Yeah no, I agree?

The Interpretation of *Yes* and *No* in Dutch

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Abstract

Yes and *no* are two of the most frequently uttered words in conversation. Their meanings might appear straightforward, but an examination of everyday discourse will reveal that quite the opposite is true. Although the different ways in which *yes* and *no* can be used have received some attention in recent years, most literature is limited to English. This thesis examines the uses of *ja* and *nee* in Dutch. By analyzing the ways in which *ja* and *nee* are used in the Corpus Gesproken Nederlands (Spoken Dutch Corpus), different categories can be established. In addition to their basic uses, *ja* and *nee* appear to have some 'special' meanings. All uses, however, can be said to have certain common features The exact interpretation of *ja* or *nee* depends on what it is they refer to. The interpretation of *ja* or *nee* is modeled by means of Optimality Theory (OT). Through possibly conflicting constraints, it is determined which possible meaning of *ja* or *nee* is interpreted by the hearer.

Symbols and abbreviations used in transcriptions

fn xxxxxx   Label of the excerpt in the CGN, followed by a time code

A: / B: Speaker labels

[   ]   Encloses talk produced in overlap

.hhh   Audible inbreath, the number of h's representing the length of the inbreath

hhh.   Audible outbreath, the number of h's representing the length of the outbreath

((description))   Description of what can be heard, rather than transcription

cu-   Cut-off word or sound

PRT   Particle

of.course   Multiple words needed to translate a single Dutch word into English are joined by . in the gloss

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1   Introduction

Yes and *no* are two of the most frequently uttered words in conversation. Their meanings might appear straightforward, but an examination of everyday discourse will reveal examples such as the ones given in (1).

    (1)   a.   You ran a six minute mile? **Yeah** right.

           b.   A: You have a big stain on your shirt.
                  B: **No**… Really?!

The basic meaning of *yes* (or *yeah*: Dutch only has *ja*, which corresponds to both *yes* and *yeah*) can be described as "a function word to express assent or agreement" (Merriam-Webster Online Dictionary). In (1a), however, *yeah* is used to indicate disbelief on the part of the speaker about the truthfulness of the other person's statement. The basic way in which *no* is used is "to express negation, dissent, denial, or refusal" (Merriam-Webster Online Dictionary). The use of *no* by speaker B in (1b), on the other hand, reveals that speaker A is stating the obvious and that the observation is therefore redundant. In (1) both *yeah* and *no* are uttered with a marked intonation, but this is not necessary for *yes* and *no* to deviate from their basic meaning and function.

        Much like in English, Dutch *ja* 'yes/yeah' and *nee* 'no' do in discourse not always appear to carry the basic meaning attributed to them in isolation.

    (2)   a.   A: Ik heb een nieuwe auto.
                        I   have a   new   car
                        'I have a new car.'

                  B: **Ja**?
                        yeah
                        'Oh really?'

           b.   A: Mijn broertje   heeft gister   zijn been gebroken.
                        my   little.brother has   yesterday his leg   broken
                        'My little brother broke his leg yesterday'

                  B: **Nee**!
                        no
                        'Are you serious?'

<div align="center">

c.   A: Ik vind dat echt   niet leuk.

I find that really not fun

'I really don't like that.'

B: **Nee**

no

'Yeah / no'

</div>

In (2a), *ja* expresses something along the lines of "Oh really?" There is no question to answer and nothing to agree with. Instead, *ja* is uttered as a question to indicate mild surprise and to request more information. *Nee* in (2b) is used to display surprise and unhappiness over the announcement made by the other speaker. *Nee* in (2c) is not meant to object to the statement uttered by speaker A. Instead, it intends to either align speaker B with speaker A's statement, or merely acknowledge the fact that it was made. Neither *ja* in (2a) nor *nee* in (2b) and (2c) correspond to the basic meanings of *ja* or *nee*, which are identical to the basic meanings of *yes* and *no* in English.

If *ja* and *nee* are not always used to express their basic meaning, how are they used? Can all meanings be related to a single core use or meaning? Are *ja* and *nee* lexical or grammatical items, or perhaps both? And if the meaning of *ja* and *nee* can vary, how do people arrive at an appropriate interpretation of *ja* or *nee*?

This thesis explores the use of *ja* and *nee* in Dutch. The use of *ja* and *nee* is explored by means of a corpus study using the Spoken Dutch Corpus (Corpus Gesproken Nederlands; CGN). The different interpretations of *ja* and *nee* are categorized and examined. In addition to their basic meaning, it is found that *ja* and *nee* can also be used as discourse markers. The use of *yes* and *no* as discourse markers has not received much attention, especially in languages other than English.

Because of the many different interpretations *ja* and *nee* can receive, this thesis will use Optimality Theory (OT) to model the interpretation of *ja* and *nee* by hearers (OT semantics). OT considers grammar to be an interplay of constraints. These constraints are violable, or 'soft.' Constraints are ranked and the ranking of constraints can differ between languages. Since constraints typically conflict, hearers come to an interpretation through a process of optimization: they select the optimal interpretation for a given form through the application of the constraints. The optimal interpretation is the interpretation that satisfies the total set of constraints best (Hendriks et. al. 2010).

The next chapter of this thesis will give an overview of the literature on *yes* and *no*, both as answers to questions and as discourse markers, and a definition and brief discussion of discourse markers in general. Chapter 3 will present the corpus study of the CGN and a categorization of the different uses of *ja* and *nee* that were found. Finally, Chapter 4 will present an Optimality Theory account to model the way in which *ja* and *nee* are used in Dutch and how hearers arrive at an interpretation of (combinations of) *ja* or *nee*.

2   Literature overview

This chapter will give a brief overview of the discussion on discourse markers and formulate a definition that will be used in the rest of this thesis. *Yes* (*yeah)* and *no*, or *ja* and *nee*, are not commonly listed as discourse markers. In Chapter 4, after analyzing the way in which *ja* and *nee* are used in spontaneous discourse, I will discuss whether or not they are indeed discourse markers. Section 2.2 and 2.3 will give an overview of the existing literature on, respectively, *yes* and *no*, both as answers to questions and as discourse markers. This literature is fairly limited, especially when it comes to *no*, and mostly restricted to English. Finally, section 2.4 will briefly discuss the state of *ja* and *nee* as discourse markers.

2.1   Discourse markers

Discourse markers have received a lot of attention within the field of linguistics in the last couple of decades. However, there still seems to be no consensus on what discourse markers are exactly, which words belong to the category, and even how discourse markers should be more appropriately called (cf. discourse operators, discourse particles, pragmatic markers, pragmatic expressions). This section will discuss several definitions of 'discourse markers' in order to arrive at a working definition that can be used in the rest of this thesis. This thesis will employ the term 'discourse markers' and will not be concerned with the question of whether or not 'discourse markers' is indeed the most fitting term.

Schiffrin (1987: 31) defines discourse markers as "sequentially dependent elements which bracket units of talk." They are independent from individual clauses, but "sequentially dependent on the structure of the discourse" (Schiffrin 1987: 40). Lee-Goldman (2011: 2628) paraphrases Schiffrin's definition by stating that a discourse marker is "some linguistic unit the primary function of which is not to contribute to the descriptive or propositional meaning of an utterance, but rather to indicate to the reader how they should understand what follows or what came before with respect to each other and to the discourse as a whole." A discourse marker does not change the meaning of the sentence it is adjoined to, but provides the reader or listener how they should interpret the sentence in relation to the preceding discourse. An example Schiffrin (1987: 318) provides is given in (3).

(3)   a.   Sue dislikes all linguists
       b.   I like her.

Without a discourse marker, there are several possible interpretations of the meaning relation between (3a) and (3b). It will depend on certain background conditions (i.e. context, identity of the speaker) whether or not a contrastive relation or a resultative relation is the preferred, or most likely, interpretation. The intended meaning relation can be made explicit by means of a discourse marker. *But*, for instance, would indicate that the speaker, unlike Sue, does like linguists or is a linguist themselves and that they like Sue in spite of her disliking linguists. *So*, on the other hand, would reveal that the speaker dislikes linguists as well. Even though these two interpretations differ from each other considerably, *so* or *but* do not change the propositional value of either "Sue dislikes all linguists" or "I like her." Instead, the discourse markers inform the listener how to relate (3b) to (3a).

Schiffrin (1987) states she deliberately uses the vague "units of talk" in her definition of discourse markers because using any more specific term would be problematic. The type and size of the two units of talk connected by discourse markers remains in Schiffrin's definition therefore unspecified. Redeker (1990) feels that Schiffrin's (1987) definition of discourse markers is insufficient. She proposes a more specific definition (Redeker prefers the term 'discourse operators' over 'discourse markers'):

> A *discourse operator* is a word or phrase – for instance, a conjunction, adverbial, comment clause, interjection – that is uttered with the primary function of bringing to the listener's attention a particular kind of linkage of the upcoming utterance with the immediate discourse context. An utterance in this definition is an intonationally and structurally bounded, usually clausal unit." (Redeker 1990: 1168)

The most important result of Redeker's specification of the two 'units of talk' is that it rules out words or expressions whose scope is not over the entire following utterance (e.g. *ohh*) and clausal indicators of discourse structure (e.g. *let me tell you a story*) as discourse markers. Additionally, Redeker's definition appears to rule out Schiffrin's (1987) proposal that nonverbal expressions, such as gestures, can also function as discourse markers.

Fraser (1999: 938) states that discourse markers "impose a relationship between some aspect of the discourse segment they are a part of, call it S2, and some aspect of a prior discourse segment, call it S1." He schematically represents this as <S1. DM+S2>. Fraser, however, acknowledges that this is merely the canonical form of discourse markers. He adds that discourse markers can also link S2 to not just the prior sentences, but to several prior sentences, and, similarly, states that S2 does not have to be limited to one sentence, but can include multiple following sentences. Additionally, S1 is not necessarily the immediately

preceding sentence, but can also be a discourse segment one or several sentences prior to the discourse marker. Finally, Fraser proposes that S1 can also be non-verbal and merely contextual, as would be the case when someone enters their living room, finds their computer missing, and asks their friends "**so**, where'd you put it?" (Fraser 1999: 938). *So*, here functions as a discourse marker linking the fact that the computer is missing (essentially S1) to S2, "where'd you put it?"

Fraser's statement that discourse markers can also connect an utterance to the preceding discourse was proposed earlier by Blakemore (1987). Closely connected to this is Blakemore's claim that discourse markers can also connect the utterance of which they are a part to assumptions that may or may not have been communicated by a prior utterance, a view that is supported by Schourup (1999). Blakemore (1987: 85) illustrates this with the following example:

(4)   A: You take the first turning on the left.
        B: **So** we don't go past the university (then).

Blakemore argues that *so* in (4) connects the rest of B's utterance not to the propositional value of A's statement, but rather to what that statement entails. The argument that discourse markers can connect non-verbal discourse or context elements to verbal utterances calls for an abandonment of Schiffin's (1987) "units of talk" and Redeker's (1990) "intonationally and structurally bounded, usually clausal units" in favor of, for instance, Fraser's (1999) "discourse segments."

Fraser (1999) and Schourup (1999), like Schiffrin (1987) and Redeker (1990), both acknowledge that discourse markers tend to precede the sentence they link to the previous sentence or discourse, although they can also occur at the end of the sentence (as 'closing brackets' in Schiffin's analysis). However, both Fraser and Schourup also add that discourse markers may occur mid-S2, as in "It is freezing outside. I will, **in spite of this**, not wear a coat." (Fraser 1999: 938). This possibility, however, seems to be limited to a select group of discourse markers. Additionally, Fraser allows for the patterns <S1, DM+S2> (e.g. "Harry will not go, unless he is paid an appearance fee") and <DM+S2, S1> (e.g. "While she is pregnant, Martha will not take a plane").

Both Fraser (1999) and Schourup (1999), unlike Schiffrin (1987) and Redeker (1990), make explicit that S1 does not necessarily have to be spoken by the same speaker as S2. What all of them seem to agree on is that words function uniquely as discourse markers, but that

there are also words that can function as discourse markers in addition to functioning as words from another category. The meaning of discourse markers is not conceptual (i.e. they do not demarcate a certain set of semantic features), but rather procedural (i.e. indicate how a segment is to be interpreted with respect to the preceding discourse). Fraser (1999), Schiffrin (1987), and Redeker (1990) for the most part agree that all discourse markers have one 'core meaning,' although their specific meaning can vary depending on the context.

When comparing Fraser (1999) and Schourup (1999) to Schiffrin (1987) and Redeker (1990), it can be concluded that they allow more variety when it comes to the formal characteristics of discourse markers. This is also the case in more recent definitions of 'discourse markers.' Van Bergen and Degand (2013), for instance, use the following definition:

> Discourse markers (DMs) are linguistic expressions of varying syntactic type (conjunctions, adverbials, prepositional, verbal or nominal phrases, etc.). Their primary function is pragmatic in nature in that they relate their host utterance to the surrounding discourse situation. (Van Bergen and Degand, 2013: 3)

Discourse markers can have their origin in different syntactic categories and their referent does not have to be a linguistic unit. Additionally, van Bergen and Degand recognize that discourse markers can appear in utterance-initial, utterance-final, and utterance-medial position.

In this thesis, discourse markers are considered to be words or phrases that provide information on how to interpret the utterance containing the discourse marker (S2) in relation to preceding discourse (S1) and vice versa. They are not a syntactic part of, and do not change the propositional value of, the sentence they are adjoined to (S2). Discourse markers usually precede S2, but can also be adjoined at the end of S2. Both S1 and S2 can vary in size from a single sentence to a larger chunk of discourse. S1 can be contextual or an assumption underlying the preceding discourse and does not necessarily have to be immediately adjacent to S2. A discourse marker has an identifiable 'core meaning,' which is procedural, rather than conceptual, although its specific interpretation depends on the context. Furthermore, words that function as discourse particles can also function as words from another category.

2.2   Literature on *yeah*

2.2.1   *Drummond & Hopper (1993)*

Drummond and Hopper (1993) discuss *yeah* in English. They identify it as an acknowledgment token: a token used by recipients of an extended telling to encourage the speaker to continue and to signal that they are still listening.[1] Drummond and Hopper compare *yeah* to *uh-huh* and *oh*, other acknowledgment tokens that are used in English. They propose that these tokens differ when it comes to speakership incipiency: the likelihood that the speaker of the acknowledgment token resumes talking. Whereas *uh-huh* displays low speakership incipiency and *oh* a higher speakership incipiency, *yeah* can be used in both ways. It can either stand alone to indicate a continuing recipient role or be used to take over the floor, in which case it is followed by speech. Additionally, the use of *yeah* as an acknowledgment token may suggest the recipient will take up speakership in the near future.

In addition to being used as an acknowledgment token, *yeah* can also supply an agreeing answer to a statement or to yes-no questions, in which case it is an agreement token. In their article, Drummond and Hopper appear to confound these two uses of *yeah*. They state that putting the two *yeah*s into separate categories is somewhat shortsighted because of the many similarities between them. Both occur prototypically in turn-initial position, are similar when it comes to speakership incipiency, and there are many examples to be found in which *yeah* is ambiguous. Drummond and Hopper support this with an example, given below as (5). It is not clear whether the *yeah* in (5) is agreeing, acknowledging, or both.

(5)   D: Death offends me: it really bothers me.
       M: **Yeah**.
       D: And I guess it's afraid of…

Although M's use of *yeah* could merely be an encouragement for D to keep talking, it could also indicate agreement with D's statement. Because y*eah* is a variable-use item when it comes to speaker incipiency and can be ambiguous between acknowledgment tokens and agreement tokens, Drummond and Hopper pose that *yeah* is very useful in keeping open interactants' options.

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[1] Drummond and Hopper note that *yes*, as opposed to *yeah*, is very rare as an acknowledgment token in common, informal conversation.

2.2.2   Jefferson (1985)

Much like Drummond and Hopper (1993), Jefferson (1985) attempts to map the use of *yeah* as an acknowledgment token in English with regard to speakership incipiency. Jefferson's approach, however, is much more systematic. She analyzes speakers' use of acknowledgment token such as *uh-huh*, *mm mm*, and *yeah*. She finds that not every speaker makes use of all acknowledgment tokens: some speakers for instance only or mostly use *yeah*. However, the ones that make use of both *mm mm* and *yeah*, make a systematic distinction between the two. *Mm mm* is used to indicate 'passive recipiency' and its use therefore displays low speakership incipiency. *Yeah* is then used when speakers are ready to take over speakership. *Yeah* in this case is still an acknowledgment token, but also a device to take the floor. Jefferson argues that this function of *yeah* explains why it is often associated with a shift in topic. Speakers want to acknowledge what the other speaker has said, but also want to start talking themselves. By using *yeah* they can do both.

2.2.3   Fuller (2003)

Fuller (2003) looks into how and how often *yeah* (as well as other discourse markers) is used as a discourse marker, and whether or not this varies depending on context (conversation versus interview). Every instance of *yeah* counted as a discourse marker, except for those answering yes-no questions. Fuller uses Jucker and Smith's (1998: 174) categories to distinguish between discourse markers: 'reception marker,' used to "signal a reaction to information provided by another speaker," and 'presentation marker,' used to "accompany and modify the speaker's own information." Unlike reception markers, presentation markers usually occur in turn- or utterance-medial position. *Yeah* is more commonly a reception marker, but can also, according to Fuller, function as a presentation marker:

(6)   (The speakers are discussing regional speech variants)
        A: Do you 'warsch' the clothes and clip the 'coupons' [kyupanz]?
        B: Grandma does…**yeah** and she 'might could' do this and y'know…

                                                                    (Fuller 2003: 29-30)

Fuller thus demonstrates that *yeah* can also be used in turn-medial position, even though it appeared more commonly in turn-initial position (72% versus 8% in conversations).

        Most instances of *yeah* Fuller found were examples of agreement markers and acknowledgment markers, both of which classify as reception markers. *Yeah* was not used

more often in one type or the other. Additionally, she mentions that *yeah* was used to open new topics, although she does not elaborate on this. Fuller concludes that *yeah* was by far used most out of all discourse markers she analyzed. This was the case in both interaction types she included in her research. Unlike some of the other discourse markers, the frequency with which *yeah* occurred did not vary between interaction types. Fuller attributes this to the broad range of functions of *yeah*.

2.3   Literature on *no*

2.3.1 Schegloff (1992)
Schegloff (1992: 1301) discusses 'third position repairs,' which he defines as "repairs after an interlocutor's response has revealed trouble in understanding an earlier turn:"

(7)   Dan: Well that's a little different from last week.

       Louise: heh heh heh Yeah. We were in hysterics last week.

       Dan: No, I mean Al.

       Louise: Oh. He…   (Schegloff 1992: 1303)

Dan corrects the assumption Louise has made based on his statement. Before the actual correction, Dan starts his turn with *no*. According to Schegloff, third position repairs are most commonly initiated by *no*, or multiple *no*s. In environments like this, *no* does not disagree with or reject a prior statement, as *no* in its most basic use does. Instead, Schegloff proposes that in third position repairs *no* functions as a 'repair-initiation component.'

Schegloff (1992) argues that third position repairs consist of four components, not all of which are necessarily always present. Component *A*, the repair-initiation component (usually *no*, but *oh* or *well* are also options), functions as an indicator of the impending repair. This can be followed by component B, an 'agreement/acceptance component' (e.g. "I understand that" or "I realize that too") agreeing with or accepting the propositional content of the other speaker's turn. Component C is the 'rejection' component, with which speaker 1 rejects the assumption the speaker 2's turn has indicated they have made based on speaker 1's prior turn. Finally, in component D, the 'repair proper,' speaker 1 "carries out some operation or operations on a prior turn, so as to address the problematic understanding of it revealed by [the] interlocutor's response" (Schegloff 1992: 1308).

Schegloff interprets *no* in third position repairs as merely indicating an upcoming repair. However, even though *no* may not indicate disagreement with or rejection of the propositional content of the other speaker's turn, it does reject their understanding of, or assumptions made based on, speaker 1's prior turn, which are revealed by speaker 2's turn. In this interpretation, *no* refers to a non-verbal element in the discourse, something that has been argued to be possible for discourse markers (cf. Fraser 1999; Schourup 1999).

2.3.2 Schegloff (2001)

Schegloff (2001) argues that the relation between (turn-initial) *no* and the expression of disagreement with, or rejection of a prior statement or question is not as uncomplicated as sometimes portrayed. On the one hand, disagreement or rejection ('dispreferred responses') is often indicated by silence, audible inbreaths, or prefaces such as *uh*(*m*) or *well*, instead of by *no* (cf. Clayman 2002; Kitzinger & Frith 1999; Pomerantz 1984; Pomerantz & Heritage 2012; Sacks 1987). On the other hand, turn-initial *no* is not always straightforwardly associated with disagreement or rejection of the prior turn, as the *no* opening a third position repair illustrates (see Schegloff 1992).

Schegloff (2001: 1948) identifies another turn-initial *no* to fit into this category: the 'joke-to-serious *no*,' which can be used to mark a transition from just-preceding talk […], talk which was analyzable 'non-serious' (of which 'joke' is the most common and overt version), to what will follow and is designedly 'serious:'

(8)   Mark: Where were we?

        Sherri: I don't know. Have you been studying lately?

        Mark: No, not at all, not at all. I have to study this whole week. Every night. And then I got something planned on Sunday with Laura. She and I are gonna go out and get drunk at four o'clock in the afternoon.

        Sherri: huh-huh

        Mark: It's a religious thing we're gonna have. I don't know why, but.. Uhm.. **No,** her ex-boyfriend is getting married and she's gonna be depressed, so..

        Sherri: She wasn't invited to the wedding?

                                                (Schegloff 2001: 1951)

No marks the transition between Mark's joking about getting drunk on Sunday as 'a religious thing' and the real explanation of his plans for Sunday. The function of *no*, according to Schegloff, is two-fold: on the one hand it functions to reveal that the previous chunk of discourse was a joke, something that may not have been understood by other interactants, and on the other hand it indicates that the upcoming speech is to be taken seriously.

2.3.3 Lee-Goldman (2011)

Lee-Goldman (2011) provides an overview of the literature on *no* as a discourse marker, categorizes the different ways in which *no* can be used, and attempts to explain and connects them in order to arrive at a more coherent and complete analysis of *no* in English. Lee-Goldman discusses Schegloff's (2001) 'joke-to-serious *no*' and proposes that it is a subcategory of a larger function of *no*: topic shift. According to Lee-Goldman, *no* can be used to indicate a shift back to an earlier topic. These instances of *no* closely resemble *no*s that indicate the transition from joking to serious talk, without there being a joking environment. Essentially, 'joke-to-serious *no*' also signals a move back to an earlier topic after the conversation has temporarily trailed off on a joking path.

Another function of *no* listed is managing misunderstanding and disagreement. This includes, but is not limited to, Schegloff's (1992) third position repair. Again, Lee-Goldman argues that Schegloff's *no* is but a subtype of a larger category. Misunderstandings can for instance be addressed and repaired by people other than the original speaker on the basis of whose turn the misunderstanding has arisen. Additionally, the realization that a misunderstanding has arisen and the repair do not have to be in strict succession. Finally, Lee-Goldman seems to suggest that *no* in these contexts does indeed reject something: the assumptions other speakers have made on the basis of preceding discourse.

Finally, Lee-Goldman briefly discusses 'turn-negotiation *no*.' This function of *no* can be found in environments in which two speakers produce overlapping speech, after which they negotiate who can have the floor. According to Lee-Goldman, speakers can yield the floor either by saying "no go ahead" directly after the overlapping speech occurred or by saying "no go ahead" after the other speaker has said "go ahead."

Even though Lee-Goldman designs these categories of *no*, he acknowledges that it is possible for *no*s to be analyzed as carrying more than one of these functions. *No* can for instance be used to mitigate misunderstanding and at the same time indicate a shift to an earlier topic. The different uses of *no* are thus not mutually exclusive.

Lee-Goldman continues by comparing the functions of *no* as discourse marker to each other and to other uses of *no* (answer, imperative, disbelief). He argues that all uses of *no* are tied together by the notions of negation and indexicality. Discourse markers relate the current utterance to the prior (and sometimes following) discourse, a relationship that can be described as indexical (Schiffrin 1987). *No* additionally expresses negation and, since negation has to be *of something*, this something has to be found in either the linguistic or extralinguistic context. What *no* negates and the ease with which this can be determined depends on its function: whereas *no* negating a statement is straightforwardly expressing negation about the propositional content of that statement, topic shift-*no*, for instance, is more complicated. Lee-Goldman proposes that the negation of topic shift-*no* is to be found at a textual level, specifically to "how parts of the discourse cohere (or do not cohere) with one another. Marking a shift back to a main topic denies that what is about to be said will form a cohesive unit with what preceded it" (Lee-Goldman 2011: 2642).

Whereas all uses of *no* are similar in the sense that they all express negation, they differ in what they negate. In addition, some *no*s are an expected answer to a speech act and some *no*s can stand alone and act as a full turn. *No*s that function as an answer to a yes/no question can always grammatically stand alone, but so can commands ("Jimmy, **no**!"), reactions to commands ("Please leave now." "**No**."), or *no*s that express disbelief or despair (yelling "**noooooooo**!" when your favorite baseball team loses). According to Lee-Goldman, it is uncommon for all uses of *no* as a discourse marker listed above to stand alone and they need to be supplemented.

2.4 *Ja* and *nee* as discourse markers

In the literature discussed above, *yes* and *no* are largely considered to be discourse markers. However, when *yes* and *no* uttered in response to a question or statement, they are usually not attributed discourse marker status. Lee-Goldman (2011: 2630), for instance, does not consider *no* "as a negative response particle used to negate or reject a prior question or directive" to be a discourse marker because "it operates primarily on the propositional level." The same reasoning can be used to exclude *yes* used to answer or agree to a prior question or directive. On the other hand, Lee-Goldman (2011: 2630) acknowledges that even these uses of *yes* and *no* depend on the preceding discourse "in a way comparable to indexicals and anaphors." The decision to regard these types of *yes* and *no* as non-discourse markers is thus mainly based on the assumption that they carry (too much) lexical content and their, somewhat more

problematic, characteristic that they can appear in isolation without being a part of a full sentence.

This thesis will collapse the 'discourse marker uses' and 'non-discourse marker uses' of *ja* and *nee*. When *yes* or *no* is used, for instance, to answer a question like "are you ready?" it can be uttered in isolation, but adding a sentence is always an option: "yes (I am ready)" or "no (I am not ready)." In case the full sentence is uttered, *yes* or *no* adhere to all the formal qualities of discourse markers listed above in section 2.1: they are words or phrases that provide information on how to interpret the utterance containing the discourse marker in relation to preceding discourse, they are not a syntactic part of, and do not change the propositional value of, the sentence they are adjoined to, and they usually precede the sentence they are adjoined to, but can also follow it. Additionally, as will be elaborated upon in Chapter 3, the core meaning of the 'discourse marker uses' of *ja* and *nee* is the same as that of the 'non-discourse marker uses' of *ja* and *nee*. The variation in the interpretation of *ja* and *nee* is mainly caused by what exactly it is *ja* or *nee* refers to.

2.5   Conclusion

This chapter has given a short overview of the discussion on discourse markers and formulated a working definition of 'discourse markers.' It has summarized the existing literature on *yes* and *no* as discourse markers and argued in favor of collapsing the uses of *yes* and *no*, or *ja* and *nee*, that have been considered to be 'non-discourse marker uses' with the 'discourse marker uses' of *ja* and *nee*. The next chapter will present the conducted corpus study and provide a categorization of the different uses of *ja* and *nee* that were encountered in the data.

3   Corpus study

3.1   Methodology

All data for this study was collected from the Spoken Dutch Corpus (CGN: Corpus Gesproken Nederlands). The CGN consists of roughly 800 hours of recorded speech, all of which had been orthographically transcribed. It contains fifteen different types of data, ranging from spontaneous dialogue to television broadcasts to recited texts. Although the corpus contains both Dutch and Belgian Dutch data, this study only uses speech from speakers of Dutch.

The conversational data of the CGN was most relevant to this study, as *yes* and *no* occur much more often in dialogue than in monologue or writing (cf. Tottie 1991). The data used in this study was taken from the telephone recordings of the CGN (adding up to 156 hours of recorded dialogue, each separate session being roughly ten minutes). Because speakers are (usually) unable to see each other during telephone conversations, their conversations do not include informative visual cues such as for instance nodding, head shaking, eye contact, or facial expressions. In telephone conversations, speakers have to use sound in order to reveal their (dis)agreement and emotions and to indicate that they are still paying attention to what the other person is saying. This can for instance be done by making sounds like "hm mm" or by audible breathing, but also by saying *yes* or *no*. It can therefore be assumed that telephone data includes a bigger range of possible uses of *ja* and *nee* than face-to-face conversational data, or at least that certain uses of *ja* and *nee* (for instance the "I'm listening" use of *ja*) will be more frequent in telephone conversations than in face-to-face conversations.

To eliminate the problems the search engine had because of the high frequency of *nee* and especially *ja*, two sets of fifty sessions were randomly selected from the telephone data. The orthographic transcriptions of each subset of sessions were then searched for instances of the words *ja* and *nee*. The number of times each word was uttered in roughly 500 minutes of dialogue can be found in Table 1:

	Ja	Nee
Number of hits	6257	1087

Table 1: The number of times *ja* and *nee* were uttered in the subsets of 50 sessions.

In order to arrive at a subcorpus of 100 utterances of both *ja* and *nee*, every 62th *ja* and 10th *nee* were selected. The 100 utterances of, respectively, *ja* and *nee* were closely examined, after which they were grouped according to the way in which they were used. This was initially done on the basis of the data itself. Later, the categories that were established were compared to the uses of *yes* and *no* described for English (see Chapter 1), slightly adjusted when needed, and given corresponding names.

To later expand the subcorpus with an additional 100 *ja*'s and 100 *nee*'s, another 1023 utterances of *ja*, and 596 utterances of *nee* were reduced to 100 each by selecting every 10th instance of ja and every 6th instance of *nee*. The additional data was categorized according to the different uses of *ja* and *nee* identified on the basis of the first 100 *ja*'s and *nee*'s. An overview of the categories that were established and the amount of times each use was found in the subcorpus can be found in sections 3.2 and 3.3 below.

3.2   The uses of ja

All occurrences of *ja* in the subcorpus were analyzed and categorized according to their interpretation. An overview of the established categories and the number of occurrences of each type of *ja* can be found in Table 2.

Uses of *ja*	Number of occurrences
Affirmative answer to a question (closed or leading)	23
Affirmative reaction to a statement	77
'Continuer'	28
To indicate topic shift	12
To conclude a topic	5
To introduce a direct quote	4
To underline or emphasize own statement / turn	17
To express emotion	7
Thinking / contemplative *ja*	20
Total	193

Table 2: The different uses of *ja* and the number of occurrences of each use in the subcorpus.

The amount of times each category was found in the subcorpus does not total 200, but 193. All instances of *ja* that were left out of the categorization process were instances of repeated ja ("jaaa ja") that, as such, received a special interpretation along the lines of 'I understand,'

or a sarcastic "oh sure." The repetition of *ja* with a complex discourse marker as result will receive more attention in the next chapter.

3.2.1 *Affirmative answer to a question (closed or leading)*

In the introduction it was stated that the most basic use of *ja* is "to express assent or agreement." This can either be in response to a question or a statement. Even though *ja* (or *yes*) as an answer to a question is perhaps more canonical, it occurs with a lower frequency than *ja* in response to a statement, as was shown in Table 2 above. (9) and (10) are examples of *ja* as an affirmative answer to a closed question.

(9)　　A:　　En　uh volgende week heb ik nog een afspraak　　met d'r gemaakt.
　　　　　　and　next　　week have I an-other appointment with her made
　　　　　　'And I made another appointment with her for next week.'

　　　　B:　　Met　Henriët?
　　　　　　with　Henriët
　　　　　　'With Henriët?'

　　　　A:　　**Ja**.
　　　　　　'Yeah.'

(10)　　A:　　Ooh is nog best　　leuk! En daar krijg je　nog punten voor ook?
　　　　　　ooh is still kind.of fun　And there get　 you still points　for　also
　　　　　　'That sounds kind of fun! And you even get points for that?'

　　　　B:　　**Ja**　　daar krijg je dan punten voor.
　　　　　　yeah there get　 you then points for
　　　　　　'Yeah you get points for that.'

In (9) and (10), there are only two possible answers: affirmative (*ja*) and negative (*nee*). It is possible for *ja* to be the entire answer, as in (9), or to be followed by a statement underlining or slightly modifying *ja*. In addition to answering a closed question, *ja* can answer a leading question, as in (11).

(11)　　A:　　Morgen　　moet　je　toch werken zeker?
　　　　　　tomorrow have.to you　PRT work　 right
　　　　　　'Tomorrow you have to work, right?'

　　　　B:　　**Ja**.
　　　　　　'Yeah.'

3.2.2 Affirmative reaction to (agreeing with or confirming) a statement

Another use of *ja* is as an affirmative reaction to a statement, in which case it also has its basic meaning. In (12) or (13), *ja* expresses assent or agreement with the prior statement. *Ja* can make up the entire turn, as in (12), but (13) and (14) demonstrate that this is not necessarily the case.

(12) A: Ja   en   dan kun je   in Oxford mooi   uh t één en ander bekijken en
          yeah and then can you in Oxford nice   it one and other look.at   and

          bezoeken
          visit

      'Yeah and when you are in Oxford you can visit some places.'

      B: **Ja**
          'Yeah.'

(13) A: Ja want   ik kreeg al   een mailtje van   Marcel Lingo Veldkamp of
          yes because I got   already an email   from Marcel Lingo Veldkamp or

          zoiets.
          something.like.that

      'Yeah because I already received an email from Marcel Lingo Veldkamp, or
      something like that.'

      B: **Ja** heel goed.
          yes very good
          'Yeah great.'

In (13), *ja* is modified to make it stronger. By adding "heel goed," speaker B enforces the affirmative reaction that *ja* alone conveys. Similarly, *ja* can be made weaker, or simply longer or more elaborate. In (14), speaker B's answer to A's suggestion starts out affirmatively with two times "ja." The rest of the turn, however, weakens the agreement.

(14) A: Maar dat ging dus niet helemaal goed met de laatste trein, dus je   moet
          but   that went so not totally   well with the last   train, so you have.to

          wel even   kijken of ze   ook werkzaamheden hebben.
          PRT short.while look   if they also construction   have

'But it did not completely work out with the last train, so you really should check if there is any construction going on.'

B: **Ja**. **Ja**. Nou, ik kijk wel even. Anders   gaan we met de auto.
    yes yes well, I look PRT PRT   otherwise go   we with the car.
    'Yeah. Yeah. Well, I'll see. Otherwise we will go just go by car.'

(14) additionally demonstrates that it can be hard to determine whether *ja* is used as an indication of agreement, or if it merely acknowledges the other speaker's statement. The distinction between *yes* as an agreement token and *yes* as an acknowledgment token in English and the overlapping of the two, as described by for instance Jefferson (1985) and Drummond and Hopper (1991), was elaborated upon in the previous chapter. In Dutch, *ja* can indicate both agreement and acknowledgment with the preceding discourse, as is also illustrated by the use of *ja* as a continuer, which is described in the next section.

Both answer-*ja* and reaction-*ja* have 'late' varieties, as it is always possible to respond to not the immediately preceding turn, but to something that occurred earlier in the discourse. In 'late' answers or reactions, it is no longer possible for *ja* to make up the entire turn. Additional information is then needed to communicate what exactly it is that *ja* refers to.

3.2.3   Continuer
When another person is speaking, listeners want to indicate that they are still listening, paying attention, and understand what is being said. One way of doing so is by saying *ja*. This 'continuer' use of *ja* often overlaps with the other speaker's turn, as in (15).

(15)   A: Dat is hetzelfde als uh dat je   net d'rin   komt en dat je   dan uh als je
             that is the.same if   that you just in.there come and that you then   if   you

             d'r net gaat wonen dat je   dan heel secuur bent
             there just go   live   that you then very careful are

       'That is the same as when you just move in somewhere and you are very careful at first.'

       B: [**Ja**]
             'Yeah.'

A: [en] uiteindelijk zie je   het niet meer.
        and eventually see you it   no   more
       'and eventually you no longer see it.'

As Drummond and Hopper (1991) proposes, continuers are used to encourage the other speaker to continue talking. This use of *ja* should therefore be seen as predominantly acknowledging the other speaker's turn, although it is also used when listener is agreeing with what is being said. However, since there does not seem to be a word that can be used to encourage someone to continue speaking that simultaneously conveys disagreement, continuer use of *ja* should not automatically be interpreted as an agreement token. Whether or not the listener agreed with what the speaker was saying will most likely become clear once they take the floor themselves.

It should be noted that *ja* as a continuer can easily be replaced by non-verbal communication, most iconically nodding, or non-lexical items, for instance *uh huh* or *hm mm*. During a telephone conversation (the source of all data used in this thesis), however, nodding is very unproductive and has to be replaced by sound. It is therefore expected that the relative frequency of continuer-*ja* is higher in telephone conversations than in face-to-face interaction.

Ja in Dutch, at least in telephone conversations, does not seem to necessarily indicate high speakership incipiency on the part of the listener, as in most cases continuer-*ja* was preceded or followed by more continuers (*ja* or *nee*: this will be elaborated upon in section 3.3.2.4). This then corresponds to both Jefferson's (1985) and Drummond and Hopper's (1991) finding that *yes* can both indicate 'passive recipiency' and be used when speakers are ready to take over the floor.

3.2.4   Topic shift

Ja can be used to indicate topic shift, as in (16). The conversation has landed on a particular house that is for sale and speaker A states that she concluded earlier that the prices of the houses on that street were still rising. Speaker B answers "ja" (which can either be agreeing or merely acknowledging), but does not continue talking. After a short pause, speaker A then says "hmm," probably because speaker B has not really responded to what she said. Speaker B then introduces a new, though somewhat related topic (since both topics mention houses).

(16) A: Nou, d'r   heeft ook een huis   daar twee huizen vandaan   te koop gestaan.
           well there has   also a   house there two   houses away.from to buy   stood

           Dat heeft wel in de krant   gestaan. Dit niet. Maar dat   andere wel.   En
           that has   PRT in the newspaper stood   this not but   that other PRT and

           toen dacht   ik ook   al   nou nou nou die   stijgen nog wel.
           then thought I   also already well well well those rise   still PRT

       'Well, there was also a house for sale two doors away from that one. That one has
       been in the newspaper, but this one has not. And then I thought well, those prices are
       still going up.'

    B: Ja
           'Yeah'

    A: Hmm

    B: **Ja**   ik ben van de week in het huis   geweest van die Pakistaanse familie
           yeah I am of   the week in the house been   of   that Pakistani   family

           die bij mijn deur woont.
           that by my door lives

       'A couple days ago I went into the house of that Pakistani family that lives next door
       to me.'

In (16), "ja" prefaces a topic shift. Crucially, this shift is to a new topic, as was the case in all instances found in this research in which *ja* indicated a topic shift. This is then in contrast with the topic shift function of *nee*, in which case the topic that is being shifted to is always old (see section 3.3).

In terms of function and meaning, *ja* as an indicator of topic shift does not differ much from the other uses of *ja* described above. Topic shift-*ja* can also be seen as an acknowledgment token. However, instead of acknowledging a single preceding turn, as for instance continuer-*ja* or possibly affirmative reaction-*ja*, it acknowledges an entire chunk of preceding discourse, before moving on to a new topic.

3.2.5   To conclude topic

Closely connected to the use of *ja* to indicate topic shift is *ja* used to conclude a topic. *Ja* acknowledges an entire chunk of conversation, but is not followed by more speech. An example of topic conclusion-*ja* can be found in (17).

(17)   A: En dit   is een subsidie die bedoeld is voor mensen die uh die die   werken hè?
              and this is a   subsidy that meant   is for people that   that that work   huh
              'And this is a subsidy that is meant for people that work, right?'

       B: Ja.
             'Yeah.'

       A: Dus naast je   werk moet je dan zoiets   doen.
             so   next.to your work have you then something.like.that do
             'So you have to do something like that in addition to your job.'

       B: Ja.
             'Yeah.'

       A: En ik weet niet precies hoe ze   dat berekenen. Naar draagkracht   of
             and I know not exactly how they that calculate.   to   financial.means or

             wat dan ook.
             what then also

       'And I am not exactly sure how it is calculated. Taking into account financial means or
       something.'

       B: Ja.
             'Yeah.'

       A: .hhh **Ja**.
             'Yeah.'

       B: Maar uhm. Nou ja   goed.
             but   well yes good
             'But.. Well okay then.'

Speaker A is talking about a subsidy she will be receiving. Speaker B uses continuer-*ja* to encourage speaker A to continue speaking. However, speaker B expects speaker A to continue, but she does not. When after a short pause speaker B does not take the floor,

speaker A says "ja." By doing this, she concludes the topic. This is underlined by speaker B's reaction: "Maar uhm" reveals his intention of commenting on what speaker A has said earlier, but he stops and says "Nou ja goed," by which he acknowledges that the topic is closed. After this short exchange, the conversation moves to a new topic.

3.2.6   To introduce a direct quote
In the subcorpus, four instances of *ja* were found that seemed to indicate that *ja* could be used to introduce a direct quote. An additional, specific search in the CGN yielded more such examples. Two are given below as (18) and (19).

(18)   A: Maar Jolanda die vriend   was er   dan t   weekend [hè]
            but   Jolanda that boyfriend was there then the weekend huh
            'But Jolanda's boyfriend is there this weekend.'

       B: [oh] ja
            'Oh that's right.'

       A: Die   zien elkaar   voornamelijk in t   weekend
            those see each.other especially   in the weekend.
            'They see each other mainly during weekends.'

       B: Ja
            'Yeah.'

       A: En uh ja   die was d'r dan uh nu   en ze zei **ja**   vind k niet zo leuk om
            and   yeah that was there then   now and she said yeah find I not so fun to

            dan al   's ochtends   vroeg weg te gaan.
            then already in.the.morning early away to go

       'So he is there now and she said "I would prefer not to leave early in the morning."'

(19)   A: Hé maar uhm uh die uh rookmelder
            hey but   that smoke.detector
            'Hey about that smoke detector.'

       B: Ja
            'Yeah.'

A: Die uh gaat Martijn uh .hh als t goed is vanavond of morgen   ophangen
        that   goes Martijn   if it okay is tonight   or tomorrow hang

        want   dat ding dat ligt hier maar ik zeg tegen Martijn van **ja**   dan moet
        because that thing that lies here just I   say to   Martijn of   yeah then has.to

        er   wel   geboord worden om die   schroeven d'rin   te krijgen.
        there PRT   drilled   be to   those screws   in.there to get

'Martijn will hang it tonight or tomorrow because now it is just lying around here, but
I told Martijn "you have to drill in order to get those screws in."'

Examples (18) and (19) seem to demonstrate that *ja* can be used as a quotative. However, this
use of *ja* has not been described in the existing literature on either Dutch *ja* or quotatives in
general.

Foolen et. al. (2006) described Dutch *van* ("of") as a quotative and noted that it is
often followed by a particle, or interjection:

(20)   Toen had ik zoiets   *van* **ja**   daar wil   ik ook aan meedoen.
        then had I something VAN PRT there want I also on   participate
        'Then I was like "(yeah) I want to participate".'

(21)   Toen dacht   ik *van*   hé   dat is opvallend.
        then thought I VAN PRT that is remarkable
        'Then I thought "hey that is remarkable".'

(22)   Dus ik had een stuk of zeven mensen waren bij   mij geweest *van*   nou   och got d'r
        so   I   had a   piece of seven people were with me been   VAN PRT   gee there

        zijn maar drie boeken of zo.
        are only three books or so

'So I had about seven people come up to me saying there are only about three books.'

In example (20), Foolen et. al. (2006) call "ja" a particle, or interjection. However, even
though "ja" follows the quotative and, as such, appears to be part of the quote, it was not
necessarily uttered by the person being quoted. In (18), it is even fairly unlikely that "ja" was
part of the original statement. Example (18) also illustrates that *ja* can be used to introduce a
quote without *van*, or any other quotative or particle. Since multiple quotatives can be used to

introduce direct speech (e.g. Fleischman 1999), (20) does not constitute a counterexample to the proposition that *ja* can be used to introduce a direct quote.

The use of *ja* as a quotative marker can be explained by *ja*'s formal qualities. *Ja* usually appears at the beginning of a turn or sentence. In the subcorpus, *ja* was found mostly sentence-initially (see Table 3 below). The majority of the sentence-initial *ja*'s were also turn-initial. *Ja* in sentence-medial position is very rare, especially considering that out of the 16 instances of *ja*, 4 introduced direct quotes and the rest were examples of thinking or contemplative-*ja*. This type of *ja*, as described in section 3.2.9 below, is usually intonationally marked and/or accompanied by pauses.

	Number of occurrences	Percentage
Sentence-initial (turn-initial)	167/193 (145/193)	86.5% (75.1%)
Sentence-final	10/193	5.2%
Sentence-medial	16/193	8.3%

Table 3: the position of *ja* in the turn / sentence.

Quotative *ja* appears in sentence-medial position, usually without a pause. It can be concluded from Table 3 that sentence/medial *ja* is very infrequent. When *ja* is encountered in the middle of a sentence, it is therefore marked. Because *ja* occurs predominantly at the beginning of a turn or sentence, it has an inherent turn-initial quality. This, then, seems especially useful for introducing a direct quote. The quote was originally uttered as a sentence or turn in a different context and, as such, constitutes a new turn. The transition from the current turn to the quote (a new turn) can be signaled by *ja*.

No quotative use of *yeah* was found in the literature on English *yeah*. Future research is required to investigate if *yeah* is indeed not used as such (or if the equivalent of *yeah*/*ja* is used as a quotative in other languages). In English too, *yeah* appears predominantly in sentence-initial position (cf. Fuller 2003). If *yeah* in English is not used as a quotative, this could be caused by a lower turn-initial frequency of *yeah* compared to Dutch *ja*. At this point, however, there is not specific enough data to make this comparison.

Although Fuller (2003) includes the frequencies with which *yeah* was found in turn-initial and turn-medial positions, there is a problem: all isolated instances of *yeah*, that are by definition also turn-initial, are filed in the same category as turn-final occurrences of *yeah* and all instances of *yeah* in second position (following another discourse marker or a verbal filler) were counted as turn-initial (no raw data was included in the article). Additionally, Fuller's

data was collected from face-to-face conversations. As explained earlier, the category of *ja* that will differ most in frequency between face-to-face and telephone data is continuer-*ja*, which is always found in isolation. Both Fuller's collapsing of data and the different conversation types makes it hard to compare the frequency with which English *yeah* is uttered in turn-initial and turn-medial position to the frequency with which Dutch *ja* occurs in these positions.

Other reasons for a (possible) lack of English quotative-*yeah* might be a higher turn-medial occurrence rate of *yeah*, or its lack of phonetic prominence (i.e. *yeah* might be more "invisible" than *ja*).

3.2.7 To underline or emphasize own statement/turn

Ja can be used to underline or emphasize a speaker's own, immediately preceding statement. In these cases, speakers are essentially agreeing with themselves. This use of *ja* never appears turn-initially, but can appear sentence-initially, as in (23). Additionally, it can be found at the end of a turn.

(23)   A: En   alles is goed gegaan?
                and   all   is good gone
                'And everything went fine?'

        B: Ja   nou. **Ja**,   fantastisch.
                yeah PRT   yeah   fantastic
                'Definitely. Yeah, it was fantastic.'

It was discussed in Chapter 2 that discourse markers can appear in sentence-final position. In that case, the discourse marker still refers to the preceding sentence, rather than to the sentence adjoined to. An example of this would be B answering "alles is goed gegaan, ja" ('everything went fine, yeah') in (23). In the current study, instances of *ja* were therefore only considered to be examples of emphasizing-*ja* when there was a pause between *ja* and the sentence preceding it.

Liu (2013) investigated the use of the English discourse marker *yeah* by Chinese speakers of English (see also Fuller 2003). Liu found that the Chinese speakers used *yeah* to acknowledge information from the interviewer much more often than English native speakers (65% versus 12.5%), while the English native speakers used *yeah* relatively more often within a turn to confirm their own statements.

When *ja* appears in sentence-final position, it will often be ambiguous if it refers to the immediately preceding sentence by the same speaker, or to the preceding turn of the other speaker. This is largely due to the fact that in both interpretations, the speaker is essentially agreeing with, or affirming the same thing: the other speaker's statement or question. In the case of emphasizing-*ja* this happens indirectly, as it is used to emphasize the speaker's own statement that is in agreement with, or affirming the other speaker's statement or question.

3.2.8   To express emotion

Sometimes, *ja* can be used to express emotions such as for instance surprise, indignation, disbelief, or enthusiasm. The interpretation of emotion-*ja* depends on the context and intonation. When watching sports, for example, something might enthusiastically yell "jaaaaaaa!" indicating that they are happy with what is happening. *Ja*, however, is not only able to convey positive emotions (such as happiness). It can for instance indicate surprise on the part of the speaker, as in (24).

(24)   A: Wat   doen ze   dat snel   zeg!
               what   do   they that quick say
               'They are really fast!'

       B: Ja   maar met vier man.
               yes but   with four man
               'Yeah, but they are with four people.'

       A: Oh vier   man.
                   four people
               'Oh, four people.'

       B: **Jaa**   joh?
               yeah PRT
               'Yeah! What did you think?'

In the above example, speaker B is talking about renovations to his house, to which speaker A replies that she thinks that the workers are working really fast. Speaker B then tells her that although the renovations are happening quickly, there are actually four people working. With this he implies that it is not as impressive as speaker A seems to think. Speaker A indicates that she did not realize there were four workers, to which speaker B replies "Jaa joh?" Speaker B thus expresses his surprise (or possibly disbelief) about the fact that speaker A thought there were less people working on her house. In addition to expressing emotion,

speaker B's *ja* also affirms speaker A's statement. It should therefore be noted that emotion-*ja* can overlap with other types of *ja*.

3.2.9   *Thinking/contemplative* ja

Ja can be used to indicate that the speaker is considering, or thinking about something. This it can happen in the middle of a speaker's own turn, in which case it functions as a 'filler,' or in response to another speaker's statement or question, as in (25). Especially in the latter case, *ja* is stretched out.

(25) A: Maar ja,   oké, je   kan beter   toch   maar een keertje soms   over de
            but   yeah okay you can better PRT   just   a   time   sometimes over the

            drempel   heen stappen of zo   uh.
            threshold over step   or something

      'But sometimes you are better off just doing it.'

      B: **Jaaa**
            'Yeah well'

      A: Ja   nou ja.
            yeah well yeah
            'Yeah, anyway.'

When uttered in response to another speaker's turn, thinking-*ja* indicates a reluctance to agree. In (25), speaker B's stretched out *ja* indicates that he is considering, or thinking about speaker A's suggestion. In response, speaker A's diminishes his prior statement by saying "ja nou ja." This suggests that thinking-*ja* is a 'dispreferred response.' Even though the speaker has not actually expressed disagreement, they have overtly not agreed. The only non-committing answer in this case would be an acknowledgment-*ja* (although that could be interpreted as an agreement-*ja*, as was explained above). Thinking-*ja* as a response is therefore not a neutral reaction.

3.3 The uses of n*ee*

Uses of *nee*	Number of occurrences
Negative answer to a question (closed)	31
Negative reaction to a statement	19
Preface to self-correct	13
To return to a topic	20
To express emotion	5
Affirmative answer to a question containing a negation (leading)	11
Affirmative reaction to a statement containing a negation	64
Continuer when the preceding discourse contains a negation	19
To underline or emphasize own statement / turn when it contained a negation	7
Non-negation *nee* without a negation in the preceding discourse	5
Total	194

Table 4: The different uses of *nee* and the number of occurrences of each use in the subcorpus.

For *nee*, as for *ja*, all occurrences in the subcorpus were analyzed and categorized according to their interpretation. An overview of the established categories and the number of occurrences of each type of *nee* can be found in Table 4 above.

As will be elaborated upon below, *nee* can both receive a negative or an affirmative interpretation. The first five categories in Table 4 are negative uses of *nee*. The other categories are affirmative uses of *nee*. The subcorpus included 88 instances of negative *nee* (45.3%) and 106 instances of affirmative *nee* (54.6%).

All occurrences of *nee* included in the above table total 194, not 200 as might be expected. Most instances of *nee* that were left out of Table 4 were uttered in combination with *ja* ('ja-nee'). Because it has been claimed that combinations of *ja* and *nee* (or *yeah* and *no*) are complex discourse markers (cf. Burridge & Florey 2002; Lee-Goldman 2010), these were disregarded in the initial categorization process. The combination *ja-nee* will be further discussed in chapter 4. One instance of *nee* was left out of the above table because it was part of a repetition of *nee* ("neeee nee") that receives a special meaning along the lines of 'I understand.' This special meaning of repeated *nee*, also a complex discourse marker, will also be returned to in Chapter 4.

3.3.1 Negative nee

3.3.1.1 Negative answer to a question (closed or leading)

The most prototypical use of *nee* is as a negative answer to a question. In this use, *nee* expresses "negation, dissent, denial, or refusal" and thus captures *nee*'s most basic meaning. Negative *nee* can be uttered in response to both a closed or leading question, much like *ja*. An example of *nee* answering a closed question can be found in (26). In this example, *nee* indicates that speaker B's pet did not have to lie in a warm spot after its surgery. N*ee* can occur in isolation or be supplemented or modified with additional information. Although an isolated *nee* would have been a sufficient answer to the question "did he have to lie in a warm spot?" in (26), speaker B supplements her *nee* with the statement that her dog did not have to lie down at all.

(26) A: Moestie   ook war- moestie   ook op een warm plekje liggen of

            did.he.have.to   also   did.he.have.to also on a   warm spot lie   or

            niet?
            not?

‘Did he also have to lie in a warm spot?’

      B: Nee maar hij .hh hij ligt helema- ja   hij ligt nu   wel   maar hij wilde   ook
            no   but he   he lies   yeah he lies now PRT   but   he wanted also

            direct   al   weer lopen
            immediately   already again walk

‘No. He is lying down now, but immediately afterwards he wanted to walk again.’

In addition to responding to the propositional content of a preceding question or statement, *nee* can apply to the assumption underlying that question or statement. This corresponds to what Schegloff (1992) calls "misunderstanding-*no*." Examples of this type were also found in the data:

(27) A: Lag je   te maffen meissie?
            lay you to sleep   girl
            ‘Were you sleeping?’

B: Ja
       'Yeah'

A: Oh hoe   laat lag je   erin   dan?
            how late lay you there.in then?
       'Oh what time did you go to bed?'

B: **Nee** ik lag wel   op de bank   maar..
        no   I lay PRT on the couch but
       'No I was lying on the couch, but..'

In (27), speaker A asks speaker B if she was sleeping. When speaker B says she was, speaker A asks what time she went to bed, assuming that that was where speaker B was sleeping. Speaker B, however, was sleeping on the couch. She therefore answers "no, I was lying on the couch." Speaker A's question was not a closed question, and simply answering *ja* or *nee* would have been infelicitous. Speaker B's *nee* therefore negates the assumption that speaker A has made, which was revealed by her (immediately preceding) question.

3.3.1.2   Negative reaction (refuting or disagreeing with) to a statement
In addition to negatively answering a question, *nee* can be used to negatively respond to a statement. In this use too, *nee* carries its basic meaning. Here, *nee* can also be used in isolation, although it is often part of a longer turn, as in (28).

(28)   A: Ik hoorde bij   jou kabaal.
              I   heard   with you noise
              'I heard noise on your end.'

       B: **Nee** dat   was bij   jou.
              no   that was with you
              'No that was on your end.'

As answer-*ja* and reaction-*ja*, both answer-*nee* and reaction-*nee* have 'late' varieties, in which case *nee* refers not to the immediately preceding turn, but rather to something earlier in the preceding discourse. As a late reaction or answer, *nee* cannot make up the entire turn, as it is necessary to indicate what exactly *nee* is referring to.

When looking at the frequency of *nee* as a negative response to statements, it can be concluded that it is not used very often (19 times), especially when compared to *nee* negatively answering a question (31 times) and the respective frequencies found for *ja* (23

times answering a question, 77 times responding to a statement). This finding appears to be consistent with Schegloff (2001) and other literature on dispreferred responses in the field of conversation analysis (CA). CA defines dispreferred responses to be all responses that are not the preferred response. This includes negative responses when a positive response is preferred, positive responses when a negative response is preferred, and all kinds of non-answers. The most basic type of a dispreferred response, however, is the refuting of, or disagreeing with, a statement. It should be noted that *no* as an answer to a question can often not be seen as a dispreferred response, as questions often inquire about truth-conditions, as in (26).

An asymmetry has been found in the design of preferred versus dispreferred responses. Preferred responses tend to be straightforward, short, and unprefaced. Often, preferred responses take the form of just 'yes,' if a positive response is the preferred response. Dispreferred responses, on the other hand, tend to be delayed, prefaced, complex, and/or accounted for (Clayman 2002; Kitzinger & Frith 1999; Pomerantz 1984; Pomerantz & Heritage 2012; Roberts et. al. 2011; Sacks 1987; Schegloff 2001). As a result, turns with dispreferred responses do not usually consist of just a 'no.' In fact, the word 'no' is often not even explicitly uttered (Kitzinger & Frith 1999).

Pomerantz & Heritage (2012: 215) formulated an interactional principle to help explain the asymmetry between preferred and dispreferred responses: "If possible, avoid or minimize a stated disagreement, disconfirmation or rejection, and, if possible, include an agreement, confirmation, acceptance or other supportive action." This, Clayman (2002: 230) states, is done in order to "avoid conflict and promote solidary actions." This view is supported by the other literature on dispreferred responses. It is therefore not surprising that preferred responses are found to be more frequent than dispreferred responses (Sacks 1987; Stivers et. al. 2009).

The data collected for this thesis supports the claims made by CA that people prefer to avoid explicitly disagreeing with their conversation partners. As explained above, *nee* as a negative response to a question or statement is less frequent than *nee* as an affirmative response, or *ja*. Additionally, negative *nee* does often not constitute the entire turn: negative *nee* was found in isolation only 9/88 times (10.2%), whereas affirmative *nee* was found in isolation 35/106 times (33.0%) and *ja* 67/193 times (34.7%). This then supports CA's claim that dispreferred responses are usually not made up of just *no*, but tend to be longer.

3.3.1.3   Preface to self-correct

Nee was used several times by speakers as a preface to self-correct, as in (29). The speaker is talking about a music institute that is organizing special workshops because of some significant event. He starts by saying that the institute or its board has existed for a certain amount of time, but remembers it has something to do with the director after which the institute was named, Theo Driessen. He breaks off the sentence, says "nee" to indicate that what he said before was wrong (by negating it), and then proceeds to give the actual reason. Later in the same turn, he corrects himself again. This time, however, he does not self-correct with *nee* mid-sentence, but rather in a new sentence.

(29)   A: Maar daar zit dan   ook een bestuur bij   en   nu   bestaat dat uh 't zit
               but   there sits then also a   board   with and now exists   that   it sits

               iets   uhm   **nee** die die die Theo Driessen is geloof ik honderd jaar
               something   no   that that that Theo Driessen is believe I hundred year

               geleden geboren of overleden. **Nee** geboren waarschijnlijk.
               ago   born   or died   no born   probably
        'But there is also a board and that has existed for.. Ehm it's been there for something
        like.. Ehm no it's because that Theo Driessen died or was born a hundred years ago I
        think. No, was born probably.'

3.3.1.4   To return to topic

Much like *ja*, *nee* has a topic shift function. However, as already touched upon in section 3.2.4., *nee* signals a return to a previous topic, rather than to a new topic. This was the case in all instances found in the data. In example (30), speaker A and B are talking about watching television. Speaker A starts telling speaker B that in their previous conversation he could hear himself back through the telephone. Speaker B jumps in on speaker A's story by telling him he could hear, and is hearing, himself as well. Speaker A repeats this and speaker B agrees. Speaker A then returns to his original story, which was saying that he turned off the sound of his television to limit the noises on the line.

(30)   A: Ja   ik hoorde dus straks mezelf ook dus dat uh.
               yeah I heard so   before myself also so   that
               'Yeah so I also heard myself before so that..'

B: Ja   ja   ja   typisch hè? Ja   ik hoor mezelf nu   ook hoor.
        yeah yeah yeah typical huh yeah I hear myself now also PRT
        'Yeah strange huh? Yeah I'm also hearing myself back now.'

A: En   jij   hoort jouw kamer terug dus…
        and   you hear   your room back so
        'And you hear your own room so…'

B: [Ja]
        'Yeah.'

A: [**Nee**] ik heb 't   geluid weer uit staan   want   ik vind 't een beetje
         no   I have the sound again out standing because I find it a   bit

        irritant tijdens xxxx.
        annoying during

'No I turned the sound off again because I think it's a little annoying during xxxx.'

In (30), *nee* thus prefaces a topic shift. *Nee* essentially dismisses the side-track the conversation got on before the conversation returns to a previous topic. This use of *nee* in Dutch corresponds to Lee-Goldman's (2011) observation that English *no* can signal a shift back to an earlier topic.

3.3.1.5   *To express emotion*

Much like *ja*, *nee* can be used to express emotion. In the data, similar emotions were found to be expressed by *nee* as by *ja*: surprise, indignation, and disbelief. All these examples of *nee* are intonationally marked. In (31), for instance, *nee* is stretched. Speaker B expresses her disbelief about what speaker A is telling her. By doing so, she is not actually negating that speaker A got a head ache shortly after being on the phone with her. Instead, the negation is more abstract, or hopeful.

(31)   A: Want   ik had jou net gebeld.
                because I had you just called
                'Because I had just called you.'

        B: Ja.
                'Yeah.'

A:	En dus 's middags		hing	ik	wat	op	de	bank	nou	toen	kreeg	ik	me
	and so	in.the.afternoon	hung	I	a.bit	on	the	couch	well	then	got	I	me

toch een hoofdpijn.
PRT a   head.ache

'And so in the afternoon I was just lounging on my couch and then I got a terrible headache.'

B: **Neeeeee**.
'Nooooo! / Are you serious?!'

Nee in the above example conveys a negative emotion, although this is not necessarily always the case (when someone is being told they have won the lottery they may respond "neeeee!"). Additionally, emotive-*nee* can potentially overlap with other uses of *nee*.

3.3.2 *Affirmative* nee

As will be demonstrated below, it was found that *nee* was often used as an affirmative answer or reaction. The core meaning of affirmative *nee* can be said to correspond to the core meaning of *ja*. *Nee* was actually used more often in an affirmative than in a negative way. When a question or statement contains a negation, the way to respond affirmatively in Dutch appears to be to give a reaction containing a negation as well. According to Pope (1973), the system is called an "agreement-disagreement answering system." Characteristic of this system is that an answer to a negative utterance is "agreeing if it matches the question with respect to negativity, and disagreeing if it doesn't" (Pope 1973: 482). Instead of an agreement-disagreement answering system, languages can have a "positive-negative answering system," in which an "answer is negative if it contains a sentential negation in its highest clause, and positive if it doesn't" (Pope 1973: 482). In a language with a positive-negative answering system, the agreeing response to the question in for instance (32) would be "yes."

The Dutch agreement-disagreement answering system is, however, slightly different from the basic version described above. Like many other languages (for instance German, French, and Norwegian, cf. Pope 1973), Dutch has a special word to express 'positive disagreement' (disagreeing with a negative to arrive at a positive): *jawel*. The agreeing response to a negative utterance is still negative ("nee"), but the disagreeing response is no longer a simple positive ("ja"). In fact, answering "ja" to a negative utterance is infelicitous. The appropriate answer is "jawel," a compound of *ja*, meaning "yes," and *wel*, a word used to

deny a denial (Hogeweg 2009). The presence of *jawel* in the Dutch answering paradigm makes responding to questions or statements, whether they are positively or negatively phrased, relatively straightforward:

> Positive utterance – agreeing response: *ja*
>
> Positive utterance – disagreeing response: *nee*
>
> Negative utterance – agreeing response: *nee*
>
> Negative utterance – disagreeing response: *jawel*

The Dutch answering system is fairly straightforward and consistent, especially when compared to English, which does not have a special word to express positive disagreement. Even though Pope (1973) states that English has a positive-negative answering system, many other studies have found discrepancies with this system. Bald (1980), Jefferson (2002), Tottie (1991), and Yaeger-Dror (1985) all find that "no" can be used to acknowledge or agree with negative utterances, although "yes" or "yeah" is not infelicitous. The result is that "yes"/"yeah" and "no" are both agreeing responses to negative utterances in English and that the only way to unambiguously respond to a negatively framed utterance is to make a full sentence, preceded by either "yes"/"yeah" or "no" (Bald 1980).

Jefferson (2002) analyses doctor-patient interaction, a context in which doctors have to be careful about differentiating between understanding the patient and agreeing with them. Based on the conversations she analyzed, Jefferson states that there appears to be a difference between British and American English when it comes to 'no' as an answer to a negatively framed statement. She proposes that whereas 'no' is used by speakers of British English as a 'continuer,' meaning "'I understand what you said'," speakers of American English use it as an 'affiliative:' to express "'I feel the same way', 'I'd do the same thing', etc., i.e., 'I'm with you'" (1345).

3.3.2.1 *Affirmative answer to a question containing a negation (leading)*

(32) is an example of *nee* as an affirmative answer to a leading question (i.e. a question that suggests the answer that is expected by the person asking the question). Speaker A asks if there is no more sun in speaker B's back yard. Speaker B then says "nee" to indicate that there is indeed no more sun. *Nee* is not denying or refusing anything, but rather uttered to affirm the other speaker's assumption: that there is no more sun.

(32)   A: Oh heb je dan al   geen zon meer?
            oh have you then already no   sun anymore
            'Oh is there already no more sun?'

       B: **Nee**.
            no
            'Yeah/no.'

Another example of *nee* as an affirmative answer is (33). Here, *nee* does not make up the entire turn. Speaker B has been telling speaker A about his weekend trip, after which speaker A asks "So it was not bad, huh?", by which he means to ask for confirmation that it was (really) good. Speaker B answers by saying "no, no, it was not bad at all," by which he means to say that it was indeed very good. Again, *nee* does not negate anything, but is used to confirm the assumption made by speaker A.

(33)   A: Was niet verkeerd dus?
            was not wrong   so
            'So it was good huh?'

       B: **Nee nee** was helemaal niet verkeerd.
            no   no was totally   not wrong
            'Yeah it was very good.'

Like answer-*ja*, reaction-*ja*, negative answer-*nee*, and negative answer-*nee*, both affirmative answer-*nee* and affirmative reaction-*nee* (discussed below in 3.3.2.2) have 'late' varieties, in which case they respond to not the immediately preceding turn, but to something that occurred earlier in the discourse. In 'late' answers or reactions, it is no longer possible for *nee* to make up the entire turn. Additional information is then needed to communicate what exactly it is that *nee* refers to.

3.3.2.2   *Affirmative reaction (confirming or agreeing with) to a statement containing a negation*

Nee can also be used to affirmatively respond to a statement containing a negation, as in (34). This was the type of *nee* most frequently found in the data (64 times). In fact, *nee* was used slightly more often as an affirmative response than as a negative response. This again supports the claim described above that people try to maximize agreement and avoid disagreement. In

(34), *nee* is used to agree with speaker A's statement. Additionally, it is followed by "I agree," which confirms the assumption that *nee* is used affirmatively.

(34)   A: Maar zes- drieëntwintig euro dat is toch uhm nou dat is al   gauw
              but   six- twenty.three euro that is PRT   well that is already fast

              vijftig gulden   voor een fles.
              fifty guilders for   a   bottle

       'But twenty three euro, that comes down to about fifty guilders for a bottle.'

       B: Ja   da's   behoorlijk veel   geld.
              yeah that.is quite   much money
              'Yeah that is quite expensive.'

       A: Dat ja   dat doe ik niet. Dat vind ik ook niet leuk dan meer   hè.
              that yeah that do I not   That find I also not fun then anymore huh
              'I am not paying that. That way it just isn't fun anymore."

       B: **Nee**. **Nee** dat vind ik ook.
              no   no   that find I also
              'I agree.'

3.3.2.3   Continuer when preceding discourse contains a negation

Like *ja*, *nee* can be used as a continuer. Nee, however, can only be used in this way when the preceding turn contained a negation. (35) is a good example of how *ja* and *nee* thus complement each other as continuers.

(35)   A: Ze   houden natuurlijk wel   de boel   in de gaten uh.
              they keep   of.course PRT the whole.lot in the look
              'Of course they do keep an eye on everything.'

       B: Ja   [ja]
              'Yeah yeah.'

       A: [Maar] uh niet in die   zin   dat ze   uh regulerend gaan op[treden]
                    but   not in that sense that they   regulating go   act
              'But not in the sense that they are going to regulate everything.'

       B: [**Nee   **]
              'No.'

B: **[Nee]**
'No.'

A: [En] dingen gaan snoeien of of [gaan] gaan gaan ma- maaien nee da's niet
         and things go   prune or or go   go go   mow no that's not

de bedoeling nee.
the intention no

'And it is not the idea that things are going to be pruned and mowed.'

B: [**nee**]
       'No.'

Speaker A is telling a story, while speaker B listens and repeatedly indicates that she is still paying attention. Speaker A's first turn in the above example (and a few preceding turns) does not contain a negation. Speaker B therefore uses *ja* as a continuer. However, when speaker A starts using negations, speaker B immediately switches to *nee*.

As was discussed in the previous chapter, *ja* as a continuer can be replaced by non-verbal nodding, or non-lexical *mm mm*, or *uh huh*. Although continuer-*nee* can be replaced by head-shaking, it can be questioned if passive recipiency items, like for instance *mm mm* or *uh huh*, can replace *nee*.

3.3.2.4   *To underline or emphasize own statement/turn containing a negation*
Much like *ja* can be used to underline or emphasize a speaker's own statement or turn, *nee* can be used to do the same if the statement or turn contained a negation. In (36), speaker B uses "nee nee" to underline his (or, more accurately, their) turn. As for *ja*, only instances of turn-final *nee* were considered to be examples of emphasizing-*nee* if there was a prosodic break between *nee* and the rest of the turn.

(36) A: Die   mensen die   dronken uh Biesboschwater
            those people those drank   Biesboshwater
            'Those people drank water from the Biesbosh'

      B: [Zo]
            like.that
            'Wow.'

A: [Nou] dat zouden wij nou niet meer   [uh]
       well   that would   we now not anymore
      'Well, that's something we would never...'

B: [Hè] niet meer   durven nee.
                                             not anymore dare   no

      Nee nee.
      no   no

"Never dare to do nowadays. No."

3.3.2.5   *Non-negation* nee

A few instances of *nee* could not receive a negative interpretation, even though the preceding turn did not contain a negation. In all cases, the affirmative interpretation of *nee* was arrived at because of the rest of the turn, as in (37).

(37)   A: Ja   dat is duidelijk natuurlijk [ja   die   zijn] daar zijn er   ook meer van.
             yeah that is clear   of.course yeah those are   there are there also more of
             'Yeah that is clear, of course. After all, there are more of those.'

       B: [Maargoed uh]
                                     but.well
             'Anyway.'

       A: ((silence))

       B: .hh ja

       A: [mmm]

       B: [Ja]
             'Yeah.'

       A: **Nee** inderdaad.
             no indeed
             'Indeed.'

 "Inderdaad" can only be interpreted as affirmative. *Nee* in the above example negates the assumption speaker A initially made, which was expressed by, or underlying a statement uttered earlier in the conversation. In the example above, *nee* negates speaker A's initial

doubts. By doing this, however, the speaker affirms the other speaker's point of view. This type of *nee* will therefore be considered as affirmative.

3.4   An overview of the uses of *ja* and *nee*

Sections 3.2 and 3.3 above have listed and given examples of all the uses of *ja* and *nee* encountered in the corpus. Although at first sight all uses appear to have a different meaning, a core meaning can be identified. All instances of *ja* and affirmative *nee* express assent or agreement. What it is they refer to, however, varies between the different uses. This was indicated above for each type of *ja* and affirmative *nee*. The same holds for negative *nee*. All uses of negative *nee* negate something. What it is exactly that is being negated differs between the types of *nee*. Again, this was separately addressed for each use of *nee* above.

Ja	*Nee*	**Refers to**
Answer-*ja* Reaction-*ja* Continuer-*ja* Underlining-*ja* Thinking-*ja* Emotion-*ja*	Neg. answer-*nee* Neg. reaction-*nee* Aff. answer-*nee* Aff. reaction-*nee* Continuer-*nee* Underlining-*nee* Self correct-*nee* Emotion-*nee*	Propositional content of the immediately preceding sentence
Emotion-*ja*	Emotion-*nee* Prohibitive-*nee*	Immediately preceding context
	Misunderstanding-*nee*	Assumptions made, revealed by the preceding turn
Quotative-*ja* Late answer-*ja* Late reaction-*ja*	Late neg. answer-*nee* Late neg. reaction-*nee* Late aff. answer-*nee* Late aff. reaction-*nee* Late self correct-*nee*	Propositional content earlier sentence
	Non-negation *nee*	Assumptions made, revealed by an earlier turn
Topic shift-*ja* Concluding-*ja*	Topic return-*nee*	Larger chunk of preceding discourse

Table 5: The uses of *ja* and *nee* and what element of the discourse they refer to

An overview of all types of *ja* and *nee* that were identified and what element of the discourse each use refers to can be found in Table 5 above. For the sake of completeness, prohibitive-*nee* has been included, even though no examples of this use of *nee* were found in the data. Prohibitive-*nee* (e.g. when a five-year old kid starts climbing a tree and his mother shouts "Johnny no!/nee!") can certainly be found in Dutch. However, telephone conversations between two adults are not a context in which a lot of imperatives are used. Prohibitive-*nee* is often directed at children and uttered in response to an action.

3.5   Conclusion

This chapter has presented the corpus study conducted for this thesis. All uses of *ja* and *nee* encountered in the data were categorized, described, and supported with examples. Many uses of *ja* and *nee* corresponded to the uses of *yes* and *no* described in the literature discussed in Chapter 2. There were, however, some differences. *Ja* in Dutch seems to be used as a quotative marker, whereas this has not been described for English *yes*. Additionally, *nee* is often used affirmatively, whereas the affirmative use of *no* is much less straightforward and widespread. The final section of this chapter has provided a summary of all uses of *ja* and *nee* found in the data. *Ja* and *nee* can refer to different elements in the discourse. When *ja* or *nee* refers to something that is not the immediately preceding sentence, they do not appear in isolation. The next chapter will present an Optimality Theory model for the interpretation of *ja* and *nee*. Additionally, it will address combinations of *ja* and *nee* (e.g. *ja-nee*, *ja-ja*, and *nee-nee*) that were left out of the initial categorization process for reasons of simplification.

4 The interpretation of *ja* and *nee*

If *ja* and *nee* can receive different interpretations, as outlined in the previous two chapters, how do hearers come to an appropriate interpretation to fit the context? This chapter will present an Optimality Theory (OT) account to model the interpretation of *ja* and *nee*. It will make use of a model designed by Zwarts (2004) and further developed by Hogeweg (2009). This chapter will also briefly touch upon the production of *ja* and *nee*. Specifically, it will discuss the production of dispreferred responses. Additionally, the Dutch positive-negative answering system will be modeled and compared to the less straightforward English answering paradigm. The final sections of this chapter will discuss combinations of *ja* and *nee* (i.e. *ja-ja*, *nee-nee*, or *ja-nee*) and demonstrate how these can be interpreted.

4.1 An interpretation model

4.1.1 Optimality Theory

Optimality Theory, which has its roots in connectionism, considers grammar to be a system of ranked constraints. The optimal, and thus grammatical, candidate is the one that satisfies the entire set of constraints best. The idea that language could be seen as a process of optimization started in the field of phonology (Prince and Smolensky 1993, McCarthy and Prince 1993a,b) and then spread to for instance syntax, semantics, and pragmatics. Essential to Optimality Theory is that all constraints are violable, or soft, rather than inviolable, or hard (Hendriks et. al. 2010). These constraints potentially conflict. The ranking of the constraints differs between languages, which accounts for different grammatical structures between languages. The optimization process in OT is visualized in 'tableaux.' To model the interpretation of *ja* and *nee*, this thesis will make use of OT semantics, first described by Hendriks and de Hoop (2001) and de Hoop and de Swart (2000).

4.1.2 Bidirectional Optimality Theory

In addition to unidirectional OT (e.g. OT semantics or OT syntax), there is a bidirectional approach: bidirectional OT. Bidirectional OT holds that hearers do not only take into account their own hearer's perspective, but also the speaker's perspective, and vice versa (Blutner 2000; Blutner, de Hoop & Hendriks 2006, Hendriks et. al. 2010). To interpret a certain form, the hearer not only has to determine the optimal form from their perspective, but also consider if they would have picked that form to produce that meaning if they were the speaker. If not,

that meaning could not have been intended by the speaker. The hearer thus has to select a different meaning. This works similarly for speakers: when a speaker wants to produce a certain form for their intended meaning, they have to check whether, if they were the hearer, they would infer that meaning when presented with that form.

Certain forms are preferred to other forms because they are 'unmarked.' They are for instance "shorter, less complex, ordinary, the default choice in a particular situation, or they occur in many languages" (Hendriks et. al. 2010: 9). If there are multiple potential forms for a meaning, the more marked forms are often blocked for this meaning. Similarly, certain meanings can be unmarked, for example "because they require less effort by the hearer, or are less complex or more stereotypical" (Hendriks et. al. 2010: 9). When several meanings compete for a form, the more marked meanings are often blocked.

Bidirectional optimization can lead to the formulation of form-meaning pairs. A form-meaning pair is optimal when there is no better pair with a better form or a better meaning. In this case, there is 'total blocking' of that meaning and that form. This is called 'strong bidirectional optimization.' Form-meaning pairs can be determined based on the following assumptions:

A form-meaning pair <f,m> is bidirectionally optimal iff:
(a) There is no other pair <f', m> such that <f', m> is more harmonic than <f, m>.
(b) There is no other pair <f, m'> such that <f, m'> is more harmonic than <f, m>.

(Hendriks et. al. 2010: 11)

'Harmony' in this case refers to how well a candidate satisfies the constraints of a grammar. Once a form-meaning pair has been established, the other forms are blocked from that meaning.

In addition to strong bidirectional optimization, there is 'weak bidirectional optimization.' Sometimes a situation arises in which one form is the optimal candidate for more than one meaning. In that case, the 'best' (most harmonic) meaning forms a pair with the 'best' form. All other combinations containing either the form or the meaning that is part of the already formed pair are 'blocked.' Because of this partial blocking, the second-best form forms a form-meaning pair with the second-best form. The resulting form-meaning pairs are called 'super-optimal pairs:'

A form-meaning pair <f,m> is super-optimal iff:

(a) there is no super-optimal pair <f',m> such that <f',m> is more harmonic than <f,m>.

(b) there is no super-optimal pair <f,m'> such that <f,m'> is more harmonic than <f,m>.

(Hendriks et. al. 2010: 12)

Under weak bidirectional optimization there are thus two rounds of optimization: one to yield the first super-optimal pair and a second round to yield the other one. As the name already points out, weak bidirectional optimization is a weaker form of optimization than strong bidirectional optimization and, as such, yields weaker form-meaning pairs.

4.1.3   Zwarts (2004) and Hogeweg (2009)

Zwarts (2004) models the interpretation process of the polysemous word (*a*)*round*. (*A*)*round* can have multiple different interpretations, as the sentences in (38) demonstrate:

(38)   a.   The postman ran round the block

   b.   The burglar drove round the barrier

   c.   The steeplechaser ran round the corner

   d.   The tourist drove round

   e.   The driver took the long way round

   f.   The woman came round again   (Zwarts 2004: 349)

The prototypical meaning of *round*, Zwarts takes to be "a circle, a circular shape or movement" (Zwarts 2004: 350). This meaning is modeled in terms of sets of paths. A path is defined as "a sequence of *vectors* located with their starting point in one common origin" (Zwarts 240: 350). *Round*, Zwarts models using set of paths that describe exactly one perfect circle. The closer to a full circle the interpretation of *round* is, the stronger the interpretation is. However, the interpretation has to still fit the context. In a sentence such as "he came round the door," for instance, *round* will not denote a complete circle, as the man is unlikely to have walked back through the wall. Zwarts thus uses two essential constraints to model the interpretation of (*a*)*round*: FIT and STRENGTH:

FIT: interpretations should not conflict with the (linguistic) context

STRENGTH: stronger interpretations are better than weaker interpretations

In Zwart's model, FIT and STRENGTH potentially conflict. This is resolved by ranking FIT over STRENGTH. This way, a weak meaning that fits the context wins over a strong meaning that conflicts with the context.

Hogeweg (2009) applies Zwarts' (2004) model to the interpretation of Dutch *wel*. On the basis of corpus research, Hogeweg identifies several different interpretations of *wel*: correction, explicit contrast, implicit contrast, surprise, and modifier. All these interpretations have a core meaning: they are "a denial of an implicit or explicit previous negation" (Hogeweg 2009: 36). She establishes a hierarchy of the interpretations of *wel* on the basis of their strength:

Correction >> Explicit contrast >> Implicit contrast >> Surprise >> Modifier

Essentially, each interpretation incorporates all the weaker interpretations, as the information that is presupposed by for instance "the use of *wel* indicating contrast also entails the information that is presupposed by the uses 'implicit contrast,' 'surprise,' and 'modifier'" (80). Hogeweg applies the OT model to a couple of sentences, one of which is repeated in (39).

(39)   Het feestje was wel   leuk.
        the party   was WEL nice
        "The party was fun/OK."

The constraint STRENGTH asks the hearer to attribute the strongest interpretation to *wel*: 'correction.' This interpretation, however, will violate FIT if the context does not contain a contradictory statement (e.g. that the party was not fun). If there is a statement in the preceding discourse that something else was not fun, for instance dinner, 'contrast' would fit the context. Because it does not violate FIT, 'contrast' will be the optimal candidate. It should be noted that the other, weaker interpretations might also fit the context. Each lower ranked interpretation is more in violation of STRENGTH. The optimization process is visualized in Tableau 1 below. The interacting constraints FIT and STRENGTH make hearers pick the appropriate interpretation of *wel*. In the sections below, this model will be applied to the interpretation of *ja* and *nee*.

'Het feestje was wel leuk.'	FIT	STRENGTH
Correction	*	
☞ Contrast		*
Implicit contrast		**
Surprise		***
Modifier		****

Tableau 1: The optimization of the interpretation of *wel* (Hogeweg 2009)

4.1.4   The interpretation of ja and nee

In order to apply the OT model presented above to the interpretation of *ja* and *nee*, it is necessary to establish a hierarchy in the different interpretations of the words. As was argued in Chapter 3, *ja* (and affirmative *nee*) and negative *nee* both have a core meaning. The differences between the interpretations, then, lie in what it is *ja* or *nee* refers to. The ranking in the hierarchy of the different interpretations of *ja* and *nee* will be established using the following two criteria:

Referential distance: Interpretations that include a shorter referential distance are stronger than interpretations that include a longer reference distance.

Concreteness: Interpretations that include a reference to a specific element in the discourse are stronger than interpretations that include a reference to a more vague part of the discourse.

On the basis of these two criteria it is possible to establish a hierarchy of interpretations. This hierarchy can be found in Table 6 below. The right column indicates the amount of times each category violates STRENGTH on the basis of the hierarchy.

Table 6 identifies the different layers within the discourse each interpretation of *ja* and *nee* refers to. The strongest interpretations of *ja* and *nee* are the ones referring to the immediately preceding turn or sentence or to the immediately preceding context. Each interpretation of *ja* and *nee* ranked lower in the hierarchy refers to an element in the discourse that is further removed or less defined (for instance the entire chunk of discourse that topic shift-*ja*, concluding-*ja*, and topic return-*nee* refer to) than the discourse element higher ranked interpretations refer to. As such, each lower ranked layer violates STRENGTH more than the higher ranked layers.

Refers to	*Ja*	*Nee*	Strength
Propositional content of the immediately preceding sentence	Answer-*ja* Reaction-*ja* Continuer-*ja* Underlining-*ja* Thinking-*ja* Emotion-*ja*	Neg. answer-*nee* Neg. reaction-*nee* Aff. answer-*nee* Aff. reaction-*nee* Continuer-*nee* Underlining-*nee* Self correct-*nee* Emotion-*nee*	
Immediately preceding context	Emotion-*ja*	Emotion-*nee* Prohibitive-*nee*	*
Assumptions made, revealed by the preceding turn		Misunderstanding-*nee*	**
Propositional content earlier sentence	Quotative-*ja* Late answer-*ja* Late reaction-*ja*	Late neg. answer-*nee* Late neg. reaction-*nee* Late aff. answer-*nee* Late aff. reaction-*nee* Late self correct-*nee*	**
Assumptions made, revealed by an earlier turn		Non-negation *nee*	***
Larger chunk of preceding discourse	Topic shift-*ja* Concluding-*ja*	Topic return-*nee*	***

Table 6: The ranking of the different interpretations of *ja* and *nee*

Consider example (40), presented before as (9).

(40) A: En   uh volgende week heb ik nog een afspraak   met d'r gemaakt.
        and   next   week have I an.other appointment with her made
        'And I made another appointment with her for next week.'

     B: Met   Henriët?
        with   Henriët
        'With Henriët?'

     A: **Ja**.
         'Yeah.'

According to STRENGTH, *ja* in (40) should receive one of the highest ranked interpretations. Some of these interpretations, however, violate FIT. First of all, emotion-*ja* and thinking-*ja* violates FIT because "ja" was intonationally neutral. Underlining-*ja* violates FIT because "ja"

occurs at the beginning of a turn. Continuer-*ja* violates FIT because "ja" was not uttered in response to a run-on story. Finally, reaction-*ja* violates FIT because "ja" was not uttered in response to a statement. The optimal interpretation is thus answer-*ja*.

Input: Met Henriët? **Ja.**	FIT	STRENGTH
☞ Answer-*ja*		
Reaction-*ja*	*	
Continuer-*ja*	*	
Underlining-*ja*	*	
Thinking-*ja*	*	
Emotion-*ja*	*	*
Quotative-*ja*	*	**
Late answer-*ja*		**
Late reaction-*ja*		**
Topic shift-*ja*	*	***
Concluding-*ja*		***

Tableau 2: The optimization of the interpretation of *ja*

When considering an example of affirmative *nee*, repeated below as (41), most interpretations violate FIT.

(41)   A: Oh heb je   dan al   geen zon meer?
                oh   have you then already no   sun anymore
                'Oh is there already no more sun?'

        B: **Nee**.
                no
                'Yeah/no.'

Because of the presence of the negation in the question, all negative interpretations violate FIT. Because *nee* is turn-initial, underlining-*nee* violates FIT. Because "nee" is in reaction to a question, both affirmative reaction-*nee* and late affirmative reaction-*nee* are in violation of FIT. The only two candidates that do not violate FIT are affirmative answer-*nee* and late affirmative answer-*nee*. STRENGTH then yields affirmative answer-*nee* as the optimal candidate.

Input: Oh heb je dan al geen zon meer? **Nee**.	FIT	STRENGTH
Neg. answer-*nee*	*	
Neg. reaction-*nee*	*	
☞ Aff. answer-*nee*		
Aff. reaction-*nee*	*	
Continuer-*nee*	*	
Self correct-*nee*	*	
Underlining-*nee*	*	
Emotion-*nee*	*	*
Prohibitive-*nee*	*	*
Misunderstanding-*nee*	*	**
Late neg. answer-*nee*	*	**
Late neg. reaction-*nee*	*	**
Late aff. answer-*nee*		**
Late aff. reaction-*nee*	*	**
Late self correct-*nee*	*	**
Non-negation *nee*	*	***
Topic return-*nee*	*	***

Tableau 3: The optimization of the interpretation of *nee*

Essentially, as is demonstrated by Tableau 2 and 3, only the highest ranked interpretations can be attributed to *ja* or *nee* that makes up the entire turn. Because *ja* or *nee* can almost always refer to the immediately preceding turn, the highest ranked interpretations will not violate FIT. Since FIT outranks STRENGTH, one of the highest ranked interpretations will be chosen as the optimal candidate. Lower ranked interpretations (for instance late reaction-*nee*) will therefore need extra information (so that the higher ranked interpretations violate FIT). *Ja* or *nee* that receive interpretations that are not in the highest rank of the hierarchy are therefore always part of a longer turn.

An example of a lower ranked interpretation of *ja* or *nee* can be found in (42), given before as (27).

(42) A: Lag je   te maffen meissie?
             lay you to sleep   girl
             'Were you sleeping?'

      B: Ja
             'Yeah'

> A: Oh hoe laat lag je erin dan?
>   how late lay you there.in then?
>   'Oh what time did you go to bed?'
>
> B: **Nee** ik lag wel op de bank maar..
>   no I lay PRT on the couch but
>   'No I was lying on the couch, but..'

Just the "nee" by itself would yield negative answer-*nee* as the optimal candidate. However, the addition of "ik lag wel op de bank," which corrects speaker A's assumption that speaker B was in bed, makes all interpretations but misunderstanding-*nee* violate FIT. In this case, the extra information that follows *nee* explicitly points out as referent the assumption made by the other speaker that was revealed by the preceding turn.

Input: Oh hoe laat lag je er in dan? **Nee** ik lag wel op de bank..	FIT	STRENGTH
Neg. answer-*nee*	*	
Neg. reaction-*nee*	*	
Aff. answer-*nee*	*	
Aff. reaction-*nee*	*	
Continuer-*nee*	*	
Self correct-*nee*	*	
Underlining-*nee*	*	
Emotion-*nee*	*	*
Prohibitive-*nee*	*	*
☞ Misunderstanding-*nee*		**
Late neg. answer-*nee*	*	**
Late neg. reaction-*nee*	*	**
Late aff. answer-*nee*	*	**
Late aff. reaction-*nee*	*	**
Late self correct-*nee*	*	**
Non-negation *nee*	*	***
Topic return-*nee*	*	***

Tableau 4: The optimization of the interpretation of *nee*

An exception to the 'rule' that *ja*s or *nee*s that make up the entire turn can only receive an interpretation from the highest level in the hierarchy is concluding-*ja*, which by definition stands on its own. Concluding-*ja*, however, is not aimed at eliciting a reaction (except maybe no reaction), is intentionally vague, and is often not preceded by anything that can be

responded to by *ja* or *nee*. An example of concluding-*ja* can be found in (43), given before as (17).

(43)　A:　En dit is een subsidie die bedoeld is voor mensen die uh die die werken hè?
　　　　　and this is a subsidy that meant is for people that that that work huh
　　　　'And this is a subsidy that is meant for people that work, right?'

　　　B:　Ja.
　　　　　'Yeah.'

　　　A:　Dus naast je werk moet je dan zoiets doen.
　　　　　so next.to your work have you then something.like.that do
　　　　　'So you have to do something like that in addition to your job.'

　　　B:　Ja.
　　　　　'Yeah.'

　　　A:　En ik weet niet precies hoe ze dat berekenen. Naar draagkracht of
　　　　　and I know not exactly how they that calculate. To financial.means or

　　　　　wat dan ook.
　　　　　what then also

　　　　'And I am not exactly sure how it is calculated. Taking into account financial means or something.'

　　　B:　Ja.
　　　　　'Yeah.'

　　　A:　.hhh **Ja**.
　　　　　'Yeah.'

Because in (43) "ja" is not preceded by a statement, question, or run-on story and is intonationally neutral, none of the highest ranked interpretations fit the context and, as such, all violate FIT. It is not followed by a quote, nor is it specified what it could be a late response to. Additionally, "ja" is not followed by additional speech. The only interpretation that does not violate FIT is concluding-*ja*. This is therefore the optimal candidate, even though it maximally violates STRENGTH.

Input: Ja.	FIT	STRENGTH
Answer-*ja*	*	
Reaction-*ja*	*	
Continuer-*ja*	*	
Underlining-*ja*	*	
Thinking-*ja*	*	
Emotion-*ja*	*	*
Quotative-*ja*	*	**
Late answer-*ja*	*	**
Late reaction-*ja*	*	**
Topic shift-*ja*	*	***
☞ Concluding-*ja*		***

Tableau 5: The optimization of the interpretation of *ja*.

4.1.5   On the production of ja *and* nee

When taking into account the conclusion that *nee* is more often used affirmatively than negatively in combination with the claims from CA that people aim to minimize disagreement with their conversation partners (as elaborated upon in section 3.3.1.2), it seems plausible that there is an additional constraint relevant to the production of *ja* and *nee*: to avoid negation. This constraint is discussed at length in Hendriks et. al. (2010: 109-136). It is explained that negation in every language is a marked form. Since language prefers unmarked forms over marked forms, marked forms are to be avoided if possible. The output, however, should convey the intended meaning. Hendriks et. al. (2010: 112) therefore include the constraint FNEG ("be faithful to negation, i.e., reflect the non-affirmative nature of the input in the output"). This constraint can be seen as an instance of the constraint FIT that was given above, which for production denotes that the output should fit the input.

*NEG: Avoid negation in the output

This constraint is ranked below FIT. Its relative ranking to STRENGTH is not relevant, as this is a constraint strictly relevant to interpretation. After all, STRENGTH aims to determine the aspect of the conversation the speaker is referring to. For the speaker, this is mostly content-related (as opposed to being motivated by formal properties).

*NEG explains why people answer or respond negatively without saying *no* (or *nee*), or even by starting their turn with *yes* (or *ja*), followed by a sentence that implicitly negates (disagrees with, denies, or dissents from) the other speaker's turn (see 3.3.1.2). Additionally,

the presence of *NEG can account for the fact that hearers are able to correctly interpret an occurrence of *ja* that prefaces a mitigated response and, as such, not expresses agreement at all (though possibly acknowledgment). Through bidirectional optimization, hearers take into account that speaker aim to avoid using explicit negation and thus resort to other constructions, such as prefacing a dispreferred response with *ja* instead of *nee*, or by silence or other fillers. Since *NEG is not relevant to the interpretation of sentences containing a negation, it does not affect the tableaux presented both above in section 4.1.3 and below in section 4.2.

4.1.6 Answering positively and negatively framed utterances

In the majority of the occurrences of *nee* that were found in the data, *nee* was used affirmatively. This is part of what Pope (1973) has called an "agreement-disagreement answering system," as mentioned in section 3.3.2. The Dutch paradigm for answering questions and responding to statements is as follows:

> Positive utterance – agreeing response: *ja*
> Positive utterance – disagreeing response: *nee*
> Negative utterance – agreeing response: *nee*
> Negative utterance – disagreeing response: *jawel*

This system can be seen as the result of bidirectional optimization. There seem to be two ways to affirmatively react to another speaker's turn: to answer with *ja* and by having your response mirror the way in which the other speaker's turn was framed. Three constraints can thus be formulated:

FAITH: Use *ja* to give an affirmative response and *nee* to give a negative response

ALIGN: Align the response with the utterance that is being responded with regard to framing to answer affirmatively; do not align the response with the utterance that is being responded to with regard to framing to answer negatively

*NEG: Avoid negation in the output.

ALIGN is ranked above FAITH, because otherwise *ja* would be used to agree with everything and *nee* to negate everything, regardless of the framing of the utterance that is being responded to. *NEG is ranked below FAITH, because it is more important to be faithful to the input than to avoid using marked constructions. It should be noted that the constraint *NEG is

two-fold: sentences with a negative content should be avoided because agreement is the preferred option and sentences that contain a negation should be avoided because they are more linguistically complex. *NEG can therefore be violated twice.

For Dutch, the following form-meaning pairs can be established:

Form-meaning pairs	ALIGN	FAITH	*NEG
☝ < ja, aff + >			
< nee, aff + >	*	*	*
< jawel, aff + >			
< ja, neg + >	*	*	*
☝ < nee, neg + >			**
< jawel, neg + >	*	*	*
< ja, aff − >	*		
☞ < nee, aff − >		*	*
< jawel, aff − >	*		
< ja, neg − >		*	*
< nee, neg − >	*		**
☝ < jawel, neg − >		*	*

Tableau 6: The bidirectionally optimal form-meaning pairs for responding to positively and negatively framed utterances in Dutch

Using *ja* to respond affirmatively to a positively framed question violates no constraints, as it uses *ja* to agree, mirrors the way the utterance that is being responded to is framed, and does not have negation in the output. Using *nee* to respond affirmatively to a positively framed utterance violates all constraints, as it does not mirror the framing of the other speaker's utterance, does not use *nee* to negate, and has a negation in the output. Using *jawel* to respond affirmatively to positively framed utterances also, like *ja*, satisfies all constraints. However, both *ja* and *jawel* are yielded as the optimal forms to negate a negatively framed utterance, since neither violates ALIGN. *Jawel* is more marked than *ja* since it is longer and more complex (a compound of *ja* and *wel*). Responding affirmatively to a positively framed utterance is less marked than negating a negatively framed utterance, as it is a less complex construction. The unmarked form pairs with the unmarked meaning and the marked form

pairs with the marked meaning, yielding < ja, aff + > and < jawel, neg - > as super-optimal pairs.

When it comes to negating positively framed utterances, using *ja* or *jawel* violates ALIGN, since it mirrors the framing of the utterance to disagree. Additionally, it violates FAITH, as it uses *ja* to disagree, and violates *NEG once. *Nee* satisfies both ALIGN and FAITH, but violates *NEG twice. The super-optimal form-meaning pair is therefore < nee, neg + >

Nee is, however, also the optimal form to respond affirmatively to negatively framed utterances. Although it violates *NEG (once) and FAITH, as it uses *nee* to respond affirmatively, it satisfies ALIGN, since the response mirrors the utterance that is being responded to with respect to framing, which in this case is negative. Since both *ja* and *jawel* violate ALIGN, *nee* is the optimal candidate to express this meaning. *Nee* was, however, also part of the optimal pair < nee, neg + >. Because there are only three forms available for four meanings, one form has to express two meanings. *Nee* is the unidirectionally optimal candidate to respond affirmatively to a negatively framed question. < nee, aff - > is therefore the fourth form-meaning pair in Dutch.

In section 3.3.2, the Dutch answering system was compared to the English answering system. English does not have as straightforward a paradigm as Dutch. Although there are established form-meaning pairs when it comes to answering to positively framed utterances, problems arise when speakers have to respond negatively framed utterances. This can mainly be attributed to the absence of a word equivalent to Dutch *jawel*. Because English only has two forms for four meanings, both *yes* and *no* will have to pair with two meanings.

Yes is the optimal candidate for responding affirmatively to positively framed utterances, as it satisfies all constraints, whereas *no* violates all of them. No arises as the optimal candidate to negate positively framed utterances, as it satisfies both ALIGN and FAITH, and only violates *NEG (twice), whereas *yes* violates all constraints. Two super-optimal form-meaning pairs are thus formed: < yes, aff + >, < no, neg + >.

As can be seen in Tableau 7, when FAITH is ranked above ALIGN, or when the constraints are considered to be equally important, *yes* is still the optimal form to respond affirmatively to positively framed utterances and *no* the optimal form to negate them. Since both *yes* and *no* are found in English to respond either affirmatively or negatively to negatively framed utterances, it appears that the relative ranking of ALIGN and FAITH is

undetermined, or can differ between speakers. English appears to thus lack definite form-meaning pairs when it comes to responding to negatively framed utterances.

Form-meaning pairs	ALIGN	FAITH	*NEG
☝ < yes, aff + >			
< no, aff + >	*	*	*
< yes, neg + >	*	*	*
☝ < no, neg + >			**
☞ < yes, aff – >	*		
☞ < no, aff – >		*	*
☞ < yes, neg – >		*	*
☞ < no, neg – >	*		**

Tableau 7: The bidirectionally optimal form-meaning pairs for responding to positively and negatively framed utterances in English

4.2   Combinations of *ja* and *nee*

4.2.1   Ja-nee

A fairly common, though seemingly contradicatory combination in Dutch is *ja-nee*.[2] This combination also exists in (Australian) English, as described by for instance Burridge & Florey (2002) and Lee-Goldman (2010). Burridge and Florey review the combination as one unit. They establish three different types of *yeah-no*:

Propositional *yeah-no*: indicates both assent and dissent

Textual *yeah-no*: fulfills the discourse function of cohesion

Expressive or personal *yeah-no*: fulfills the pragmatic functions of hedging and face-saving by softening or reducing the force of an utterance

(Burridge & Florey 2002: 149)

When reviewing the examples Burridge and Florey provide, it appears that the differences between the categories are subtle, there seems to be some overlap between them, and not

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[2] A corpus search suggests that *nee-ja* as a combination is very rare.

every example of *yeah-no* can straightforwardly be filed into a single category. Burridge and Florey acknowledge this themselves when they state the following:

> *Yeah-no* is no different from most other conversational markers – it can be used in a number of different functions simultaneously. Where this resumptive *yeah-no* [that resumes a topic raised earlier in the conversation] occurs at turn-transitional points […], it has both the function of creating relevance between the turns of a conversation, while at the same time acknowledging the contribution of the previous speaker.
>
> (Burridge & Florey 2002: 161)

There thus seem to be some problems with analyzing *yeah-no* as a single unit.

Lee-Goldman (2010) also recognizes these problems when he discusses Burridge & Florey (2002). He suggests that it may be more productive to analyze *yeah-no* as a combination of *yeah* and *no*, rather than as a single unit. He does, however, mention that complex discourse markers (such as *yeah-no*) can potentially have uses that would be "unexpected given the independently attested functions of the parts" (Lee-Goldman 2010: 2646). Never reviewing *yeah-no* as a single unit could therefore also be misguided.

When analyzing *yeah-no* as a combination of *yeah* and *no*, all of Burridge and Florey's *yeah-no* categories appear to contain a 'yeah' that is, in the labels produced in this thesis, an answer-*yes* or reaction-*yes*, be it acknowledging or agreeing, a thinking-*yes*, or an emotive-*yes*. These are all interpretations of *yes* from the highest level in the hierarchy given in section 4.1.4. *No* in Burridge and Florey's combinations is usually, as also pointed out by Lee-Goldman, a topic return-*no*. It can also be misunderstanding-*no* or a late reaction-*no* or late answer-*no* (as at least *yes* stands in between *no* and its referent). These interpretations of *no* are all ranked lower in the hierarchy. This makes sense when considering the fact that it is *no*, the latter item in the combination, that can be elaborated upon.

In reviewing instances of Dutch *ja-nee*, it appears that there are many similarities between *ja-nee* and *yeah-no* as described above. Consider the following example:

(44) A   'k had gister   een film opgenomen en die wou   'k eigenlijk nog
              I had yesterday a   film recorded   and that wanted I actually   still

              effe   kijken
              PRT   watch

'I recorded a movie yesterday that I actually still wanted to watch now.'

B   mmm

B   Welke film?
which movie
'Which movie?'

A   uhm ja zo leuk was die nou …
yeah so fun was it PRT
'Well, it wasn't that much fun..'

A   Effe   kijken hoor
PRT   look   PRT
'Let me see.'

A   'k heb de gids nog liggen van gisteren
I have the guide still lie   of yesterday
'I still have yesterday's tv guide here.'

A   over een man die uhm die ge..
about a man that that
'about a man who..'

A   A Stranger to Love

B   Oh

A   uh getrouwd een gelukkig vader van twee kinderen verliest z'n geheugen hij
married   a   happy   father of two children loses his memory he

verdwijnt z'n vrouw denkt dat ie dood is maar niks   is minder waar
disappears his wife   thinks that he dead is but   nothing is less   true

'married, a happy father of two children loses his memory. He disappears. His wife thinks he died, but she could not be further from the truth.'

B   Oh

A   't is echt   zo'n   uh drama weet je   wel
it is really one.of.those   drama know you PRT
'It's really one of those dramas, you know.'

B   Oh

A   maar daar ben ik gek op
       but there am I crazy at
       'but I love those.'

B   **Ja**   **nee** ik heb gisteren uh we hadden gisteren   een paar   films gehuurd
       yeah no I have yesterday   we had   yesterday a   couple films rented

       en uh eentje was dan de Moulin Rouge
       and   one   was then the Moulin Rouge

'We rented a couple of movies yesterday and one of them was Moulin Rouge.'

Speaker B's *ja* acknowledges speaker A's statement "maar daar ben ik gek op." *Nee*, then, prefaces a return to the prior topic of movie watching in general, as opposed to the specific topic of *A Stranger to Love*. Something similar happens in (45):

(45) A   Ja   ik moet nog iets   van vier hoofdstukken voordat 't   eerste boek is
            yeah I have still something of four chapters   before   the   first book is

            afgelopen
            finished

'Yeah, I still have to go about four chapters before I have finished the first book.'

B   Ja oh
       yeah oh
       'Yeah, oh.'

B   Oh ik dacht   dat je allang   in 't   tweede boek zat
       oh I thought that you since.long in the second book sat
       'Oh I thought you had started on the second book a long time ago.'

A   Maar ik zit op dr- pagina driehonderdtachtig
       but   I sit on   page   threehundredeighty
       'But I am on page 380!'

B   **Ja**   **nee** maar dan goed 't zijn meer dan duizend   pagina's dacht   ik
       yeah no   but   then good it are   more than thousand pages   thought I
       'Yeah but still, it's over a thousand pages I thought.'

Ja in this example can be categorized as a reaction-*ja*, as it responds to the immediately preceding statement. After the acknowledgment of speaker A's somewhat indignant statement

that she is already on page 380, *nee* returns the topic of conversation to speaker B's surprise that speaker A has not made more progress in reading her book.

When analyzing *ja-nee* as a combination of *ja* and *nee*, rather than as a single discourse marker, interpreting *ja-nee* is identical to interpreting *ja* or *nee* in other contexts. The optimization of the interpretation of *ja-nee* from, for instance, (45) is presented in the following two tableaux:

Input: Maar ik zit op pagina 380! **Ja** nee maar..	FIT	STRENGTH
Answer-*ja*	*	
☞ Reaction-*ja*		
Continuer-*ja*	*	
Underlining-*ja*	*	
Thinking-*ja*	*	
Emotion-*ja*	*	*
Quotative-*ja*	*	**
Late answer-*ja*	*	**
Late reaction-*ja*	*	**
Topic shift-*ja*	*	***
Concluding-*ja*	*	***

Tableau 8: The optimization of the interpretation of *ja-nee*

The *ja*-component of *ja-nee* in (45) can only be interpreted as a reaction to the preceding utterance, as it is intonationally neutral, turn-initial, not uttered in response to a question or run-on story, and is not elaborated upon. The only candidate not violating FIT is therefore reaction-*ja*. Since there is not anything that can be agreed with in the utterance *ja* refers to, it can only be interpreted as an acknowledgment token. *Ja* is then followed by *nee*.

The elaboration on *nee* (i.e. the remainder of the speaker's turn) ensures that it can only be interpreted as a preface to a topic return, even though this candidate maximally violates STRENGTH. The optimal interpretation of the *ja-nee* combination in (45) is therefore that speaker B acknowledges the side note speaker A made, but still continues his own line of reasoning.

Input: Ja **nee** maar dan goed 't zijn meer dan duizend pagina's..	FIT	STRENGTH
Neg. answer-*nee*	*	
Neg. reaction-*nee*	*	
Aff. answer-*nee*	*	
Aff. reaction-*nee*	*	
Continuer-*nee*	*	
Self correct-*nee*	*	
Underlining-*nee*	*	
Emotion-*nee*	*	*
Prohibitive-*nee*	*	*
Misunderstanding-*nee*	*	**
Late neg. answer-*nee*	*	**
Late neg. reaction-*nee*	*	**
Late aff. answer-*nee*	*	**
Late aff. reaction-*nee*	*	**
Late self correct-*nee*	*	**
Non-negation *nee*	*	***
☞ Topic return-*nee*		***

Tableau 9: The optimization of the interpretation of *ja-nee*

Although many combinations of *ja* and *nee* appear to be similar to the examples given in (44) and (45), other instances of *ja-nee* are also encountered:

(46) A Nou uh mag je   dit   inschrijfformulier even   invullen
          well   may you this registration.form   short.while fill.out
          'Well, you can fill out this registration form.'

      B Is dat alles wat je   doet?
         is that all   what you do
         'Is that all you have to do?'

      A **Jaaa nee** dat kan nog veel.. ik doe nu   maar wat   want   ik heb
         yeah no that can still much I do now just something because I have

         nog geen echt officiële training gehad
         still no   real official   training had

      'Well, I'm just winging it, because I have not had official training yet.'

In (46), *ja* can be interpreted as an example of thinking-*ja*, as it is stretched and uttered with doubt. This interpretation is supported by speaker A's following statement that she does not actually know what to do. *Nee* then answers speaker B's question "is dat alles wat je doet?"

As such, it can be categorized as a late answer-*nee*. Again, the interpretation of both *ja* and *nee* can be seen as the result of two processes of optimization.

4.2.2   Ja *repeated*

When *ja* is repeated, it often gets a special meaning, or interpretation, along the lines of "I see," or "I understand." This interpretation is attributed to two consecutive *ja*s, of which the first one is stretched, as in (47).

(47)   A   Nee wij zitten op op de kant waar alleen maar zon is heel   de dag
            no   we zit   on on the side where only   just sun is whole the day
            'No, we are on the side where there is sun the entire day.'

       B   **Jaaa ja**
            'I see.'

In examples such as the one above, *ja-ja*, a complex discourse marker, receives a complex meaning that cannot be predicted on the basis of the meaning of its two parts. This is the same for the sarcastic "jaaaa ja," which gets an interpretation along the lines of "yeah sure." Sometimes, however, repeated *ja* does not yield any special interpretation. In (45), for example, "ja ja ja" does not constitute a complex discourse marker, but merely the repetition of *ja*. In these cases, all *ja*s are intonationally neutral and can be treated as one *ja*. Interpretation this type of repeated *ja* is therefore identical to interpreting a single *ja*.

(48)   A   Oh ja Machteld die zei   trouwens   dat d'r   gisteren   nog een uh
             yeah Machteld that said by.the.way that there yesterday still a

           stukje   in de krant   stond in de in de Trouw dat mij zou   kunnen
           little.piece in the newspaper stood in the in the Trouw that me would can

           interesseren ook iets   over gymnasia   [ofzo]
           interest   also something about high.schools or.something

       'Oh by the way, Machteld said that there was an article in yesterday's paper that might interest me. Also something about high schools or something.'

       B   [J**a**   ] **ja**   **ja**
             'Yeah yeah yeah.'

4.2.3   Nee *repeated*

Although repeated *nee* can be interpreted as "I see," or "I understand" when uttered in response to a statement containing a negation and with a similar intonation as "jaaa ja," described above, often no special interpretation is attributed to the repetition of *nee*. No *nee*s then have a special intonation. An extract of a conversation in which *nee* is repeated many times can be found in (49). Perhaps somewhat counterintuitively, repeating *nee* does not necessarily make its meaning stronger.

(49)   A   Zeg had je   vanmiddag   al   gebeld [Coen?]
                say had you this.afternoon already called   Coen
                'Did you call this afternoon as well, Coen?'

       B   [**Nee**]   **nee** [**nee**]
                 'No no no.'

       A   [Oh nee] dan [is da..]
                                                               oh no   then is tha..
                'Oh then that is…'

       B   [**Nee**] nu..
                                                                           no now..
                'No, now..'

       A   Om n uur of drie ging de [tele   ]foon maar ik was net te   laat
                 at an hour or three went the telephone   but   I   was just too late
                'The phone rang around three o'clock, but I just missed it.'

       B   [**Nee nee**]
                'No no.'

       B   **nee nee** was ik niet **nee**
                no   no was I   not no
                'No no that was not me.'

Although speaker A is not accusing speaker B of anything terrible, speaker B responds by saying *nee* nine times. Although this is perhaps a little extreme, it does demonstrate that repeating *nee* does not necessarily strengthen its meaning. This is supported by the lack of a response by speaker A to the amount of times speaker B repeats *nee*. For the purpose of interpreting intonationally neutral repeated *nee*, they can be treated as a single *nee*.

4.3   Conclusion

This chapter has presented a model for the interpretation of *ja* and *nee*. It commented on the production of *ja* and *nee*, especially in relation to dispreferred responses. It presented an account for the Dutch positive-negative answering system and applied this to English to explain why the English answering system is less straightforward. Finally, examples of combinations of *ja* and *nee* were given and it was explained how these can be interpreted.

5   Conclusion

This thesis explored the use of *ja* and *nee* in Dutch. Chapter 2 summarized the existing literature on English *yes* and *no* and gave a brief overview of the discussion on what constitutes a discourse marker, since *yes* and *no* have been claimed to function as such. A definition of discourse markers was formulated and it was established that *yes* and *no*, or *ja* and *nee*, indeed function as discourse markers.

Chapter 3 presented the corpus study conducted for this thesis. An analysis of instances of *ja* and *nee* in the Spoken Dutch Corpus yielded several categories of *ja* and *nee*. Although many uses of *ja* and *nee* corresponded to what was found in the literature on English *yes* and *no*, several new, or specifically Dutch, observations were made. Interestingly, it was found that *nee* received an affirmative interpretation at least as often as it received a negative interpretation. Additionally, it was found that *ja* appears to function as a quotative marker. Other descriptions of this use of *ja*, or *yes*, have not been found. Quotative *ja*, or the possibility of *yes* (or its equivalent from other languages) functioning as a quotative marker, might therefore be a very interesting topic for further research.

Although the identified uses of *ja* and *nee* appear to differ greatly, it was argued that they all have a 'core meaning.' All instances of *ja* and affirmative *nee* were used to express assent or agreement. All instances of negative *nee* were used to negate something. The differences between the interpretations of *ja* and *nee* are mainly caused by which element of the discourse *ja* or *nee* refers to.

After establishing a hierarchy of the uses of *ja* and *nee*, Chapter 4 presented an Optimality Theory model for the interpretation of (combinations of) *ja* and *nee* along the lines of Zwarts (2004) and Hogeweg (2009) and briefly commented on the production of *ja* and *nee*. Additionally, an OT account was developed to model the Dutch positive-negative answering system and to compare it to the English answering system.

Although *ja* and *nee* appear to be very simple and straightforward words, this thesis has demonstrated that this is not the case. In fact, *ja* and *nee* can be used to fulfill many purposes. By means of a corpus study and a theoretical model, this thesis has given a complete overview of the way in which *ja* and *nee* are used in Dutch and how hearers are able to arrive at an appropriate interpretation.

Appendix – Fragment sources

fn xxxxxx :   Label of the excerpt in the CGN, followed by a time code

(9)   fn008055 – 00:07:05.440-00:07:54.151
(10)   fn008064 – 00:05:43.444-00:05:44.540
(11)   fn008069 – 00:05:14.025-00:05:17.433
(12)   fn008053 – 00:08:27.762-00:08:31.287
(13)   fn008074 – 00:04:22.717-00:04:31.420
(14)   fn008057 – 00:07:59.260-00:08:10.784
(15)   fn008068 – 00:03:32.696-00:03:40.014
(16)   fn008079 – 00:04:54.757-00:05:16.969
(17)   fn008065 – 00:08:21.529-00:08:36.754
(18)   fn008327 – 00:07:45.264-00:07:58.340
(19)   fn008115 – 00:05:33.930-00:05:47.987
(23)   fn008098 – 00:00:31.247-00:00:35.100
(24)   fn008097 – 00:07:30.455-00:07:36.273
(25)   fn008103 – 00:08:02.421-00:08:10.970
(26)   fn008026 – 00:01:07.558-00:01:11.424
(27)   fn008119 – 00:00:10.857-00:00:16.956
(28)   fn008036 – 00:00:37.818-00:00:40.249
(29)   fn008040 – 00:03:12.121-00:03:23.314
(30)   fn008036 – 00:04:26.057-00:04:35.307
(31)   fn008026 – 00:07:56.627-00:08:02.539
(32)   fn008045 – 00:02:22.641-00:02.25.061
(33)   fn008021 – 00:03:43.755-00:03:45.414
(34)   fn008032 – 00:04:49.484-00:04:59.943
(35)   fn008033 – 00:04:34.810-00:04:48.218
(36)   fn008034 – 00:04:55.948-00:05:01.568
(37)   fn008023 – 00:03:10.246-00:03:16.388
(41)   fn008045 – 00:02:22.641-00:02.25.061
(43)   fn008065 – 00:08:21.529-00:08:36.754
(44)   fn008000 – 00:00:38.029-00:01:12.713
(45)   fn008091 – 00:08:40.638-00:08:50.592
(46)   fn000831 – 00:06:21.549-00:06:30.292
(47)   fn008018 – 00:01:54.219-00:01:57.821
(48)   fn008144 – 00:09:11.065-00:09:18.080
(49)   fn008012 – 00:00:06.423-00:00:08.409

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