distancing in (175) to strong distancing in (177).

Most common in predictive conditionals is the use of *will* in the consequent to refer to a future situation (i.e., a prediction), but it can also signal 'epistemic or habitual prediction'. Dancygier (1998, p. 45) follows Joos (1964) in describing (non-hypothetical) *will* as 'a kind of commitment on the part of speaker that she has sufficient grounds for saying what she does and takes a kind of responsibility for the statement made'. Predictive conditionals frequently have a sentence-initial antecedent (see section 5.2 for a discussion concerning this claim) and they usually invoke alternative scenario's through conditional perfection (cf.

Geis & Zwicky, 1971; see also the discussion in section 2.6), through which, Dancygier (1998, p. 43) and Dancygier and Sweetser (2005, p. 32) argue, the antecedent opens up an 'extension space' in which its consequent holds and an 'alternative space' in which the consequent of its negation holds. It is mostly in these cases that the resumptive element *then* is used to refer to the 'unique space set up' opened up by the antecedent (Dancygier & Sweetser, 1997, p. 131), whereas it cannot be felicitously used in conditionals with generic reference, such as concessive conditionals (see below).[23] With respect to these alternative scenario's, Dancygier and Sweetser (1997) and Dancygier and Sweetser (2005) consider concessive conditionals, as in (178), to be 'predictions without specific alternatives'.

(178) Even if he commits a crime, they will vote for him. (Dancygier & Sweetser, 2005, p. 157)

Following Kay (1990), Dancygier and Sweetser treat *even* as a scalar operator and they analyse (178) by arguing that 'the most extreme case of the range of alternative values [...] for P is still not extreme enough to set up an alternative scenario to Q'. Therefore, concessive conditionals do not invoke an alternative scenario, but cancel the standard predictions connected to P in (178). This scalar relation can be further explained in terms of Ducrot's (1996) topoi: background assumptions that are scalar in nature and to which concessives introduce an exception (cf. Reuneker and Boogaart, 2013, p. 295; see also Lycan, 2001, p. 122).

For Sweetser (1990, p. 116), conditionals in the epistemic domain are one step further from real-world causality and express causality in reasoning processes; the (hypothetical) knowledge of the truth of the antecedent is a sufficient condition for drawing the conclusion in the consequent, as in (179).

(179) If she's divorced, (then) she has been married. (Sweetser, 1990, p. 116)

Dancygier (1998, p. 83) argues that in such non-predictive conditionals there is no backshift, as verb tense indicates time and not modality. According to Dancygier and Sweetser (2005, p. 117), the function of the antecedent of an epistemic conditional is 'simply to give background to the addressee, by invoking the relevant parts of the cognitive context which brought about this conclusion'. Sweetser (Sweetser, 1990, p. 126; cf. Haiman, 1978) classifies antecedents of epistemic conditionals as topics: 'they are givens, but only relative to the apodosis'. In relation to the discussion in the previous chapter (see section 2.5), the question is why given information is presented as an unasserted antecedent. Sweetser argues that this is because the speaker's epistemic state

[23]Note that van Belle and Canegem-Ardijns (2007, p. 829) argue against the claim that 'predictive conditionals almost inevitably get a *q if and only if p* interpretation'. They also argue that *conditional perfection* is too broad a notion and that there are three types of conditional perfection, namely 'only if p, q', 'only if not p, not q', and 'if not p, then not q'. As this discussion goes beyond the scope of this overview, I refer here to van Belle and Canegem-Ardijns (2007) and Declerck and Reed (2001, pp. 429–430).

is not directly available to the hearer (see also Dancygier & Sweetser, 2005, pp. 117, 121). This connects to Akatsuka's (1985, p. 632) distinction between newly-learned information and knowledge, as discussed in section 2.5. This type is accompanied by a high frequency of modals like *must* and of resumptive *then* to signal reasoning processes, but, as with other non-predictive conditionals, they typically do not involve alternative scenarios. As we saw in section 2.6, Noordman (1979, p. 85) argues that the example in (77) (repeated for convenience below) expresses 'that John's being ill is a condition or eventually a cause for not going to his work', while (78) expresses 'that one may infer John's illness from John's not going to his work'.[24]

(77) If John is ill, he is not going to his work. (Noordman, 1979, p. 85)

(78) If John is not going to his work, he is ill. (Noordman, 1979, p. 85)

Noordman (1979, p. 86) explains the difference as follows: 'if the condition [...] is mentioned after the conjunction [as in (77)], the sentence expresses a condition-consequence relation' and 'if the condition is mentioned in the other clause [as in (78)], the sentence expresses an inference relation'. This adheres closely to Sweetser's (1990, p. 123) characterisation of epistemic conditionals as reversed causality, and to Dancygier and Mioduszewska's (1984, p. 123) 'shifted' order of the 'p and q sequence'.

Speech-act conditionals are one more step away from real-world causality in predictive conditionals. The illocutionary force of the speech act in the consequent takes effect conditionally and as such, the antecedents of speech-act conditionals express factors which influence, enable or cause the 'performance of the speech act' (Sweetser, 1990, pp. 118, 142; see also Knott, 2001, pp. 138–139), as in the example in (171) and in Austin's example (106) from section 3.3.2 repeated below.

(106) There are biscuits on the sideboard if you want them.

Here, the maxim of Relation is invoked, because only in the case of the hearer being hungry the offering of biscuits is relevant. In other words, 'if you want them' introduces a sufficient condition not for the content of the consequent ('there are biscuits on the sideboard'), but for the act of making an offer.[25] When the antecedent of a speech-act conditional involves given information, the speech act often is an act of politeness (cf. Sweetser, 1990, p. 131), an indirect strategy in the sense that addressing a felicity condition before making a question, command or request saves the negative face of the hearer, as

[24]Neither Sweetser (1990), Dancygier (1998) nor Dancygier and Sweetser (2005) relate their distinction between content and epistemic conditionals to this earlier psycho-linguistic work by Noordman (1979, p. 65), who demonstrates a processing difference between 'sentences expressing a condition-consequence relation and sentences expressing an inference relation'.

[25]See section 2.6.3 for a discussion on whether or not maxims actually apply to parts of utterances (Douven, 2017b, p. 1542).

we already discussed in terms of politeness Brown and Levinson's politeness theory briefly in section 3.3.4 on Quirk et al.'s (1985) *indirect conditionals*. Interestingly, this relation can also be introduced by *when*, as in (180).[26]

(180) When amber lights flashing, prepare to stop. (Dancygier & Sweetser, 2005, p. 116)

The relationship between conditionals and speech acts has been discussed in detail by van der Auwera (1986, pp. 198–199). He distinguishes speech act *about* conditionals from conditional speech acts, as in his examples in (181) and (182) respectively.

(181) If you inherit, will you invest?
Yes, if I inherit, I will invest. (van der Auwera, 1986, p. 198)

(182) If you saw John, did you talk to him?
Yes, (I saw him and) I talked to him. (van der Auwera, 1986, p. 198)

The difference between (181) and (182) can be seen in the responses they elicit; in (181) the addressee will normally affirm or deny the whole conditional, while in (182), the speech act of asking a question is 'dependent on the condition that the protasis is true' (van der Auwera, 1986, p. 199) and consequently, *yes* confirms only the antecedent, not the whole conditional. Several authors (e.g., Lauerbach, 1979; Heringer, 1972; van Dijk, 1979; cited by van der Auwera, 1986, p. 199) have analysed speech-act conditionals in a Gricean fashion: 'the protasis is a comment on a conversational or politeness maxim and functions as a politeness or opting out device'. This use must be distinguished from speech acts about conditionals. Sweetser's (1990) speech-act domain would coincide with what van der Auwera (1986) calls speech-act conditionals, while 'speech acts about conditionals' as in (181) would 'simply' be conditionals in the content domain.[27]

Dancygier and Sweetser (2005) discuss a fourth type of connection, licensing so-called 'metalinguistic conditionals', as exemplified in (183) and (184).

(183) "That's what we're in business to do, get this cocksucker nailed, if you'll excuse my Greek." (Dancygier & Sweetser, 2005, p. 128)

(184) John managed to solve the problem, if that was at all difficult. (Sweetser, 1990, p. 140)

[26]It is surprising, as van Belle and Canegem-Ardijns (2007, p. 830) note, that Dancygier and Sweetser argue that speech-act conditionals generally do not take distanced verb forms. Although (a) below would amount to Dancygier and Sweetser's (2005) 'specialized constructions' because of the mixed tense pattern in the antecedent and consequent, van Belle and Canegem-Ardijns (2007, p. 830) provide counter-examples like (a).

(a) I'll help you with the dishes, if that would be alright with you.

[27]For a more detailed discussion, see van der Auwera (1986, p. 199) on so-called *non-commentative conditional speech acts*.

These conditionals are different from speech-act conditionals in that they relate to the speech act as a linguistic performance, but they do not relate to the force of the speech act itself. Put differently, the antecedent of a metalinguistic conditional comments on a part of the consequent, while the antecedent of a speech-act conditional comments on the complete consequent. The relationship between antecedent and consequent in metalinguistic conditionals is therefore more specific than in speech-act conditionals: it is about the choice of linguistic form in the consequent. [28] In (183), the antecedent comments on the use of the word *cocksucker*, while in (184) the antecedent comments on the presupposition of difficulty licensed by *managed*.[29] Another difference is that antecedents of metalinguistic conditionals do not seem able to occur in sentence-initial position, because they refer to the apodosis anaphorically (Dancygier, 1998, p. 106). This, in effect, results in sentence-medial or sentence-final position, as was corroborated by Reuneker (2017b) on basis of corpus data.[30]

The last type of conditional distinguished by Dancygier (1998, p. 108) and Dancygier and Sweetser (2005, p. 132) maps a metaphor from the antecedent onto the consequent, as in (185).

(185) If the beautiful Golden Gate is the thoroughbred of bridges, the Bay Bridge is the workhorse. (Dancygier & Sweetser, 2005, p. 132)

Here the metaphor 'the Golden Gate is a horse' is extended to another object: the Bay Bridge. If one accepts the metaphor used in the antecedent, it follows that another object in the same domain may be characterised in terms of the same metaphor ('one submapping is conditional on the other', cf. Sweetser, 1996, p. 223).[31] The question remains whether or not the meta-metaphorical type of conditional is a type in itself. As it concerns an inferential transfer between domains in metaphors, it shares characteristics with both metalinguistic conditionals (commenting on linguistic choices) and epistemic conditionals (reasoning from a premise to a conclusion). Dancygier and Sweetser (2005, pp. 135–136) argue that this type behaves most similarly to epistemic conditionals, because the relation between the antecedent as premise and the consequent as conclusion does not structurally differ from that in epistemic

[28] For a recent analysis of 'if you like' as both a (metalinguistic) hedge targeted at the form of the consequent, and as a hedge targeted at the content of the consequent, see Elder (2019b).

[29] See also Athanasiadou and Dirven's (1997a) detailed classification of metalinguistic conditionals.

[30] It would be expected that metalinguistic conditionals cannot be used predictively (see e.g., Dancygier, 1992; Dancygier, 1998). However, see Dancygier and Sweetser (2005, p. 127).

[31] For specifics on this type, see Sweetser (1996, p. 221), who distinguishes between three sub-types of meta-metaphorical conditionals.

conditionals. Consequently, I argue that meta-metaphorical conditionals can be explained by the general characteristics of epistemic conditionals, applied to metaphors (see also Sweetser, 1996, p. 231).[32]

In conclusion, Dancygier and Sweetser (2005) argue for causality in all conditionals, which may be situated however in different (content, epistemic, speech-act and metalinguistic) domains. This is a stronger claim than the analysis presented section 2.6, in which I argued for a general conventional meaning of connectedness in conditionals, of which causality is a possible, and perhaps frequent, but not the only more specific implicature to be derived. This depends, however, on whether one views an inferential connection between an antecedent and a consequent (i.e., an epistemic conditional) as extended from (content) causality. With respect to grammatical features and connections, Dancygier (1998) argues that more traditional approaches to classifying conditionals as open and hypothetical conditionals have proven problematic, because verb tense does not unambiguously mark temporal reference and epistemic modality. She introduces *backshift* as the main parameter by which predictive conditionals are epistemically marked, while non-predictive conditionals are not. However, as backshift can only be indirectly observed in verb tense, this classification, even given Dancygier's criticism above, points towards verb tense as an important feature of conditionals again, together with modal auxiliaries. Backshift is 'observable' only through tense and context (i.e., tenses such as simple past or past perfect do not unequivocally indicate backshift), and it will not be included as such in the corpus study that follows. Dancygier and Sweetser's account does add the grammatical features *clause order* as Dancygier and Sweetser argue that predictive conditionals usually have iconic order supporting the (direct) causal connection between antecedent and consequent, which is in line with the analysis presented in section 2.6.3 based on the non-commutivity of $\supset$. Finally, the use of the resumptive element *then* also may have an effect on the implicatures of connectedness, as it refers back to the antecedent 'and locates the event or state described in the apodosis in that mental space', signalling compatibility with a biconditional ('if and only if') implicature (cf. Dancygier & Sweetser, 1997, p. 116; see also Iatridou, 1991). Resumptive *then* will therefore be included as a feature in the corpus study.

3.3.8 Polarity, source of coherence and segment order in conditionals

In the framework of the Cognitive approach to Coherence Relations (*CCR*; cf. Sanders, Spooren and Noordman, 1992) coherence relations are considered to be cognitive entities, i.e., in understanding discourse, language users need to infer coherence relations between segments (see e.g., Hobbs, 1979; Sanders,

[32]Dancygier and Sweetser (2005, p. 136) argue for yet another type of conditional, the meta-spatial conditional. I will not discuss this type here, as it is, as they argue themselves, a left-over category, in which *spatial* refers to the general idea of mental spaces, not geographical space. See Dancygier and Sweetser (2005, pp. 136–138) for examples and discussion.

Spooren & Noordman, 1992; Kehler et al., 2008; Hoek, 2018), as they do not engage in the exchange of isolated segments (phrases, clauses, utterances). Consequently, they combine segments in order to construct a cognitive representation in which these segments form a coherent whole. As Schilperoord and Verhagen (1998, p. 141) remark, 'the notion *coherence structure* refers to connectedness of discourse that sets it apart from random sets of sentences', and as such its relevance to the current inventory of implicatures from connectedness can be seen.

Sanders, Spooren and Noordman (1992, pp. 2–3) make clear that discourse coherency is different from cohesion, in which 'the connectivity of the discourse is primarily tied to the explicit marking of semantic relations'. As I mentioned in section 2.2, one characteristic of conditionals is that they consist of two 'parts' (clauses mostly), which are connected by a conjunction or presented using another construction. However, as we discussed extensively in the previous chapter, the exact nature of the connection between these parts is often not explicitly marked as such and it was analysed in terms of a conversational implicature. The consequent is, in some way, 'conceptually dependent' on the antecedent and in order to arrive at a coherent conceptualisation, they have to be related by the language user (cf. Schilperoord & Verhagen, 1998, p. 150).[33] Within the CCR framework, conditional relations between segments have a *causal* basic operation (as opposed to *additive relations*), because 'there is an implication relation between the two arguments ($P \rightarrow Q$)' (Hoek, 2018, p. 44) meaning that one segment influences the other, in contrast to additive relations, which only express '$P \wedge Q$'. As Sanders, Spooren and Noordman (1992, p. 7) argue, 'it appears that whether the causal basic operation holds does not depend solely on the truth value of the antecedent and the consequent, but also on the link between the antecedent and the consequent'. This relates very closely to conversational implicatures of specific connections we are after in this part of the chapter.

The types of conditionals distinguished in the Cognitive approach to Coherence Relations are based on combinations of the remaining 'CCR primitives', namely *polarity*, *source of coherence* and *order of the segments*, which results in *positive objective conditionals*, *positive subjective conditionals*, *negative objective conditionals* and *negative subjective conditionals*, all of which can have a *basic* or *non-basic* order of the antecedent and consequent. A conditional can either have positive or negative polarity, as in the examples in (186) and (187) respectively, in which it is implicated that the situation expressed in the antecedent either causes or enables the situation expressed in the consequent, as in (186), or it is implicated that the antecedent prevents the situation expressed in the consequent, as in (187).

(186) If it rains, Jill will bring an umbrella. (Hoek, 2018, p. 59)

[33] Although Schilperoord and Verhagen (1998) study restrictive relative clauses, this 'conceptual dependency' seems suitable for other phenomena too.

(187) Unless the skies have cleared, we are bringing an umbrella.[34] (Hoek, 2018, p. 60)

Next, positive and negative conditionals can either have a semantic (objective) or a pragmatic (subjective) 'source of coherence', as in (186)-(187) and (188) respectively.

(188) If Jill brought an umbrella, it must be raining. (Hoek, 2018, p. 59)

Objective conditionals are comparable to Dancygier and Sweetser's (2005) *content conditionals*, as they relate the antecedent and consequent according to the world they refer to, e.g., as cause and effect, whereas subjective conditionals are comparable to epistemic and speech-act conditionals, because they relate the antecedent and consequent with respect to the reasoning of the speaker. The coherence relation is further specified for the order of antecedent and consequent. The alternative of the basic-order conditional in (188) for instance would be the conditional in (189) below.

(189) It must be raining, if Jill brought an umbrella.

Next to the original 'CCR primitives' *polarity*, *basic operation*, *source of coherence* and *order of the segments*, several other dinstinctions have been proposed, such as *temporality* (Evers-Vermeul, Hoek & Scholman, 2017), volitionality (Stukker, Sanders & Verhagen, 2008) and, recently, disjunction (Hoek, Evers-Vermeul & Sanders, 2019).[35]

The reason that I discuss this approach (only) briefly at this point, is that, although it does not offer a detailed classification of conditional connections as such (which is not its main objective), it does point towards features related to the specific connections between antecedents and consequents of conditionals. As 'source of coherence' coincides with the specific connection itself and is directly based on the work by Dancygier and Sweetser discussed in the previous section, this is not a 'feature' to be considered. Polarity, however is, and points towards negation in clauses of conditionals, as is clause order, which was also mentioned in relation to iconicity in predictive conditionals by Dancygier and Sweetser (2005) discussed in the previous section.[36]

3.3.9 Hypothetical, course-of-event and pragmatic conditionals

Athanasiadou and Dirven (1996) and Athanasiadou and Dirven (1997a, p. 62) regard conditionals as utterances in which there is 'mutual dependency between the two propositions in the subclause and in the main clause', and although they remark that this dependency is 'the common factor of all conditionals –

[34] See Daalder (1994) for the Dutch conditional conjunction *tenzij* 'unless'.

[35] See Hoek (2018) for a recent overview.

[36] See section 5.9 in the next chapter for a more detailed discussion of this feature and the differences between polarity and negation.

and consequently also the main factor of conditionality', no further analysis of how this dependency, comparable to the connectedness argued for in chapter 2, comes about is offered. Rather, as was discussed already in section 2.6, they postulate it and continue by distinguishing between three types of conditionals: *course-of-event*, *hypothetical* and *pragmatic conditionals*.

The classification is based on the distribution of conditionals in several corpora. The corpus-based approach is argued for by showing that 'any conceptual category has many more structural realisations than an approach solely based on introspection can guarantee, and corpus-based examples will provide the whole range of structural possibilities' (Athanasiadou & Dirven, 1997a, p. 23). According to Athanasiadou and Dirven (1997a, p. 61) hypotheticality is not a prototypical feature of all conditionals, as is assumed in many accounts of conditionality, but the prototypical feature of one specific, albeit highly frequent type of conditionals, namely the type in which the connection is causal in nature. This causality is not, as Comrie (1986) argues, common to all conditionals, but it forms a scale on which hypothetical conditionals are at the high end (strong causal dependency), and pragmatic conditionals at the low end (low causal dependency). With respect to the analysis in the previous chapter, this hypotheticality is only one of the possible implicatures from unassertiveness. In other words, all conditionals are unassertive, but not all need to be considered hypothetical, which is reflected in Athanasiadou and Dirven's account.

Hypothetical conditionals operate in what Athanasiadou and Dirven (1997a, p. 62) call a 'non-actual frame'. This type of conditional expresses two different events, which stand in a consecutive relation and are hypothetical, while the hypothetical character is not involved in the relation between the two situations expressed. The likelihood of hypothetical conditionals is positioned by Athanasiadou and Dirven (1997a, p. 73) on their scale of likelihood from 'potentially real' without the use of epistemic markers ('unmarked hypothetical conditionals'), as in (190) below, to 'less likely', as in (191), and, finally, 'unreal', as in (192), by means means of tense and modal verbs ('marked hypothetical conditionals').

(190) If I go bald, I will shoot myself. (Athanasiadou & Dirven, 1997a, p. 73)

(191) If I should go bald, I would shoot myself. (Athanasiadou & Dirven, 1997a, p. 73)

(192) If I had gone bald, I would have shot myself. (Athanasiadou & Dirven, 1997a, p. 73)

The nature of the connection between antecedent and consequent in hypothetical conditionals can be brought out by paraphrasing the utterances using *because* (Athanasiadou & Dirven, 1997a, pp. 65–67), as in (193)-(194).

(193) If there is no water in your radiator, your engine will overheat immediately. (Athanasiadou & Dirven, 1997a, p. 65)

(194) The engine will overheat *because* there is no water in the radiator. (Athanasiadou & Dirven, 1997a, p. 67)

However, not all hypothetical conditionals involve a causal connection, as can be seen in (195) below.

(195) If the allowance is more favourable to a widow than the retirement pension, she will be paid that allowance. (Athanasiadou & Dirven, 1997a, p. 66)

Whereas there is a 'strong *causal*' connection in (193), this is not the case for the second sub-type of hypothetical conditionals distinguished by Athanasiadou and Dirven, the *condition* in (195), which is the only sub-type that can be paraphrased with 'on condition that'.

(196) ? The engine will overheat on condition that there is no water in the radiator.

(197) The widow will be paid the allowance on condition that it is more favourable. (Athanasiadou & Dirven, 1997a, p. 66)

Athanasiadou and Dirven (1997a, p. 68) further remark that this sub-type only expresses desirable outcomes, i.e., you cannot 'punish somebody *on condition that* he does something wrong' (italics added), which is in line with Daalder's (2006; 2009) observation that the Dutch conditional conjunction *mits* 'on condition that' can only be used for desirable outcomes. The third sub-type is *supposition*, as in (190) repeated below.

(190) If I go bald, I will shoot myself. (Athanasiadou & Dirven, 1997a, p. 73)

Here the consequent expresses a reaction to a 'supposed state of affairs' (Athanasiadou & Dirven, 1997a, p. 66). The connection of dependency is still present, but, according to Athanasiadou and Dirven, there is no cause or condition involved, merely a possible 'resultative action' in case p becomes true.

The second main type of connection is that in *course-of-event conditionals*, which express a relation of co-occurrence between two situations. Athanasiadou and Dirven argue that the speaker commits herself to the 'actual, frequent or general realisation of the two situations', which is not the case for hypothetical conditionals. In contrast to hypothetical conditionals, course-of-event conditionals have as the 'most typical characteristic [...] the absence of modals', which is explained by Athanasiadou and Dirven (1996, p. 617) as conditionals being used to 'talk about a world of reality, experienced and described usually by someone with expert knowledge'. When modals appear in this type of conditional, Athanasiadou and Dirven (1996, p. 620) suggest *can* and *may* are the most likely candidates, as they 'evoke the sense of coming a bit closer to known reality'. Furthermore, in contrast to hypothetical conditionals which refer to specific situations, course-of-event conditionals typically refer to 'general time

in the present or past' or a combination of both (cf. Athanasiadou & Dirven, 1996, pp. 616–617). This is also reflected in the frequent use of the simple present, as in (198), and present perfect, as in (199), which 'in English is the form *par excellence* to combine past time and present time'. Specific adverbs like *normally*, *always* and *sometimes* can be used to express 'generality and reality', as in (200).

(198) If there is a drought at this time, as happens so often in central Australia, the fertilised egg in the uterus still remains dormant. (Athanasiadou & Dirven, 1996, p. 611)

(199) If there has been rain and there is a good pasture, then the egg now restarts its development. (Athanasiadou & Dirven, 1996, p. 616)

(200) If the tonsils are remove , the adenoids are sometimes cut out too. (Athanasiadou & Dirven, 1996, p. 619)

In course-of-event conditionals two events co-occur, of which one is dependent on the other (Athanasiadou & Dirven, 1997a, pp. 62, 70), but there is a relation of co-occurrence, not necessarily causality. This type of conditional can be characterised as expressing a 'whenever' relation. Athanasiadou and Dirven (1997a) argue that Comrie's (1986, p. 88) generalisation that all conditionals are hypothetical in nature is too broad, because his argument that 'greater hypotheticality means lower probability and lower hypotheticality means greater probability' is problematic for course-of-event conditionals. While, as in hypothetical conditionals, both events referred to in the respective clauses are unasserted (see section 2.5), in course-of-event conditionals 'there is a suggestion of a real occurrence of the two events' in the sense that whenever the first situation occurs, the second also occurs'. Course-of-event conditionals are not as prototypical as hypothetical conditionals are, because, although they are high in frequency, they have a lower dependency between clauses and they do not mark epistemic attitudes towards the situations expressed.[37]

In the third type of conditional, the *pragmatic conditional*, the antecedent expresses a 'metapragmatic signal' which marks the relevancy of consequent, as in (201).

(201) If you are thirsty, there's beer in the fridge. (Athanasiadou & Dirven, 1997a, p. 61)

In (201), the antecedent addresses one of the felicity conditions for the offer in the consequent (the preparatory condition of the addressee being thirsty). Athanasiadou and Dirven argue that this type of conditional is the least prototypical, as it is less frequent than the other types, has the lowest level interdependency between clauses, and although it can appear marked and has

[37] Athanasiadou and Dirven (2000) further divide this type into three sub-types, namely the referential course-of-event conditionals discussed above, inferential course-of-event conditionals, and instructive course-of-event conditionals. For reasons of space, I will not discuss these types further here. See Athanasiadou and Dirven (2000) for details.

sub-types, it has no internal prototypicality range, and does not express epistemic attitudes towards the situations expressed. Athanasiadou and Dirven (2000, pp. 3, 5) define pragmatic conditionals as a super-ordinate category which distinguishes itself from hypotheticals and course-of-event conditionals because they are '"speaker-oriented" or "hearer-oriented" and thus are apt to serve the interpersonal function of language'. This type must be distinguished from Sweetser's (1990) speech-act conditionals, discussed in section 3.3.7, which denote the narrower category of speech acts. For Athanasiadou and Dirven (2000, p. 13) this category comprises conditionals that signal 'the relationship between the sign and the user'. The category of pragmatic conditionals is further divided into *logical* and *conversational conditionals*, the former resembling Dancygier and Sweetser's epistemic conditionals discussed in section 3.3.7, the latter resembling the speech-act conditionals from the same section. Logical pragmatic conditionals involve analytic reasoning processes, in which, with respect to form, the antecedent 'can only be preposed to the consequent'. The link between the antecedent and the consequent in this subcategory can be either identifying, as in (202), or inferential, as in (203).

(202) If there's one species to be put out to pasture it's Presidents. (Athanasiadou & Dirven, 2000, p. 7)

(203) If she's divorced, then she's been married before. (Athanasiadou & Dirven, 2000, p. 7)

In identifying conditionals, the antecedent offers a description identifying the subject of the consequent. However, Athanasiadou and Dirven (2000) argue that the communicative function of this sub-type is not to reveal someone's identity, but, more rhetorically, to emphasise the important features of a category to be identified.

Inferencing conditionals emphasise the inferential nature of the utterance. According to Athanasiadou and Dirven (2000, p. 12) resumptive *then* and modal verbs are frequently used to emphasise the act of reasoning. This type of pragmatic conditional is, as might be expected, frequently marked for epistemic modality by modal auxiliaries like *may* and *must*, modal adverbs like *surely*, and phrases like 'it seems likely that', and 'it follows that'. Finally, conversational pragmatic conditionals are divided into *discourse conditionals* and *meta-communicative conditionals*, comparable to Dancygier and Sweetser's distinction between *speech-act* and *metalinguistic conditionals* respectively. Discourse conditionals, like those in (204) and (205) (adapted from Athanasiadou & Dirven, 2000, p. 14; Austin, 1970, pp. 210, 212), involve speech acts or aspects of the discourse 'such as metalinguistic references', in which the antecedent 'tends to be postposed'.

(204) If you're hungry, there's food in the fridge. (Athanasiadou & Dirven, 2000, p. 14)

(205) There are biscuits on the sideboard if you want them. (Athanasiadou & Dirven, 2000, p. 15; adapted from Austin, 1970, p. 212)

In this category, the antecedent links the consequent to 'some or other, usually hearer-oriented, pragmatic factor in the conversation' (Athanasiadou & Dirven, 2000, p. 13). Characteristics of this category are that resumptive *then* is not used, there are no hypothetical verb forms or changes of tense (but see the discussion on distanced speech-act conditionals in section 3.3.7), no explicit use of performatives (but see Gabrielatos' remark in section 3.3.4), a variety of speech acts, and a preferred clause order of sentence-initial antecedents. As an indication of the low level of dependency between antecedent and consequent, Athanasiadou and Dirven (2000, p. 15) remark that this type of conditional can be paraphrased as two independent sentences, as in their example in (206), although I note here that question-answer pairs have been linked historically to conditionals before (Cuypere, 2008, p. 294; Traugott, 1985, p. 100; Leuschner & van den Nest, 2015; for a discussion of verb-first conditionals in (fictive) questions, see Pascual, 2014; Leuschner, 2016), and such paraphrases are by no means impossible for other types distinguished by Athanasiadou and Dirven either.

(206) There are biscuits on the sideboard. You want some? (Athanasiadou & Dirven, 2000, p. 15)

Comrie (1986) groups together all non-directly causal conditional conditionals, while Sweetser (1990) separates what are called logical and conversational by Athanasiadou and Dirven (2000). Athanasiadou and Dirven (2000, p. 3) adopt Comrie's perspective by proposing the super-ordinate category of pragmatic conditionals, because the types both express a dependency relation between antecedent and consequent that is non-causal, i.e., logical or conversational. Where the antecedents of discourse conditionals contextualise the speech act performed in the consequent and are 'hearer-oriented', meta-communicative conditionals point out 'some aspects of the global communicative act' and are more 'speaker-oriented'.[38]

It is clear that Athanasiadou and Dirven's classification differs from the accounts discussed in the previous sections. With respect to features, Athanasiadou and Dirven position hypothetical conditionals on their scale of likelihood from 'potentially real', to 'unreal' as they are marked by means of verb tense and modal verbs, which we have seen in the other classifications as well. Course-of-event conditionals are not marked for hypotheticality and frequently have simple (present or past) tense in both clauses without overt marking of likelihood, although modals like *can* and *may* are suggested to be viable in this type of conditionals, especially in what they call 'instructive conditionals'. This means that not only occurrence of modals is of importance to the type of connection implicated, but also the type of modality (see section 5.5). Within the category of pragmatic conditionals, logical (identifying, inferencing) conditionals are linked to high frequencies of sentence-initial

[38]See Athanasiadou and Dirven (2000, pp. 18–20) for the sub-types of meta-pragmatic, metalinguistic, and restrictive pragmatic conditionals, which, for reasons of space and relevance, are omitted here.

antecedents and the used of *then* to explicitly mark the inference chain from argument to conclusion, possibly in combination with modal auxiliaries like *must*. Conversational pragmatic conditionals on the other hand frequently feature sentence-final antecedents, cannot, according to Athanasiadou and Dirven be used with *then*, and, at large, and have present tense in both clauses, whereas this is less restricted in logical pragmatic conditionals. This classification thus reinforces the importance of the previously mentioned features of verb tense, clause order, resumptive *then*, and marking and type of modality.

3.3.10 Event and premise conditionals

Haegeman (2003) analyses conditionals from a syntactic perspective (in a 'broadly generative framework') and argues for two types of conditionals in terms of embedding, namely *event conditionals*, in which the conditional clause affects the event expressed in the main clause and is inserted inside the matrix domain, while in *premise conditionals*, the conditional clause is attached outside the matrix domain. The distinction between *event* and *premise conditionals* is, as can be seen in her examples in (207)-(208), not comparable to the direct-indirect distinction by, among others, Quirk et al. (1985) (see section 3.2), but to the content-epistemic distinction by Dancygier and Sweetser (2005) discussed in section 3.3.7.[39]

(207) If it rains we will all get terribly wet and miserable. (Haegeman, 2003, p. 317)

(208) If [as you say] it is going to rain this afternoon, why don't we just stay at home and watch a video? (Haegeman, 2003, p. 317)

In the event conditional in (207), the antecedent is related to the event structure, while in the premise conditional in (208), the antecedent is related to the discourse structure. According to Haegeman (2003, p. 320) antecedents of event conditionals express a cause that leads to the effect expressed in the consequent. In premise conditionals, on the other hand, the antecedent 'makes manifest' a context for the consequent. Haegeman (2003, p. 318) argues that these types not only differ in their interpretation, but also in terms ('internal and external') syntax.

Syntactic properties related to event conditionals but not premise conditionals are that the time reference of the conditional clause is determined by the time reference in the matrix clause ('*will* deletion' cf. Jespersen, 1940; Palmer, 1974). In premise conditionals, future time is expressed independently in the antecedent, as in (209) below.

(209) If I'm no longer going to be arrested for possessing cannabis for my own consumption (Cannabis laws eased in drugs policy shake-up, October 24), shouldn't I be able to grow my own? [...] (Haegeman, 2003, p. 321)

[39] For clarification, the event-premise distinction thus also does not resemble Quirk et al.'s distinction between conditional adjuncts and disjuncts respectively.

Antecedents of event conditionals can appear in the scope of the adverbial adjuncts in the matrix clause, as in (210), while this is not possible for premise conditionals, as in (211).

(210) John *sometimes* works best if there is a lot of pressure. (Haegeman, 2003, p. 321)

(211) If John lives in Rome, he *probably* never uses his bike. (Haegeman, 2003, p. 322)

In (210), *probably* scopes over the antecedent, but this is not the case in (211). Whereas (210) may be paraphrased as 'It is sometimes the case that John works best if there is a lot of pressure' (note that this wide-scope reading of (210) is less likely with a sentence-initial antecedent), (211) cannot be paraphrased as 'It is probably the case that if John lives in Rome, he never uses his bike'. In the same vein, focus markers, such as *only* in (212), can scope over antecedents of event conditionals, but not over antecedents of premise conditionals, as can be seen in (213).

(212) John will only finish the book if there is a lot of PRESSURE on him. ('only if') (Haegeman, 2003, p. 322)

(213) John will only finish the BOOK, if there is already such a lot of pressure on him. (i.e., 'he won't finish anything else') (Haegeman, 2003, p. 323)

Pronouns in antecedents of event conditionals can be in the scope of a quantifier in the consequent, as in (214), in which *he* is bound to *no one*, while pronouns in antecedents of premise conditionals are not, as can be seen in (215), in which *he* is not bound by *no one*.

(214) *No one* will answer the phone if *he* thinks it's his supervisor. (Haegeman, 2003, p. 323)

(215) Why does *no one* answer the phone, if *he* probably thinks it's *his* supervisor? (Haegeman, 2003, p. 323)

Furthermore, event conditionals can be clefted, while premise conditionals cannot, as can be seen in the examples below.

(216) It is (only) if he takes more exercise that John will get fitter. (Haegeman, 2003, p. 323)

(217) $*$ It is only if there is already such a lot of pressure on him now, that John will finish the book. (Haegeman, 2003, p. 323)

With respect to the integration of the antecedent in the domain of the consequent (their 'external syntax'), VP substitution is possible in event conditionals but not in premise conditionals, as can be seen in (218) and (219).

(218) If his paper is accepted, John will go to the conference and so will Mary.

(219) If his children aren't in the garden, John will already have left home, and so will Mary.

The ellipsis in the consequent of (218) ('so will Mary') allows for a so-called 'sloppy identity' reading of *his*, meaning that *his* in (218) may 'be interpreted as either 'Mary will go to the conference if *John's paper* is accepted' or 'Mary will go to the conference if *her paper* is accepted'. This is not possible in the premise conditional in (219), which cannot be interpreted as 'If his children aren't in the garden, John will already have left home and if her children aren't in the garden, Mary will already have left home'. In other words, a sloppy interpretation is not available and *his* in this premise conditional can only refer to John's children (see Haegeman, 2012, p. 171).

As this discussion shows, Haegeman (2003) does not intend to offer a full classification of conditional connections, but focuses on the syntactic differences between what she calls *event* and *premise conditionals*, coinciding with the aforementioned *content* or *predictive* conditionals and all kinds of *non-predictive conditionals*. The reason I discuss this account to some detail here is that Haegeman (2003) points towards a number of grammatical features that may help determine the connection between the antecedent and consequent. First, there is the difference in time-reference between the two types. Time-reference of the antecedent is determined by the consequent in event conditionals, whereas it is not in other types of conditionals, so antecedents of event conditionals typically do not feature *will* while referring to future scenario's. The future reading of the antecedent is carried over from the consequent. This points, again, to verb tense and modal auxiliaries as relevant features. Scoping of adverbial adjuncts and pronouns in consequents over antecedents in event conditionals, but not in premise conditionals is not a feature directly observable in large corpus data, and it will not be used further. Haegeman (2003) does point towards another feature, namely *focus markers*, such as *only* and *even*, which scope over antecedents in predictive conditionals only. As such focus markers (or *focus particles*, see section 5.10) may be helpful in distinguishing between types of conditional connections, they will be added as a feature of interest.

3.3.11 Case-specifying and rhetorical conditionals

Next to the possible-worlds account by Declerck and Reed discussed in section 3.2.8, which focused mainly on implicatures of unassertiveness, Declerck and Reed (2001, p. 47) offer a 'typology of case-specifying *P*-clauses', which takes as main parameter *case-specification*, resulting in a distinction between *case-specifying* and *rhetorical* or *non-case-specifying conditionals*.

In *case-specifying-P conditionals*, the antecedent specifies in which cases q is valid. These conditionals come in various sub-types: *actualising*, *inferential* and *purely case-specifying conditionals*, as in the examples in (220) to (222) respectively.

(220) If the enemy attacks, we will defend ourselves. (Declerck & Reed, 2001, p. 278)

(221) If it wasn't Greene who wrote Bruno's Dream, it was/must have been Murdoch. (Declerck & Reed, 2001, p. 284)

(222) (hospital regulation) If you're wearing your own nightie, wear a short-sleeved one. (Declerck & Reed, 2001, p. 304)

Actualizing-P conditionals as in (220) express a condition for the actualisation of q. This type coincides with the strongest type of direct conditionals, i.e., predictive conditionals in Dancygier and Sweetser's account (see section 3.3.7) and the causal sub-type of hypothetical conditionals in Athanasiadou and Dirven's account (see section 3.3.9). Other types of *actualizing-P conditionals* are *preclusive (*p *prevents* q*)*, *actualization-licensing* (i.e., van der Auwera's *enablement*, see section 3.3.7), *non-preclusive conditionals* (concessive preclusion), and *in case-conditionals*, as in (223) to (226) respectively.

(223) If it freezes, the contest will not be cancelled. (Declerck & Reed, 2001, p. 278)

(224) I could open the door if I had the key. (Declerck & Reed, 2001, p. 280)

(225) Even if it rains, we'll go to the seaside. (Declerck & Reed, 2001, p. 281)

(226) I always carried an umbrella in case it rained (but it never did). (Declerck & Reed, 2001, p. 282)

(227) I'll drop in and see you at 10 tonight, if you will be alone. (Declerck & Reed, 2001, p. 283)

In (223), the antecedent triggers the 'non-actualisation' of q. Here, the question rises whether this is not 'just' an *actualising-P conditional* with negation, as there seem to be no meaning that cannot be attributed compositionally to these two phenomena. However, it does point towards negation as an important feature. The *actualisation-licensing conditional* in (224) resembles what Sweetser (1990) and van der Auwera (1986) call *enablement* rather than causation, i.e., p does not cause q, but enables it. In *non-preclusive-P conditionals*, as in (225), q actualises in spite of p, i.e., this is a concessive conditional, which, in this case, is marked by the focus particle *even*. In (226), the anticipated possibility of the actualisation of p triggers q, rather than the actualisation of p itself. Finally, in (227), the sentence-final antecedent adds an '"a posteriori" condition' (cf. Declerck & Reed, 2001, p. 283) to the consequent, and can only occur in sentence-final position.

The *inferential* sub-type of *case-specifying conditionals* implicates a connection of reasoning from antecedent to consequent. Declerck and Reed (2001, p. 285) argue that this type *presupposes* the truth of p, but I will use the term *implicate* for reasons discussed in section 2.5. In *direct inferentials*, as in (221) above, the inference goes directly from the antecedent, expressing the premise, to consequent, expressing the conclusion, and p forms a necessary and sufficient condition for q. This type is comparable to Johnson-Laird's *completely-determinate conditionals* (see section 3.3.5, see also the 'ideal type' discussed by Gildersleeve (1882; see section 3.2.3). This type is often used with epistemic modals such as *must*, as was also observed by, amongst others, Dancygier (1998) (see section 3.3.7). In *inferential bridges*, as in (228) below, there is a 'missing step' (Declerck & Reed, 2001, p. 290) in the inference from p to q.

(228) If today's Tuesday, you need your hat. (Declerck & Reed, 2001, p. 290)

Contrary to *direct inferentials*, p is neither a necessary, nor a sufficient condition for q, i.e., other conditions than the one expressed are involved (see also Johnson-Laird's *partially determinate conditionals* in section 3.3.5). In *non-standard direct inferentials* p is neither necessary nor sufficient for concluding q and this can be highlighted by the use of the focus particles, such as *especially* in (229), which, according to Declerck and Reed (2001, p. 433), 'block[s] the necessity implicature'.

(229) An amateur video poses fewer problems, especially if it is done in addition to professional photographs. (Declerck & Reed, 2001, p. 294)

In *indirect inferentials*, the inference goes from q to p, instead of from p to q, as in (230), a well-known example of Dutchman-conditionals (or *Dracula, rhetorical, ad absurdum conditionals*; see sections 3.2.8 and 3.3.4, and see Verbrugge and Smessaert, 2010, pp. 342–344 for a detailed analysis).

(230) If he passed his exam, I'm a Dutchman. (Declerck & Reed, 2001, p. 296; adapted from Strawson, 1952, p. 89)

Despite the Dutchman, Dracula and Pope examples in the literature, Declerck and Reed (2001, p. 301) remark that indirect inferentials need not be *ad absurdum* conditionals, but can also be licensed by the 'counterfactual verb form of the Q-clause', as in their example in (231).

(231) If my mother-in-law was coming tomorrow, I would be busy cleaning the house from top to bottom. (Declerck & Reed, 2001, p. 301)

The same operation is at work here. The consequent may not be absurd, but is implicated to be false. From the falsehood of q, the falsehood of p is inferred.

Purely case-specifying conditionals 'just specify[...] the case(s) in which (or the circumstances under which) the Q-situation actualises, or the cases in which Q is true' (Declerck & Reed, 2001, p. 304). According to Declerck and Reed, *if* in these cases can be substituted with *when*, as in (232) below.

(232) {When/If} you come to think of it, there's a lot of truth in what he says. (Declerck & Reed, 2001, p. 304)

This type is limited with respect to the use of *then* (Declerck & Reed, 2001, p. 306), as can be seen in (233).

(233) {If/When} you travel to Calcutta, (∗then) there is an awful lot of poverty. (Declerck & Reed, 2001, p. 306)

Within the category of *purely case-specifying conditionals*, there are cases in which the antecedent specifies the circumstances under which the q actualises. In (234), the antecedent specifies in which cases q is true, or the antecedent identifies a set, as in (235).

(234) Supplemental vitamins are helpful if there is a dietary deficiency [...]. (Declerck & Reed, 2001, p. 305)

(235) A car is little use if its brakes won't work. (Declerck & Reed, 2001, p. 309)

The *set-identifying* type of case-specifying-P conditional in (235) specifies the relevant cases through the restriction of a set referred to in the consequent, i.e., restricting the set of 'cars that are of little use' to those with dysfunctional brakes. This type seems to be related to the implicit conditional construction Audring (2016) illustrates with the example adapted in (236) below, which also have a set-identifying function, albeit much more specific.

(236) The only good Indian is a dead Indian. (Audring, 2016, p. 16)

In this type of conditional, *if* can be replaced with 'atemporal or restrictive *when*' (see for references Declerck & Reed, 2001, p. 310). It usually features a sentence-final *if*-clause and has to be 'unbounded', meaning that the reference in the antecedent cannot be specific. Declerck and Reed (2001, p. 312) also point towards (lexical) aspect (which we will discuss in chapter 5) as a factor of influence on the connection between antecedents and consequents, as *set-identifying conditionals* mostly feature antecedents which express states (i.e., 'habitual characteristics') and they have an 'unbounded' noun phrase in the antecedent referring to a noun phrase in the consequent.

Conditionals that are not case-specifying are *rhetorical conditionals*, which are described by Declerck and Reed (2001, p. 319) as conditionals that feature 'a particular rhetorical function of the P-clause or Q-clause'. Contrary to what the notion of the *rhetorical conditional* amounts to in most other accounts discussed, in Declerck and Reed's account it is an umbrella term comprising multiple sub-types of non-case-specifying conditionals (see Declerck & Reed, 2001, p. 363). The first sub-type is the *utterance conditional*, which specifies the cases in which the uttering of the consequent is meaningful, as in (237) and (238) below. The example in (237) is a clear case of what is generally understood to be a pragmatic or speech-act conditional, in which the antecedent addresses

a felicity condition of the speech act performed by means of the consequent. In (238) the antecedent concerns the object of evaluation in the consequent (for numerous subtypes, see Declerck & Reed, 2001, pp. 321–330).

(237) If you're hungry, there's a pie in the fridge. [...] (Declerck & Reed, 2001, p. 321)

(238) [...] If this is the famous Mona Lisa, it's not half as good as everybody says. [...] (Declerck & Reed, 2001, p. 329)

In *comparing conditionals*, the antecedent merely introduces the ground for its comparison to the consequent, as in the similarity-based comparison in (239), or the gradation-expressing comparison in (240).

(239) If your sister is clever, so is mine. (Declerck & Reed, 2001, p. 330)

(240) If you think Pete's children are badly behaved, you should see Diana's twins. (Declerck & Reed, 2001, p. 333)

This subtype has sentence-initial antecedents mainly. In contrast, consequents of *commenting-q conditionals* have to be in sentence-final position, because the antecedent expresses a comment on the contents of the consequent or the conditions for uttering it (cf. Declerck & Reed, 2001, pp. 340, 353), as in the 'downtoning' example in (241), or the *metalinguistic* example in (242).

(241) There will only be two or three people there, if any at all. (Declerck & Reed, 2001, p. 340)

(242) He is a true yuppie, if that word is still used. (Declerck & Reed, 2001, p. 353)

The last type of rhetorical conditionals is the *pseudo-implicative conditional*, which mimics direct inferentials, as in (243), by licensing the addressee to infer from the truth of the protasis the truth of the apodosis, here 'I may spit on the floor'.

(243) If you spit on the floor in your own house, you may do it here. [...] (Declerck & Reed, 2001, p. 358)

However, Declerck and Reed argue this to be a 'pseudo-implicative conditional', because the inferential chain is used in combination with irony by presenting a proposition p that is clearly false. In this sense, this type also resembles rhetorical conditionals, by using the falsity of one proposition to implicate the falsity of the other. Finally, in *pleonastic conditionals* the consequent is a repetition of the protasis, as in (244).

(244) "I can't reach him. He must have switched off his mobile phone.' – "Well, if you can't reach him, you can't reach him. Try again tomorrow." (Declerck & Reed, 2001, p. 359)

In most cases, the consequent is echoic. According to Declerck and Reed (2001, p. 360), this type is used to 'convey the message that the speaker accepts what she considers as an inescapable fact'. For Dutch, this type has been noticed by Renkema (2016) as one form of expression of what he calls the 'basta function', i.e., an expression to end (a part of) a conversation, as can be seen in his example in (245).[40]

(245) Als de colleges in het Engels moeten worden gegeven, moeten ze in het Engels worden gegeven. (Renkema, 2016)
If the classes must be taught in English, they must be taught in English.

In this section, I discussed the second detailed account of conditionals by Declerck and Reed. As Mauck and Portner (2006, p. 1330) remark, their work is of high interest because of its empirical nature and the large number of examples. The benefit of their analysis can clearly be seen in level of detail in, for instance, the diverse set of non-case-specifying conditionals, as the sub-types characterise a heterogeneous collection of conditionals that occur in natural language, but are hard to categorise in more top-down classifications. The downside of this is that the various types are not logically and/or explicitly linked to each other, resulting in a typology that is exhaustive, but does not lend itself easily to generalisations – one of the major benefits of classifications (see Dancygier, 2003, p. 322; see also Croft, 2001, pp. 31–32 on 'splitting' and 'lumping' approaches to categorisation, and see chapter 6.) Declerck and Reed's account does provide a number of features relevant to this study. While most types of conditionals have simple present in both clauses, and tense is used to express epistemic distance, other features are more clearly linked to (sub) types of conditionals, such as *relevance conditionals*, which cannot feature *then* (Declerck & Reed, 2001, p. 364),[41] negation in *preclusive-P conditionals* (Declerck & Reed, 2001, pp. 279–280), the use of focus particles, such as *even* in *non-preclusive-P conditionals* (Declerck & Reed, 2001, pp. 280–281), and the sentence-final position of antecedents in *restrictive postscript-P-conditionals* (Declerck & Reed, 2001, p. 283). *Inferential conditionals* are frequently marked by epistemic modal verbs, and *purely case-specifying conditionals* are limited with respect to the use of *then* (Declerck & Reed, 2001, p. 306), as are several sub-types of rhetorical conditionals Declerck and Reed (2001, p. 364). Most *rhetorical conditionals* have simple present in both clauses, pointing towards verb tense as a feature of influence on implicatures of connectedness. In *commenting-Q conditionals*, clause order is restricted to sentence-final antecedents, as their consequents comment on the topic expressed in the antecedent (Declerck & Reed, 2001, pp. 329–330). *Comparing conditionals*, on the other hand, mainly have sentence-initial antecedents. A feature not yet seen in the accounts discussed in this chapter is aspect, which, according to

[40] What is unclear, is why this type is termed 'pleonastic' by Declerck and Reed. In line with Renkema's observations, I think it more fitting to speak of tautological than of pleonastic.

[41] For exceptions, see Declerck and Reed (2001, p. 322).

Declerck and Reed (2001, p. 312), is related to the connection between antecedents and consequents in *set-identifying conditionals*, which mostly feature antecedents that express states. Declerck and Reed (2001, p. 365) also observe that relevance conditionals in Dutch and German do not feature inversion of subject and finite verb in the consequent, in contrast to conditionals with a more direct connection between antecedent and consequent (i.e., Declerck and Reed's *case-specifying conditionals*). As this is highly relevant for this study, I will discuss this feature in greater detail in chapter 5 in terms if syntactic integration patterns.

3.3.12 Conclusion

The accounts discussed in this section all distinguish types of conditionals based on different connections between antecedents and consequents. What we saw in this section in general is that the difference between *direct* (performance, content, hypothetical) and *indirect* (decision, telling, speech-act, free, pragmatic, rhetorical) conditionals is present in each of the classifications, albeit phrased and analysed in different terms. In most (not all) accounts, direct conditionals are sub-divided into *causal* and *inferential* (epistemic, knowledge, logic) conditionals. *Indirect conditionals* are subdivided into several pragmatic categories (most often having to do with different politeness strategies), such as *decision*, *politeness*, *uncertainty* and *metalinguistic conditionals*.

The goal of this section was not only to inventory which specific implicatures of the connectedness in conditionals are distinguished in the literature, but also, in line with section 3.2, to gather the grammatical features to which the implicatures are related in the respective accounts, in order to test to what extent certain uses of conditionals in Dutch have separate constructional status. First, reminiscent of the accounts in 3.2, we have seen non-present verb tense and modal verbs as means of licensing implicatures of epistemic distance, which are less common in indirect conditionals. Epistemic use of the modal verb *must* is linked to *epistemic* or *inferential conditionals* in several accounts, and, as with non-present tense, indirect conditionals are linked to the absence of such modal marking. Next, we saw mention of syntactic integration and especially the role of resumptive *then* in licensing bi-conditional implicatures and in distinguishing between predictive and epistemic or inferential conditionals. Clause order is related to the direct-indirect distinction mostly, in the sense that direct conditionals, especially those involving causality, favour iconic clause order. Also related to this distinction is the sentence type of the consequent, because consequents that are not declarative appear often in indirect conditionals, such as conditional questions. Then, a number of accounts discussed in this section address focus particles, because adverbs like *even* and *only* affect the relation between antecedents and consequents. *Negation* is another feature mentioned, but as we will see in the next chapter, most literature focuses on negation *of* conditionals, not *in* conditionals. Nevertheless, it plays an important role in terms of *polarity*. Aspect also plays a role, mainly in distinguishing so-called

set-identifying conditionals. Finally, although it is not mentioned as such in the accounts discussed, it is noticeable that most examples of indirect conditionals feature first- and second-person subjects, which is, given the function of these conditionals, not surprising, but may point to another feature influencing how conditionals are interpreted as a whole. Therefore, it is added to the corpus study as a potentially relevant feature.

Although this summary only provides a very rough sketch of this section, we have seen that most accounts of conditionals dealing with implicatures of connectedness distinguish between direct and indirect conditionals, and suggest several grammatical features to be associated with those types and their subtypes. Before setting up the corpus study and systematically investigating these features in Dutch, I will offer a conclusion to this chapter in the next section.

3.4 Conclusion

The first aim of this chapter was to explore which types of conditionals are distinguished in the literature with respect to the two meaning aspects of conditionals argued for in chapter 2. In that chapter, I argued for the unassertiveness and connectedness of conditionals (see sections 2.5 and 2.6 respectively), which both are non-truth-conditional meanings of conditionals, licensing, together with grammatical features and context, further conversational implicatures to specify the type of unassertiveness and connectedness. Speaking very broadly, we have seen implicatures of unassertiveness of the neutral and non-neutral kind (e.g., implicatures of factuality, uncertainty, counterfactuality), and implicatures of connnectedness of the direct and indirect kind (e.g., implicatures of causality, reasoning, speech-act relations).

The second aim of this chapter was to inventory the grammatical features that may license the conversational implicatures mentioned above. Implicatures of unassertiveness seem related most strongly to verb tense and the use of modal auxiliaries and adverbs (i.e., modal marking), although there is ample debate on the ambiguity of tense as referring to either a temporal or a modal dimension. Implicatures of connectedness seem to have a weaker link to specific features, although we have seen the influence of verb tense and modal marking, complemented by the features clause order, syntactic integration, negation, sentence type, (lexical) aspect, and the use of focus particles, such as *even* and *only*. One important note on the issue of grammatical features and their relation to implicatures is language specificity. Most classifications discussed in this chapter concern English conditionals, and it is no given that these features are related to types of unassertiveness and types of connections in the same way. Therefore, I will discuss this issue explicitly in the next chapter (see section 4.4), and in the final discussion in chapter 7.

Before moving on, I would like to emphasise here that I consider the specific types of unassertiveness and connectedness to be *conversational* implicatures. This means that it is not expected that any of the grammatical features men-

tioned fully determine these implicatures. Even the most promising predictor in English conditionals, the occurrence of *will* in the consequent, can occur in several types, as we have seen throughout this chapter. One could argue that *will* may express something else in different conditionals, but the point is that one cannot easily device a rule by which the different categories can be neatly distinguished. Therefore, I do not agree with Dancygier and Sweetser (2005, pp. 23–24) who argue against a more statistical approach to conditional constructions on the basis of linguistic features. While I do agree with them that careful examination of conditional constructions in their contexts is important for analysis, the fact that no necessary and sufficient criteria can be formulated for the implicatures under discussion asks for a more probabilistic approach.

In the previous chapter, we analysed conditionals in terms of unassertiveness and connectedness, and in this chapter, we looked at the more specific implicatures that are distinguished in the literature. I also inventoried to which grammatical features of conditionals these implicatures are linked in the literature. The next step is to test to what extent these features can be systematically linked to types of conditionals, i.e., to specific implicatures of unassertiveness and connectedness. In other words, we want to test to what extent different types of conditionals form a network of constructions (form-meaning pairings), taking seriously for instance Dancygier's (1998, pp. 14, 184–185) remarks on *if* being a conjunction as part of a larger construction, rather than the sole element responsible for all conditional meaning. To do so, all features will be discussed in isolation in chapter 5, and in combination in chapter 6, but before doing so, in chapter 4, I will present the necessary data selection, annotation and analysis.