Information structural transfer in advanced EFL writing: Does it ‘feel’ non-native?
An empirical study of native speaker perceptions of clause-initial circumstance adverbials in L1 Dutch advanced EFL writing

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Abstract
This thesis investigates native speaker perceptions of the use of clause-initial circumstance adverbials in texts written by L1 Dutch advanced learners of English as a Foreign Language (EFL). Such infelicitous sentence-beginnings in English are a result of information structural transfer from Dutch into English. Previous research on this phenomenon was conducted by Van Vuuren (2013) and Verheijen, Los & De Haan (2013), who denoted the use of clause-initial adverbials in L1 Dutch EFL texts as distinctly ‘non-native’. This thesis questions the assumption that such sentence-beginnings are a sign of non-nativeness by investigating how native speakers of English perceive L1 Dutch advanced EFL texts. It is hypothesized that native speakers judge them to be less native-like, less coherent, and less continuous than native speaker texts due to the marked overuse of clause-initial circumstance adverbials. This hypothesis was tested by means of a survey conducted among native speakers of English, which consisted of operation tasks and judgements tasks on excerpts of L1 Dutch student essays. The results were analysed both quantitatively and qualitatively. The hypothesis was not confirmed, because most scores were not significant and many of the respondents’ comments contradicted the expectations. This shows that the idea of ‘non-nativeness’ of information structural transfer in L1 Dutch EFL writing is not as unambiguous as it seemed.

Keywords: English as a Foreign Language (EFL), Dutch, second language acquisition, information structural transfer, writing, pragmatics.
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1. Introduction

The topic of this thesis first came up during a course called ‘Pragmatics in Translation’, which introduced me to the notion of information structural transfer. I read a study by Van Vuuren (2013), who found that Dutch EFL learners tend to overuse adverbials in clause-initial position in their English writing. I was also taught that it is best to avoid using such sentence-beginnings in Dutch-to-English translations, since they are a sign of non-nativeness even in advanced writing. A fellow student in my class, who is a bilingual speaker of both Dutch and English, pointed out that she does not see why starting a sentence with an adverbial would be considered infelicitous. She had even asked her native English friends to judge some L1 Dutch EFL sentences with clause-initial adverbials, and they agreed with her. This caught my attention: native speakers of Dutch judge the use of clause-initial adverbials in EFL writing as non-native, but native speakers themselves do not agree. This curious observation inspired me to write my thesis on native speaker perceptions of clause-initial circumstance adverbials in L1 Dutch advanced EFL writing.

This introductory chapter will briefly introduce the theoretical background of the topic and the gap I found in the existing research on information structural transfer in Dutch EFL writing. It will then present the research questions and hypotheses that are central to the research of this thesis as well as the relevance of this topic to the existing research in the field. The ‘method’ section will elaborate on how this thesis has found the answers to the research questions. Finally, I will anticipate the structure of this thesis chapter by chapter.

1.1 Topic and theoretical background

Information structural transfer in general is not a field of linguistics that has been much researched yet. There are two important studies on information structural transfer from Dutch into English: Van Vuuren (2013) and Verheijen, Los & De Haan (2013). These studies investigate, among other things, the use of the clause-initial constituent by advanced Dutch EFL writers. They conclude that even advanced Dutch learners of English overuse non-subject clause-initial constituents in English, which are mostly adverbials. This is due to the differences in word order between the languages. Dutch is a verb-second (V2) language, which makes the clause-initial position in Dutch a multifunctional position: subjects, objects, or adverbials can occur (Van Vuuren 2013). English, on the other hand, has a much more rigid SVO-order which prefers the subject in clause-initial position. These word order differences have an effect on information structuring in both languages: Dutch language users
tend to use the pre-verbal constituent to establish a link to the immediately preceding discourse, a function labelled as ‘local anchoring’ by Los & Dreschler (2012). English, however, prefers ‘global anchoring’, meaning that the language tends to use the subject to establish links over longer discourse stretches (Los & Dreschler, 2012, p. 860).

As a result of this information structural transfer, even advanced learners of English demonstrate a marked overuse of clause-initial adverbials in their EFL writing (Van Vuuren 2013). The use of such clause-initial adverbials in English is pragmatically infelicitous, although not ungrammatical. Verheijen, Los and de Haan denote this infelicitous use of clause-initial constituents in L1 Dutch writing as “feell[ing] distinctly non-native” (2013, p. 92) and Van Vuuren calls it “recognizably Dutch” (2013, p. 173). These denotations present opportunities for further research. For example, does the use of clause-initial adverbials in EFL writing really ‘feel’ non-native? In other words, how do native speakers of English perceive this information structural transfer?

1.2 Research questions
The research questions this thesis aims to answer are as follows:

− Main research question: Is the use of clause-initial circumstance adverbials in L1 Dutch advanced EFL writing perceived as non-native by native speakers of English?
− Sub-question 1: Does the use of clause-initial circumstance adverbials have an effect on the perception of coherence and continuity by the native speaker of English?
− Sub-question 2: Are native speakers able to actively indicate the infelicitous use of clause-initial circumstance adverbials in Dutch EFL texts? If they can, what kind of clause-initial adverbial (i.e. with or without an identity link) do native speakers perceive as most infelicitous?

The assumption that the use of clause-initial adverbials by L1 Dutch speakers of English ‘feels’ or ‘sounds’ non-native has been made from a non-native speaker perspective, since Verheijen, Los, De Haan (2013) and Van Vuuren (2013) are all native speakers of Dutch. This raises the question whether native speakers of English judge a Dutch EFL text with information structural transfer in the same way as native speakers of Dutch do. In other words, is the use of clause-initial circumstance adverbials in L1 Dutch advanced EFL writing perceived as non-native by native speakers of English? This study focuses on the overuse of clause-initial circumstance adverbials in English texts written by Dutch writers, since this
category of adverbials was also researched by Van Vuuren (2013). This kind of clause-initial adverbial will be elaborated on in chapter 2.

There are two important sub-questions to be answered as part of the main research question. The first one is whether the use of clause-initial circumstance adverbials has an effect on the perception of coherence and continuity by the native speaker of English. Information structuring usually has a significant effect on the connections between sentences and the coherence of the text on the whole. Moreover, the local versus global anchoring difference between English and Dutch can affect the coherence and continuity of an English text written by a Dutch advanced learner.

The second sub-question goes a step further than the first two questions. These questions relate to what intuitions native speakers have with the texts, i.e. whether it ‘feels’ or ‘sounds’ right. The second sub-question seeks to find out whether native speakers are also able to actively indicate the infelicitous use of a clause-initial circumstance adverbial. And if they can, what kind of clause-initial adverbial (i.e. with or without an identity link) do they perceive as most ‘non-native’?

1.3 Hypotheses
The hypotheses underlying the research questions are based on the theory discussed in chapters 2 and 3. The discussion of the hypotheses in this section will refer to the theory in those chapters.

The theory discussed in chapter 2 suggests that the use of clause-initial circumstance adverbials in L1 Dutch advanced EFL writing is a sign of non-nativeness (Van Vuuren, 2013 and Verheijen, Los & De Haan, 2013). This means that the hypothesis underlying the main research question is that this use of clause-initial circumstance adverbials is perceived as ‘non-native’ by native speakers of English. Moreover, Rosén (2006) conducted a comparable study on information structural transfer from Swedish into German (discussed in more detail in section 2 of chapter 3). She found that native speakers of German judged the L1 Swedish/L2 German productions as ‘non-native’, ‘odd’, and ‘unidiomatic’. Since the nature of the transfer from Swedish into German is comparable to that from Dutch to English, it can be hypothesized that native speakers of English also judge the L1 Dutch advanced EFL writing with clause-initial circumstance adverbials as ‘non-native’.

The hypothesis of the first sub-question can also be based on Rosén (2006), who found that native speakers of German perceive German texts written by L1 Swedish advanced
learners as ‘choppy’ and ‘incoherent’ as a result of information structural transfer in the pre-verbal position. Again, since this transfer is similar to that from Dutch into English, it can be hypothesized that native speakers of English also perceive the use of clause-initial circumstance adverbials in advanced L1 Dutch EFL texts as less coherent and continuous. Moreover, this hypothesis is based on the theory of ‘local anchoring’ in Dutch versus ‘global anchoring’ in English (see section 2.2.3). Since these differences in context-linking exist, it can be expected that transfer of these information structures from Dutch into English negatively affects the perception of coherence and continuity of the text by a native speaker of English.

The second sub-question cannot be hypothesized, since there is no existing literature to base this expectation on. If it turns out that native speakers can actively indicate the infelicitous use of clause-initial circumstance adverbials, it can be hypothesized that they will perceive those with an identity link as more infelicitous than those without an identity link. This assumption can be based on the theory of local vs global anchoring: clause-initial adverbials with an identity link are typical of Dutch information structure (i.e. local anchoring), which contrasts with English global anchoring.

1.4 Relevance and significance
This research is relevant because it contributes to the existing knowledge on information structural transfer from Dutch into English. Most importantly, it tests assumptions previously made in the studies by Verheijen, Los & De Haan (2013) and Van Vuuren (2013). Their theories suggest that the use of clause-initial adverbials in English writing is recognizably non-native, but this assumption has not yet been tested by letting native speakers judge the use of these pre-subject constituents. This thesis aims to fill this gap in the research.

Moreover, the results of this study are a valuable contribution to cross-linguistic research on information structural transfer. Rosén (2006) and Bohnacker & Rosén (2007, 2008) have studied information structural transfer from Swedish into German and the perception of these language productions by native speakers of German. This study tests the same phenomenon but for different languages, namely Dutch and English. By doing so, it contributes to a well-grounded theoretical basis for making cross-linguistic assumptions in the field of native speaker perceptions of information structural transfer.

Finally, many studies on native speaker perceptions of EFL are focussed on phonetic, phonological, lexical and syntactic aspects of the target language, which becomes apparent
from literature reviews on native-speaker perceptions of non-native English by Ludwig (1982) and Eisenstein (1983). A study related to native speaker perceptions of subtler aspects of language, like information structure, would be new in this field. Moreover, most of the studies in this field focus on language errors, such as the extensive research by Hultfors (1986), while this study on information structural transfer will look at native speaker perceptions of pragmatic felicity. This thesis therefore provides new insights into the existing research on this topic.

1.5 Method
In order to give answers to the research questions posed for this study, theoretical and empirical research was conducted. The theoretical component consists of a literature study of information structural transfer in relation to Dutch and English as well as a review of existing research in the field of native speaker perceptions of L2 language use. The empirical component is a study conducted among native speakers of British English who were asked to judge Dutch EFL texts both quantitatively and qualitatively in a survey. The exact method for this empirical study can be found in section 1 of chapter 4. Finally, the results of the empirical research were combined with the theory of the existing literature.

1.6 Anticipation of structure
The body of this thesis is divided into three chapters. Chapter 2 presents an overview of the theory related to information structural transfer. It discusses information structure in general and then the syntactic and pragmatic differences between Dutch and English that lie at the basis of information structural transfer from the former language into the latter. Finally, the chapter presents a detailed overview of the existing research on information structural transfer in L1 Dutch advanced EFL writing. Chapter 3 serves to justify the methods used in the empirical component of this study by presenting a detailed discussion of existing literature in the field of testing native speaker perceptions of non-native language. Its focus is on a study by Rosén (2006), of which this research is a (partial) replication study. Finally, chapter 4 reports on the empirical research that was conducted for this thesis. It elaborates on the method, procedure, analysis, and the results. An extensive interpretation of these results can be found in the discussion and the conclusion. Chapter 5 concludes this thesis as a whole by discussing the outcome of the empirical study in the light of the theory discussed in chapters 2
and 3. It will then elaborate on the implications and relevance to the existing research and make suggestions for further research.
2. Dutch V2 vs English SVO: information structural transfer in L1 Dutch EFL writing

This chapter will provide the theoretical framework that forms the foundation of this research. It will discuss some important concepts related to the topic of information structural transfer as well as some key studies on the occurrence of this phenomenon in L1 Dutch EFL writing. Section 2.1 will highlight the most important concepts in relation to information structural transfer in L2 acquisition. Section 2.2 will present important syntactic and pragmatic differences between Dutch and English, which facilitate information structural transfer from Dutch into English. Firstly, it will introduce the main syntactic differences in relation to word order, with Dutch being a verb-second (V2) language and English an SVO language. It will then discuss the pragmatic implications of these word order differences with regards to the use of clause-initial adverbials and local anchors. Finally, section 2.3 will look at current research on information structural transfer in L1 Dutch EFL writing. This section will include a discussion of the studies by Verheijen, Los and De Haan (2013) and Van Vuuren (2013, forthcoming), which have raised the research questions that this thesis will answer.

2.1 Information structural transfer

2.1.1 Information structure

Halliday (1985) first identified the notion of information structure in his systemic functional model. This communicative structure is important in the production and interpretation of texts by both the speaker and the hearer, since it plays a role in the decision to present or interpret a constituent as given or new (Hannay & Keizer, 1993, p. 67). Moreover, this concept is closely related to textual cohesion, since such text-forming components link together elements that are structurally unrelated to each other (Halliday & Hasan, 1976, p. 27). That is why information structure is important in L2 writing, because “subtle shifts in the saliency and recoverability of information in the target text” can cause dissatisfaction with the coherence of the text (Hannay & Keizer, 1993, p. 67).

Information structure can be defined as “the ordering of the text, independently of its construction in terms of sentences, clauses and the like, into units of information on the basis of the distinction into given and new” (Halliday & Hasan, 1976, p. 27). Given information is what the speaker treats as recoverable to the hearer, and new information is non-recoverable (p. 27). Krifka and Musan (2012) describe information structure in more general terms as “aspects of natural language that help speakers to take into consideration the addressee’s
current information state, and hence to facilitate the flow of communication” (p. 1).
Information structure not only guides textual cohesion and the distribution of information
over a sentence, but in a broad sense it also “encompasses factors which determine the kind of
information which is selected for expression and how it is mapped into form” (Carroll &
Lambert, 2003, p. 267). This makes it a very subtle pragmatic principle that interacts with all
linguistic levels of a language. Since the operation of information structure differs across
languages, it is an aspect of the target language that is usually problematic for (advanced) L2
learners (Callies, 2009, p. 2).

2.1.2 Information structure in L2 acquisition
The operation of information structure is a language-specific pragmatic principle, which
makes it subject to transfer in L2 productions. Even advanced learners of a second language,
who have mastered near-native syntax and vocabulary, still have difficulties applying the
grammatical forms they acquired according to the L2 principles of information structure
(Callies, 2009, p. 2). Since these principles are language-specific and form a part of the native
speakers’ linguistic knowledge, negative transfer of information structure occurs in L2
productions (Callies, 2009, p. 2). This occurrence of information structural transfer in
advanced L2 productions across many languages has been demonstrated in studies by Bülow-
(2007a,b, 2008), Van Vuuren (2013, forthcoming), Verheijen, Los & De Haan (2012), and
more.

There is so little awareness of information structural transfer in second language
learning because teaching is not focused on the pragmatics of the target language. A number
of studies have shown that “compared to interaction outside the classroom, L2 pragmatic
input in instructional discourse is functionally and formally limited” (Kasper & Rose, 2002, p.
208). Moreover, the focus in foreign language teaching is on ‘errors’ related to syntax or
vocabulary. This concept of ‘errors’ is not applicable to discourse patterns (Ringbom, 2001, p.
59), because information structure is a matter of pragmatic felicity rather than grammatical
error. Therefore, information structural transfer often occurs in L2 language productions, even
if the learner is very advanced.
2.2 Syntactic and pragmatic differences between Dutch and English

This thesis focusses on information structural transfer in L1 Dutch/L2 English language productions. The syntactic and pragmatic differences related to word order between Dutch and English have major implications for information structure in these languages. These differences facilitate the occurrence of information structural transfer in L1 Dutch advanced English. This section will explore the major syntactic and pragmatic differences between Dutch and English and explain how information structural transfer occurs as a result.

2.2.1 Word order: V2 vs SVO

The underlying word order of Dutch is SOV with an SVO pattern in main clauses as a result of the V2-rule (Koster, 1975, p. 111). This rule does not affect embedded clauses, which is why these still have the SOV word order:

(1) Tasman maakt het dek schoon
    Tasman make3SG the deck clean
    “Tasman is cleaning the deck.”

(2) … dat Tasman het dek schoon maakt
    Dat Tasman the deck clean make3SG
    “…that Tasman is cleaning the deck.” (examples from Zwart, 2011, p. 249)

Dutch ‘verb-second’ entails that the finite verb of the main clause appears in the position following the first constituent in that clause (Zwart, 2011, p. 281). The main clause word order is then derived by two movements: the finite verb is moved to second position and a constituent from the clause is topicalized into the initial position (Los, 2009, p. 100). This makes the clause-initial (pre-verbal) position in Dutch a multifunctional position: subjects, objects, or adverbials can occur (Van Vuuren, 2013, p. 174):

(3) U kunt dat zien op uw jaaropgave.
    You can that seeINF on your annual statement.

(4) Dat kunt u zien op uw jaaropgave.
    That can you seeINF on your annual statement.

(5) Op uw jaaropgave kunt u dat zien.
    On your annual statement can you that seeINF.
    “You can find that on your annual statement.” (examples from Van Vuuren, forthcoming, p. 3)
These clause-initial constituents can be discourse-new, contrastive, or discourse-old (Dreschler & Hebing, 2011, p. 58-9).

English is an SVO language with a much more rigid structure than Dutch. English used to have the V2-rule as well, but it is generally assumed that this was lost in the fifteenth century (Fischer et al., 2000, p. 129-137). While Dutch allows for any constituent to appear in clause-initial position, English reserves the first position for the subject. The appearance of non-subject constituents in the pre-verbal position is pragmatically marked and the canonical SVO order is the pragmatically neutral order (Los, 2009). Typically, the subject encodes old information and the complement new information (Los, 2009, p. 111).

2.2.2 Word order and adverbial placement

Since Dutch and English have different basic word orders, they also have different rules with regards to the placement of certain constituents. This section will briefly discuss the ways in which Dutch and English differ in their placement of adverbials in the main clause. Biber et al. (1999) divide adverbials into three major classes: stance adverbials, linking adverbials, and circumstance adverbials (p. 763). This thesis focusses on circumstance adverbials:

“Circumstance adverbials are the most varied class, as well as the most integrated into the clause structure. Circumstance adverbials add information about the action or state described in the clause, answering questions such as ‘How, When, Where, How much, To what extent?’ and ‘Why?’ They include both obligatory adverbials (…) and optional adverbials. (…) Circumstance adverbials can have scope over different amounts of the clause. They may modify an entire clause (…) or they can have scope only over the predicate of the clause.” (Biber et al, 1999, p. 763-4)

More specifically, this thesis focusses on the placement of circumstance adverbials in clause-initial position in Dutch and English.

Dutch, as a V2-language, has a very flexible pre-verbal position. As mentioned in the previous section, subjects, objects, and adverbials can occur in the initial position of the main clause regardless of their information status (Van Vuuren, 2013, p. 174-5). This means that circumstance adverbials are always grammatical and pragmatically felicitous in clause-initial position in Dutch sentences.

English, on the other hand, with its rigid SVO structure, has much more restrictions on the clause-initial position than Dutch. Biber et al. (1999) have studied the frequencies of different types of adverbials across four different registers (conversation, news, fiction and
academic writing) in English. On the basis of spoken and written corpora, they have concluded that the final position is by far the most common position for adverbials with 64,000 per one million words, while initial position holds only 14,000 adverbials per one million words (Biber et al., 1999, p. 772). Circumstance adverbials have a strong preference for final position (p. 772) and are marked in initial and medial position (p. 802). Especially place adverbials are marked in initial position, with an occurrence of only 5% against 90% in clause-final position (Biber et al., 1999, p. 802).

As a result of this difference between Dutch and English with regards to adverbial placement, negative information structural transfer occurs from Dutch into English. An example of this is given in (6). Dutch allows a non-subject constituent like *In het eerste hoofdstuk* in initial position, whereas this literal translation is infelicitous in English because of its preference for circumstance adverbials in clause-final position.

(6) Dutch: *In het eerste hoofdstuk wordt de hoofdpersoon voorgesteld.*

Translation: “*In the first chapter the protagonist is introduced.*”

2.2.3 Local anchoring vs global anchoring

Another distinction between the use of clause-initial adverbials in Dutch and English can be made with regards to the way in which these languages use the first constituent to establish a link to the preceding discourse. Dutch typically uses *local anchors*, whereas English refers back to the discourse by means of *global anchoring*. This section will elaborate on the difference and explain how this is caused by the syntactic differences between Dutch and English. It will also look at the implications of this information structural difference for Dutch EFL writing.

Dutch, as a modern V2-language, has a multifunctional clause-initial position. This pre-verbal ‘background’ domain, also known as the ‘prefield’ or German *Vorfeld* (Bohnacker & Rosén, 2007b, p. 27), is known to “link to the immediately preceding discourse” (Los & Dreschler, 2012, p. 1), a function labelled by Los and Dreschler (2012) as ‘local anchoring’. This means that speakers of V2-languages such as Dutch and German have a tendency to use the prefield for adverbal local anchors that establish a link to the preceding discourse. The local anchors often contain demonstrative pronouns, since these typically have very local reference (Los & Dreschler, 2012, p. 3). Dutch has developed a specific form of local anchors, namely pronominal adverbs which constitute of a combination of *daar* (‘there’) and
a preposition (Los & Dreschler, 2012, p. 3). Examples are daarop (‘there-on’), daarmee (‘there-with’), daarvan (‘there-of’), daarvoor (‘there-for’), daarna (‘there-after’) and more.

English lost V2-movement in the fifteenth century and became an SVO-language with a rather rigid word order. Los and Dreschler (2012) found that this change in word order also meant a change in information structure. As a V2-language, Old English still had a pre-verbal position that was used for local anchoring. When English lost V2 and thus the pre-verbal position, the information structure also changed: it is no longer felicitous in Present-Day English to use clause-initial adverbials or to use these pre-verbal elements to link to the immediately preceding discourse by means of local anchors (Los & Dreschler, 2012, p. 1). The SVO word order allowed for the subject in English main clauses to be the element that establishes links to the discourse, since this is usually the initial constituent of a PDE sentence. This type of linking in English, i.e. by means of the subject, is usually referred to as ‘global anchoring’, which contrasts with Dutch and German ‘local anchoring’. These terms refer to “a difference in the scope of expressions of time and place” (Los & Dreschler, 2012, p. 2). Local anchors link each discourse move to a point in time or space, which is usually in the immediately preceding context. Global anchoring refers to elements that establish a link to time and space that refer back to longer stretches of discourse (Los & Dreschler, 2012, p. 2).

The ‘anchoring’ difference between Dutch and English demonstrates that the different word orders are responsible for information structural differences between the languages. The use of adverbial local anchors is much more restricted in English than in Dutch, which means that negative information structural transfer in Dutch EFL productions is very likely. An example of this transfer is the translation in (7). This sentence has an adverbial in initial position which establishes an identity link (i.e. local anchor) with the previous sentence. Such a translation would be infelicitous in English.

(7) Dutch: In deze zogenoemde REM-fase komen dromen voor. In this so-called REM-phase occurPRS dreams PREP.

Translation: “There then follows a period of rapid eye movement. In this so-called REM phase dreams occur.” (Los & Dreschler, 2012, p. 2).

2.3 Information structural transfer in L1 Dutch advanced EFL writing

This final section will consist of a discussion of the studies by Verheijen, Los & De Haan (2013) and Van Vuuren (2013, forthcoming) on information structural transfer in L1 Dutch advanced EFL writing, with a focus on the use of clause-initial adverbials. These articles have
given rise to the research question of this thesis, since they assume that the use of clause-initial adverbials in L1 Dutch EFL writing are a sign of non-nativeness.

2.3.1 Verheijen, Los & De Haan (2013)

Lieke Verheijen and her colleagues investigated the development of syntactic structures in very advanced Dutch EFL writing and how information structure presents the final hurdle towards a native-like use of English. Among other things, they looked at three typical features of Dutch that may interfere with the advanced learners’ use of EFL due to information structural differences: discourse linking with clause-initial adverbials, clause-initial pronominal adverbials, and restrictive focus particles (p. 96). They investigated whether the interference of such typically Dutch elements in EFL writing decreases as the learners develop their advanced English. I will discuss the investigation of discourse linking with clause-initial adverbials and clause-initial pronominal adverbials, since these relate to the topic of this thesis.

Verheijen, Los & De Haan used a corpus of 137 EFL essays written by Dutch BA students of English Language and Culture at Radboud University in their first and second year, which belong to the “advanced learner variety” (Callies, 2009, p. 1). A reference corpus of native English essays was used as a control group. The data were analysed by determining the frequency rate of each feature per set of texts.

With regards to the use of clause-initial adverbials for discourse linking, they found a decrease in frequency in the EFL texts during the students’ course of education towards an information structure more similar to native speaker texts (p. 103). They also found that typically Dutch pronominal adverbs like ‘daarmee’, a subcategory of local anchors, are particularly prone to L1 interference in Dutch EFL texts because these hardly ever occur in native English texts (p. 103). The frequency with which these types of local anchors were used in the L1 Dutch EFL essays did show a steady decrease over the course of the students’ education (p. 103).

Verheijen and her colleagues conclude that their findings demonstrate that different systems of information structure and syntax mapping in Dutch and English can be explicitly taught in order for Dutch advanced EFL learners to reach native-like competence (p. 105). They also note that including notions of information structure in the criteria of the Common European Framework of Reference (CEFR) would make it a more helpful tool in identifying level C2, since these notions go beyond the grammatical correctness of texts (p. 106).
2.3.2 Van Vuuren (2013, forthcoming)
Sanne van Vuuren conducted a cross-linguistic study of information structural transfer in advanced Dutch EFL writing (2013). She hypothesized that the information structural differences between Dutch and English in relation to the clause-initial position result in an overuse of clause-initial adverbials in advanced Dutch EFL writing. Her study not only investigates the ‘non-native’ use of information structure by these Dutch writers, but also investigates the way in which they use clause-initial elements to link to the preceding discourse (local anchoring) and whether these Dutch writers develop in the direction of native writing (p. 174).

Van Vuuren used a longitudinal corpus of essays written by Dutch BA students of English Language and Culture at Radboud University between their first and third year, which were collected as part of the LONGDALE project (p. 177). A reference corpus consisting of essays on similar topics written by native speakers was used for comparison. A database was made which classified all clause-initial adverbials and categorized them according to function and discourse status. The results were analysed in two categories: the use of clause-initial place adverbials (e.g. ‘in the book’) and the use of clause-initial addition adverbials (e.g. ‘in addition’). Van Vuuren also analysed the frequency of clause-initial adverbials that establish an identity link: “clause-initial place adverbials that function as local anchors because they link back to the directly preceding context by means of an identity link” (p. 180). This section will discuss the results of the analyses of the clause-initial place adverbials and identity links, since these are relevant for this thesis. Only the results of the analysis of the literature essays will be discussed, since this genre is the focus of this thesis.

Van Vuuren’s analyses found that there was a steady decline in the use of clause-initial place adverbials in the Dutch EFL texts between year 1 and 3 (Van Vuuren, 2013, p. 180). The literature essays started out with 2.63 clause-initial place adverbials per 1000 words in year 1 and ended with a frequency of 1.52 per 1000 words in year 3 (p. 180). The higher frequency of clause-initial adverbials in literature texts compared to other written assignments is, according to Van Vuuren, due to the fact that references such as ‘in the poem’ and ‘in chapter three’ are very common in literature essays (p. 180). The analyses also found that the use of clause-initial place adverbials with an identity link also declined in frequency: from 0.64 per 1000 words in year 1 to 0.37 per 1000 words in year 3, with a slight dip in year 2 of 0.32 per 1000 words (p. 180). Van Vuuren compared these results to the native speaker essays. These had an average of 1.3 clause-initial place adverbials per 1000 words and 0.24
clause-initial place adverbials with an identity link per 1000 words in their literature essays (p. 181).

Van Vuuren concludes that information structural differences between Dutch and English do lead to an overuse of clause-initial place adverbials by Dutch EFL learners (p. 184). Place adverbials only rarely occur clause-initially in English texts, of which students gain awareness during the course of their education at Radboud University (p. 184). The number of place adverbials with an identity link declines at a similar pace (p. 184). Finally, Van Vuuren points out that it is relevant for future EFL professionals to reach a near-native level of proficiency by acquiring the language-specific principles of information structure (p. 184).

A later study by Van Vuuren (forthcoming), re-analyses the data from the 2013 study by means of statistical analysis “in order to test whether observed differences between groups and text types represent truly distinct patterns of use” (p. 5). She finds that Dutch students’ EFL writing indeed has a higher frequency of pre-subject adverbials, but that the year 3 learners’ writing is generally closer to native speaker writing than the year 1 texts. This is “likely to be the combined effect of an increase in proficiency and academic maturity” (p. 46). As expected, the learners used considerably more local anchors than native speakers (p. 47). There is, however, a clear development towards native writing in the course of the students’ university education. Finally, Van Vuuren observes that “the relatively high frequency of [pre-subject adverbials] is one of the subtle features that distinguishes advanced Dutch learner writing from NS writing” (p. 48). She points out that a correct use of information structure in Dutch EFL writing is not necessarily a linguistic norm, since being aware of information structural transfer is mainly to the benefit of (future) language professionals.

2.4 Conclusion
Transfer of information structure in advanced L2 language use is a phenomenon that occurs cross-linguistically. The appropriate use of information structure in an L2 is a matter of pragmatic felicity rather than grammatical error, which is why education on the topic is usually limited in foreign language teaching. This is why even advanced users of an L2 lack awareness of the L1 interference of information structure. The theory discussed in this chapter has demonstrated that this information structural transfer also occurs in the language productions of advanced L1 Dutch speakers of English. The syntactic (V2 vs SVO) and
pragmatic (adverbial placement and local/global anchoring) differences between the languages facilitate this L1 interference. As the studies by Verheijen, Los & De Haan (2013) and Van Vuuren (2013, forthcoming) have shown, this information structural transfer can be observed in the overuse of clause-initial circumstance adverbials and clause-initial local anchors in advanced L1 Dutch EFL writing. The use of such clause-initial adverbials in English is pragmatically infelicitous, though not ungrammatical: Verheijen, Los and de Haan denote it as “feeling distinctly non-native” (2013, p. 92) and Van Vuuren calls it “recognizably Dutch” (2013, p. 173). According to the theory discussed in this chapter, the information structural transfer that occurs in advanced L1 Dutch EFL writing is a sign of non-nativeness. This thesis will expand the existing theory on this topic by testing this assumption.
3. Methods for empirical research: testing native speaker perceptions of non-native English

In order to give a reliable and appropriate answer to the questions posed in this thesis, it is necessary to provide a theoretical framework to justify the methods used in the empirical research. Testing native speaker perceptions of information structural elements in L2 texts requires a reliable and effective method: information structure is a subtle aspect of language use, which is why it is very important to capture the respondents’ most intuitive responses to Dutch EFL texts. This chapter will touch upon methods used in previous research on native speaker perceptions of non-native language that are applicable to this research.

Section 3.1 will discuss two techniques for measuring native speaker reactions to non-native English: the operation task and the semantic differential technique. It will shed light on a number of studies that have applied these techniques in a way that is relevant for this research. Section 3.2 is a detailed discussion of the study by Rosén (2006) on information structural transfer in L1 Swedish advanced German texts and how native speakers of German perceive these texts. Rosén’s qualitative study is very comparable to this thesis, which is why I will propose a partial replication of her methods. To conclude, I will combine the findings of this chapter by proposing a method for the empirical research of this thesis.

3.1 Research on native speaker perceptions of non-native language use

The empirical research of this thesis is concerned with native speaker perceptions of non-native written language, with a focus on information structure. This aspect of non-native language use is a matter of pragmatic felicity rather than error (such as incorrect pronunciation or grammar). Eisenstein’s (1983) and Ludwig’s (1982) overviews of research in the field demonstrate that most research on native speaker perceptions of non-native language focusses on errors: acceptability, irritation and comprehensibility are well-researched aspects of this topic. More recent research is also primarily concerned with native speaker perceptions of all aspects of non-native language use except for pragmatic felicity. There are a few exceptions, such as Hendriks (2010) and Rosén (2006); the former will be discussed in this section and the latter more extensively in section 3.2. Some of the studies discussed by Eisenstein (1983) are not concerned with pragmatic felicity or information structure, but their methods can be applied to this research. These methods, the operation task and the semantic differential technique, will be discussed in this section.
Firstly, Eisenstein discusses the *operation task* (Quirk & Svartvik, 1966) as a means of revealing unconscious reactions from the hearer or reader (Eisenstein, 1983, p. 161). Subjects are asked to perform various tasks on language samples, such as repeating erroneous sentences or performing changes on the samples in order to improve them. This way, the informant’s intuitive behaviour towards a non-native language sample can be measured. It has been used in an extensive study by Hultfors (1986, 1987) on error gravity in L1 Swedish users of English. He tested how native speakers of English interpret erroneous sentences written by non-native speakers by asking them to correct the sentences (Hultfors, 1986, p. 2). He measured their most intuitive responses by stating beforehand that they had to answer fast and only if they thought the correction was necessary (Hultfors, 1987, p. 127). This technique is very suitable for the research in this thesis, since measuring native speaker perceptions of non-native information structure calls for a method that can capture the respondents’ subconscious responses to the text. The results lend themselves to qualitative analysis but they can also be quantified.

Secondly, Eisenstein mentions the *semantic differential technique*, developed by Osgood, May and Miron (1975). This technique presents the informant with a series of bi-polar adjective scales on which the informant rates a language sample for a given set of characteristics (Eisenstein, 1983, p. 162). In most sociolinguistic research, these characteristics relate to social judgements of the speaker/writer like personality, class, and race. This technique can, however, also be applied to judgements of linguistic aspects of a language sample that are based on intuitive responses to a text. This was done by Hultfors (1986) in his research on native speaker reactions to non-native English. Besides the aforementioned operation task, he used a judgement test to quantitatively measure native speaker responses to non-native English (Hultfors, 1986, p. 7). This test consisted of erroneous sentences followed by bi-polar adjective scales. Hultfors used five-graded scales with the adjectives ‘native-like’ vs ‘very foreign’ and ‘very easy to understand’ vs ‘very difficult to understand’ (Hultfors, 1986, p. 37-38). These scales were designed to elicit the attitudes of the native speakers towards the non-native language use with regards to acceptability and intelligibility.

The semantic differential technique cannot only be applied to native-speaker judgements of language errors, but also to pragmatic felicity. This was done by Hendriks (2010), who studied native speaker perceptions of the use of indirect request in emails written by non-native speakers. The notion of indirectness in speech acts is a matter of pragmatics that is language-specific: the Dutch writers in Hendriks’ study transfer their language-specific
pragmatics into their English. Hendriks measured (among other things) comprehensibility of emails including indirect requests that were written by L1 Dutch writers. She asked native speakers whether the texts were ‘clear’, ‘well-structured’, and ‘informative’ on a 7-point Likert scale (Hendriks, 2010, p. 230), a technique similar to the semantic differential technique. Hendriks applied this technique in the same way Hultfors (1986) did, except her language samples were typically ‘non-native’ because of pragmatic transfer rather than grammatical error. This demonstrates that the semantic differential technique is also applicable to non-native texts that are completely grammatical but contain some kind of pragmatic transfer from the writer’s L1. The semantic differential technique is therefore a suitable method for the empirical research of this study. Moreover, the semantic differential technique allows for quantitative analysis.

3.2 Rosén (2006)
The second chapter of this thesis already mentioned the study by Rosén (2006) as an example of research on information structural transfer in L2 productions. This dissertation, called “Warum klingt das nicht deutsch?” – Probleme der Informationsstrukturierung in deutschen Texten schwedischer Schüler und Studenten, presents a detailed account of information structural transfer in L2 German texts written by Swedish learners of German. This transfer is concerned with the occupation of the Vorfeld, i.e. the clause-initial constituent. Section 3.2.1 will elaborate on the nature of this transfer. Section 3.2.2 will then highlight part of Rosén’s study, namely a qualitative analysis of the perception of information structural transfer in L1 Swedish German texts by native speakers of German. This component of Rosén’s study is very relevant to this thesis, because the nature of her research is very similar. Therefore, I will propose a (partial) replication study in section 3.2.3.

3.2.1 L1 Swedish/L2 German transfer of information structure
The information structural transfer from Swedish into German that Rosén studies in her dissertation relates to the occupation of the Vorfeld. Swedish is an SVO language and German is SOV, but both languages have the V2-rule. This means that they allow only one constituent in pre-verbal position (Rosén, 2006, p. 22). This Vorfeld “may be occupied by almost any type of constituent, irrespective of syntactic category, complexity and semantic function” (Bohnacker & Rosén, 2007b, p. 28). Although any constituent in clause-initial position is grammatical, Swedish has a strong preference for the subject in pre-verbal position. German,
on the other hand, is both subject- and topic-prominent. In comparison to English, a prototypical subject-prominent language, Swedish holds a position in between English and German with regards to the occupation of the Vorfeld (Rosén, 2006, p. 23). This difference in terms of the occupation of the Vorfeld is described in more detail by Bohnacker and Rosén (2007b):

“(…) Swedish has a stronger tendency than German to fill the prefield with a thematic subject or a phonologically light all-purpose element of low informational value (expletive det ‘it’, thematic pronominal object det ‘it/that’, etc.) to establish textual coherence. German also allows these options, but also places rhematic subjects, as well as phonologically heavier object and adverbial constituents in the prefield, including morphologically complex thematic pronominal adverbs and a range of connective and sentence adverbials.” (p. 37).

As a result of these differences between Swedish and German, information structural transfer occurs in L2 German productions by (even advanced) Swedish learners. Bohnacker and Rosén (2007b) described the nature of this transfer in the following way:

“[Swedish learners of German] overuse subject-initial and expletive-es-initial clauses and fronted thematic object das, structures that are typical of and frequent in their Swedish L1. They underuse typically German ways of introducing a sentence with objects other than pronominal das, with specific pronominal adverbs and a range of connective adverbials. The results indicate that our learners, both at lower and higher proficiency levels, have problems with the acquisition of the German-specific linguistic means that have an impact on information structuring.” (p. 37)

Generally speaking, it can be said that this transfer is the opposite of what occurs in L1 Dutch productions in English. Dutch learners exhibit a marked underuse of the subject in initial position and an overuse of other pre-verbal constituents in their English, while Swedish learners exhibit a marked overuse of the subject in initial position and an underuse of other pre-verbal constituents in their German.

3.2.2 Qualitative research: native speaker perceptions of information structural transfer

Rosén (2006) asked a very similar research question with regards to information structural transfer as this thesis does: how do native speakers perceive a marked use of the clause-initial position (as a result of information structural transfer) in advanced non-native language
productions? Since her research is very comparable to this study, it is only logical to have an in-depth look at her methods, which will be discussed in this section.

Rosén (2006) carried out a qualitative study which investigated the perception of L1 Swedish advanced German by native speakers of German. She asked 60 native speakers of German to each judge 2 texts written by advanced Swedish learners of German who studied German in their higher education at the time (p. 112). It should be noted, however, that Rosén does not specify their exact level of German in terms of the Common European Framework of Reference for Languages (CEFR) nor any other measurement. In order to yield reliable results, the informants were asked to read the entire text very carefully and then to write down their spontaneous and most intuitive impression of the text (p. 112). The following questions were presented alongside the L2 texts (my own translation):

1. Does the text make a coherent impression to you? Please explain your answer.
2. Do the sentences connect to each other or not? Please give examples.
3. Does the text contain over-applications of certain phrases or idioms?
4. Do you miss certain syntactic patterns?
5. Are certain constructions used too often in order to sound German? (p. 113)

Rosén notes that the informants were not familiar with theories on information structure. The use of the word *syntaktische* (‘syntactic’) in question 4, however, does suggest that Rosén assumed her informants had a certain amount of linguistic knowledge. She does not make this explicit in her dissertation, but it should be kept in mind when interpreting the results of her study. This is because linguistic knowledge might mean that the informants are more aware of learners’ syntax and word order, which could make their responses concerning the coherence of the text less intuitive. I will only discuss the informants’ replies to questions 1 and 2, since these are most relevant to the research question of this thesis.

The majority of the informants replied to the first question by saying that the texts were distracting and incoherent (p. 113). Fourteen of the informants used the word *abgehackt* (‘choppy’) to describe their general judgement of the text, referring to the concatenation of main clauses. The many short SVO-sentences are perceived as a mere enumeration of facts which the informants find typical of the language use of German elementary schoolers.

The second question, relating to the connections between sentences, was answered by the majority by saying that the connections between the sentences were missing and the coherence in the text was often not clear. According to the informants, the texts contained very sudden changes in ideas and “sehr großen Gedankensprüngen” (big ‘mental leaps’) (p.
Several informants gave examples from the texts and some of them gave suggestions for improvements.

The informants’ comments relate primarily to the ‘micro-structuring’ of the texts, i.e. the local connections between the sentences (p. 120). They particularly note that they miss variation in the Vorfeld: they notice an exaggerated use of the subject and dummy pronouns in initial position (p. 120). The informants also miss the typically German “kontext-anknüpfende Adverbien” (literal translation: ‘context-attaching adverbials’, i.e. local anchors), which connect the sentences (p. 121). Several informants proposed using local anchors like deshalb (‘therefore’), daher (‘therefore’) and dadurch (‘thereby’) in order to establish coherence between the sentences (p. 121).

The results of Rosén’s study are in line with the theory discussed in chapter 2 on information structural differences between Dutch and English. Her qualitative study has demonstrated that a difference in information structure between two languages leads to different ways of structuring a text. The comments by the native speakers of German suggest that they, like native Dutch speakers, have a tendency towards local anchoring by means of an initial constituent that is not the subject. This becomes clear from their remarks on the Swedish learners’ overuse of main clauses starting with a subject and their underuse of context-linking adverbials (i.e. local anchors). The Swedish learners’ over-application of subject-initial main clauses suggest that they tend towards global anchoring in their native language, just like native English speakers. Table 1 summarizes the findings. This table also demonstrates that in relation to word order and information structure, Swedish is similar to English and German is similar to Dutch.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Swedish/English</th>
<th>German/Dutch</th>
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</thead>
<tbody>
<tr>
<td>Word order</td>
<td>SVO</td>
<td>SOV</td>
</tr>
<tr>
<td>Prefield</td>
<td>Subject</td>
<td>Subject, object or adverbial</td>
</tr>
<tr>
<td>Information structure</td>
<td>Global anchoring</td>
<td>Local anchoring</td>
</tr>
</tbody>
</table>
3.2.3 Replication study

Rosén hypothesized that native speakers of German would judge the L1 Swedish learners’ German as ‘non-native’ with regards to the occupation of the Vorfeld, the coherence of the texts and the connections between the sentences. Her hypothesis was confirmed, since the qualitative analysis demonstrated that L1 speakers of German indeed perceive these elements in the L2-texts as infelicitous. The hypotheses for this thesis are very similar to Rosén’s: it is expected that the L1 Dutch use of clause-initial circumstance adverbials in advanced EFL writing (i.e. information structural transfer) is perceived as ‘non-native’ by native speakers of English. It is also hypothesized that the use of clause-initial circumstance adverbials in L1 Dutch English texts affects the native speaker’s perception of the coherence and continuity of the text. Since these hypotheses are comparable to Rosén’s, a (partial) replication of her method can be used for this study. A qualitative study of native speaker perceptions of L1 Dutch advanced EFL writing will demonstrate whether the native speakers judge the information structural transfer as non-native, less coherent, and less continuous. Moreover, it will be a useful method for answering the last sub-question: whether native speakers are able to actively indicate the infelicitous use of a clause-initial circumstance adverbial, for example by proposing improvements like Rosén’s informants did. This method is similar to the operation task discussed in section 3.1.

A few critical notes should be made regarding Rosén’s study which are of importance to the replication study. Firstly, Rosén did not specify the exact level of the L2 German learners. Since the respondents compared their use of German to that of pre-schoolers, it is questionable whether the Swedish students were really that advanced. The research of this thesis looks at native speaker perceptions of texts written by very advanced learners of English (C1 on the CEFR), which can yield less obvious results than Rosén’s study. Secondly, Rosén does not specify to what extent the German informants had knowledge of linguistics. For the empirical study of this thesis, it was important to make sure that the informants had never studied linguistics nor any foreign languages in higher education. This is to make sure their responses to the texts are intuitive rather than based on linguistic knowledge. Finally, Rosén did not use a control text in this qualitative study. The results of her research would have been more reliable if the German informants had also judged a text written by a native speaker of German alongside the texts written by the Swedish learners. According to the hypothesis, the informants would not have any major issues with the native speaker text, which would make their responses to the learners’ texts even more striking.
Therefore, the empirical research of this thesis presents the respondents with a control text (written by a native speaker of English) alongside the texts written by Dutch learners.

3.3 Conclusion
The theory discussed in this chapter suggests a number of methods that are suitable for answering the research questions posed in this thesis. It is most important that the method measures intuitive responses of respondents, since the research deals with information structural transfer, a very subtle aspect of non-native English. Firstly, the semantic differentials technique in the form of a questionnaire is a good way of quantitatively measuring native speaker’s judgements of non-native language. Secondly, a combination of the operation task and Rosén’s method is a suitable qualitative method that can shed light on how native speakers perceive information structural patterns in non-native language use and how they think these can be changed in order to improve them. In short, the ideal method for the research in this thesis is a combination of quantitative and qualitative methods. It will be discussed in more detail in sections 2 and 3 of chapter 4.
4. Report of empirical research
The empirical component of this thesis aims to answer the research question and the sub-questions that are central to this study. The following questions were asked:

− Main research question: Is the use of clause-initial circumstance adverbials in L1 Dutch advanced EFL writing perceived as non-native by native speakers of English?
− Sub-question 1: Does the use of clause-initial circumstance adverbials have an effect on the perception of coherence and continuity by the native speaker of English?
− Sub-question 2: Are native speakers able to actively indicate the infelicitous use of clause-initial circumstance adverbials in Dutch EFL texts? If they can, what kind of clause-initial adverbial (i.e. with or without an identity link) do native speakers perceive as most infelicitous?

The introductory chapter of this thesis discussed the hypotheses to these research questions (section 1.3). This chapter will discuss the empirical study that tested the hypotheses. Section 4.1 provides details on the methods and procedure of this study. Section 4.2 discusses the ways in which the results of the survey were analysed, with a quantitative component on the one hand and a qualitative component on the other. Section 4.3 presents the results of the study. Finally, section 4.4 discusses the results and section 4.5 concludes this empirical study.

4.1 Method and procedure
The theoretical background of the methods used in this research has been elaborated on in Chapter 3, which proposed a combination of quantitative and qualitative research. This was applied in the method for the empirical research investigating native speaker perceptions of clause-initial adverbials in Dutch EFL texts. The ways in which the different components of this research have answered the research questions is summarized in table 2.

Table 2
Summary of methods.

<table>
<thead>
<tr>
<th></th>
<th>Quantitative/qualitative</th>
<th>Method</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ</td>
<td>Quantitative + qualitative</td>
<td>Judgement task* + comments</td>
<td>Repeated measures ANOVA + discussion of comments</td>
</tr>
<tr>
<td>Sub1</td>
<td>Quantitative + qualitative</td>
<td>Judgement task* + comments</td>
<td>Repeated measures ANOVA + discussion of comments</td>
</tr>
<tr>
<td>Sub2</td>
<td>Qualitative</td>
<td>Operation task</td>
<td>Identification and discussion of comments</td>
</tr>
</tbody>
</table>

* Semantic differentials technique
These techniques were all used in the survey that was conducted among 30 native speakers of British English. This survey presented the respondents with four excerpts of student essays. Three of these were written by advanced Dutch EFL writers and contained clause-initial circumstance adverbials. The fourth text was a control text written by a native speaker of British English, which did not contain any clause-initial circumstance adverbials. The respondents were asked to carry out judgements tasks and operation tasks on these texts. The following sections will elaborate on the methods and procedures applied in the process of designing and conducting the survey.

4.1.1 Respondents

The survey was filled out by 30 native speakers of British English, of which 10 were male, 19 female, and 1 unspecified. 19 respondents were aged 20-30, 8 were under 20 and 3 were over 40. When asked about their country of origin, 14 respondents replied with ‘UK’. 14 said ‘England’ and 2 were from Scotland. 12 of the respondents spoke a foreign language. The languages mentioned were French, German, Dutch (low proficiency), Spanish, Norwegian, and Vietnamese.

The respondents were only allowed to participate in the survey if they met the following conditions, which were stated at the beginning of the survey:

1. They are native speakers of British English.
2. They have never studied language nor linguistics in their higher education.
3. They do not speak more than one foreign language.
4. They are not dyslectic nor have any other reading disability.

Conditions 2 and 3 were set to make sure the respondents did not have an in-depth knowledge of linguistics or information structure. Condition 4 was set because the survey asked the respondents to judge the coherence and continuity of a text and reading disabilities could possibly influence this judgement. In order to make sure the respondents filled out the survey with care and attention, it was stated beforehand that they had to work in a quiet environment where they could concentrate. To ensure the quality of their answers, they were also told that correctly filling out the survey would give them the chance to win a £25 Amazon gift card.
4.1.2 Survey

The survey starts out with general questions on the respondent’s gender, age, language background, and country of origin. The answers to these questions have not been used in the analysis but served to gain insight into the demographical and geographical background of the group of respondents. They were also used to make sure the respondents conformed to the criteria mentioned in section 4.1.1.

The body of the survey consists of four sections. Each section presents the respondents with an English text of ±200 words, followed by three scaled questions (judgement task) and an open question asking for comments on the answers provided. This page is followed by a new page where the respondent is asked to re-read the text and to improve it where necessary (operation task). This order (judgement task, comments, operation task) was repeated for all four texts. Three of these texts were written by advanced Dutch EFL writers and one (control) text was written by a native speaker of British English. Section 4.2.3 will elaborate on how these texts were selected.

The scaled questions were designed to provide answers to the main research question and the first sub-question. They were designed according to the semantic differentials technique and can be classified as a judgement task (Hultfors, 1986). They presented the respondent with a five-point scale with polar opposite adjectives on each end. The opposites were ‘coherent – incoherent’, ‘continuous – choppy’, and ‘native-like – foreign’. The first two questions on coherence and continuity aimed to provide answers to the first sub-question. The final question on nativeness aimed to provide an answer to the main research question. The questions were presented to the respondents in the following way:

How did the text (as a whole) come across to you? As…
Coherent o o o o o o Incoherent

What did you think of the general “flow” of the text? It was…
Continuous o o o o o o Choppy

---

1 The survey used for this study can be found in appendix A. This is a copy of the digital version that was made in Google Forms.
What overall impression did the text make? It seemed…

Native-like o o o o o o Foreign

After the scaled questions, the respondents were asked to “comment on the writing style and the flow of information in the text by providing explanations to your answers above”. This question was designed to give an answer to the main research question and the first sub-question. These questions are thus answered in both a quantitative (scaled questions) and qualitative way (comments).

Finally, the respondents were asked to re-read the text and to perform an operation task (Quirk & Svartvik, 1966) on it. The question was worded as follows: “Are there any sentences or passages you would change in order to make the text more native-like, coherent and continuous? If so, please write down your improvements below”. This qualitative method, a replication of Hultfors (1986) and Rosén (2006), provided answers to the second sub-question.

4.1.3 Material

The material used in the survey was taken from two corpora. The three texts written by Dutch advanced EFL writers were taken from the LONGDALE corpus (Longitudal Database of Learner English). As part of the LONGDALE project, 899 essays written by Dutch students of English Language and Culture at Radboud University were collected between their first and third year of university (2008-2012). 440 of these essays are written on topics in British and American literature. These texts were used for this research, since Van Vuuren (2013) found that these texts displayed the highest frequency in clause-initial circumstance adverbials. The control text, i.e. an essay written by a native speaker of British English at university level, was selected from the LOCNESS corpus (The Louvain Corpus of Native English Essays). This is a corpus of native English argumentative and literary essays written by British A-level students, British university students, and American university students. It is made available by the Centre for English Corpus Linguistics (CECL) at Université catholique de Louvain.

First, three text were selected from the LONGDALE corpus. From these texts, the first one or two paragraphs were selected. These introductory sections were suitable since they form a coherent whole and because they do not contain any quotations or references. Each excerpt of around 200 words (206, 196, and 183 words respectively) contains 3-4 clause-
initial circumstance adverbials of which one establishes an identity link with the immediately previous sentence. The texts can be found in appendix B, where the clause-initial circumstance adverbials are underlined and those with an identity link are in bold.

Finally, a text was selected from the LOCNESS corpus, more specifically from the literature essays written by native British English university students. These essays are most comparable to the LONGDALE ones in terms of topic (literature) and academic maturity of the writer. Moreover, the text chosen was written by a native speaker of British rather than American English, since the native speaker respondents were British as well. After selecting a few texts of which the first 200 words formed a coherent whole (i.e. the introduction or the introduction plus the first paragraph), one text was selected at random. This excerpt does not contain any clause-initial circumstance adverbials. This excerpt can also be found in appendix B.

An important consideration was made in the process of selecting the material for the survey that is worth mentioning. The texts written by the Dutch writers are very advanced, but the possibility remains that they contain elements other than information structure that can be perceived as non-native by native speakers of English. This would mean that a variable other than the use of clause-initial circumstance adverbials could alter the outcomes of the study. This problem was overcome by posing the questions in such a way that the respondents are guided into the direction of pragmatic felicity (how does the text ‘feel’) rather than grammatical or idiomatic errors (what is ‘wrong’). This was done by using words and phrases like ‘the text as a whole’, ‘the general flow’ and ‘overall impression’. Moreover, the open questions all specifically asked for comments on or improvements of the coherence and continuity of the texts rather than their grammaticality or vocabulary.

4.2 Analysis

4.2.1 Quantitative component

The quantitative component of this study was designed to answer the main research question and the first sub-question of this thesis. The data used for the analysis are the scores resulting from the judgement task (semantic differentials technique) that the respondents performed on the text samples in the survey. Each answer was given a score from 1 to 5, with 1 being the left end of the scale (coherent, continuous, and native-like) and 5 being the right end of the scale (incoherent, choppy, foreign). The data of the ‘native-like – foreign’ scale were used to answer the main research question. The data of the other two scales, ‘coherent – incoherent’
and ‘continuous – choppy’ were used for the first sub-question. The data were statistically analysed by means of a repeated measures ANOVA and tests of within-subject contrasts to analyse the differences in data between the non-native texts and the native control text. The results of the analysis are reported in section 4.3.

4.2.2 Qualitative component

The qualitative component of the survey consisted of two parts: the comment section and the operation task. The respondents’ answers in the comment section were used to answer the main research question and the first sub-question alongside the qualitative data. This way, the qualitative data provides explanations to the results of the quantitative analysis. These will be discussed in section 4.3.

The operation task was designed to answer the final sub-question, i.e. whether native speakers are able to actively indicate the infelicitous use of clause-initial circumstance adverbials. This research question was answered by first identifying the different types of comments and determining their frequencies. The most important comments, i.e. those related to the use of clause-initial circumstance adverbials, are then discussed in more detail. The results of this analysis can be found in section 4.3.

4.3 Results

4.3.1 Main research question

The mean scores on the ‘native-like – foreign’ scale for all four texts are presented in figure 1.

The figure demonstrates that text 1 ($M = 2.47, SD = 1.11$) and text 2 ($M = 2.37, SD = 1.22$)
scored higher (i.e. less ‘native-like’) than the native control text \((M = 2.00, SD = 1.21)\), which is in line with the hypothesis. The mean score of text 3 \((M = 1.73, SD = .91)\), however, is lower than the control text, which contradicts the hypothesis. A repeated measures ANOVA was performed on the scores of nativeness of the four texts. The overall effect was significant \((F(3, 87) = 3.642, p = .016, \eta^2 = .112)\). Tests of within-subjects contrasts revealed a significant difference between text 1 and the control text \((F(1, 29) = 3.359, p = .046)\). The difference between text 2 and the control text was not significant \((F(1, 29) = 1.696, p = .203)\). This means that the respondents only perceived text 1 as significantly less ‘native-like’ than the control text. The difference between text 3 and the control text was not significant either \((F(1, 29) = .912, p = .348)\). This means that although text 3 scored lower than the control text, which contradicts the hypothesis, the effect is not significant and thus it does not have major implications for the results of this analysis.

These quantitative data can be linked to the qualitative data provided by the respondents in the comments section. Text 1 was perceived as significantly less native-like than the control text. The respondents commented that the text contained clumsy sentences, lacked basic grammar and seemed too simplistic for an academic essay. Text 2 was also perceived as less native-like than the control text, but this effect was not significant. The respondents thought the sentences were ‘awkward’ and it was often unclear what the author was referring to. Finally, text 3 was perceived as considerably more native-like than the control text, although this was not significant. The respondents commented that the text was easy to understand and sounded native-like. Despite for some grammatical errors noted by the respondents, they were most positive about the nativeness of this text. The control text was also very positively commented on: many said it had a perfect style of writing and that it sounded very native-like. None of the comments contained anything related to sentence-beginnings or the overuse of clause-initial adverbials in the non-native speaker texts.

4.3.2 Sub-question 1
The mean scores on the ‘coherent – incoherent’ and ‘continuous – choppy’ scales are presented in figures 2 and 3 respectively.
With regards to the coherence scores, it can be observed that text 1 \((M = 2.17, SD = 1.02)\) and text 2 \((M = 2.13, SD = 1.11)\) scored higher (i.e. less ‘coherent’) than the native speaker control text \((M = 1.93, SD = 1.14)\), which is in line with the hypothesis. Text 3 scored lower than the native speaker control text \((M = 1.43, SD = .63)\), which contradicts the hypothesis. A repeated measures ANOVA was performed on the scores of coherence of the four texts. The overall effect was significant \((F(3, 87) = 4.380, p = .006, \eta^2 = .131)\). Tests of within-subjects contrasts revealed that the difference between text 1 and the control text was not significant \((F(1, 29) = 1.092, p = .305)\). The difference between text 2 and the control text was not significant either \((F(1, 29) = .554, p = .463)\). This means that the respondents perceived neither the first nor the second second text as significantly less coherent than the control text. There was, however, a significant difference between text 3 and the control text \((F(1, 29) = 5.241, p = .030)\). This means that the non-native speaker text 3 was perceived as significantly more coherent than the native speaker control text. This effect is opposite to the effect predicted by the one-way hypothesis.

Again, these quantitative data are linked to the qualitative data provided by the respondents in the comments section. Text 1 was judged to be less coherent than the control text, but this effect was not significant. The respondents did not say much about the coherence of the text, except that some thought it seemed like conversational English, “written as if someone was speaking”. Text 2 was also perceived as less coherent than the control text, but this was not significant either. The respondents said the text was difficult to read and confusing at times. Text 3 was perceived as significantly more coherent than the control text. Many respondents pointed out that the text was coherent: it is well structured and easy to understand. Finally, the control text is also received rather positively by the respondents. They thought the “text is well laid out” and “seems to be in good order”. Again, none of the respondents commented on sentence-beginnings or the overuse of clause-initial adverbials in
the non-native speaker texts.

The same analysis was carried out for the continuity scores. The results of the mean scores are summarized in figure 3.

![Figure 3. Mean scores on the ‘continuity’ scale.](image)

With regards to the continuity scores, text 1 ($M = 3.10, SD = 1.16$) and text 2 ($M = 2.20, SD = 1.00$) scored higher (i.e. less ‘continuous’) than the control text ($M = 2.13, SD = 1.20$), which is in line with the hypothesis. Text 3 scored lower ($M = 1.53, SD = .78$) than the control text, contradicting the hypothesis. A repeated measures ANOVA on the continuity scores revealed that the overall effect was significant ($F(3, 87) = 12.937, p < .001, \eta^2 = .308$). Tests of within-subjects contrasts showed a significant difference between text 1 and the control text ($F(1, 29) = 12.140, p = .002$). The difference between text 2 and the control text was not significant ($F(1, 29) = .055, p = .816$). This means that the respondents only perceived text 1 as significantly less continuous than the control text. The difference between text 3 and the control text was also significant ($F(1, 29) = 5.674, p = .024$). This means that text 3 was perceived as significantly more continuous than the native speaker control text. Again, this effect is opposite to the effect predicted by the one-way hypothesis.

These quantitative data can also be linked to the qualitative data from the comments-section. Text 1 was perceived as significantly less continuous than the control text. Most of the respondents noted that the text was too choppy due to short sentences, an overuse of full stops, and a lack of connectives. They said it “bounced from point to point” and that the text “came across as very abrupt and not natural”. Text 2 was perceived as less continuous than the control text, but this was not significant. The respondents thought the text came across as “jumbled” and “choppy”, mostly due to unnatural placement of commas and overly complex
sentence structures. There was one respondent who pointed out the infelicitous use of a clause-initial circumstance adverbial: “This extract was clear but there were moments which faltered, for example; ‘in the narrative Shooting an Elephant’ doesn't flow as a sentence, it would read better as ‘the narrative voice in Shooting an Elephant’”. There were also some very positive comments: seven respondents thought the text flowed well. Text 3 was perceived as significantly more continuous than the native speaker control text. The respondents were very positive and said the text “reads incredibly well” and it is “well paced”. Most of them thought the text flowed well because the sentences connected to each other. Their criticism was mostly related to punctuation: some respondents thought it disrupted the flow of the text. Finally, seven of the respondents thought the control text had a good flow of information, with complex sentences connecting well. However, there were also twelve respondents who thought the text was choppy due to a lack of commas, an overuse of full stops and too many short sentences. Except for the one comment on text 2, none of the respondents commented on sentence-beginnings or the overuse of clause-initial adverbials in the non-native speaker texts.

4.3.3 Sub-question 2

The various types of improvements that the respondents made on the texts were identified and their frequencies were determined. Four different types were distinguished:

A. Respondent changed the sentence structure, but did not add nor omit any clause-initial (circumstance) adverbials.

B. Respondent changed the sentence structure by adding a clause-initial (circumstance) adverbial.

C. Respondent changed the sentence structure by omitting a clause-initial (circumstance) adverbial, thus starting the sentence with a different constituent.

D. Respondent changed an aspect other than sentence structure, i.e. vocabulary, punctuation, spelling, or grammar.

The frequencies are summarized in figure 4. The total of improvements for each text does not add up to 30, because some respondents performed several improvements per text while others did not improve anything for some texts.
Figure 4. Frequency diagram displaying the distribution of types of improvements.

Only the improvements of type A, B and C will be presented in this results section, since these are most relevant for the research question. The discussion (section 4.4.3) will go into more detail regarding the frequencies of type D.

Improvements of type A occurred on all four texts, with the highest frequency on text 1. The improvements mostly included omitting and adding punctuation and inserting conjunctions to connect sentences. Some of these operations occurred on sentences that contained a clause-initial circumstance adverbial, but the respondents did not change any sentence-beginnings.

Improvements of type B, i.e. the respondent adding a non-subject clause-initial constituent, occurred 9 times in total, of which 6 on text 1 and 3 on the native speaker control text. The changes were as follows (A = original sentence, B = improvement):

Text 1

1. A. The role of women has shifted a lot during the centuries.
   B. Over the centuries, the role of women has shifted quite significantly. (Respondent 3)

2. A. He is a physician and thinks logically and with science, while women are emotional and imaginative according to him.
   B. As a physician he considers himself to be logical and scientific whereas women are, according to him, emotional and imaginative. (Respondent 10)

3. A. He is a physician and thinks logically and with science, while women are emotional and imaginative according to him.
B. **Being a physician**, John believes he has good logical and scientific thinking, comparable to women which, according to him, are emotional and imaginative. (Respondent 13)

(4) A. They had to be obedient and be the perfect housewife; they had to take care for their husbands and their children.
B. **During this time period** women would have ‘housewife’ duties and be obedient to their male counterparts. (Respondent 13)

(5) A. He thinks he knows what is good for her, because he is a man and she is a woman.
B. **Because of his position as a man** John believes he knows what is best for his wife. (Respondent 29)

(6) A. They had to be obedient and be the perfect housewife; they had to take care for their husbands and their children.
B. **Considering the husband’s superior position over his wife** the wife was expected to be obedient and serving to her husband. (Respondent 29)

**Control text**

(1) A. One should simply help others and live in reality within ones limited knowledge.
B. **In the book Candide**, Voltaire believes that one should simply help others and live in reality within ones limited knowledge. (Respondent 29)

(2) A. He therefore sets out to prove these points in Candide.
B. **As a consequence**, he sets out to prove this to the characters within the novel. (Respondent 29)

(3) A. Pangloss contracts syphilis which when you follow it back to its origin comes from the crew of Christopher Columbus's ship when he brought chocolate back from one of his voyages.
B. **In the tale** Pangloss contracts the disease syphilis and it appears to have originated from the crew of Christopher Columbus's ship, when he brought chocolate back from the voyages. (Respondent 29)

Improvements of type C, i.e. the respondent omitting a clause-initial circumstance adverbial, occurred 3 times in total, all on text 1. The changes were as follows (A = original sentence, B = improvement):

(1) A. The role of women has shifted a lot during the centuries. **In stories**, one can always see how women were supposed to behave and it sometimes becomes clear how they themselves felt about the role they had to fulfil.
B. The role of women has shifted considerably during the ages and this is best
illustrated by the literature of the day where expectation of women's behaviour, their
social role and their own feelings about this are explored. (Respondent 10)

(2) A. In *The Yellow Wallpaper, Desiree's Baby* and *How I found America*, one can see
how the American women from the mid-twentieth century had to behave and how
they felt about that.
B. Several books focus on how American women [...] during the mid-twentieth
century, including *The Yellow Wallpaper, Desiree's Baby* and *How I Found America*.
(Respondent 13)

(3) A. No matter how tired and worn-out they were, one was not supposed to see that. In
the story, one can clearly see that she is tired of this role. She is forced to be someone
who she does not want to be.
B. This perceived way of being a perfect women [sic] was often tiresome and evident
in the story of John and (insert name), she is clearly tired of adhering to this role that
society has forced her to conform to. (Respondent 13)

4.4 Discussion
In this section, the results of the empirical research will be interpreted in the light of the
research questions and hypothesis. Finally, it will critically evaluate the research that was
conducted for this study in section 4.4.4.

4.4.1 Main research question
The main research question was whether the use of clause-initial circumstance adverbials in
L1 Dutch advanced EFL writing is perceived as non-native by native speakers of English. It
was hypothesized that texts written by L1 Dutch advanced writers that contain clause-initial
circumstance adverbials are perceived as less native-like than texts written by native speakers
of English that contain no clause-initial circumstance adverbials. This hypothesis is not
confirmed. The quantitative results demonstrate that only one out of three non-native texts
was perceived as significantly more non-native than the control text. The qualitative data add
to this by demonstrating that none of the respondents based their answers on sentence-
beginnings or the overuse of clause-initial adverbials in the non-native speaker texts.
4.4.2 Sub-question 1
The first sub-question was whether the use of clause-initial circumstance adverbials has an effect on the perception of coherence and continuity by the native speaker of English. It was hypothesized that texts written by L1 Dutch advanced writers that contain clause-initial circumstance adverbials are perceived as less coherent and less continuous than texts written by native speakers of English that contain no clause-initial circumstance adverbials. Again, this hypothesis is not confirmed. The coherence scores revealed that text 1 and text 2 were not perceived as significantly less coherent than the control text. However, text 3, a non-native text that contained three clause-initial circumstance adverbials, was perceived as significantly more coherent than the control text, which contained no clause-initial circumstance adverbials at all. The qualitative data support this, since none of the respondents brought up sentence-beginnings in their answers. Therefore, these did not have an effect on their perception of coherence.

With regards to the continuity scores, the same conclusion can be drawn. The respondents only perceived text 1 to be significantly less continuous than the control text. Again, text 3 was perceived as significantly more continuous than the native speaker control text, even though it contained three clause-initial circumstance adverbials. The qualitative data support these findings.

4.4.3 Sub-question 2
The final research question was whether native speakers are able to actively indicate the infelicitous use of clause-initial circumstance adverbials in Dutch EFL texts. Based on the results of this survey, this question can be answered with ‘no’. There are several reasons for this, which will be elaborated on by means of a discussion of all the types of improvements the respondents performed on the text samples.

Firstly, the type A improvements revealed that many respondents changed sentence structures in order to make the text more coherent and continuous by means of omitting and adding punctuation and inserting conjunctions to connect sentences. Many of these sentences contained clause-initial adverbials, but the respondents did not change those. This suggests that it is not the clause-initial adverbial that they find disrupting or non-native, but rather comma placement and/or sentence length.

Secondly, as figure 4 demonstrates, the improvements of type D are by far the most frequent. This is an important observation, since it suggests that the infelicitous use of
grammar, vocabulary, spelling, or punctuation is more notable to native speakers in these
texts than marked sentence-beginnings. This again means that apparently the native speaker
respondents were not aware of the marked amount of clause-initial circumstance adverbials in
the texts.
Finally, only the type C improvements could suggest that the native speakers perceive
clause-initial circumstance adverbials as infelicitous. This kind of improvement, however,
ocurred with such a low frequency (3 out of 170 improvements) that no conclusions can be
based on these.
The only responses that seemed to provide an answer to the research question were the
type B improvements, where respondents added non-subject initial constituents to make the
text more coherent, continuous and native-like. This contradicts the hypotheses and the theory
discussed in chapter 2. However, it should also be noted that these results are not
representative of the population, since only 9 out of 170 improvements contained this type.
Moreover, 5 out of 9 improvements that added a non-subject clause-initial constituent came
from one single respondent, number 29. Therefore, this outcome could be attributed to their
(academic) writing style rather than their tendency (as a native speaker of English) towards
using non-subject clause-initial constituents. All in all, it cannot be concluded from these
results that native speakers are actively aware of their use of these clause-initial constituents.

4.4.4 Evaluation
The outcomes of this study were not conclusive or one-directional, since some texts scored
significantly higher than the control text while text 3 scored significantly lower. It should also
be noted that this is a small-scale study that can be expanded and improved to yield more
reliable results. This section will therefore evaluate this empirical study and propose methods
for future research.
Firstly, it is important to note that the scope of this study is relatively small, and
therefore the outcomes are influenced by such limitations. Most importantly, this means that
the number of respondents might be too low to draw conclusions on the data. It also means
that the survey had to be relatively short, with only four text excerpts, in order to hold the
attention of the respondent. Future research, with a bigger scope, could use more respondents
and more texts in the survey.
Secondly, the texts used for this survey were selected at random, and thus the
conclusions tied to the responses can only relate to these texts and not to Dutch EFL texts in
general. The random selection also caused text 3 to significantly deviate from text 1 and 2 in terms of perceived continuity, coherence and nativeness, which could be attributed to coincidence. A future study, using different texts, might yield different findings.

Thirdly, the maturation effect might have occurred in this study. Respondents commented in less detail towards the end of the survey, and therefore the responses to texts 3 and the control text (the final two texts) are less reliable than those to text 1 and 2. This can be due to a loss of concentration or impatience on the side of the respondent. In future research, this problem can be overcome by randomizing the order of the texts.

Finally, a notable effect that was observed and might have influenced the outcome of the test is the Hawthorne effect. Some responses seemed to reveal that the respondents were aware that they were judging a student’s text and seemed to be very polite in their answers. Some of these comments included:

1. “… but apart from those small blips, it was great” (Respondent 3)
2. “… but they’re only minor things that don’t effect understanding at all!” (Respondent 6)
3. “…my English teacher would have told me… this could just be where I went to school though.” (Respondent 7)

The respondents were all British, which is a culture known for its politeness. This can result in more indirect answers and answers that weaken the respondent’s criticism, like the examples above. This might have affected the reliability of the qualitative data. To avoid this effect in a future study, it could be made explicit at the beginning of the survey that none of the writers will see the criticism on their texts and that the responses have to be as honest as possible.

4.5 Conclusion
The results of this study seem to suggest that native speakers of English do not judge the use of clause-initial circumstance adverbials as non-native nor disruptive to the coherence and continuity of the text. The hypotheses cannot be confirmed, but cannot be completely rejected either. The discussion has shown that the results are rather ambiguous and therefore the conclusion requires some nuance.

This study aimed to measure native speakers’ intuitive responses towards the use of clause-initial circumstance adverbials in Dutch EFL texts. In order to measure these intuitions, the responses were recorded by means of scaled questions according to the
semantic differentials technique. The qualitative data which were linked to these scores, however, revealed that the respondents were much more concerned with aspects of the text other than clause-initial adverbials, such as sentence length, punctuation and vocabulary. Therefore, it is not clear if it was the clause-initial adverbials that affected the respondents’ scores on the scaled questions, or if it was other aspects of the texts.

However, these results from the qualitative analysis could also be interpreted in the opposite direction. The fact that respondents did not seem to be concerned with sentence-beginnings in their comments could also reveal that apparently they find other infelicitous (but grammatical) aspects of a text, such as punctuation and sentence length, more disrupting and non-native than an infelicitous use of clause-initial adverbials. If this interpretation is considered to be correct, the possibility should be kept in mind that the clause-initial circumstance adverbials did have an effect on the respondents’ perceptions, but that the effect of other aspects of the text was larger. This could mean that these other effects overshadowed the effect of the clause-initial adverbials, and therefore these did not come up in the qualitative data. It would imply that the native speakers might also have intuitively perceived them as odd or foreign, but that these intuitions were suppressed by the conscious awareness of the other disruptions in the texts.

This conclusion can be disambiguated by means of further research that aims to uncover native speakers’ intuitive perceptions of information structural transfer in Dutch EFL texts. The current study could be elaborated and improved by means of the evaluation points mentioned in section 4.4.4. The method can also be changed completely, for example by employing techniques other than a survey, such as EEG or eye-tracking. Moreover, while the current study focusses on perception, native speaker production could also be studied in relation to clause-initial constituents. These suggested methods exceeded the scope of this BA thesis but would certainly be interesting for a future research project.
5. Conclusion
The conclusion of the empirical research established that the results are still somewhat ambiguous and therefore difficult to interpret. There are, however, conclusions to be drawn with regards to existing theory. The studies by Van Vuuren (2013, forthcoming) and Verheijen, Los & De Haan (2013) agreed that clause-initial adverbials in Dutch EFL writing are a sign of non-nativeness. Their conclusion was based on the fact that their research on learners’ essays revealed that Dutch L2 learners tend to overuse clause-initial adverbials in their English writing. This information structural transfer is, according to Van Vuuren, “recognizably Dutch” (2013, 173), and Verheijen, Los, and De Haan said it “feels distinctly non-native” (2013, p. 92). The research of this thesis, however, has demonstrated that the issue of clause-initial constituents in Dutch EFL writing is not as unambiguous as Van Vuuren and Verheijen, Los & De Haan might have thought, at least not from a native speaker perspective. Most of the native speaker respondents who participated in this study were not aware of the marked overuse of clause-initial circumstance adverbials in the Dutch EFL texts. If these clause-initial constituents had been a ‘sign’ of non-nativeness, the native speakers would have noticed. Therefore, it can be concluded that the assumptions made by Van Vuuren and Verheijen, Los & De Haan might be a bit too sweeping. There is definitely a truth in them, as their research demonstrated, but this study has shown that the issue is more ambiguous than it seemed.

This study of information structural transfer in Dutch EFL texts was a partial replication study of Rosén (2006), who studied this kind of transfer from Swedish into German with relation to the pre-verbal position. It is therefore relevant to compare the results of this study to those of Rosén’s. The results of this study were not conclusive, whereas Rosén’s results all pointed in one direction. Her respondents judged the L2 German texts as very choppy and incoherent, pointed out that connections between sentences were missing and noticed an exaggerated use of the subject in initial position. The British respondents in this study did not judge the L2 English texts as significantly more choppy and incoherent than the native speaker text and they were unable to point out any marked sentence-beginnings. This striking difference between the two studies can possibly be attributed to the fact that Rosén did not specify the exact level of the Swedish learners of German. The Dutch learners of English whose texts were used for this study were of a very advanced level, which could be the reason why their information structural transfer was not as noticeable to native speakers as it was in the German texts. Of course, it should also be noted that both studies are dealing with different languages and different forms of information structural transfer.
Van Vuuren (2013, forthcoming) and Verheijen, Los & De Haan (2013) all suggested that the outcomes of their studies were of considerable importance to teaching English as a Foreign Language to Dutch students. It would be particularly relevant for ‘future language professionals’ to reach near-native proficiency by going beyond grammatical correctness and acquiring the English principles of information structure. The outcome of this study does not change the fact that it is important for Dutch students of English linguistics to become aware of the occurrence of information structural transfer. It does, however, suggest that perhaps it is not as necessary as it seemed to teach the students that non-subject clause-initial constituents are intrinsically infelicitous. An overuse of such constituents is certainly marked in English, but completely avoiding them does not necessarily make a text more native-like.

The conclusion of chapter 4 already suggested a few methods for future research that might provide more conclusive results in a similar study on native speaker perceptions of information structural transfer. Of course, there is also much more to research in this field that is concerned with other aspects of information structural transfer. For example, a study like this could also focus on the difference between local anchoring and global anchoring in English and Dutch. It would also be interesting to apply the research questions of this study to other languages. Chapter 3 already revealed that Swedish and English are similar in word order and information structure, which contrast with Dutch and German. A future study could research information structural transfer from, for example, German into English. This could be a corpus study, like Van Vuuren (2013), or a study of native speaker perceptions, like Rosén (2006) and this study.

All in all, the research conducted for this BA thesis project has made a valuable contribution to the existing research in the field of information structural transfer. It has provided a new angle of studying the phenomenon and it has challenged accepted notions in the existing literature. Moreover, the outcomes of this study have revealed some exciting opportunities for further research. Information structure is a very subtle and multi-faceted aspect of language, which means that it will provide researchers with plenty of food for thought and challenging research possibilities for many years to come.
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Rosén, C. (2006). “Warum klingt das nicht deutsch?” – Probleme der Informationsstrukturierung in deutschen Texten schwedischer Schüler und Studenten. [“Why doesn’t that sound German?” – Problems of information structure in German...


Appendix

A. Survey

Survey

Thank you for taking time to fill out this survey. Before you begin, make sure the following statements are applicable to your situation:

- You are a native speaker of British English.
- You have never studied a language nor linguistics during your higher education.
- You do not speak more than 1 foreign language.
- You are not dyslectic nor have any other reading disability.

Make sure you are in a quiet environment where you can concentrate. The survey will take around 15-20 minutes of your time. Your answers are 100% anonymous and are solely used for a BA thesis project. If you're curious to know what this project is about and what the results were, you can fill in your email address at the end and you will receive more information.

If you've correctly filled in your survey and left your email address at the end, you get a chance to win a £25 Amazon voucher.

Thanks a lot for participating!

Kind regards,

Myrte van Hilten
Radboud University
Nijmegen, The Netherlands
General questions

What is your gender? *
Your answer

What is your age? *
- <20
- 20-30
- 30-40
- 40-50
- 50-60
- >60

Are you a native speaker of British English? *
- Yes, English is my first language
- Yes, English is one of my first languages (I am bilingual)
- No

What is your country of origin? *
Your answer

Do you speak any foreign languages? *
- Yes
- No

If yes, what foreign language(s) do you speak?
Your answer
The next section consists of four short texts, which are all excerpts from student essays. Each text is followed by a set of multiple choice and open questions. Please read the texts and the questions carefully before giving your answer and make sure your answers are as intuitive as possible.
Text 1

Please read the following text once and then answer the questions below.

"The role of women has shifted a lot during the centuries. In stories, one can always see how women were supposed to behave and it sometimes becomes clear how they themselves felt about the role they had to fulfill. In The Yellow Wallpaper, Desirée's Baby and How I found America, one can see how the American women from the mid-twentieth century had to behave and how they felt about that. In The Yellow Wallpaper it becomes clear that John is a very controlling husband, he patronizes her and feels superior to her. He is a physician and thinks logically and with science, while women are emotional and imaginative according to him. He thinks he knows what is good for her, because he is a man and she is a woman. The position of women was different from now. They had to be obedient and be the perfect housewife; they had to take care for their husbands and their children. Appearance was also very important. No matter how tired and worn-out they were, one was not supposed to see that. In the story, one can clearly see that she is tired of this role. She is forced to be someone who she does not want to be."

How did the text (as a whole) come across to you? As... *

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<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Incoherent</th>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Coherent</td>
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</tbody>
</table>

What did you think of the general "flow" of the text? It was... *

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<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Choppy</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Continuous</td>
</tr>
</tbody>
</table>

What overall impression did the text make? It seemed... *

<table>
<thead>
<tr>
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Please comment on the writing style and the flow of information in this text by providing explanations to your answers above. If necessary, you can point out specific sentences from the text to illustrate your ideas. *

Your answer
Please re-read text 1 and then answer the question below.

"The role of women has shifted a lot during the centuries. In stories, one can always see how women were supposed to behave and it sometimes becomes clear how they themselves felt about the role they had to fulfill. In The Yellow Wallpaper, Desiree's Baby and How I Found America, one can see how the American women from the mid-twentieth century had to behave and how they felt about that. In The Yellow Wallpaper it becomes clear that John is a very controlling husband, he patronizes her and feels superior to her. He is a physician and thinks logically and with science, while women are emotional and imaginative according to him. He thinks he knows what is good for her, because he is a man and she is a woman. The position of women was different from now. They had to be obedient and be the perfect housewife; they had to take care for their husbands and their children. Appearance was also very important. No matter how tired and worn-out they were, one was not supposed to see that. In the story, one can clearly see that she is tired of this role. She is forced to be someone who she does not want to be."

Are there any sentences or passages you would change in order to make the text more native-like, coherent and continuous? If so, please write down your improvements below. *

Your answer
Text 2

Please read the following text once and then answer the questions below.

"It is difficult to attribute meaning to a text by looking at its actual author, because it is never sure whether the author put a meaning in his text intentionally or unintentionally. For example, in the narrative Shooting an Elephant by George Orwell, it is not sure whether Orwell wishes to state a point about imperialism, or if he merely wants to let us read a good story. The perspective of the reader can change if he or she puts too much emphasis on the meaning of the text. Then there is also the difference between the real author and the narrator. In the case of Shooting an Elephant, the real author is George Orwell. The narrator however, is the person who tells the narrative, which is in this case the main character. In this narrative an implied author, the image you get from the author when you read a text, is present. So while reading Shooting an Elephant, one could think the author is a man, who dislikes imperialism and who does not feel he belongs in Burma. This is not true of the real author, but it could be an image a reader has."

How did the text (as a whole) come across to you? As...

Coherent

1 2 3 4 5

Incoherent

What did you think of the general "flow" of the text? It was...

Continuous

1 2 3 4 5

Choppy

What overall impression did the text make? It seemed...

Native-like

1 2 3 4 5

Foreign

Please comment on the writing style and the flow of information in this text by providing explanations to your answers above. If necessary, you can point out specific sentences from the text to illustrate your ideas.

Your answer
Text 2

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Are there any sentences or passages you would change in order to make the text more native-like, coherent and continuous? If so, please write down your improvements below. *

Your answer
Van Hilten (s4185145) / 57

Text 3

Please read the following text once and then answer the questions below.

"Candide is a humorous tale of a young man who is completely innocent and is in search of his ideal. However this wit does not swamp the undertones of the serious point Voltaire makes about philosophical optimism. The book is very much the mirror image of Voltaire’s life as he doesn’t believe in optimism. One should simply help others and live in reality within ones limited knowledge. He therefore sets out to prove these points in Candide. Voltaire’s character Pangloss is the mouthpiece for philosophical optimism and what happens to him serves to denounce optimism. Pangloss believes in divine providence, what happens happens for a reason and for the good of society. It is at this point that Voltaire ridicules this idea. Pangloss contracts syphilis which when you follow it back to its origin comes from the crew of Christopher Columbus’s ship when he brought chocolate back from one of his voyages. Pangloss however claims that he doesn’t mind having syphilis because otherwise people wouldn’t have known what chocolate was. The reader obviously laughs at this theory of optimism and Voltaire has succeeded in proving what a stupid unethical theory it is. The fact that Pangloss remains adamant in his belief of philosophical optimism could also demonstrate Voltaire’s low opinion on those who believe in it."

How did the text (as a whole) come across to you? As... *

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What did you think of the general "flow" of the text? It was... *

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What overall impression did the text make? It seemed...

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Text 3

Please re-read text 3 and then answer the question below.

"Candide is a humorous tale of a young man who is completely innocent and is in search of his ideal. However this wit does not swamp the undertones of the serious point Voltaire makes about philosophical optimism. The book is very much the mirror image of Voltaire’s life as he doesn’t believe in optimism. One should simply help others and live in reality within one’s limited knowledge. He therefore sets out to prove these points in Candide.

Voltaire’s character Pangloss is the mouthpiece for philosophical optimism and what happens to him serves to denounce optimism. Pangloss believes in divine providence, what happens happens for a reason and for the good of society. It is at this point that Voltaire ridicules this idea. Pangloss contracts syphilis which when you follow it back to its origin comes from the crew of Christopher Columbus’s ship when he brought chocolate back from one of his voyages. Pangloss however claims that he doesn’t mind having syphilis because otherwise people wouldn’t have known what chocolate was. The reader obviously laughs at this theory of optimism and Voltaire has succeeded in proving what a stupid unethical theory it is. The fact that Pangloss remains adamant in his belief of philosophical optimism could also demonstrate Voltaire’s low opinion on those who believe in it."

Are there any sentences or passages you would change in order to make the text more native-like, coherent and continuous? If so, please write down your improvements below.*

Your answer
Text 4

Please read the following text once and then answer the questions below.

"In the traditional rendering of war fiction, war is often being described as a testimony of heroism, where the protagonists display certain virtuous qualities such as courage, resolution and leadership. In The Things They Carried by Tim O'Brien, however, this mode of war depiction has undergone a metamorphosis. The violent nature of war, which is mostly represented by the description of the bloody battle field in the conventional war narrative, has changed to the detailed explanation of the 'things' that soldiers carry on their shoulders. These things are of various kinds, but roughly they can be divided into two categories: physical and emotional/moral. In the first category there is a list of military equipment such as the steel helmets, machine gunner or malaria tablets, etc. which are purely intended for the military duties. But there are also items the characters/soldiers carry that are of emotional importance, for instance, Ted Lavender's marijuana, which he uses to reduce the pain of war and Jimmy Cross's love letters from his girl friend, which serves as the distraction for his fear for the inexpressible horror of war."

How did the text (as a whole) come across to you? As...

1 2 3 4 5

Coherent Incoherent

What did you think of the general "flow" of the text? It was...

1 2 3 4 5

Continuous Choppy

What overall impression did the text make? It seemed...

1 2 3 4 5

Native-like Foreign

Please comment on the writing style and the flow of information in this text by providing explanations to your answers above. If necessary, you can point out specific sentences from the text to illustrate your ideas.

Your answer
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Please re-read text 4 and then answer the question below.

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Are there any sentences or passages you would change in order to make the text more native-like, coherent and continuous? If so, please write down your improvements below. *

Your answer
Thank you for taking the time to fill out this survey. Your contribution to my BA thesis research is invaluable. I appreciate it very much! Leave your email address here for more information on this research and to get a chance to win a £25 Amazon gift card.

Your answer

Please state your preferences here:

☐ Yes, I would like to receive more information on this research via email.
☐ Yes, I would like to get a chance to win a £25 Amazon gift card.

100%: You made it.
B. Original texts

LONGDALE texts (non-native speakers)

C09yr1t3 RAD0944g

The role of women has shifted a lot during the centuries. In stories, one can always see how women were supposed to behave and it sometimes becomes clear how they themselves felt about the role they had to fulfil. In The Yellow Wallpaper, Desiree's Baby and How I found America, one can see how the American women from the mid-twentieth century had to behave and how they felt about that. In The Yellow Wallpaper, it becomes clear that John is a very controlling husband, he patronizes her and feels superior to her. He is a physician and thinks logically and with science, while women are emotional and imaginative according to him. He thinks he knows what is good for her, because he is a man and she is a woman. The position of women was different from now. They had to be obedient and be the perfect housewife; they had to take care for their husbands and their children. Appearance was also very important. No matter how tired and worn-out they were, one was not supposed to see that. In the story, one can clearly see that she is tired of this role. She is forced to be someone who she does not want to be.

C11yr1t1b RAD1102c

It is difficult to attribute meaning to a text by looking at its actual author, because it is never sure whether the author put a meaning in his text intentionally or unintentionally. For example, in the narrative Shooting an Elephant by George Orwell, it is not sure whether Orwell wishes to state a point about imperialism, or if he merely wants to let us read a good story. The perspective of the reader can change if he or she puts too much emphasis on the meaning of the text. Then there is also the difference between the real author and the narrator. In the case of Shooting an Elephant, the real author is George Orwell. The narrator however, is the person who tells the narrative, which is in this case the main character. In this narrative an implied author, the image you get from the author when you read a text, is present. So while reading Shooting an Elephant, one could think the author is a man, who dislikes imperialism and who does not feel he belongs in Burma. This is not true of the real author, but it could be an image a reader has.
In the traditional rendering of war fiction, war is often being described as a testimony of heroism, where the protagonists display certain virtuous qualities such as courage, resolution and leadership. In *The Things They Carried* by Tim O'Brien, however, this mode of war depiction has undergone a metamorphosis. The violent nature of war, which is mostly represented by the description of the bloody battle field in the conventional war narrative, has changed to the detailed explanation of the 'things' that soldiers carry on their shoulders. These things are of various kinds, but roughly they can be divided into two categories: physical and emotional/moral. In the first category there is a list of military equipment such as the steel helmets, machine gunner or malaria tablets, etc. which are purely intended for the military duties. But there are also items the characters/soldiers carry that are of emotional importance, for instance, Ted Lavender's marijuana, which he uses to reduce the pain of war and Jimmy Cross's love letters from his girl friend, which serves as the distraction for his fear for the inexpressible horror of war.

*Candide* is a humorous tale of a young man who is completely innocent and is in search of his ideal. However this wit does not swamp the undertones of the serious point Voltaire makes about philosophical optimism. The book is very much the mirror image of Voltaire’s life as he doesn't believe in optimism. One should simply help others and live in reality within ones limited knowledge. He therefore sets out to prove these points in *Candide*. Voltaire's character Pangloss is the mouthpiece for philosophical optimism and what happens to him serves to denounce optimism. Pangloss believes in divine providence, what happens happens for a reason and for the good of society. It is at this point that Voltaire ridicules this idea. Pangloss contracts syphillis which when you follow it back to its origin comes from the crew of Christopher Columbus's ship when he brought chocolate back from one of his voyages. Pangloss however claims that he doesn't mind having syphillis because otherwise people wouldn't have known what chocolate was. The reader obviously laughs at this theory of optimism and Voltaire has succeeded in proving what a stupid unethical theory it is. The fact that Pangloss remains adamant in his belief of philosophical optimism could also demonstrate Voltaire's low opinion on those who believe in it.