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How Clear is the PIL to my Pill? An Investigation Into Explicitation and Implication in the Translation of PILs

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How Clear is the PIL to my Pill?

An Investigation Into Explicitation and Implication in the Translation of PILs



Universiteit Leiden

MA Thesis

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Abstract

Ever since the introduction of Translation Universals, their existence has been widely debated. Explicitation and implicitation are no exception to this. These Translation Universals, both separately and together, have been studied in a variety of genres and text types. This thesis examined explicitation and implicitation in Dutch Patient Information Leaflets (PILs). It looked at how explicit the Dutch PILs were, what the rate of explicitation to implicitation was, and which explicitation and implicitation strategies were used. To study this, a bilingual parallel corpus of English and Dutch PILs of orally taken contraceptives was analysed. The source and target texts were compared side by side and occurrences of explicitation and implicitation were identified, the rate of explicitation to implicitation was calculated and the different implicitation strategies used were determined. The results show a rate of 60% explicitation and 40% implicitation, with 234 explicitation shifts and 156 implicitation shifts identified. Additionally, a wide range of explicitation and implicitation strategies was found, with the most common explicitation strategies being the addition of a connective element, the filling of an elliptical structure and the use of lexical repetition. The most commonly used implicitation strategy, by far, was the use of a hypernym. Overall, Dutch PILs were more explicit than English ones, especially concerning connectives, though English PILs were more explicit in regard to hyponyms. With this research into explicitation and implicitation, we are one step closer to either confirming or disputing these Translation Universals, using the method proposed by Chesterman (2010). Additionally, by researching the explicitness of PILs, we contribute to the existing research on their lay-friendliness.

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1. Introduction

For a lot of people, taking medicines is a part of everyday life. Seven out of ten Dutch people receive at least one prescription from their doctor a year, as shown by a 2016 study (Van Dijk, 2016). These medicines are accompanied by a Patient Information Leaflet (PIL). This PIL provides the reader with information on, for example, the administration, dose, and side-effects. Since their introduction, the quality of PILs has been a point of discussion, both in the sphere of Translation Studies and other spheres, and it has been criticized for its abundance of medical terminology, the small font and its focus on side-effects (ibid.). Due to the large number of people taking medicines and the importance of informed medicine-taking, it is important to know: how clear is the PIL to my pill?

One popular area of research in Translation Studies is the study of Translation Universals. Translation Universals are defined as “features which typically occur in translated text...and which are not the result of interference from specific linguistic systems” (Baker, 1993). Investigation into Translation Universals has been around for several decades, with one of the earliest major studies being a 1978 paper by Toury. Two Translation Universals that are studied often are explicitation and implicitation. These concepts were introduced first by Vinay and Darbelnet in 1958 (Englund Dimitrova, 2005; Jiménez-Crespo, 2011; Klaudy, 2008; Krüger, 2015). In 1986, Blum-Kulka linked the two topics and proposed that explicitation could be “a universal strategy” (p. 21). Much research has been done on the topics of explicitation and implicitation, most often focussing on one specific text type and language pair. A few examples are Øverås (1998), Pápai (2004), Klaudy and Károly (2005), Becher (2010a), Jiménez-Crespo (2011, 2015), Vesterager (2016), and Jiménez-Crespo and Sánchez (2017).

In this thesis, I intend to investigate explicitness and implicitness in Dutch PILs. I will compare English and Dutch PILs of orally taken contraceptives. Dutch PILs are intralingually and interlingually translated texts, as they are intralingual translations of English PILs, which are interlingually translated from the Summary of Product Characteristics. To investigate this topic, I aim to answer the question: to what extent are PILs aimed at Dutch readers explicit or implicit. I will also ask two sub-questions:

1. What is the rate of explicitation to implicitation?
2. Which explicitation and implicitation strategies were used?

I expect to find more explicitation than implicitation, due to the fact that translators gravitate more towards explicitation than implicitation (Klaudy, 2001), though I do expect to find evidence of both. Secondly, I expect to find some explicitation strategies similar to Pápai (2004) and their inverse implicitation strategies, barring the ones specific to Hungarian, as well as a

number of strategies relating to LG terms that are similar to the determinologisation strategies set out by Jiménez-Crespo and Sánchez (2017). Overall, I expect to find that the Dutch PILs will be more explicit than the English PILs, especially when it comes to LG terms, due to the fact that Dutch is not a language in which terms of Latin and Greek origin are considered lay medical terms (Jiménez-Crespo & Sánchez, 2017) and because of translators' general tendency of explicitation (Klaudy, 2001).

This research will fill several research gaps. Firstly, as stated previously, there is very little literature on implicitation or both explicitation and implicitation, as most research focuses solely on explicitation. Additionally, despite the extensive research on explicitation, there has not been much research on explicitation in medical texts in general, medical texts aimed at laypeople or PILs. By looking at both explicitation and implicitation, we can create a comprehensive image of the extent to which PILs are explicit or implicit. Lastly, by studying explicitation and implicitation in this context, my thesis will expand on the available research on explicitation and implicitation and that on Translation Universals in general. Chesterman (2010) argues that the best way to test universals is to make generalisations about different text types, time periods, cultures, language pairs, etc., and then combine these generalisations until we can make broader and broader claims. Therefore, by studying explicitation and implicitation in the translation of PILs of oral contraceptives from English to Dutch, this study contributes to the steadily growing research on Translation Universals.

Lastly, it is important to study PILs because these are particularly important documents for the general population. In 1998, Kenny et al. stated that the PIL was “the most widely used method for conveying health information” (p. 471). In the 25 years since this statement, the PIL has kept its position as a vital and popular source of information regarding medicines, as it was still regarded as the most popular source of medicines information by laypeople in 2016 (van Dijk et al., 2016). By studying the level of explicitness or implicitness in PILs, we can estimate how lay-friendly the PILs are.

This thesis consists of five chapters, including this introduction. The second chapter contains the literature review. This will discuss the most important existing literature on explicitation and implicitation, as well as that on medical translation and PILs. In chapter 3, corpus studies will be explored and the methodology of this thesis will be explained. The results and analysis are presented in Chapter 4, which will discuss the findings of the study and their relation to the current literature and answer the research questions. The final chapter, chapter 5, is the conclusion. In this conclusion, the aim and the results of the study will be summarized,

the study will be positioned in the field of research, and the limitations of the study will be discussed.

2. Theoretical Background

This chapter will discuss the theoretical background that supports the topic of explicitation and implicitation in medical texts aimed at laypeople. I will first discuss Translation Universals, followed by a discussion on the translation of medical texts.

2.1. Translation Universals

This section will cover the topic of Translation Universals. First, I will give a brief definition of Translation Universals and discuss problems with the term. Then, I will discuss explicitation and implicitation, including explicitness and implicitness. Lastly, I will briefly give an overview of relevant empirical studies with regard to explicitation and implicitation.

2.1.1. A Brief Introduction

The search for universal linguistic features is a centuries-old tradition. House (2008) traced the hunt for a universal grammar back to grammarians from the Middle Ages and the Renaissance. Similarly, translation scholars have been searching for Translation Universals and attempting to define the concept for decades. One of the earlier instances is approximately 45 years ago when, in 1978, Toury discussed the existence of “universals of translational behavior”. In her 1993 paper, Baker describes what she calls “universal features of translation”. She defines these as “features which typically occur in translated text rather than original utterances and which are not the result of interference from specific linguistic systems” (Baker, 1993, p. 245). More recently, in 2005, Klaudy and Károly defined Translation Universals as “the universal characteristics of translated texts independent of language pair and direction of translation” (p. 14).

In an effort to compile previous work on Translation Universals, Chesterman (2004) introduced a list of “universal differences”. He collected a number of potential universal characteristics of translations from researchers, including Toury, Blum-Kulka, and Klaudy, and compiled them in a comprehensive list. Chesterman differentiates between S-universals, which he defines as “universal differences between translations and their source texts, i.e. characteristics of the way in which translators process the source text” (2004, p.39), and T-universals, or “universal differences between translations and comparable non-translated texts, i.e. characteristics of the way translators use the target language” (ibid, p.39). The S-universals he proposes are lengthening, the law of interference, the law of standardization, dialect normalization, reduction of complex narrative voices, retranslation, sanitization, and

explicitation, and the T-universals he proposes are simplification, conventionalization, untypical lexical patterning, and under-representation of TL-specific items (ibid). Additionally, he indicates that S-universals should be studied by comparing the source and target text and T-universals should be studied by comparing translated and non-translated texts from a single language.

2.1.2. The Problem With The Term Translation Universals

The term Translation Universals originates from linguistics, where the term ‘universals’ is used to indicate properties that absolutely all languages share (Krüger, 2015). This origin has caused some issues. The first issue is that scholars are in disagreement about whether it is actually possible to formulate a true ‘universal’ claim regarding translation. Chesterman (2004) says that “any claim about a translation universal can really only be an approximation” (p. 43) and Bernardini and Zanettin (2004) state that universals are overwhelmingly influenced by certain languages, especially English, and these universals would need extensive study into other languages to be truly universal. Therefore, not all scholars agree with the use of the term Translation Universals.

It must be understood, though, that Translation Universals are not similar to true universals in linguistics (Krüger, 2015). Instead, we must understand them to be weaker claims about “what is most typical or common in translation” (Molés-Cases, 2019, p. 895). As Chesterman (2010) states, due to the fact that the term may be misleading, “some scholars prefer to use other terms, speaking of general tendencies or patterns, or indeed simply generalizations” (p. 44). In order to be in line with the other literature discussing Translation Universals, the term ‘universal’ will be used in this thesis. However, I do want to note that I am using the term to refer to general tendencies.

2.1.3. Explicitation

It is widely accepted that Vinay and Darbelnet were the first to propose the concept of explicitation in 1958 (Englund Dimitrova, 2005; Jiménez-Crespo, 2011; Klaudy, 2008; Krüger, 2015). Vinay and Darbelnet define the term as “a stylistic translation technique which consists of making explicit in the target language what remains implicit in the source language because it is apparent from either the context or the situation” (Vinay and Darbelnet, 1958/1995, p. 342). Later, in 1964, Nida discusses the concepts of explicitation and implicitation, though he does

not use these terms (Klaudy, 2008). Since then, the concept has been further expanded upon by studies by Blum-Kulka (1986) and Klaudy (2001, 2008), which will be discussed later.

From all suggested Translation Universals, explicitation is the one that is most commonly accepted. It is one of the most studied universals (Olohan & Baker, 2000), especially since the increase in popularity of corpus studies due to the rise of digital corpora (Baker, 1993). As most studies of explicitation find evidence for the presence of explicitation, scholars tend to agree on its existence as a general tendency of translation (Chesterman, 2011; Englund Dimitrova, 2005; Jiménez-Crespo, 2015; Kruger, 2015; Mauranen, 2008; Pápai, 2004). However, it is important to note that not all studies show evidence of explicitation as “inherently present in all translational activity” (Jiménez-Crespo, 2015, p. 261). Ultimately, however, most scholars tend to view explicitation as a universal of translation.

In the next few paragraphs, I will discuss explicitation more concretely. First, I will discuss explicitness and implicitness. Next, I will discuss different ways in which it has been defined. Lastly, I will propose my own definition.

2.1.3.1 Explicitness And Implicitness

Unfortunately, there are two major issues regarding studying explicitation and implicitation. The first issue is that there is not one universally agreed-upon definition of explicitation or implicitation (Becher, 2010a; Becher 2010b; Chesterman, 2004; De Metsenaere & Vandepitte, 2017; Jiménez-Crespo, 2015). An important reason for this is that the definition is centred around the concept of explicitness or implicitness, which do not have standard definitions either (Becher, 2010b; De Metsenaere & Vandepitte, 2017). Because studies do not all use the same definition, comparing results and then drawing conclusions can be difficult. Secondly, not all researchers apply their definitions consistently in their research (Becher 2010b). This means that they either wrongfully count or omit instances of explicitation or implicitation, which in turn skews their results and their conclusions. These two issues mean that it is very difficult to draw conclusions by compiling the results of different studies on explicitation or implicitation, because they do not all investigate the same things, even if they state they do. Therefore, to study explicitation and implicitation effectively, definitions of explicitness and implicitness must first be established.

One definition of explicitness and implicitness is given by Becher (2010b). He discusses explicitness and implicitness and their relation to explicitation and implicitation from a product-based approach. He states that explicitness “is the verbalization of information that the addressee might be able to infer if it were not verbalized” (Becher, 2010b, p. 3) and that

“implicitness is the non-verbalization of information that the addressee might be able to infer” (ibid, p. 2). Regarding these definitions, Becher stresses the use of the verb ‘might’. It is not important whether the reader actually infers this information, but that they could have. Moreover, he adds that the information can be any aspect of the message, whether it is syntactic, semantic or phonological (ibid., p. 2). I see merit in his approach to explicitness and implicitness. There is a clear distinction between implicit and explicit, and, though his definitions are not very lengthy, they specify a number of matters that I consider important, and that will help me formulate my own definition of explicitation and implicitation. Namely, it specifies what information can be (non-)verbalized, and whether or not it is necessary for a reader to actually infer the information, and both definitions are equally actionable. Therefore, these are the definitions of explicit and implicit that I will be adopting for this thesis.

2.1.3.2. Definitions

There is not one single accepted definition of explicitation. In his 2015 paper, Krüger states that “although explicitation is a widely applied and researched concept, it still lacks a universally accepted definition” (p. 231). Instead, there are many, and they range from very unclear to very specific. It seems that scholars, when studying explicitation, either choose one grammatical characteristic, such as cohesion markers, or use an abstract definition of explicitation and do not elaborate. In the next few paragraphs, I will explain the three ways in which scholars researching explicitation define the concept of explicitation in their research. Additionally, I will talk about the strengths and weaknesses of each approach.

Firstly, some authors define explicitation by its characteristics or results. These definitions usually mention the use of more specific language, the use of more lexical units, and the addition of information. Klaudy and Károly (2005) define explicitation in this way, stating a number of circumstances in which it occurs, such as “when a SL unit with a more general meaning is replaced by a TL unit with a more specific meaning” (p. 15) or “when the meaning of a SL unit is distributed over several units in the TL” (p. 15). Additionally, Pápai (2004) states that explicitation “is a technique of resolving ambiguity, improving and increasing cohesiveness of the ST and also of adding linguistic and extra-linguistic information” (p. 145), Molés-Cases (2019) remarks that “explicitation...will be defined as including cases of addition...related to interlinguistic factors” (p. 894), and Marco (2019) explains that the main purpose of explicitation techniques is “to make reference more unambiguous and to avoid repetition through the use of synonym” (p. 20). This approach of defining explicitation by its characteristics is very narrow and limited, as it can exclude forms of explicitation that are still

valid but not covered by the definition. Therefore, these definitions are not useful when it comes to forming a clear and all-encompassing definition of the term.

Another type of definition focusses on the fact that information that could previously only be inferred is now stated outright, and mentions ways in which the information could be gleaned. This definition originates from Vinay and Darbelnet, who, as stated previously, defined explicitness as “a stylistic translation technique which consists of making explicit in the target language what remains implicit in the source language because it is apparent from either the context or the situation” (Vinay and Darbelnet, 1958/1995, p. 342). This category also includes Jiménez-Crespo’s (2015) definition of explicitation as making information which can be inferred by the audience of the source text, or the audience of a comparable text from the target culture, available to the readers of the target text. This information can be gathered from the context, the shared cultural knowledge, or other similar sources. Another example is Becher’s (2010b) description of explicitation as explicitly stating non-verbalised information that, depending on the information the reader has as a result of the context, general knowledge or from other similar sources, the reader could most likely surmise. In these types of definitions, the meaning of explicitness is embedded in the definition of explicitation.

The last type of definitions of explicitation focus on the terms explicitness and implicitness. This is similar to the previous type of definition, though these definitions do not clearly state where the previously implicit information can be found, and depend on the words ‘explicit’ and ‘implicit’. Some definitions that fall into this category are that of Klaudy (2008), who describes explicitation as “the technique of making explicit in the target text information that is implicit in the source text” (p. 104), Heltai’s (2008) statement that explicitation is “an operation carried out by translators, resulting in a higher degree of explicitness in translated texts (TT) compared to source text (ST) and non-translated target texts (NTT)” (p. 245), and Murtisari’s (2013) description of explicitation as “the shift in translation that makes what is implicit in the source text explicit in the target text” (p. 315). Chesterman (2016) describes explicitation by saying that “translators tend to produce texts that are more explicit than the originals” (p. 69) and De Metsenaere and Vandepitte (2017) state that “explicitation is perceived as involving something being more explicit or less implicit in one text as compared to another text” (p. 387). All these definitions hinge on the concepts of explicitness and implicitness, but these are not usually explained. However, as I have defined these concepts earlier, these definitions can be used when formulating my own definition.

2.1.3.4. The Definition Used In This Thesis

To form my own clear and all-encompassing definition of explicitation, I will use Becher's definition of explicitness, "the verbalization of information that the addressee might be able to infer if it were not verbalized" (2010b, p. 3), and Klaudy's definition of explicitation, "the technique of making explicit in the target text information that is implicit in the source text" (2008, p. 104). I propose the following definition:

explicitation is a technique where translators verbalise information that is not verbalised in the source text, that the reader might be able to infer if it was not verbalised.

2.1.4. Notable Literature On Explicitation

In the next few paragraphs, I will discuss some notable literature on explicitation. First, I will discuss Blum-Kulka's Explicitation Hypothesis. Then, I will examine Klaudy's classification of obligatory, optional, pragmatic, and translation-inherent explicitation. Lastly, I will cover Klaudy's asymmetry hypothesis.

2.1.4.1. The Explicitation Hypothesis

According to Klaudy (2008), the first in-depth study of explicitation was done by Blum-Kulka in 1986. In her paper, she states that translations, when compared to their original texts, tend to be more explicit, regardless of which language pair is involved. She named this argument "the explicitation hypothesis" (Blum-Kulka, 1986, p. 19), which she defines as "an observed cohesive explicitness from SL to TL texts regardless of the increase traceable to differences between the two linguistic and textual systems involved (ibid, p. 19). Furthermore, she claims that the translation process is the cause of explicitation and that she regards explicitation as "inherent in the process of translation" (ibid., p. 19). Blum-Kulka's hypothesis has inspired a lot of research in the approximately 50 years since its release (Kruger 2015), a large amount of which has attempted to either prove or disprove it, with some notable studies being Øverås (1998), Pápai (2004), and Becher (2010b) (Kruger, 2015).

However, despite the popularity of the Explicitation Hypothesis, it must be approached with some caution. Over the years, a number of scholars have raised concerns about the hypothesis. In general, most critique seems to stem from the fact that the Explicitation Hypothesis is rather narrow. Pym (2005) states that the hypothesis "does not strictly concern all those uses of language that refer to things beyond the text or the turns in a conversation" (p. 31), and Ahangar and Rahnemoon (2019) claim that it does not account for the "linguistic or the textual system of the two languages" (p. 31). In an extensive dissection of the Explicitation

Hypothesis, Becher (2010b) raises a number of other criticisms. He states that the hypothesis only raises further questions and does not explain anything, that the concept of translation-inherent explicitation is vague and does not account for interfering factors, and that “previous studies have failed to provide conclusive evidence for the hypothesis” (2010b, p. 17). Ultimately, Becher calls for the Explicitation Hypothesis to be abandoned. While I do not think the Hypothesis is without its merit, it is important to be aware that it is limited to linguistic explicitness and does not account for all influencing factors.

2.1.4.2. Asymmetry Hypothesis

In 2001, Klaudy proposed the asymmetry hypothesis, which builds on Blum-Kulka’s Explicitation Hypothesis. The asymmetry hypothesis states that optional explicitation from one language into another is not always matched by implicitation in the other direction (Klaudy, 2008; Vesterager, 2016; Klaudy & Károly, 2005). This is because, when given the choice, translators “prefer to use operations involving explicitation, and often refrain from introducing optional implicitation” (Klaudy, 2008, p. 107). However, it is important to note that the asymmetry hypothesis only applies to optional explicitations, as “obligatory explicitation shifts are generally symmetrical, that is, explicitation in one direction is matched by implicitation in the other” (ibid., p. 107).

The asymmetry hypothesis is significant, as it could confirm the fact that explicitation is a universal feature of the translation process, should it be proven true (Klaudy and Károly, 2005; Øverås, 1998). This is because of the fact that if not all explicitation is matched by implicitation in the other direction, not all explicitations are due to a difference in the knowledge of the target audience, as the knowledge would have been implicitated in the other direction, but simply because explicitation is something translators tend to do (Klaudy and Károly, 2005; Øverås, 1998). Therefore, the asymmetry hypothesis has had an important impact on the study of explicitation and Translation Universals.

2.1.4.3. Obligatory, Optional, Pragmatic, And Translation-Inherent Explicitation

In 2008, based on her earlier work from 2001, Klaudy proposed 4 types of explicitation: obligatory explicitation, optional explicitation, pragmatic explicitation, and translation-inherent explicitation (Klaudy, 2008). It is this categorisation for which she is most known. Although she only names explicitation, others (such as Vesterager 2016) apply these terms to implicitations as well. Firstly, obligatory explicitation is the result of structural syntactic, grammatical, and semantic differences between the source language and the target language

(Englund Dimitrova, 2005; Becher, 2010a; Jiménez-Crespo, 2015; Klaudy, 2008; Vesterager, 2016). As the name implies, the translator needs to explicitate in order to create a grammatically correct translation. This can be the result of “missing categories” (Klaudy, 2008, p. 106). An example of this would be translation from Russian, which does not have a definite article, into English, which does (Klaudy, 2008). Obligatory explicitation can also be the result of semantic differences. For example, the translation of English ‘brother’ into Hungarian, which does not have one term for ‘brother’, but uses different ones for older and younger brothers (ibid).

Optional explicitation is caused by differences between the source and target language as well, more specifically by the distinct stylistic preferences and text-building strategies of each language (Englund Dimitrova, 2005; Becher, 2010a; Jiménez-Crespo, 2015; Klaudy, 2008; Vesterager, 2016). It is called optional because it is possible to construct grammatically correct sentences without the optional explicitation, though the sentence might still be marked (Klaudy 2008). Some examples of this are “sentence or clause initial addition of connective elements to strengthen cohesive links, the use of relative clauses instead of long, left branching nominal constructions, and the addition of emphasizees to clarify sentence-perspective” (ibid).

Pragmatic explicitation is caused by differences between the source culture and the target culture (Klaudy, 2008). Members of the source culture possess implicit knowledge, such as culture-specific concepts and geographical names, that the readers of the target text likely do not (ibid.). Therefore, the translator can choose to make this implicit knowledge explicit, resulting in pragmatic explicitation (Englund Dimitrova, 2005; Becher, 2010a; Jiménez-Crespo, 2015; Klaudy, 2008; Saldanha, 2008; Vesterager, 2016). An example of this would be the specification of ‘Hobby’ to ‘Hobby cigarette’ (Øverås, 1998).

Translation-inherent explicitation is different from the three previously mentioned types of explicitation. It is not caused by differences between the source and target culture or language. Rather, it “can be attributed to the translation process itself” (Klaudy, 2008, p. 107), as it is “explained by one of the most pervasive, language-independent features of all translational activity, namely the necessity to formulate ideas in the target language that were originally conceived in the source language” (ibid, p. 107). This is in agreement with Blum-Kulka’s Explicitation Hypothesis, which also states that explicitation is translation-inherent.

Over the years, these four categories of explicitation have received some critique. Firstly, the concept of translation-inherent explicitations seems opaque. Becher (2010a) states that he expects difficulty in distinguishing between optional and translation-inherent explicitations, and, in a different publication in the same year, that it is “shrouded in mystery” (Becher, 2010b, p. 5). Furthermore, Englund Dimitrova (2005) directly states that “the category

of translation-inherent explicitations is unclear” (p. 38). Secondly, it is not clear where the line between optional and obligatory explicitations is drawn (Englund Dimitrova 2005). Lastly, Saldanha (2008) says that it is unclear when something is encoded in the text and when it can only be inferred using cultural knowledge, and thus, when something falls under pragmatic explication and Englund Dimitrova (2005) states that pragmatic explication is “a subcategory of optional explicitations”. To conclude, while the concepts of optional and obligatory explication are especially useful, they are in need of a clearer distinction, the concept of pragmatic explication should be absorbed in that of optional explication and the notion of translation-inherent explication should be abandoned.

2.1.5. Implication

While explication is widely researched, there is very little research on implication (Klaudy & Károly, 2005; Krüger, 2015; Vesterager, 2016). Vesterager (2016) remarks on this difference, and states that translation scholars tend to overlook implication. It is generally not studied on its own but researched in conjunction with explication. Klaudy and Károly (2005), when discussing this imbalance, even state that “implication is treated as a stepbrother of explication: it is generally mentioned merely incidentally” (p. 13). Some notable studies of implication are Vesterager (2016), who investigates implication in Spanish-Danish legal translation, and Meyer and Webber (2013), who study implication of discourse connectives in English-French and English-German machine translation.

There is not one commonly used definition of implication. Instead, there are two types of definitions. Implication, again like explication, was introduced by Vinay and Darbelnet in 1958. They define implication as “a stylistic translation technique which consists of making what is explicit in the source language implicit in the target language, relying on the context or the situation for conveying the meaning” (1958/1995, p. 344). There have not been any other notable studies into implication since. It has been mostly ignored in favour of explication and is only mentioned in opposition to explication, such as with the asymmetry hypothesis (Krüger, 2015).

2.1.5.1. Types Of Implication

There are two ways in which scholars typically define the concept of implication. Some scholars provide more concrete definitions, which show how the scholars expect the implication to realise. Vesterager (2016), for example, claims that “implications can take two forms in this study... reduction or generalisation”. Additionally, Klaudy and Károly (2005) give

an extensive list of examples of implicitation, such as “when a SL unit with a specific meaning is replaced by a TL unit with a more general meaning; when translators combine the meanings of several SL words in one TL word” (p. 15), and Øverås (1998) says that “implicitation includes instances where explicit ST items are rendered by ambiguous TT items, but where recoverability in the immediate TT environment makes the item implicit rather than ambiguous” (p. 5). Lastly, Pápai (2004) names “making things more general, omitting linguistic or extralinguistic information of the ST” (p. 159) as examples of implicitation. While these approaches are clear, they are also very narrow, as they do not provide an exhaustive list of all forms implicitation can take.

Another type of definition of implicitation is one that uses the terms ‘explicitness’ and ‘implicitness’. This type of definition also tends to compare implicitation with explicitation, stating that it is simply the inverse or absence of explicitation. One example is Chesterman’s (2016) definition, who states that “implicitation is the opposite change: bearing in mind what the readers can be reasonably expected to infer, the translator leaves some elements of the message implicit” (p. 106). Krüger (2015) states that with implicitation “the information explicitly verbalised in the more specific source text construal is not verbalised but deemed to be implicit in the target text (p. 271). Another example is Vesterager (2016), who claims that “implicitation refers to the tendency to make implicit in the target text explicitly stated information of the source text” (p. 205) and that “implicitation constitutes the opposite of explicitation” (ibid, 205). In addition, De Metsenaere and Vandepitte (2017) remark that “implicitness can be understood as negative explicitness: the more an assumption is said to be explicit, the less it is implicit, and vice versa” (p. 400). The weakness of this approach is that there are no universally agreed-upon definitions of implicit and explicit, and therefore they might mean different things, which complicated comparing study results. However, with a clear definition of what implicit and explicit mean, these definitions can be utilised.

2.1.5.2. My Definition

To form my own definition of implicitation, I will use Becher’s (2010b) definition of explicitness, “the verbalization of information that the addressee might be able to infer if it were not verbalized” (p. 2), and implicitness, “the non-verbalization of information that the addressee might be able to infer” (ibid., p. 2), as well as Vesterager’s (2016) definition of implicitation: “implicitation refers to the tendency to make implicit in the target text explicitly stated information of the source text” (p. 205). I propose the definition:

implication is translators' tendency for making information that is verbalised in the source text, which the reader could infer if it were not verbalised, non-verbalised in the target text.

2.1.6. Recent Empirical Studies

In this section, I will be looking at notable studies on explicitation, implication, and both explicitation and implication from the past 25 years. I opted for 25 years, as that would exclude studies done before the rise of electronic corpora. I will be presenting these studies in chronological order, working from oldest to newest. This is not an exhaustive list of studies on explicitation of the last 25 years, but simply a compilation of research that I consider to be influential, as they are either often cited by other studies, or fill a particularly niche research gap relevant to this research. Unsurprisingly, the paragraph on recent studies of explicitation will be more extensive than that on implication, due to the aforementioned lack of research into implication.

The first study on explicitation I will discuss is Øverås' (1998), who studied explicitation shifts in English and Norwegian translated texts. Two years later, in 2000, Olohan and Baker attempted to find evidence of explicitation by analysing the use of 'that' with the verbs 'say' and 'tell'. These two studies are regarded as two incredibly influential studies on explicitation and have inspired many other studies (Becher 2010b). Pápai (2004) conducted research into explicitation by identifying explicitation strategies, using a parallel English-Hungarian corpus and a comparative Hungarian corpus, and Becher (2010a) conducted a study into explicitation in which he analysed occurrences of 'damit' in English-German translations, using a corpus that is both parallel and comparative, and consists of English texts, German translations of those texts, and non-translated German texts. Jiménez-Crespo (2011) looked at optional personal pronouns in a comparable Spanish-English corpus of web-texts. Øverås (1998), Olohan and Baker (2000), Pápai (2004), and Jiménez-Crespo (2011) all found evidence for the existence of explicitation. Becher (2010a) found evidence for obligatory, optional, and pragmatic explicitation, but, unsurprisingly, none for translation-obligatory explicitation. These results are in line with Marco's (2019) claim that empirical studies into explicitation usually confirm the Explicitation Hypothesis.

I want to highlight Jiménez-Crespo (2017) and Jiménez-Crespo and Sánchez (2017) here, for conducting research into explicitation in medical texts. Jiménez-Crespo (2017) studied the explicitation of medical terms in a comparable corpus of translated and non-translated Spanish medical websites and combined the corpus study with an empirical reception study. He

discovered that the translated text included fewer Latin-Greek terms and doublets than non-translated texts. Similarly, Jiménez-Crespo and Sánchez (2017) investigated the determinologisation and explicitation of Latin-Greek medical terms, using a comparative corpus of translated and non-translated Spanish medical websites. The results showed that there were more reformulation strategies used in the translated texts than in the non-translated ones. As these studies research explicitation in medical terminology, they have been incredibly influential to this thesis.

The oldest study on implicitation discussed here is Klaudy and Károly (2005), who attempted to prove the asymmetry hypothesis by investigating implicitation of reporting verbs, using two parallel corpora of literary texts, one English-Hungarian and one Hungarian-English. Meyer and Webber (2013) studied the implicitation of discourse connectives in both machine and human English-French and English-German translation, using a corpus of machine-translated texts and a corpus with human-translated texts. Lastly, Vesterager (2016) analyses implicitation in the translation of legal judgements from Spanish into Danish using contrastive text analysis and quantitative synthesis. All three studies concluded that implicitation is not often performed. Klaudy and Károly (2005) state that “translators... often fail to perform implicitation” (p. 27), Meyer and Webber (2013) found that implicitation is performed in only 18% of cases and Vesterager (2016) concluded that implications were exceedingly rare. However, both Vesterager (2016) and Klaudy and Károly (2005) stated that further investigation is needed.

Lastly, I will discuss some studies on both explicitation and implicitation. The first is Klaudy (2001), who studies the balance of explicitation v implicitation in Hungarian-English, Hungarian-German, Hungarian-French, and Hungarian-Russian translations of literary texts in both directions (from Klaudy, 2008) and found evidence that the number of explicitations is higher than the number of implicitations. Following this research, she formed the asymmetry hypothesis. Another important study is Krüger (2013), who investigates implicitation and explicitation using a cognitive linguistics framework. He focuses on the frequency of explicitation shifts in the translation directions English-German and German-English and investigates the asymmetry hypothesis, for which he finds no conclusive evidence. Lastly, Molés-Cases (2019) utilizes a parallel German-Spanish corpus and a comparative Spanish corpus to examine explicitation and implicitation of expressions of Manner-of-motion. She finds evidence for source language interference in the translation of Manner-of-motion. These studies fill an important gap, namely the research of explicitation alongside implicitation. Doing

so can shed light on whether the asymmetry hypothesis is plausible, and give insight into whether implicitation is translation-inherent.

2.2. Medical translation

The next few pages of this paper will discuss medical translation. First, I will give a general definition of medical translation. Then, I will discuss the language used in medical texts and translating medical texts for laypeople. Next, I will discuss the Patient Information Leaflet (PIL), a medical text meant for a general audience. Lastly, I will discuss some recent studies on the topic of PILs.

2.2.1. A general overview

Medical translation is thought to be the oldest type of translation (Keresztes, 2013; Montalt, 2013). Montalt (2013) even traces it back to Ancient Mesopotamia. It is also one of the most important areas of translation, due to large amount of medical texts that are translated daily (Jiménez-Crespo & Sánchez 2017; Karwacka, 2015). Medical translation is “a specific type of scientific and technical translation that focuses on medicine and other fields closely related to health and disease” (Montalt, 2011, p. 1). It includes the translation of texts from fields within medicine, such as paediatrics and cardiology, but also involves the translation of texts from related fields, for example documents relating to law, marketing, software, training courses, and administration (Faya & Quijada, 2019; Karwacka, 2015; Montalt, 2011). Some examples of texts are informed consent forms, websites with medical information, user manuals of medical devices, guidelines, and, of course, the Patient Information Leaflet, or product package insert (Jiménez-Crespo & Sánchez, 2017; Karwacka, 2015; Keresztes, 2013; Montalt & González, 2014).

2.2.2. Medical English

The English that is used in medical texts is different from general English. This variety of English is called Medical English, and can be characterised as a ‘special language’, which refers to the “natural language...used in communication between experts in a domain...and characterized by the use of specific linguistic means of expression” (ISO 1087:2019). Special language differs from general language due to the consistent use of “domain-specific terminology...phraseology and...stylistic or syntactic features” (ibid.). However, it is important to note that a special language is not a proper language in and of itself. As Askehave and Zethsen

(2000) state, “special languages and general language are two sides of the same coin” (p. 66). We cannot separate Medical English from general English, and the language should be seen as a specific register of English that is only used in specific circumstances.

As stated previously, there are a number of textual features that differentiate Medical English from general English, which can pose a challenge when translating. Firstly, the most difficult feature is the use of medical terminology (Buysschaert, 2021; Jensen & Zethsen, 2012; Montalt, Zethsen & Karwacka, 2018). Medical English is also characterised by the use of passives, heavy pre- and postmodification, acronyms, nominalisations, long sentences, the third person, initialisms, word affixation, and hedges (Askehave & Zethsen, 2000; Buysschaert, 2021; Faya & Quijada, 2019; Karwacka, 2015; Montalt, Zethsen & Karwacka, 2018; Wright, 2012; Zethsen & Askehave, 2010). Another feature is the proliferation of LG terms (terms of Latin or Greek origin). English readers are familiar with LG terms, as many medical terms in English have Latin or Greek roots (Brøgger & Zethsen, 2021; Montalt, 2011; Montalt, 2013; Montalt, Zethsen & Karwacka, 2018), and little from Germanic origin remain (Jiménez-Crespo & Sánchez, 2017; Askehave & Zethsen, 2002). For those Germanic terms that do still exist, English has “doublets”, an LG and a lay term for the same concept. One example of this is ‘coagulation’ versus ‘clotting’ (Jiménez-Crespo, 2017; Montalt, Zethsen & Karwacka, 2018). However, because words with Latin and Greek origins are not equally widespread in all European languages (Brøgger & Zethsen, 2021; Jiménez-Crespo & Sánchez, 2017), readers from different countries will be less or more familiar with LG terms. Dutch uses mostly terms with a Germanic origin, not LG terms (Buysschaert, 2021), so the abundance of LG terms in medical texts will pose a challenge when translating for Dutch lay audiences. All these features differentiate Medical English from general English and can pose a challenge when translating for laypeople.

2.2.3. Translating medical texts for laypeople

When adapting a text that is originally written for experts and translating it for an audience of laypeople, it must be transformed in such a way that lay readers can understand the contents. One technique to adapt a text in this way is by using reformulation strategies. Reformulation strategies, also called determinologisation strategies, are a way to increase the readability of complex texts for lay audiences (Jiménez-Crespo, 2017; Jiménez-Crespo & Sánchez, 2017; Muñoz-Miquel, 2012). These strategies exist on both the macrotextual and the microtextual level (Muñoz-Miquel, 2012). Some macrotextual strategies are: restructuring the text, decreasing paragraph length, removing unnecessary information, adding pertinent information,

conveying information using visual elements, and using bulleted lists (ibid). Some general, microtextual strategies are illustration, analogy, using shorter sentences, utilising the active voice, and using verbal clauses instead of noun phrases (Jiménez-Crespo, 2017; Jiménez-Crespo & Sánchez, 2017; Muñoz-Miquel, 2012). The most commonly used microtextual strategies regarding scientific terms are: an explanation of a scientific term, an explanation of a scientific term followed by the term in parenthesis, the lay term followed by the scientific term in parenthesis, and the replacement of scientific terms with lay terms (Brøgger & Zethsen, 2021; Jiménez-Crespo, 2017; Jiménez-Crespo & Sánchez, 2017; Muñoz-Miquel, 2012). Using these reformulation strategies, translators can adapt a text aimed at experts into a text for laypeople.

Unfortunately, though there are significant efforts to make medical texts aimed at laypeople easier to understand, the results are lacking. Even if the English source text is very lay-friendly, medical translators tend to use ‘expert medical language’ (Askehave & Zethsen, 2000; Brøgger & Zethsen, 2021; Jensen & Zethsen, 2012; Montalt, Zethsen & Karwacka, 2018; Pilegaard, 1997). This is because the authors, usually medical experts or medical translators, overestimate the lay audience’s knowledge of these medical terms (Brøgger & Zethsen, 2021; Clerehan & Buchbinder, 2006; Jensen & Zethsen, 2012). Another reason is that the authors are more focused on accurately conveying the contents, not on the readability of the texts (Pilegaard, 1997). Additionally, non-translator authors, such as pharmacists, might fall back on other syntactical structures such as nominalisations, as they are more familiar with those, and do not realise that they will make the texts less readable (Jensen & Zethsen, 2012). Therefore, although translators and non-translator authors do make an effort to make medical texts easier to understand for lay audiences, the result is often still difficult to understand for laypeople.

2.2.4. PILs

2.2.4.1. General Information

In the last few decades, due to recent development in the way society views the patient’s role in their healthcare, there has been a growing focus on patient empowerment, as patients wish to have more information regarding their treatment options to be able to make informed decisions (Brøgger & Zethsen, 2021; Gudde-Kuiper et al., 2012; Jensen & Zethsen, 2012; Karwacka, 2015; Montalt-Resurrecció & Shuttleworth, 2012; Montalt, Zethsen & Karwacka, 2018; Zethsen & Askehave, 2010). As a result, the demand for health communication tailored to laypeople has grown. One of these sources of information is the Patient Information leaflet.

The Patient Information Leaflet (PIL), also called a Product Package Insert, package leaflet, and, in Dutch, a “bijsluiter”, is one of the most important medical documents aimed at

laypeople. It is “a leaflet containing information for the user which accompanies the medicinal product” (Directive 2001/83/EC). Examples of this information are the recommended dose, common side effects, and contra-indications. The PIL not only contains valuable information, but also reduces anxiety in patients and leads to better outcomes (Kenny et al., 1998). The purpose of the PIL is to provide the patient with the knowledge needed to “make informed decisions about whether a medicine is right for them” (Raynor, 2007, p. 60). It is meant to be supplemental information, given in addition to oral information received from a healthcare provider (Clerehan & Buchbinder, 2006; Hirsch et al., 2009), but in the last years, there has been a shift in the way information is primarily being communicated, and today much information is provided in writing (Brøgger & Zethsen, 2021). As a result, the PIL is now the most commonly consulted source of medical information among Dutch people, (Van Dijk et al., 2016). Therefore, it is one of the most important medical texts aimed at patients.

2.2.4.2. EU regulations

The PIL is a highly regulated document. It is also called a mandatory genre, which means that it is regulated by laws (Jensen & Zethsen, 2012). When a pharmaceutical company wishes to release a medicine, it must first submit a PIL and Summary of Product Characteristics (SmPC) to the European Medicines Agency (EMA) or another competent authority (Van Dijk et al., 2014b; Zethsen & Askehave, 2010). The marketing authorization, should the documents be approved, is valid in every Member State of the EU. However, to release the medicine in Member States, the PIL needs to be translated into the official language(s) of the Member State in question. The translated versions of the PIL do not need to be approved again, though they must still meet the criteria set out in Directive 2004/27/EC, which the EMA uses to check submitted PILs and SmPCs. This document states which information the PIL must include and dictates how PILs should be formatted and in what order the information should appear.

2.2.4.3. Problems with the PIL

Research has shown that, despite its intended audience, most PILs are not very lay-friendly (Askehave & Zethsen, 2002; Brøgger & Zethsen, 2021; Jensen & Zethsen, 2012; Karwacka, 2015; Montalt-Resurrecció & Shuttleworth, 2012; Van Dijk et al., 2014a; Van Dijk et al., 2014b; Zethsen & Askehave, 2010). The European Council has become aware of this as well, and has attempted to combat it using guidelines regarding readability (Jensen & Zethsen, 2012). In 2009, the European Council published a Guideline on the readability of the labelling and

package leaflet of medicinal products for human use, in order to “ensure that the information on the labelling and package leaflet is accessible to and can be understood by those who receive it, so that they can use their medicine safely and appropriately.” (Guideline, 2009, p. 5). To guarantee this, the PIL should be tested, to “ensure that it is legible, clear and easy to use” (ibid., p. 50). However, as stated previously, only one version of the PIL needs to be tested, and this is almost always the English version (Brøgger & Zethsen, 2021). Therefore, these tests do not identify problems introduced at the translation stage. Furthermore, though the guideline does mention that the translation of the PIL should be as easy to understand as the original, it does not give any specific rules. Instead, it simply states that literal translation should be avoided. As a result, despite efforts made by the European Council, PILs are still difficult to understand.

The way the content of the PIL is written is one of the reasons why it is hard to understand for lay people. Though the target audience is laypeople, the language resembles Medical English in such a way that it negatively impacts the lay-friendliness. The authors of PILs tend to use specialised medical terminology, including LG terms, which the lay audience does not know or understand (Askehave & Zethsen, 2000; Askehave & Zethsen, 2002; Brøgger & Zethsen, 2021; Clerehan & Buchbinder, 2006; Hirsh et al., 2009; Jensen & Zethsen, 2012; Karwacka, 2015; Van Dijk et al., 2014b; Van Dijk et al., 2016; Zethsen & Askehave, 2010). Synonyms are used without it explicitly being stated that the two words are synonyms and refer to the same concept (Askehave & Zethsen, 2000; Askehave & Zethsen, 2002; Karwacka, 2015; Zethsen & Askehave, 2010) and the texts contain complex syntax, long sentences, nominalisations, dangling participles, and passive constructions (Askehave & Zethsen, 2000; Askehave & Zethsen, 2002; Brøgger & Zethsen, 2021; Karwacka, 2015; Simonsen, 2014; Van Dijk et al., 2014b; Zethsen & Askehave, 2010). Moreover, they contain too much information, the information is usually presented too densely, and the information is sometimes inconsistent across the same medicines by different brands (Askehave & Zethsen, 2000; Bjerrum & Foged, 2003; Brøgger & Zethsen 2021; Clerehan & Buchbinder, 2006; Zethsen & Askehave, 2010). Therefore, the PIL is difficult to understand for laypeople, despite it being a document aimed at laypeople.

The formatting of the PIL also contributes to its difficulty. One of the most commonly cited problems is the small print (Askehave & Zethsen, 2002; Askehave & Zethsen, 2003; Van Dijk et al., 2014b; Van Dijk et al. 2016; Zethsen & Askehave, 2010). Additionally, the information is not presented using concise and clear dotted lists (Hirsh et al. 2009; Van Dijk et al. 2016; Zethsen & Askehave, 2010), and the location where information is placed is often not intuitive (Van Dijk et al., 2014b; Zethsen & Askehave, 2010). Though there are fewer issues

with formatting than there are with the way the contents are written, these issues still contribute to the lay-unfriendliness of the PIL.

One possible explanation for the problems plaguing the PIL is that the language of the PIL is negatively impacted by intergeneric translation. As the Directive states, the PIL should be “drawn up in accordance with the summary of the product characteristics” (Directive 2004/27/EC). The SmPC is a highly technical document aimed at experts, and therefore full of complex technical language. When developing a PIL from the SmPC, the author is conducting intergeneric translation, translating from one genre into the other (Karwacka, 2015). In theory, this “requires structural and lexical simplification, determinologizing, synthesizing information, expanding relevant information, and adjusting tenor” (ibid, p.81). In practice, this means that a lot of the medical terminology and technical language is transferred over to the PIL, sometimes literally (Askehave & Zethsen, 2000; Zethsen & Askehave, 2010). This is most likely compounded by the fact that, as discussed previously, authors of medical translations tend to fall back on technical phrases and terms they are familiar with. The presence of the SmPC, then, negatively affects the language of the PIL.

Lastly, a reason for the PILs poor lay-friendliness could be the nature of the target audience. The PIL has an incredibly broad, heterogenous, target audience (Askehave & Zethsen, 2003). As the audience is so diverse, the range of what readers consider to be understandable information is quite broad. For the translator or author, it can be quite difficult to estimate what is and is not general knowledge. Additionally, the author cannot simply explain everything, as a text that is too simple may come across as patronising (Askehave & Zethsen, 2003; Hirsch et al., 2009; Kenny et al., 1998). It seems, as PILs are consistently shown to be too technical and difficult, that the authors and translators tend to think the audience will understand more than they actually do.

2.2.4.4. Recent Studies On PILs

In this section, I will discuss recent studies on PILs. I will only include studies done on PILs published in the EU, as ones from other areas, such as the US, do not need to conform to the same guidelines. As with studies on explication and implicitation, I will include the studies from the past 25 years most relevant to my research. To begin, in 1998, Kenny et al. reviewed the importance of written sources of health information, more specifically PILs, and discussed future uses of computer-generated PILs. Next, several of the most important studies on PILs were conducted by two people: Inger Askehave and Karen Korning Zethsen. Since 2000, they have conducted multiple studies into Danish PILs, four of which I will discuss. In 2000, they

researched lay-friendliness in Danish PILs, and discussed special language and reformulation strategies. Two years later, in 2002, they published a paper on translating PILs for laypeople, in which they lay out problems with translated PILs and what might be a possible reason. In 2003, they investigated possible communication barriers to translating for extremely broad target audiences and study the PIL in this light. Lastly, in 2010, Zethsen and Askehave studied the best practice initiative called ‘PIL of the month’, and whether it truly exhibited best practices regarding translating for laypeople. In addition to this, Clerehan and Buchbinder (2006) studied the clarity of PILs by identifying characteristics of the genre, discourse semantics, and lexicogrammar, as well as clarity issues, and Jensen and Zethsen (2012) investigated the differing translation practices of trained translators and pharmacists when translating PILs, and the effect this has on the lay-friendliness of the PIL.

Several studies have been conducted into Dutch PILs in the past ten years. All of the studies mentioned in this paragraph were published by the Netherlands Institute for Health Services Research (NIVEL). In 2012, Gudde-Kuiper et al. published a paper on the influence that information about possible side-effects in PILs has on the reader. Two years later, Van Dijk et al. (2014a) conducted research into whether a section with key information in PILs would have added value. In the same year, van Dijk et al. (2014b) investigated possible problems of PILs, what the cause might be, what effects the issues might have, and ways in which the PIL can be improved. Lastly, in 2016 a study examining the Dutch patients’ wants regarding information about their medication was conducted (van Dijk et al., 2016).

These studies have identified problems with PILs and shown that PILs are nevertheless used by patients searching for health information. Kenny et al. (1998) showed that patients truly want and use PILs, but that they are poorly written and should be improved. Similarly, van Dijk (2016) showed that patients primarily turned to the PIL when in search of information regarding their medication and Askehave and Zethsen (2000) and (2003) concluded that Danish PILs are not very readable, despite the EU law saying that they must be so, due to medical/technical jargon, officialese, inconsistent terminology, false friends, passive voice, impersonal style, nominalisations, and dense sentences. Clerehan and Buchbinder (2006) identified specific issues with the PIL, such as technical lexis, high lexical density, unclear formatting, and Zethsen and Askehave (2010) showed that even PILs that had been identified as an exemplary ‘PIL of the month’ were still not very user-friendly.

3. Methods

In this section, I will discuss the methods used during my research. First, the aim of this study will be explained. Then, I will briefly discuss corpus-based research. Lastly, the mode of analysis will be discussed.

3.1. Aim Of The Study

3.1.1. My Research Questions And Hypothesis

As stated earlier, this thesis examines explicitation and implicitation in PILs that have been translated from English to Dutch. As this subject is quite broad, and the scope of this study is that of a Masters' thesis, the scope has been narrowed. The main question that this thesis aims to answer is:

To what extent are PILs from orally taken contraceptives aimed at Dutch readers explicit or implicit?

To address this question, I will ask two sub-questions:

RQ 1. What is the rate of explicitation to implicitation?

RQ 2. Which explicitation and implicitation strategies were used?

I will measure the rate of explicitation to implicitation by counting the instances of explicitation, those of implicitation, and comparing the two. I expect to find that PILs aimed at Dutch readers are more explicit than implicit. Additionally, I anticipate finding a higher rate of explicitation than of implicitation. This is because translators seem to opt for explicitation over implicitation (Klaudy, 2001). Additionally, as the risks associated with miscommunication are extremely high for PILs, with a wrong interpretation possibly leading to the reader improperly handling their medication and possibly harming themselves as a result, the translator will opt to be more explicit, as that reduces the chances of miscommunication (Pym, 2013). Therefore, I expect to find more explicitation than implicitation.

The expected explicitation and implicitation strategies are based on those described by Klaudy (2008), Pápai (2004), and other sources on explicitation or implicitation, such as Øverås (1998) and Vesterager (2016). Most implicitation strategies are derived from an explicitation strategy. I also expect to find specific explicitation strategies concerning LG terms and medical

terminology. I based these on Askehave and Zethsen (2000), Zethsen and Askehave (2010), and Jiménez-Crespo and Sánchez (2017). Table 1 and 2 give an overview of the explicitation and implicitation strategies I expect to find.

Table 1

Expected Explicitation Strategies

Strategy	Explanation and/or example
Use of hyponyms	The use of a more specific noun, verb, or phrase, such as ‘shin’ instead of ‘leg’ or ‘thumb’ instead of ‘finger’ (Vesterager, 2016).
Addition of connective elements.	Explicitly stating the relation between two clauses or sentences (Jiménez-Crespo, 2017; Klaudy, 2008).
Addition of discourse-organising elements.	Explicitly stating the relation between two pieces of information (Pápai, 2004).
Filling elliptical structures	Verbalising omitted “grammatically obligatory elements capable of being understood in the context”, which have been left out entirely (Burton-Roberts, 2016, p. 95).
Lexical repetition	Repeating words, to make it clearer what is being referred to. An example is “By taking this medicine” instead of “By taking it” (Pápai, 2004).
Turning passive clauses into active ones	Clearly stating who is taking which action. “Zodra de pil is ingenomen” -> “Zodra u de pil hebt ingenomen” (Zethsen & Askehave, 2010).
Denominalisation	Turning noun phrases into verb clauses (Askehave & Zethsen, 2000).

LG term -> LG term followed by an explanation	“Resulting in pneumonia” -> “Met als gevolg pneumonie, een ontsteking van de longen” (Jiménez-Crespo & Sanchez, 2017).
LG term -> LG term in parenthesis after an explanation	“Resulting in pneumonia” -> “Wat kan zorgen voor een ontsteking van de longen (pneumonie)” (Jiménez-Crespo & Sanchez, 2017).
LG term -> Popular term followed by or following the LG term	“Resulting in pneumonia” -> “Wat een longontsteking (pneumonie) als gevolg kan hebben” (Jiménez-Crespo & Sanchez, 2017).
Replacing LG terms by popular terms	“Resulting in pneumonia” -> “Wat een longontsteking als gevolg kan hebben” (Jiménez-Crespo & Sanchez, 2017).

Table 2

Expected Implication Strategies

Strategy	Explanation and/or example
Use of hypernyms	The use of less specific nouns, verbs or phrases (Vesterager, 2016).
Removal of connective elements	Removing words/phrases that indicate the relationship between two sentences or clauses (Jiménez-Crespo, 2017; Klaudy, 2008).
Removal of discourse-organising elements	Removing a word or phrase that indicates the relationship between two pieces of information (Pápai, 2004).
Emptying of elliptical construction	Leaving out “grammatically obligatory elements” when they can be understood by the context (Burton-Roberts, 2016, p. 95).
Removal of lexical repetition	Removing the repetition of a word and replacing it with a pronoun (Pápai, 2004).

Turning active clauses into passive ones	Omitting who is doing the action described (Zethsen & Askehave, 2010).
Nominalisation	Turning a verb phrase into a noun phrase (Askehave & Zethsen, 2000).
Replacing a popular term with an LG one.	“Resulting in heartburn” -> “Met als gevolg pyrosis” (Jiménez-Crespo & Sanchez, 2017).
Removing a popular term following an LG term.	“Resulting in pyrosis (heartburn)” -> “Met als gevolg pyrosis” (Jiménez-Crespo & Sanchez, 2017).

3.2. Corpus-Based Research

3.2.1. A General Overview

In the past few decades, following the introduction of electronic corpora, the field of corpus studies has changed significantly. Where researchers used to search corpora manually, which limited the scope of research, electronic corpora could now be studied and analysed using computer programs (Baker, 1995). This made it possible to study large quantities of texts at once, and larger and larger corpora have been compiled since. Following these new developments, new areas of corpus-based research have been formed. One of these areas was corpus-based Translation Studies. Corpus-based Translation Studies is relatively young, originating in the beginning of the 1990s, when Mona Baker proposed it in a series of speculative articles discussing the possible future benefits of the study of translation through corpora (Baker, 1996; Diriker, 2008; Olohan & Baker, 2000). Since then, multiple areas and approaches of corpus-based Translation Studies have been developed, one of which is the study of Translation Universals through corpora.

3.2.2. Corpus Design

When compiling a corpus, there are a few criteria one should keep in mind. Two of the most important criteria are the representativity of the texts and the standardisation of the corpus (Gonzalez Darriba, 2018). As Baker (1995) states, a corpus “is put together for a particular purpose and according to explicit design criteria in order to ensure that it is representative of the given area or sample of language it aims to account for Zethsen & Askehave (p. 225). The representativeness of the text is the “extent to which a sample includes the full range of variability in a population” (Biber, 1993, p. 243). For example, if one endeavours to study the

entire field of fiction, they should not include only fantasy novels in their corpus, but a range of all types of fiction. Unfortunately, representativity can be hard to ensure (Diriker, 2008). Therefore, some authors now attempt to compile a ‘balanced’ corpus instead (ibid.). Secondly, standardisation refers to “the necessary filters...that must be applied to the texts” (Gonzalez Darriba, 2018, p. 128). Examples of this are the content of the texts, when and where it was published, and who wrote the texts (ibid). To summarize, it is important to consider which texts are included in your corpus, whether these are a representative collection of what you intend to research, and if the same criteria have been applied to all texts.

These criteria have been taken into consideration during the compilation of the corpus used in this thesis. The representativeness of the text is ensured by only choosing a specific text type to research: PILs concerning orally taken contraceptives available in both the Netherlands and in the UK. By limiting the research to such a narrow scope, the representativeness of the corpus can be ensured. The standardisation is safeguarded by only using PILs that have been approved by the EU and appear on official websites. This guarantees that they all meet the EU’s guidelines and were written by approved authors. Furthermore, only PILs from a specific period were used (2017-2022). By accounting for these criteria, the representativeness and standardisation of the corpus used in this study were safeguarded.

3.2.3. Corpus Typology

Within the field of corpus-based Translation Studies, there are many different types of corpora, which all serve different purposes. The most commonly used typology of corpora is Laviosa’s (2002), which is what will be used in this thesis as well. In her paper, Laviosa sets out four levels for distinguishing different types of corpora, where the most general features are specified in level 1 and subsequent levels determine increasingly more specific parameters (Laviosa, 2002). Additionally, though the typology is certainly thorough, it is not exhaustive, and corpora can be specified using further parameters not included in the typology, such as the translation method (human or machine translation) or the translator status (professional or otherwise) (ibid). For this study, the third and fourth levels do not add any further relevance, so only levels 1 and 2 will be discussed and applied to the corpus used in this study.

In level 1, there are 6 sub-questions to help researchers identify what type of corpus they are compiling. The first sub-question asks what types of texts the corpus contains (full texts, samples, or both), and the second asks whether the corpus is synchronic (it only includes texts made in a specific timeframe) or diachronic (it contains texts produced during a long period of time). The third sub-question indicates whether the corpus contains general texts or whether it

is made up of texts from specialised fields, and therefore is a terminological corpus. The fourth sub-question asks whether the corpus is monolingual, bilingual, or multilingual and the fifth asks what language(s) the corpus consists of. Lastly, the sixth sub-question asks whether the corpus contains text that is written, spoken, or both. Continuing on, level 2 specifies whether the corpus is single, parallel, or comparable. If it is single, it is made up of texts from one language (i.e. a monolingual corpus). If it is a parallel or bilingual corpus, it includes texts from language A and the translations of those texts into language B. If it is a parallel multilingual corpus, it contains source texts and their translations in multiple languages. Finally, if it is comparable, it includes original texts in both (for bilingual corpora) or more (for multilingual corpora) languages. It is important to note that, though a parallel corpus and a comparable corpus relate to two different concepts, the terms are often used interchangeably in Translation Studies (Diriker, 2008; Laviosa, 2002).

3.2.4. The Corpus Used In This Thesis

Using Laviosa's typology, the type of corpus used in this thesis can be determined. Firstly, the corpus contains full texts. Additionally, it is synchronic, as it only concerns documents from 2017 to 2022. The corpus is a terminological corpus, since it contains medical documents containing medical specialized language. Moreover, it is a bilingual corpus, and it only contains written language. To categorise the corpus in the second level, it contains English source texts and Dutch translations, which means that it is a parallel corpus. To summarize, the corpus used in this thesis is a synchronic bilingual parallel English-Dutch corpus of written specialised texts. However, for ease of reading, we will call it a bilingual parallel corpus, as that is the most pertinent information.

This corpus consists of 12 texts: six original English texts and six Dutch translations. The texts are PILs of orally taken contraceptives, both regular and emergency contraceptives. The English PILs of the contraceptives have been retrieved from the electronic medicines compendium on medicines.org.uk. This site contains up-to-date information on medicines that have been licensed for use in the United Kingdom and that have been approved by licensing agencies (Datapharm Ltd., 2023). The Dutch texts were retrieved from the Geneesmiddeleninformatiebank (Medicines Information Bank) by the Dutch Medicines Evaluation Board, which is "an independent authority that regulates the quality, effects and safety of medicines and promotes the proper use of medicines for the right patient" (Medicines Evaluation Board, 2023). Only PILs for medicines that were available on both the

Geneesmiddeleninformatiebank and the electronic medicines compendium and were from between 2017 and 2022 were included.

The PILs in the corpus belong to the following contraceptives:

1. Cerazette 75 µg
2. ellaOne 30 mg
3. Levonorgestrel 1.5 mg
4. NorLevo 1.5 mg
5. Postinor 1500 mg
6. Ulipristal 30 mg

PILs were selected for this study because they are highly regulated and prevalent. Since these texts are highly regulated, there is not much internal variation as a result of different authors, due to the stringent rules regarding the contents and the forms. Therefore, it should be easier to compare them and draw conclusions regarding general tendencies, such as explicitation and implicitation, as there is less internal variation caused by factors such as personal preference. Additionally, the fact that they are very prevalent means it is easier to compile a corpus.

3.3. Mode Of Analysis

3.3.1. Measuring Explicitation And Implicitation

One of the most commonly used methods of studying Translation Universals is through corpus research. The idea of testing universals of translation using corpora was proposed by Baker (1996). She stated that, using corpora, scholars could study “distinctive features of translated text...distinctive, universal features that have been proposed in the literature, but never tested on a large scale” (ibid., p. 176). Since then, it has become accepted knowledge that corpus analysis is very suitable for studying Translation Universals (Jiménez-Crespo, 2011; Jiménez-Crespo, 2017; Mauranen, 2008; Olohan and Baker, 2000). This is because, by studying large quantities of translated texts, subsequently isolating features of the language, and comparing these features to those of non-translated texts, scholars can identify characteristic features of language used in translated texts (Delaere & de Sutter, 2013; Jiménez-Crespo, 2011). Since the use of large electronic corpora makes detecting and comparing these features easier, corpus-based research is well-suited to studying Translation Universals.

Several methods exist for measuring explicitation. The most commonly used method is to select one textual feature whose presence is regarded as explicitation and to measure its presence. The reasoning behind this approach is that “if explicitation is genuinely an inherent feature of translation, then translated text might be expected to manifest a higher frequency of the use of optional (or redundant) syntactic elements than original writing in the same language” (Olohan and Baker, 2000, p. 142). Some examples of this approach are Olohan and Baker (2000), who analysed the presence of ‘that’ in English, and Becher (2010a), who analysed the presence of the German ‘damit’. Though this is the most common approach, it is not used in this study. Firstly, not all forms of explicitation are expressed using extra words. As stated previously, explicitation might occur when a less specific term, such as ‘beverage’, is replaced with a more specific term, such as ‘tea’ or ‘beer’. Additionally, when working with a corpus as small as this one, we do not want to focus on a subset of explicitation, as this might provide very little data. Therefore, this thesis will utilise another method of identifying explicitation. This method compares the two texts side by side to identify all forms of explicitation. One advantage of this approach is that no occurrence of explicitation will be missed. However, one disadvantage is that it takes more time and effort, as the analysis cannot be handled by computer programs. However, as this study uses a relatively small corpus with small texts (2941 words on average), this approach is feasible for this research. One study that adopted this method is Pápai (2004), who identified several explicitation strategies in English-Hungarian literary translation.

3.3.2. This Study’s Approach

As stated in the previous paragraph, the present study identified explicitation and implicitation by comparing the source and target texts side by side. First, I converted all PILs to Word documents. I made sure to maintain the formatting, as the layout of the English and Dutch documents were very similar, and this made it easier to determine the corresponding pieces of texts in each document. Then, I conducted a comparative analysis using the definitions of explicitation and implicitation as formulated in the previous chapter. I analysed the texts paragraph by paragraph, sentence by sentence and word by word. In order to ensure consistency, I searched for all instances of explicitation and implicitation I found in one PIL in the others PILs, and compared all instances of explicitation and implicitation to ensure that the same type of change was categorised as the same strategy.

I recorded all instances of explicitation and implicitation in an Excel file. Per instance of explicitation or implicitation, I wrote down the source sentence, the target language, and the

identified explicitation or implicitation strategy. The sheet contained the number of times each translation strategy occurred and the amount of implicitation and explicitation shifts as well. This information was recorded per PIL and then combined into a general spreadsheet. Additionally, two separate Excel files were made, one with all instances of each explicitation strategy, and one with all instances per implicitation strategy. I analysed this data using the table and graphing tools in excel.

4. Results and Analysis

In this section, I will be discussing the results of the research. Each sub-research question will be answered using the data collected through the research. I will share the results of the study, analyse these and then give possible explanations.

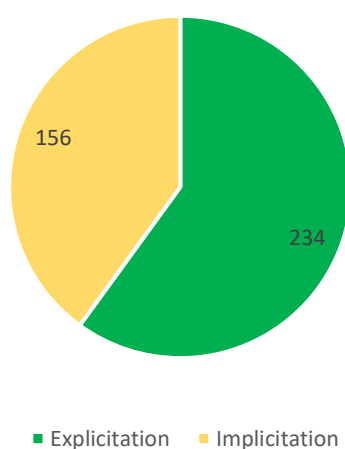
4.1. What Is The Rate Of Explicitation To Implication?

4.1.1. Results

To answer this question, the instances of explicitation and implication were collected and compared. The frequencies were collected for each individual PIL, and then combined to give an overview of the general rate of explicitation vs. implication. Figure 1 shows the total number of instances of explicitation and implication. One instance of explicitation is one shift of a word or phrase. Therefore, a single sentence can contain multiple instances of both explicitation and implication. Moreover, internal repetition, where a complete sentence occurs multiple times in a PIL, was only counted once. This was done because I assumed the translators were working with CAT tools, as the very sentence-by-sentence translation seems to indicate the use of a one, and most professional translators use CAT tools (Han, 2020). With most CAT tools, a sentence that is 100% the same as a previously translated sentence will be automatically filled. Therefore, it is just a repetition of a previous decision to either perform explicitation or implication, not a separate decision by the translator.

Figure 1.

Total Number Of Instances Of Explicitation And Implication



As shown in Figure 1, the total number of instances outweighs that of implicitations. In total, across 6 PILs, 234 instances of explication and 156 instances of impication were found. Therefore, of the 390 shifts found in these texts, approximately 60% was an explication shift, and 40% was an impication shift. This fact that explications outweigh the implicitations is expected, as translators prefer performing explication over impication (Klaudy, 2008).

As Table 3 and Figure 2 show, though the rate of explication to impication varies per PIL, there is not much internal variation. In all PILs, instances of explication outnumber those of impication. The Cerazette PIL had the highest difference between the percentages of explication and impication shifts of all the PILs, with explication shifts constituting 67% of all shifts and impication shifts making up 33%. NorLevo, conversely, had almost equal percentages explication and impication shifts, with 54% explication and 46% impication shifts. Using the percentages of each PIL, the average rate is 60,9% explication and 39,1% impication, which matches the rate calculated from the total number of explication and impication shifts.

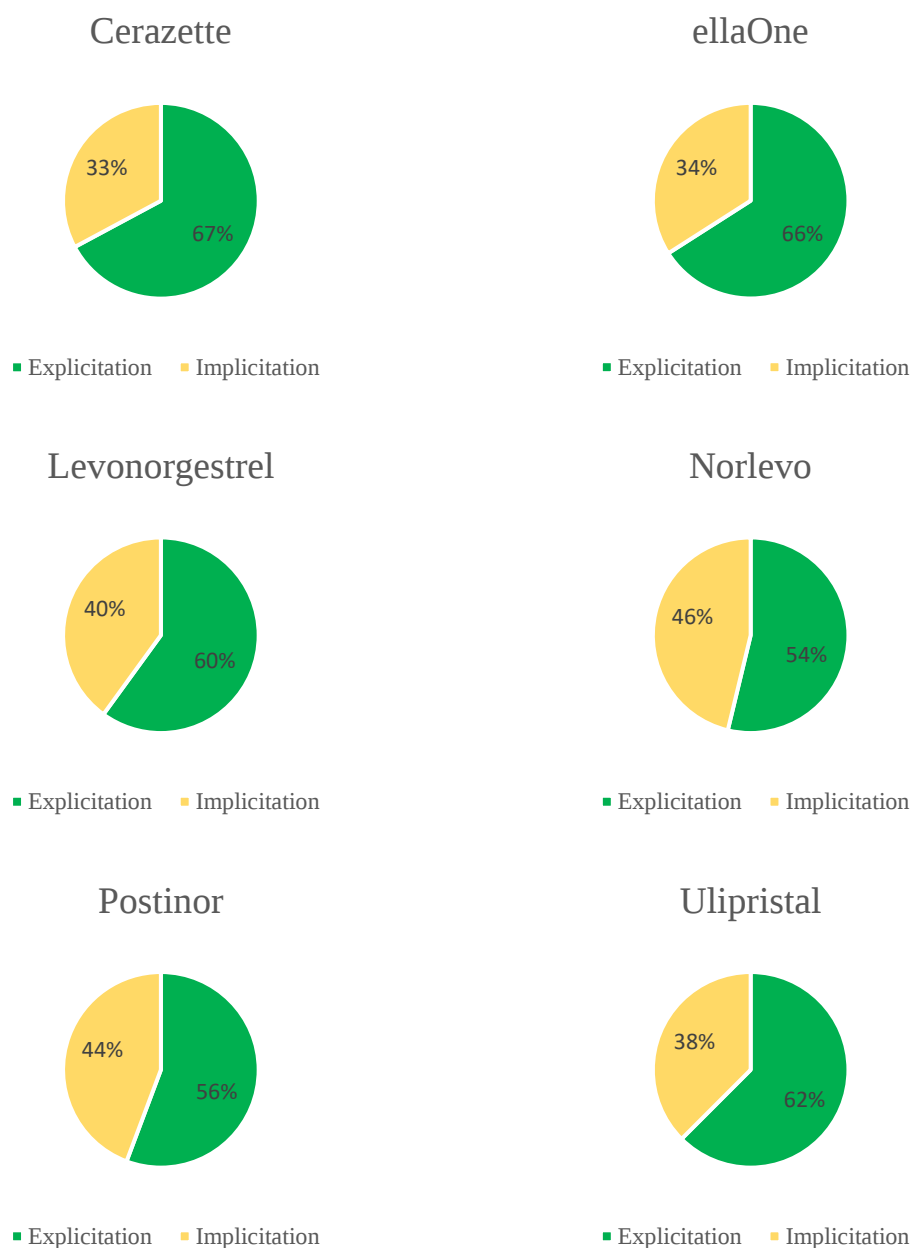
Table 3

Number Of Explication And Impication Shifts Per PIL.

	Explication	Impication	Percentage of explication shifts	Percentage of impication shifts
Cerazette	45	22	67.2%	32.8%
EllaOne	31	16	66.0%	34.0%
Levonorgestrel	39	26	60.0%	40.0%
Norlevo	50	43	53.8%	46.2%
Postinor	39	31	55.7%	44.3%
Ulipristal	30	18	62.5%	37.5%
Total	234	156	60.0%	40.0%

Figure 2.

Pie Charts Of The Rate Of Explicitation To Implication Per PIL



4.2. Which Explicitation And Implication Strategies Were Used?

This section will answer the second sub-question: which explicitation and implication strategies were used? In the previous chapter, a number of expected explicitation and implication strategies were proposed. These were based on the previous studies regarding explicitation and implication, as well as those of medical translation. Table 4 shows the explicitation strategies that were identified in the six PILs, and Table 5 shows the implication

strategies. In this section, these strategies will be explained and discussed individually using examples from the PILs.

Table 4

Realised Explicitation Strategies

Strategy	Explanation and/or Example	Instances
Use of hyponym	The use of a more specific noun, verb, or phrase.	15 (6.4%)
Addition of connective element	Explicitly stating the relation between two clauses or sentences.	62 (26.5%)
Addition of discourse-organising element	Explicitly stating the relation between two pieces of information.	14 (6.0%)
Filling elliptical structures	Verbalising omitted “elements capable of being understood in the context” (Burton-Roberts, 2016, pp. 95)	62 (26.5%)
Lexical repetition	Repeating a word instead of using a pronoun, to make it clearer what is being referred to.	27 (11.5%)
Turning passive clauses into active ones	Clearly stating who is taking which action.	20 (8.5%)
Denominalisation	Turning a noun phrase into a verb phrase.	2 (0.9%)
Addition of a popular term before or after a Germanic medical term	Adding a lay-friendly popular term before or after a medical term of Germanic origin.	4 (1.7%)
A Germanic medical term replaced by an explanation	Replacing a medical term with a Germanic origin with an explanation of that term.	6 (2.6%)
Addition of an example before or after a Germanic medical term	Explaining a medical term of Germanic origin by adding an example.	1 (0.4%)
LG term -> LG term followed by or following an explanation	“genital infection” -> “genitale infectie (infectie aan de geslachtsorganen)”.	1 (0.4%)
LG term -> Popular term followed by the LG term	“ectopic pregnancy” -> “buitenbaarmoederlijke (ectopische) zwangerschap”.	10 (4.3%)

Replacing LG terms by popular terms	“ectopic pregnancy” -> “buitenbaarmoederlijke zwangerschap”.	6 (2.6%)
Replacing LG terms with an explanation	“dose” -> “hoeveel tabletten u moet innemen”.	4 (1.7%)

Table 5

Realised Implication Strategies

Strategy	Explanation and/or Example	Instances
Use of hypernyms	The use of less specific nouns, verbs of phrases.	67.3%
Removal of discourse-organising elements	Removing a word or phrase that indicates the relationship between two pieces of information.	1.9%
Emptying elliptical structure	Leaving out “elements capable of being understood in the context” (Burton-Roberts, 2016, pp. 95).	5.8%
Turning active clauses into passive ones	Omitting who is doing the action described.	5.1%
Nominalisation	Turning a verb phrase into a noun phrase	5.8%
Removal of lexical repetition	Removing the repetition of a word and replacing it with a pronoun.	1.9%
Replacing a specific concept with examples	Replacing a term with examples of that concept.	4.5%
Replacing two synonyms with one word	Translating two synonyms using only one word.	1.3%
Replacing a possessive pronoun by an article	Replacing a possessive pronoun (your) with an article (a(n)).	4.5%
Removing a popular term following an LG term.	“menstrual cycle (period)” -> “menstruatiecyclus”.	1.3%
Removal of LG term following a popular term	“first menstrual bleeding (menarche)” -> “eerste menstruatie”	0.6%

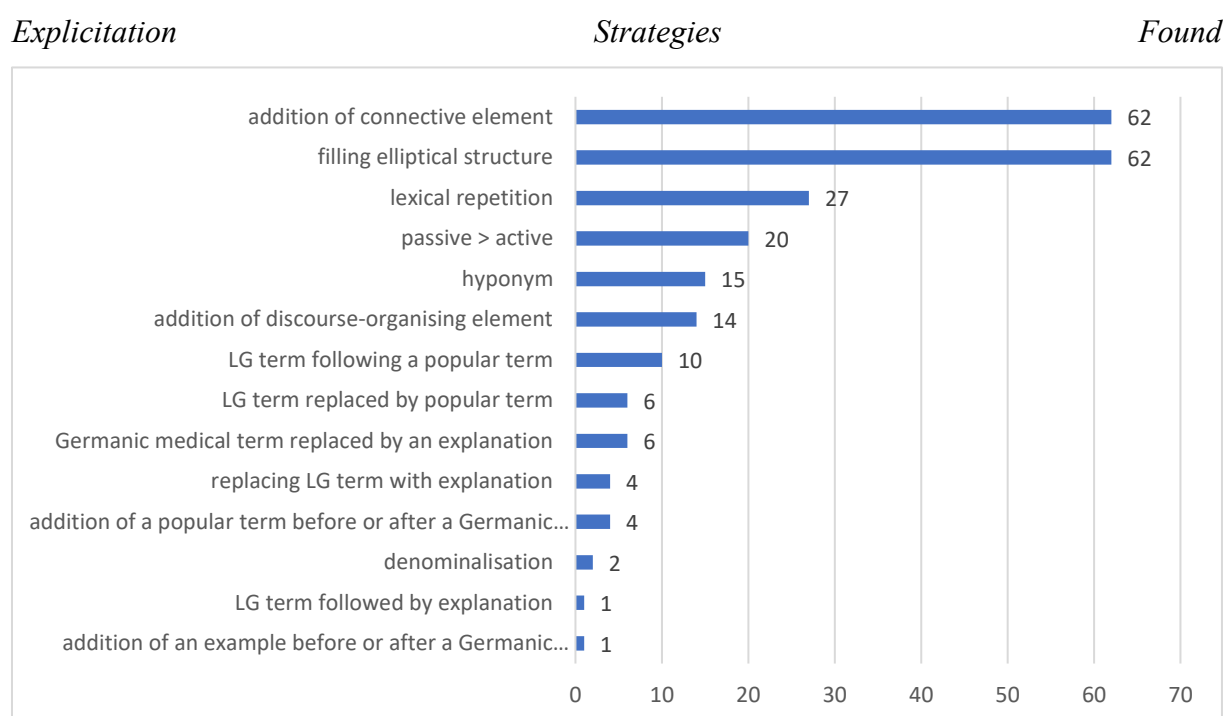
4.2.1. Explicitation Strategies

Thirteen explicitation strategies were identified, nine general strategies and four relating to LG terms. Figure 3 shows all strategies, as well as the number of times they occurred. The explicitation strategies that were used most often are the addition of a connective element and the filling of an elliptical structure, which both occurred 62 times. The third most commonly used explicitation strategy was lexical repetition, with 30 instances. The least utilised explicitation strategies are denominalisation (2), the addition of an explanation after an LG term (1), and the addition of an example before or after a Germanic medical term (1). From this, it is possible to conclude that the addition of an explanation after a medical term is a practice that is not popular among translators of PILs.

The number of explicitation strategies found, as well as their distribution, seems to confirm that English to Dutch translators of PILs of orally taken contraceptives have a tendency to explicitate. This falls in line with Pápai's (2004) findings that, when translating from English to Hungarian, explicitation appears to be a pronounced tendency. From the results of this study, I can conclude that explicitation also seems to be a tendency when translating PILs of orally taken contraceptives from English into Dutch.

While analysing the PILs, not all expected explicitation strategies occurred, and some strategies occurred that were not predicted. Firstly, three unexpected explicitation strategies were identified: the addition of a popular term before or after a Germanic medical term, the replacement of a Germanic medical term by an explanation, and the replacement an LG term by an explanation. These strategies could be used because laypeople are not familiar with medical terms or difficult words, regardless of whether they are LG terms or Germanic in origin. The latter strategy might have been absent in Jiménez-Crespo and Sánchez' (2017) corpus, which is why it was not expected. Additionally, one expected explicitation strategy, the occurrence of an LG term in parenthesis after an explanation, derived from Jiménez-Crespo & Sánchez (2017), did not occur. In place of this approach, the LG term was placed in brackets behind the popular term or the LG term was explained and the term itself left out. This could be because the translator preferred using a popular term over an explanation due to spatial constraints.

Figure 3.



4.2.1.1. Addition Of Connective Element

One of the two most commonly used explicitation strategy is the addition of a connective element. At 62 occurrences, it makes up slightly above 25% of all found explicitation shifts. With the addition of a connective element, the translator explicitly states the relation between two clauses or sentences. In the PILs, this was used to emphasize the causal relationship between statements, as seen in the examples below. Both examples emphasize that, as a result of statement A, statement B is true. The second example, the addition of “*dan*”, is the most common way this explicitation strategy was realised.

- (1) <Cerazette> EN: Cerazette is a highly effective contraceptive.
 <Cerazette> NL: Cerazette is **daardoor** heel betrouwbaar.
Back translation: Because of that, Cerazette is highly effective.

- (2) <Postinor> EN: If you have used any of the medicines below during the last 4 weeks, Postinor may be less suitable for you.
- <Postinor> NL: Als u nu of in de afgelopen 4 weken één van de geneesmiddelen heeft gebruikt die hieronder worden genoemd, **dan** kan Postinor 1500 microgram tablet minder geschikt voor u zijn.
- Back translation:* If you have used any of the medicines mentioned below, now or in the past 4 weeks, **then** Postinor may be less suitable for you.

One explanation for the occurrence of explicitation, as posited by Pym (2005), is risk-management. Pym hypothesises that risk, which he defines as “the probability of an undesired outcome” (p. 34), motivates much of translators’ choices. Not receiving their payment or losing a client, for example, are some of the biggest problems of translators. He then states that “the use of explicitation would then be a way of handling those problems as to manage the risks” (ibid., p. 35). In this instance, by clarifying the causal relationship between two clauses, the translator minimises the risk of the reader wrongly interpreting the information. Therefore, this could be an example of explicitation as a risk-management strategy, in which the translator adds connective elements to ensure all information is correctly interpreted.

4.2.1.2. Filling Elliptical Structures

The second most commonly used explicitation strategy is the filling of elliptical structures. Burton-Roberts defines elliptical structures that can be omitted as “grammatically obligatory elements capable of being understood in the context” (Burton-Roberts, 2016, pp. 96). However, in an effort to keep the number of explicitation strategies to a minimum, the strategy of filling elliptical structures includes non-grammatically obligatory elements as well. In the PILs, the filled elliptical structures were the identification of who performs an action (3) and the addition of a noun following an adjective (4), as well as the addition of the direct object, the subject of a clause, the verb, and specifying the indirect object.

- (3) <Postinor> EN: If you have been told by your doctor that you have an intolerance to some sugars, contact your doctor before taking this medicinal product.
 <Postinor> NL: Indien uw arts u heeft meegedeeld dat u bepaalde suikers niet verdraagt, neem dan contact op met uw arts voordat u dit middel inneemt.
Back translation: If your doctor has told you that you do not tolerate some sugar, then contact your doctor before you take this medicinal product.
- (4) <ellaOne> EN: MORE ABOUT EMERGENCY CONTRACEPTION
 <ellaOne> NL: MEER **INFORMATIE** OVER NOODANTICONCEPTIE
Back translation: MORE **INFORMATION** ABOUT EMERGENCY CONTRACEPTION

Depending on the way this explicitation strategy is realised, there are different reasons this might have been done. In the circumstances as seen in example 3, this is an obligatory change, as the phrase “before taking” can either be translated using a regular Subject-Object-Verb structure “u dit middel inneemt” or as a nominalisation “het innemen”. And, as translators tend towards explicitation rather than implicitation, the first option is chosen and this explicitation strategy is utilised. Therefore, one possible reason this explicitation strategy was used was because of obligatory explicitation between languages and a preference for explicitation over implicitation.

In the circumstances as seen in example 4, though this applies in other contexts as well, another potential reason is because the translator wanted to decrease the likelihood of the reader wrongly interpreting the text. This also ties into Pym’s (2005) hypothesis of explicitation as risk-management. By explicitly stating who the direct or indirect object is, the translator reduces the possibility that the reader misinterprets the empty category. Therefore, the filling of an elliptical structure is a risk-managing strategy by the translator.

4.2.1.3. Lexical Repetition

The use of lexical repetition is another explicitation strategy. This strategy was also identified by Øverås (1998) and Pápai (2004). Normally, a word would be written out when it first occurs, and subsequently omitted or referred to by a pronoun. When lexical repetition is utilised, the word is repeated partially or in full. A partial repetition, as considered in this thesis, is a less specific term, such as the use of “this medicine” instead of the name of the medicine. In the

PILs, three forms of this phenomenon were present: a pronoun is replaced by the full term (example 5), a pronoun is replaced by a partial term, and an empty category is filled with the full term.

- (5) <Levonorgestrel> EN: Your doctor may prescribe another type of (non-hormonal) emergency contraceptive, i.e. a copper intrauterine device (Cu-IUD). If **this** is not an option for you or if you are unable to see your doctor promptly...

<Levonorgestrel> NL: Uw arts kan u dan een ander noodanticonceptiemiddel voorschrijven, zoals een koperspiraaltje (Cu-IUD). Als **een koperspiraaltje** voor u geen optie is of als u niet onmiddellijk naar uw arts kunt gaan...

Back translation: Your doctor may prescribe you another type of emergency contraceptive, like a copper intrauterine device (Cu-IUD). If **a copper intrauterine device** is not an option for you or you are unable to go to your doctor immediately...

One reason this strategy might be used, similar to the previous two strategies, is to minimise the chance of miscommunication. A lay reader might not understand what the pronoun refers to. As a result, they could misinterpret it, which may then lead them to make decisions based on faulty information. As this is a medical document, this decision might have a negative impact on the health of the reader. Therefore, as a form of risk-management, the translator reduces the risk of miscommunication by repeating the term instead of using pronouns.

4.2.1.4. Turning Passive Clauses Into Active Ones

One of the most well-known examples of explicitation is the transformation of passive clauses into active ones. The difference between this and the strategy ‘filling elliptical structures’ is that, with filling elliptical structures, the subject of the clause is not changed. As seen in example 1, the subject of the clause “contact your doctor before taking this medicinal product”, the subject, though not verbalised, is “you”. When turning a passive clause into an active clause, the subject changes, as shown in example 6, where the subject changes from “a barrier contraceptive method” to “you”.

- (6) <Cerazette> EN: If you are taking medicines or herbal products that might make Cerazette less effective, a barrier contraceptive method should also be used.
 <Cerazette> NL: Als u geneesmiddelen of kruidenmiddelen gebruikt die Cerazette minder effectief kunnen maken, **moet u** ook een barrière-anticonceptieve methode gebruiken.
Back translation: If you are using medicines or herbal products that might make Cerazette less effective, **you should** also use a barrier contraceptive method.

One possible reason that this is done is to make the text more lay-friendly. As stated previously, passive clauses are a feature of technical texts (Askehave & Zethsen, 2000; Askehave & Zethsen, 2002; Karwacka, 2015). As Askehave and Zethsen (2011) stated, a way to lay the focus on the reader is by “by addressing the patient directly in the text through the second person pronoun” (p. 112). Therefore, it is possible that the translator aimed to make the text more lay-friendly by turning passive clauses into active clauses.

4.2.1.5. Use Of Hyponyms

The fifth most commonly used explicitation strategy is the use of a hyponym. This is an example of explicitation provided by Vesterager (2016) and Klaudy and Károly (2005), though they do not use the word hyponym. For this thesis, a hyponym is defined as “a more specific noun, verb, or phrase”. This might be a noun, such as translating shown in example 7, but might also be a verb. This is explicitation, as the knowledge that is specified using the hyponym is present in the source context. In example 7, it is clear that the cycle refers to a “menstrual cycle”, even though it is not directly stated. In these PILs, hyponyms were used most often for the translation of the verb “use” as “innemen” (take).

- (7) <ellaOne> EN: You can take the tablet at any time in your **cycle**.
 <ellaOne> NL: U kunt de tablet op elk tijdstip in uw **menstruatiecyclus** innemen.
Back translation: You can take the tablet at any time in your **menstrual cycle**.

This explicitation strategy was likely used to reduce the chance of the reader misinterpreting the PIL. As Buysschaert (2021) stated, hyponyms of medical conditions tend to be confused with the hypernyms. By using a more specific term, such as “menstrual cycle” instead of “cycle”, as in the example, the translator minimises the possibility that the reader interprets the sentence incorrectly. Additionally, by using the more specific verb “take”, the PIL

explicitly states how the medicine should be used. The reader does not have to wonder how to “use” the tablet, as they are explicitly told to “take” it. Therefore, by using hyponyms, the translator reduces the chance of misinterpretation by the reader.

4.2.1.6. Addition Of Discourse-Organising Element

An explicitation strategy that is similar to the addition of a connective element is the addition of a discourse-organising element. A discourse-organising element is a phrase or word that makes the relation between two pieces of information clear. It is different from a connective element in that it does not connect two separate clauses; instead, it gives more information regarding the position of a clause in relation to other information in the text. One example of the ways this explicitation strategy is realised is the addition of the phrase “naast Cerazette/Postinor/Ulipristal”, shown in example 8.

(8) <Cerazette> EN: Tell your doctor, pharmacist, or Family Planning Nurse if you are taking, have recently taken or might take any other medicines or herbal products.

<Cerazette> NL: Gebruikt u **naast Cerazette** nog andere geneesmiddelen of kruidenmiddelen, heeft u dat kort geleden [sic] gedaan of bestaat de mogelijkheid dat u in de nabije toekomst andere geneesmiddelen gaat gebruiken? Vertel dat dan uw arts of apotheker.

Back translation: Do you use any other medicines or herbal products **apart from Cerazette**, have you done that recently, or does the possibility exist that you will use other medicines in the near future? Then tell that to your doctor or pharmacist.

A possible explanation for the addition of discourse-organising element is that the translator thought the reader might not correctly interpret the relationship between the two pieces of information. In the original text, the relationship is not explicitly stated. It is possible that the translator thought there was a risk of the reader wrongly interpreting the information. By adding a discourse-organising element, the translator more clearly states the relationship between two pieces of information in a text. As a result of this, the reader is less likely to misinterpret the relationship.

4.2.1.7. Addition Of A Popular Term Before An LG Term

When translating LG terms, there are a few explicitation strategies the translator can use. The most popular option is to add a popular term before the LG term. This is one of the four

strategies identified by Jiménez-Crespo (2017) and Jiménez-Crespo and Sánchez (2017) regarding the translation of LG terms. The LG term is maintained but a popular term, which in Dutch is most likely one of Germanic origin, is added. The LG term that was translated using this strategy most often was “ectopic”, the translation of which can be seen in example 9.

- (9) <NorLevo> EN: Therefore, if you have had an **ectopic pregnancy** or an infection of the fallopian tubes you should contact your doctor before taking NorLevo.
 <NorLevo> NL: Daarom moet u als u eerder een **buitenbaarmoederlijke (ectopische) zwangerschap** of een ontsteking van de eileiders heeft gehad contact op nemen met uw arts voordat u dit middel gebruikt.
Back translation: Therefore, if you have had a **pregnancy outside of the womb (ectopic)** or an infection of the fallopian tubes you should contact your doctor before you use this medicine.

It is possible that this is the most popular strategy due to the fact that, while it does make the segment more understandable for lay audiences by adding the popular term, they do not leave out anything that was in the source text. The LG terms alone do not add much informational value for the average Dutch lay reader, so a popular term is added. Additionally, Translators are reluctant to remove information, as this leads to an increased risk of miscommunication (Pym, 2013). By adding a popular term before the LG term, the translator does not remove any information and adds a lay-friendly term, both of which decrease the risk of miscommunication.

4.2.1.8. Replacing LG Terms With Popular Terms

Another strategy for the explicitation of LG terms is to replace the LG term with a popular term. This is also one strategy identified by Jiménez-Crespo (2017) and Jiménez-Crespo and Sánchez (2017). With only 6 occurrences, this is the second least popular explicitation strategy regarding LG terms. This strategy was utilised when translating the terms “ectopic” and “pelvic”, which were translated as “buitenbaarmoederlijke” and “bekken”, instead of the options “ectopisch” and “pelvis”, which are Dutch variants of LG terms.

- (10) <Levonorgestrel> EN: **pelvic** inflammatory disease
 <Levonorgestrel> NL: een ontstekingsziekte in het **bekken** (PID)
Back translation: an inflammatory disease in the **pelvis** (PID)

This explicitation strategy might have been used, similarly to the previous strategy, because the translator did not think that the reader would know the term. Additionally, the translator might have chosen for the popular term instead of an explanation because the terms either didn't lend themselves to an explanation, as in the case of "pelvic" in example 10, or because the translator thought the term itself was self-explanatory. One example of the latter reasoning is the term "buitenbaarmoederlijke", which is a compound of the words "buiten", meaning outside, and "baarmoederlijke", which is an adjectival form of the noun "baarmoeder", which means "uterus". Additionally, the translator might have removed the LG term because they did not think they would add any value, as they might cause confusion (Jensen & Zethsen, 2012). Therefore, the translator used this explicitation strategy because they did not think the reader would understand the LG terms, and the terms did not lend themselves to an explanation.

4.2.1.9. A Germanic Medical Term Replaced By An Explanation

Another explicitation strategy regarding Germanic medical terms is to replace the medical term with an explanation. Surprisingly, the Germanic medical terms that are explicitated using this strategy are not terms that laypeople would necessarily be unfamiliar with. The three terms that are translated and explicitated using this strategy are "adolescents", "history", and "overdose", the second of which is shown in example 11.

- (11) <Postinor> EN: you have a **history** of ectopic pregnancy (where the baby develops somewhere outside the womb)
 <Postinor> NL: als u **eerder** een buitenbaarmoederlijke zwangerschap **heeft gehad** (de baby ontwikkelt zich ergens buiten de baarmoeder)
Back translation: if you **have had** a pregnancy out of the womb **before** (the baby develops somewhere outside the womb)

A possible explanation of the use of this explicitation strategy is that the translator assumed that the reader would not know what the medical term itself meant. As stated previously, it can be hard to identify which terms such a broad target audience does and does not know (Askehave & Zethsen, 2003). It is likely that the translator wanted to err on the side

of caution in the case of medical terms. They might have thought that the Dutch terms would not be clear to the audience, and that an explanation was preferred. Additionally, they might have removed the medical term to avoid confusion, as the combination of an unknown term and an explanation might confuse the reader (Jensen & Zethsen, 2012). Therefore, this explicitation strategy was possibly used because the translator thought that these medical terms would not be understood by laypeople, and the addition of or the replacement with a popular term was not an option.

4.2.1.10. Replacing LG Terms With An Explanation

The second most popular explicitation strategy regarding LG terms is the replacement of an LG term with an explanation. This is a similar strategy to the one discussed previously, except it is for LG terms. This explicitation strategy is primarily used to translate the term “dose”, which the Van Dale indicates as having a Latin origin, and it is used once when translating “anaphylaxis”.

(12) <Cerazette> EN: angioedema and/or **anaphylaxis**

<Cerazette> NL: angio-oedeem en of **levensbedreigende allergische reactie**

Back translation: angioedema and/or **life-threatening allergic reaction**

One reason to choose to replace these words with an explanation is that the translator believed that the target audience would not know the Dutch translations of the terms, and there were no ‘popular’ variants to turn to. This is most likely true for the translation of “anaphylaxis”, which is a LG term lay-people are not likely to be familiar with. The LG term was likely not maintained because, if the readers do not know the term, it can cause confusion, as stated earlier (Jensen & Zethsen, 2012). It is possible the translator thought the same of the translation of “dose”. Though the Dutch “dosis” is much more likely to be known by Dutch lay audiences, it is possible that the translator, as with the previous strategy, operated from a position of caution. To conclude, the translator could have opted to use this explicitation strategy because there was no popular term of the LG term, and they believed the reader might not know the LG term itself.

4.2.1.11. Addition Of A Popular Term Before Or After A Germanic Medical Term

The strategy of adding a popular term before or after a Germanic medical term is similar to that of adding a popular term to an LG term. However, instead of medical terms with a Greek or Latin origin, this is for medical terms with a Germanic origin. The origin of words was checked

using the Van Dale dictionary. In these PILs, this strategy was used to translate the term “sexually transmitted disease(s)”. As demonstrated in example 13, the acronym “SOA” was added after the translation of “sexually transmitted disease”. Although this looks like the addition of an abbreviation, a “soa” is, at this point in time, its own word, and a popular way to refer to a sexually transmitted disease (Van Dale).

- (13) <Levonorgestrel> EN: If you are worried about sexually transmitted diseases
<Levonorgestrel> NL: Als u zich zorgen maakt over seksueel overdraagbare
aandoeningen (SOA's)
Back translation: If you are worried about sexually transmitted diseases (STDs).

As with the addition of a popular term before or after an LG term, this strategy is most likely used to ensure that the reader understands all terms. Though the medical terms of Germanic origin are not quite as unfamiliar to the Dutch lay reader as the LG terms (Jensen & Zethsen, 2012), they are still part of specialized language and not accessible for all readers. Therefore, to ensure that the lay readers understand what is being said in the text, the popular term is added after a Germanic medical term.

4.2.1.12. Denominalisation

One of the least often used explicitation strategies was denominalisation. This strategy was identified by Vesterager (2016). Denominalisation is a strategy utilised in intra-lingual translation as well, when adapting texts meant for a professional audience to be understood by a lay audience. Nominalisation occurs when a verb phrase is transformed into a noun phrase. By turning that nominalisation back into a verb (denominalisation), the translator clearly states who the true subject and direct object are. In two of these PILs, denominalisation was utilised to translate the term “contraceptive failure”.

- (14) <Ulipristal> EN: Take one tablet by mouth as soon as possible and no later than 5 days (120 hours) after unprotected sex or **contraceptive failure**.
<Ulipristal> NL: Neem één tablet via de mond zo spoedig mogelijk in en niet later dan 5 dagen (120 uur) nadat u onbeschermdde geslachtsgemeenschap heeft gehad of nadat **de anticonceptiemethode** die u heeft gebruikt, **heeft gefaald**.
Back translation: Take one tablet by mouth as soon as possible and no later than 5 days (120 hours) after you had unprotected intercourse or after **the contraceptive** you used **failed**.

The reason for this translation strategy, as it occurred in these instances, was most likely because a translation that maintained the nominalisation would not be lay-friendly. As stated in the literature review, nominalisation is a characteristic of technical texts (Askehave & Zethsen, 2000; Brøgger & Zethsen, 2021). With nominalisations the actual subject and direct object can be unclear. To conclude, the translator might have removed the nominalisation in order to ensure that the text was more lay-friendly.

4.2.1.13. Addition Of An Explanation Following An LG Term

One of the two least used explicitation strategies, with only one instance found, is the addition of an explanation after an LG term. This is not one of the strategies identified by Jiménez-Crespo (2017) and Jiménez-Crespo and Sánchez (2017). This strategy is the least used explicitation strategy regarding LG terms found in the PILs, as it only occurs once. It is used to translate the term “genital infection”, as seen in example 15.

(15) <ellaOne> EN: This is especially important if you have severe abdominal (stomach) pain or bleeding or if you have previously had a pregnancy outside the womb, tubal surgery or long term (chronic) **genital infection**.

<ellaOne> NL: Dit is vooral belangrijk als u ernstige buikpijn (maagpijn) of een bloeding heeft of als u eerder een buitenbaarmoederlijke zwangerschap, een operatie aan de eileiders of een langdurige (chronische) **genitale infectie (infectie aan de geslachtsorganen)** heeft gehad.

Back translation: This is especially important if you have severe abdominal pain (stomach pain) or a bleeding or if you have previously had a pregnancy outside the womb, a surgery to the fallopian tubes or a long term (chronic) **genital infection (infection of the genitals)**.

This explicitation strategy might have been used for the same reason as the strategy of the replacement of an LG term with an explanation. Namely, it might have been used because the translator did not think the reader would understand the LG term, and the term does not have a popular equivalent. And, similar to the addition of a popular term after an LG term, the translator might not have wanted to remove the term, as translators are hesitant to remove information (Pym, 2013).

4.2.1.14. Addition Of An Example Before Or After A Germanic Medical Term

The second least often utilised explicitation strategy is the addition of an example before or after a Germanic medical term. This strategy is not similar to any of the ones regarding LG terms posed by Jiménez-Crespo (2017) and Jiménez-Crespo and Sánchez (2017). Similar to the previous strategy, this strategy was only used once. It was used in the PIL belonging to Cerazette to translate the phrase “additional barrier method”. This is explicitation, not addition, as a reader who is familiar with the term “barrier method” could know that a condom is included in the meaning of the term, and this is not new information that the reader has no way of inferring.

(16) <Cerazette> EN: If you follow these instructions, make sure you use an **additional barrier method** of contraception for the first 7 days of tablet-taking.

<Cerazette> NL: Als u deze aanwijzingen opvolgt, moet u wel een **extra voorbehoedsmiddel (een condoom)** gebruiken tijdens de eerste 7 dagen van tabletgebruik.

Back translation: If you follow these instructions, you should use an **additional contraceptive method (a condom)** during the first 7 days of tablet-using.

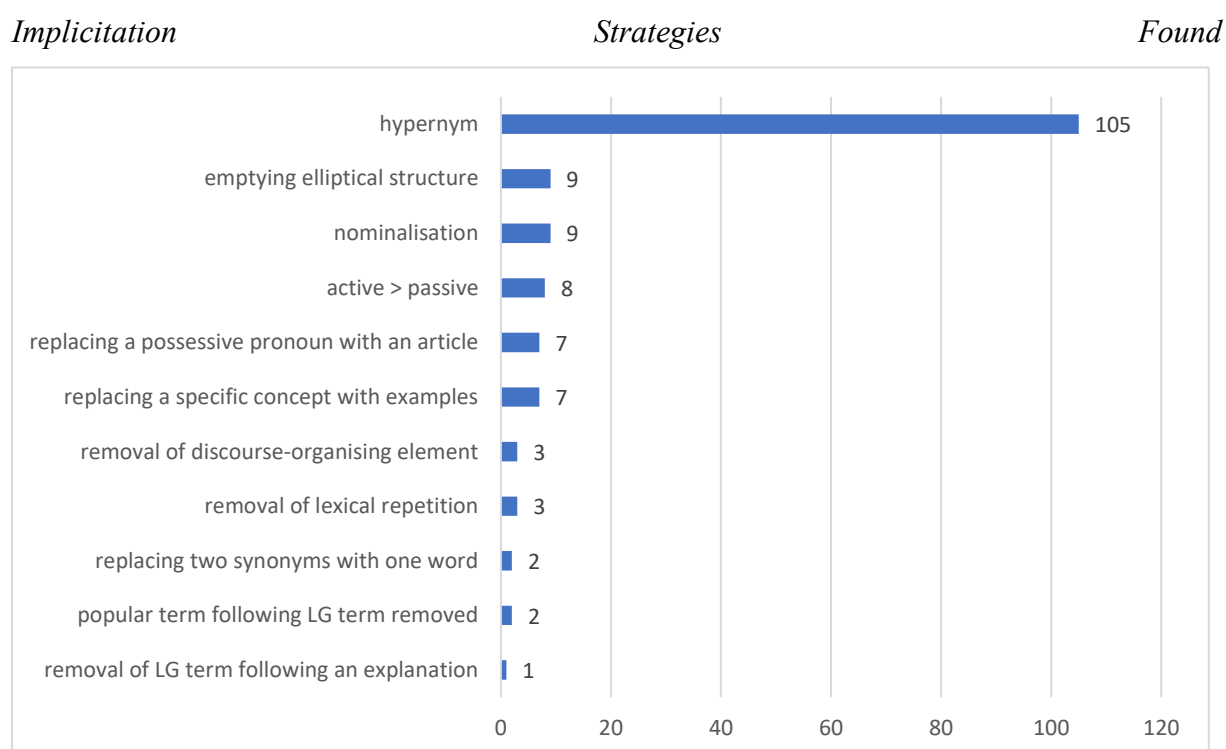
One reason that this explicitation strategy might have been used is that the translator did not think everyone would know what the medical term meant. The phrase translated using this strategy, shown in example 16, does not have a more lay-friendly equivalent, though it does lend itself to an explanation. As the translator opted for adding an example instead of an explanation, it is possible to assume that they thought that the easiest way to convey the information would be to add an example.

4.2.2. Implication Strategies

Through analysing the PILs, 12 implication strategies were identified. All implication strategies, as well as the number of times they occurred, can be found in figure 4. The implication strategy that was used the most often, by a wide margin, was the use of a hypernym. With 105 of the 156 total instances, the use of a hypernym makes up just over two-thirds (69%) of all implication shifts. The strategies that were used the least are the removal of a popular term following an LG term and the removal of a connective element, both only occurring once.

Four implication strategies were found that were not predicted. These strategies were: the replacement of a possessive pronoun by an article, the replacement of two synonyms by one word, the removal of an LG term following an explanation, and the replacement of a specific concept with examples. The reason they were not predicted is that they are not the inverse of a suspected explicitation strategy. Two expected implication strategies were not found, namely the replacement of a popular term with an LG term and the removal of a connective element. The fact that these two strategies were not found can be attributed to the fact that they would have negatively impacted the lay-friendliness and readability of the texts.

Figure 4.



4.2.2.1. The Use Of A Hypernym

The most popular implicitation strategy, as mentioned previously, is the use of a hypernym. In this thesis, a hypernym is a less specific phrase, verb, or noun, which encompasses a broader meaning and makes the exact meaning implicit. There were three major circumstances in which this implicitation strategy was applied. The first, and most common, use of a hypernym is the replacement of the name of the medicine, NorLevo for instance, with “dit middel” or “dit geneesmiddel” (this medicine). The second most common circumstance is the translation of “take” with “gebruiken” (to use). The third way this implicitation strategy is realised is by translating the verbs “talk” or “speak” as “neem contact op” (to contact).

- (1) <NorLevo> EN: The use of **NorLevo** is not recommended in the following cases
 <NorLevo> NL: Het gebruik van **dit middel** wordt afgeraden in de volgende gevallen
Back translation: The use of this **medicine** is not recommended in the following cases

- (2) <ellaOne> EN: Always **take** this medicine exactly as described in this leaflet or as your pharmacist, doctor or other healthcare professional has told you.
 <ellaOne> NL: **Gebruik** dit geneesmiddel altijd precies zoals beschreven in deze bijsluiter of zoals uw arts, apotheker of andere beroepsbeoefenaar in de gezondheidszorg u dat heeft verteld.
Back translation: Always **use** this medicine exactly as described in this leaflet of as your doctor, pharmacist or other healthcare professional has told you.
- (3) <Ulipristal> EN: You are advised to **speak** to a healthcare professional if you are concerned about any problems related to taking emergency contraception.
 <Ulipristal> NL: U wordt geadviseerd **contact op te nemen** met uw arts of apotheker als u zich zorgen maakt over eventuele problemen in verband met het innemen van noodanticonceptie.
Back translation: You are advised to **contact** your doctor or pharmacist if you are concerned about any problems related to taking emergency contraception.

There are a few possible explanations for the use of this implicitation strategy, depending on the context in which it is used. Firstly, in the case of translating the name of the medicine with a phrase such as “dit middel”, this is most likely done out of practical considerations. Because of the use of the phrase “dit middel”, the template can be used for different medicines without having to be changed. If the sentence does not have to be changed for every medicine, the company does not have to pay for the translation of it. Therefore, one reason this implicitation strategy might be used is as a cost-saving measure.

Another reason could be that it is used to make the text more lay-friendly. The use of hypernyms is often seen in combination with a reduction of the technicality of the text (Hill-Madsen, 2015). It is more likely that a lay audience knows the more general term and does not know the more specific term. It is possible that, by reducing the semantic specificity, the translator aims to make the text more lay-friendly.

4.2.2.2. Emptying Of An Elliptical Structure

The second most commonly used implicitation strategy is the emptying of an elliptical structure. As with the accompanying explicitation strategy, an elliptical structure is defined here not only as a grammatically obligatory element, but a non-obligatory element as well. The most common way this implicitation strategy was realised was through the removal of the verb, as shown in

example 4. Additionally, the strategy was also realised through the removal of a pronoun, and that of an adjective following an adverb.

- (4) <ellaOne> EN: Tell your pharmacist, doctor or other healthcare professional if you are taking or have recently taken any other medicines, including medicines **obtained** without a prescription or herbal medicines.

<ellaOne> NL: Gebruikt u naast ellaOne nog andere geneesmiddelen, of heeft u dat kort geleden [sic] gedaan? Vertel dit aan uw arts, apotheker of apotheker. Dat geldt ook voor geneesmiddelen **waar geen recept voor nodig is** en kruidenmiddelen.

Back translation: Do you use any other medicines other than ellaOne, or have you done that recently? Tell this to your doctor, pharmacist or apothecary. This includes medicines that **do not require a prescription** and herbal medicines.

As none of the translators participating in Vesterager's (2016) study on implicitation chose to use this strategy, it is remarkable that this is the second most prevalent implicitation strategy found in this study. A possible reason for the use of this implicitation strategy is that the translator thought that the text would flow better if the elliptical structure was removed, and assumed that the reader would still understand the text if the elliptical structure was missing. In the circumstances shown in example 4, the text would flow less smoothly if it were translated more literally and the verb was maintained. This is the case for the other instances of this implicitation strategy as well. Therefore, the translator most likely removed the elliptical structure to improve the flow of the sentence.

4.2.2.3. Nominalisation

Nominalisation is the third most frequently used implicitation strategy. Nominalisation occurs when a noun phrase is transformed into a verb phrase. There were two ways this strategy was primarily realised in the PILs. The first way is the translation of "after you take" or "after taking" as "na het innemen" or "na het gebruik" (after the taking/using), as demonstrated in example 5. It also occurs in the translation of "preventing you from getting pregnant" to "het voorkomen van zwangerschap" (the prevention of pregnancy).

- (5) <Levonorgestrel> EN: **After you have taken** Levonorgestrel 1.5mg tablets, you are advised to make an appointment to see your doctor about three weeks later, to make sure that Levonorgestrel 1.5mg tablets have worked.

<Levonorgestrel> NL: Na **het innemen** van Levonorgestrel 1,5 mg Focus wordt u geadviseerd na ongeveer drie weken een afspraak te maken met uw arts om te controleren of Levonorgestrel 1,5 mg Focus heeft gewerkt.

Back translation: After **the taking** of Levonorgestrel 1.5 mg you are advised to make an appointment with your doctor after approximately three weeks, to make sure that Levonorgestrel 1,5 mg has worked.

This strategy might have been used to improve the flow of the text. This might seem counter-intuitive, as I have previously stated that nominalisation is not lay-friendly and a characteristic of technical texts (Askehave & Zethsen, 2000; Brøgger & Zethsen, 2021; Karwacka, 2015; Zethsen & Askehave, 2010). However, the nominalisation is mostly used in specific circumstances, as seen in example 6. If a nominalisation had not been used, the sentence in example 6 would have been translated as “Na u Levonorgestrel 1,5 mg Focus hebt ingenomen, wordt u geadviseerd...”. The translator might have considered the construction with the nominalisation to flow better, that the true subject and direct object were clear in the nominalisation as well, and therefore utilised the implicitation strategy of nominalisation.

4.2.2.4. Turning An Active Clause Into A Passive Clause

Another implicitation strategy regarding verb phrases is the transformation of active clauses into passive clauses. When this strategy is applied, an active verb phrase, consisting of subject, verb and direct object, is transformed into a phrase where the direct object is now the subject. This removes the true subject, and can make it unclear who has undertaken what action. This strategy was also identified by Askehave and Zethsen (2002), who determined that “The direct and active voice in English inserts is often replaced by a passive and indirect voice in Danish” (p. 20). In the PILs, this strategy was mostly realised through the transformation of clauses where the reader (“you”) takes an action, which were translated as clauses where the focus is on the action and the true direct object.

(6) <Cerazette> EN: However, if you have already had sex, **check that you are not pregnant** before starting Cerazette.

<Cerazette> NL: Als u al geslachtsgemeenschap heeft gehad, **moet zwangerschap worden uitgesloten** voordat u met Cerazette begint.

Back translation: If you have already have intercourse, **pregnancy must be ruled out** before you start Cerazette.

This strategy might have been used because the translator has deemed that the action more important, and wants to highlight it by making the clause passive. This is showcased in example 6, where the focus is no longer on the word “you”, stressing that it is something you must do, but on the word pregnancy, highlighting that pregnancy is what must be rule out. Therefore, by turning active clauses into passive ones, the translator highlights what they consider to be the most important information in the sentence.

4.2.2.5. Replacing A Possessive Pronoun With An Article

One unexpected implicitation strategy was the replacement of a possessive pronoun by an article. This strategy did not come up in the sources consulted for this thesis. However, it is not very surprising, as the absence of personal pronouns is common in PILs (Askehave & Zethsen, 2000). With this strategy, the second person possessive pronoun “you” is replaced by an article, “de” of “een” (“the” or “an”). This constitutes implicitation because it is clear from the context that the noun following the verb, “rijvaardigheid” in example 7, does not refer to something in general, but refers to that belonging to the reader. Therefore, the information is not removed, as it can still be inferred from the context.

(7) <Postinor> EN: Your Postinor tablet is unlikely to affect **your ability to drive a car** or use machines.

<Postinor> NL: Voor zover bekend heeft Postinor 1500 microgram tablet geen invloed op **de rijvaardigheid** en het vermogen om machines te bedienen.

Back translation: As far as we know, Postinor 1500 microgram tablet has no effect on **the driving ability** and the ability to operate machines.

A possible reason for the use of this implicitation strategy is that the translator aims to make the statement more general. As with the sentence in example 7, not only is your ability to drive a car not influenced by taking the medicine, no one’s ability is. This the case in other

sentences in which this strategy is applied as well. Therefore, by replacing the possessive pronoun with an article, statement is made to apply more generally.

4.2.2.6. Replacing A Specific Concept With Examples

The second unexpected strategy was the replacement of a specific concept with examples. This strategy replaces a word that has a specific meaning with two examples of the meaning of that phrase. Similar to the use of hypernyms, this constitutes implicitation because the full meaning of the source text is limited, though it can still be gleaned through the context by readers. This strategy is mostly used to translate a term that does not have a straightforward Dutch translation: “wastewater”, also spelled “waste water” (8).

- (8) <Ulipristal> EN: Do not throw away any medicines via **waste water**.
<Ulipristal> NL: Spoel geneesmiddelen niet door **de gootsteen of de WC**.
Back translation: Do not flush medicines down **the sink or the toilet**.

A reason this implicitation strategy is used might be because the translator is focussed on the situations the reader is most likely to encounter. As stated previously, these terms do not have direct lay-friendly Dutch translations. Therefore, the translator likely used this strategy to ensure the most pertinent information was communicated to the Dutch readers. The examples used are the instances or occurrences that the reader is most likely to encounter. Regarding the case of “wastewater”, readers are most likely to flush medicines down the toilet or sink, and less likely to throw them away in the shower drain (which is also included in the definition of wastewater). The translators highlights what they think will be the most common situations that the patient actually might encounter, and uses those to translate the term. This highlights a very practical approach by the translator, as they focus on the most important information. Therefore, even though this counts as implicitation, it results in a more lay-friendly and reader-focussed text.

4.2.2.7. The Removal Of A Discourse-Organising Element

Another very sparingly used implicitation strategy is the removal of discourse-organising elements. A reason this strategy is not used very often might be because it decreases the readability of the text. A discourse-organising element, as mentioned previously, is an element that makes the relationship between two pieces of information clear. By removing a discourse-

organising element, the translator makes the relation between two pieces of information less clear.

- (9) <Postinor> EN: you have a history of ectopic pregnancy (**where** the baby develops somewhere outside the womb)
<Postinor> NL: als u eerder een buitenbaarmoederlijke zwangerschap heeft gehad (de baby ontwikkelt zich ergens buiten de baarmoeder);
Back translation: you have previously had a pregnancy outside of the womb (the baby develops somewhere outside the womb)

This finding is in line with that of Meyer and Webber (2013), who found that English discourse connectives were not maintained during the translation into French or German in 18% of cases. One reason that this strategy may be used is due to length restrictions. Another reason might be that the translator estimates that the audience does not need the connection to be spelled out explicitly. Meyer and Webber (2013) state that discourse-connectives can be implicitated “where the latter would be redundant or where the SL discourse relation would more naturally be conveyed in the TL by other means” (p. 19). In example 9, it is realised by the removal of the discourse-organising term “where”. However, since the information is in brackets and follows a medical term, it can be easily deduced which term the additional information is explaining. Therefore, the translator might have removed the discourse-organising element because they did not feel it was necessary to understand the relation between the two pieces of information.

4.2.2.8. The Removal Of Lexical Repetition

The removal of lexical repetition is one of the implicitation strategies that was applied very infrequently, with only three occurrences. This implicitation strategy is the inverse of the explicitation strategy of lexical repetition. When this strategy is applied, a word or phrase that is repeated throughout a sentence or paragraph is replaced by a pronoun or is left out completely. In two of the three instances, the word was removed completely, as shown in example 10.

- (10) <ellaOne> EN: Therefore, it is suggested that you take your tablet immediately after a breast-feeding and avoid nursing at least 8 hours following **levonorgestrel administration** then drain your milk with a breast pump for 8 hours following tablet taking.

<ellaOne> NL: Daarom wordt aanbevolen om uw tablet direct na het geven van borstvoeding in te nemen en **na inname** ten minste 8 uur geen borstvoeding te geven en vervolgens uw melk gedurende 8 uur na het innemen van de tablet afkolven met een borstkolf en de melk weggooien.

Back translation: Therefore it is suggested to take your tablet directly after the breastfeeding and to not breastfeed for at least 8 hours **after the taking** and then to drain your milk with a breast pump and throw it away for 8 hours after the taking of the tablet.

The removal of lexical repetition might have been done to make a text flow smoother and remove redundancy. Lexical repetitions make for a less diverse vocabulary (Pápai, 2004), and the repetition of a word in a sentence or paragraph results in a text that flows less smoothly. As seen in the example, it is still clear what is referred to when a pronoun is used or the word is removed, so the repetition of the word could be seen as unnecessary by the translator. To conclude, the translator might have removed the lexical repetition and omitted the phrase or replaced it with a pronoun to improve the flow of the text.

4.2.2.9. Replacing Two Synonyms With One Word

The replacement of two synonyms with one word is another implicitation strategy that was not expected. When this strategy is applied, two synonyms are translated using one term. In the PILs, the words were usually separated by “or”, or one term would follow the other between brackets. This is used when translating medical terminology that is very lay-friendly, such as “breast secretion or leakage” or “if you are sick (vomit)”, the latter of which is shown in example 11.

- (11) <Levonorgestrel> EN: If you are **sick (vomit)** within three hours of taking the tablet, you should immediately take another tablet.

<Levonorgestrel> NL: Als u binnen drie uur na de inname van de tablet heeft **overgegeven**, moet u direct weer een tablet innemen

Back translation: If you **vomit** within three hours after the taking of the tablet, you should immediately take another tablet.

This strategy might have been used to eliminate redundancy. The translator might have thought that the term referred to by two synonyms was lay-friendly enough that it did not require a clarification. The two terms in sentence 11, “sick” and “vomit”, are lay-friendly medical terms, and it is possible that the translator therefore did not think the use of two lay terms was necessary. This aligns with Heltai’s (2005) claims that explicitation increases redundancy, from which can then be extrapolated that implicitation decreases redundancy.

4.2.2.10. The Removal Of A Popular Term Following An LG Term

The first of the two implicitation strategies regarding LG terms, as mentioned previously, is the removal of a popular term following an LG term. This is the inverse of a strategy by Jiménez-Crespo (2017) and Jiménez-Crespo and Sánchez (2017). When this strategy was utilised, the popular term that followed an LG term between brackets was removed. This occurred twice, in two PILs, in similar contexts. It was used when translating the term “menstrual cycle (period)”, as shown in example 12.

- (12) <Levonorgestrel> EN: If Levonorgestrel 1.5 mg tablet is used more than once in a menstrual cycle, it is less reliable and it is more likely to upset your **menstrual cycle (period)**.

<Levonorgestrel> NL: Als Levonorgestrel 1,5 mg Focus tijdens een menstruatiecyclus meer dan één keer is gebruikt, is het middel minder betrouwbaar en zal het uw **menstruatiecyclus** eerder verstoren.

Back translation: If Levonorgestrel 1,5 mg is used more than once during a menstrual cycle, the medicine is less reliable and is more likely to upset your **menstrual cycle**.

This could have been done because the translator thought that most lay readers would know the definition of the term. It is notable that the translator decided to retain the LG term instead of the popular term. From this, we can conclude that the translator considered “menstruatiecyclus” to be lay-friendly enough that it does not need clarification, either in the form of a popular term or an explanation. With such a broad audience, it can be difficult for a translator to determine what said audience does and does not know (Askehave & Zethsen, 2003). Therefore, the translator might have chosen to remove a popular term following an LG term because they assumed that lay readers would know the meaning of the term.

4.2.2.11. The Removal Of An LG Term Following An Explanation

This strategy is the second one concerning the impication of LG terms. Similar to the previous impication strategy, this strategy is derived from one by Jiménez-Crespo (2017) and Jiménez-Crespo and Sánchez (2017). When the translator applies this strategy, the LG term that is in brackets behind the explanation is removed. This strategy was only found once in the six PILs, and was used to translate the phrase “first menstrual bleeding (menarche)”, as seen in example 13.

- (13) <NorLevo> EN: Do not use this medicine before **the first menstrual bleeding (menarche)**.

<NorLevo> NL: Neem dit geneesmiddel niet vóór **de eerste menstruatie**.

Back translation: Do not take this medicine before **the first menstruation**.

This was most likely done because the translator did not think the Dutch lay readers would know the term. As it is preceded by an explanation, it is not necessary to maintain the LG term to understand the sentence. Additionally, the LG term could confuse readers (Jensen & Zethsen, 2012). Therefore, to avoid the risk confusing the readers and possible miscommunication, the term was removed.

5. Conclusion

The aim of this thesis was to investigate explicitation and implicitation in PILs, when translated from English to Dutch. The main research question was:

1. To what extent are PILs of orally taken contraceptives aimed at Dutch readers explicit or implicit?

To investigate this, I posed two sub-questions:

RQ 1. What is the rate of explicitation to implicitation?

RQ 2. Which explicitation and implicitation strategies were used?

I researched this by analysing a bilingual parallel corpus of English and Dutch PILs of orally taken contraceptives. I compared the source and target texts side by side to identify instances of explicitation and implicitation, and then categorised the strategies used in each explicitation or implicitation shift.

In the introduction, I stated that I expected to find more explicitation than implicitation. This turned out to be true, as I found that the rate of explicitation to implicitation was 60% explicitation and 40% implicitation, with 234 explicitation shifts and 156 implicitation shifts in total. Additionally, I expected to find explicitation strategies similar to the general ones Pápai (2004) found, as well as translation strategies regarding LG terms similar to the determinologisation strategies introduced by Jiménez-Crespo and Sánchez (2017). In reality, I found a number of translation strategies I did not expect, and some that I did expect to find did not occur. Firstly, I had not accounted for medical terms of Germanic origin in addition to LG terms, so the explicitation strategies regarding them were unexpected. Secondly, I did not accurately predict the implicitation strategies. This was because, due to the lack of research on the topic of implicitation strategies, I had constructed my list of expected implicitation strategies using the expected explicitation strategies. Therefore, implicitation strategies that did not have an accompanying explicitation shift were not anticipated. Thirdly, my findings on explicitation and implicitation shifts of LG terms did not completely match Jiménez-Crespo and Sánchez' (2017) determinologisation strategies. One expected explicitation strategy, the addition of an explanation before an LG term, did not occur. This might indicate a preference for the use of popular terms over explanations, which could be due to the limited amount of space in the PIL. Additionally, the strategy of replacing an LG term with an explanation was not expected. A

possible reason for this is that it simply did not occur in Jiménez-Crespo's (2017) sources. There were also corresponding implicitation strategies that were not expected, but as Jiménez-Crespo and Sánchez only discussed determinologisation, it is not possible to compare expected and realised implicitation strategies with anything said by them.

Unfortunately, this study had a few limitations. Firstly, it would have been better to have the exact same two editions of the English and the Dutch PIL. Because there are few official sources where these documents are available, I had to settle for the most recent documents as uploaded by the Dutch and English sources, which did not match perfectly. However, to get the same edition of both languages of the PIL, I would have either have to purchase all 6 PILs or contact the manufacturers, both of which are outside of the scope of this project. To combat this, PILs of which the two versions were too different to properly compare were eliminated from the study. Furthermore, the more recent versions of PILs tended to deal with added or removed information, which did not affect this study, as it only deals with implicitation and explicitation and not omission and addition.

Secondly, one step that would make the results of this study better suited for future comparison would be to have the explicitation and implicitation shifts identified and categorised by multiple researchers. For the present study, they were identified and categorised by a single person. This leads to the possibility of unconscious personal bias, as well as the chance of the translator simply missing or mis-categorising an explicitation or implicitation shift. If this study were to be repeated with a larger scope, multiple translators could identify and categorise the shifts, as to avoid personal bias and user error.

This study has contributed to the research on Translation Universals. By investigating explicitation and implicitation in the specific context of the translation of PILs from English to Dutch, this thesis follows Chesterman's (2010) recommended approach to researching Translation Universals by studying different text types, genres, language pairs, etc., and drawing a general conclusion from these studies. Therefore, by providing the conclusions from one specific text type and language pair, this study has brought the field of Translation Studies one step closer to a conclusion on the existence of Translation Universals. For future research, this study could be repeated with a larger corpus, perhaps with PILs from another type of medicine or from varying medicines, as well as for other language pairs, and the studies could be performed by multiple translators. Additionally, the kinds of explicitation shifts as identified by Klaudy (2008) could also be taken into account, and a future study might investigate which type of explicitation (and corresponding implicitation) shifts occur in these circumstances.

Lastly, this thesis has also contributed to the research on PILs. In some areas, the Dutch PILs are more explicit than the English ones, though they are less explicit in others. The Dutch PILs contain more explicit causal relationships, as the explication strategies of the addition of discourse-organising and connective elements were used often. English PILs, on the other hand, used more specific terms (hyponyms), as the impication strategy of the use of a hypernym was used very often. Overall, as there were more explication than impication shifts, the Dutch PILs are more explicit than the English ones, and therefore more lay-friendly.

References

- Ahangar, A. A., & Rahnemoon, S. N. (2019). The level of explicitation of reference in the translation of medical texts from English into Persian: A case study on basic histology. *Lingua*, 228, 102704. <https://doi.org/10.1016/j.lingua.2019.06.005>
- Askehave, I., & Zethsen, K. K. (2000). Medical texts made simple-dream or reality?. *HERMES-Journal of Language and Communication in Business*, (25), 63-74.
- Askehave, I., & Zethsen, K. K. (2002). Translating for laymen. *Perspectives: Studies in Translatology*, 10(1), 15-29.
- Askehave, I., & Zethsen, K. K. (2003). Communication barriers in public discourse: The patient package insert. *Document design*, 4(1), 22-41.
- Baker, M. (1995). Corpora in translation studies: An overview and some suggestions for future research. *Target. International Journal of Translation Studies*, 7(2), 223-243.
- Baker, M. (1996). Corpus-Based Translation Studies*: The challenges that lie ahead. *Terminology, LSP, and Translation: Studies in Language Engineering in Honour of Juan C. Sager* (pp. 175-186). John Benjamins Publishing Company.
- Baker, M., Francis, G., & Tognini-Bonelli, E. (1993). Corpus Linguistics and Translation Studies Implications and Applications. *Text and Technology*. The Netherlands: John Benjamins Publishing Company.
- Becher, V. (2010a). Towards a more rigorous treatment of the explicitation hypothesis in translation studies. *Trans-kom*, 3(1), 1-25.
- Becher, V. (2010b). Abandoning the notion of “translation-inherent” explicitation: Against a dogma of translation studies. *Across languages and cultures*, 11(1), 1-28.
- Bernardini, S., & Zanettin, F. (2004). When is a Universal not a Universal? In P. Kujamäki, & A. Mauranen (Eds.), *Translation universals. Do they exist* (pp.51-63). John Benjamins Publishing Co.
- Biber, D. (1993). Representativeness in Corpus Design. *Literary and Linguistic Computing*, 8(4), 243-257.
- Bjerrum, L., & Foged, A. (2003). Patient Information Leaflets—helpful guidance or a source of confusion?. *Pharmacoepidemiology and Drug Safety*, 12(1), 55-59.
- Blum-Kulka, S. (1986). Shifts of Cohesion and Coherence in Translation. In J. House, & S. Blum-Kulka (Eds.), *Interlingual and Intercultural Communication: Discourse and Cognition in Translation and Second Language Acquisition Studies* (pp.17-36). Gunter Narr Verlag Tübingen.

- Brøgger, M. N., & Zethsen, K. K. (2021). Inter-and intralingual translation of medical information: The importance of comprehensibility. In Ş. Susam-Saraeva & E. Spišiaková (Eds.), *The Routledge Handbook of Translation and Health* (pp. 96-107). Routledge.
- Burton-Roberts, N. (2016). *Analysing sentences: an introduction to English syntax*. Routledge.
- Buysschaert, J. (2021). Medical terminology and discourse. In Ş. Susam-Saraeva & E. Spišiaková (Eds.), *The Routledge Handbook of Translation and Health* (pp. 65-79). Routledge.
- Chesterman, A. (2004). Beyond the particular. In P. Kujamäki, & A. Mauranen (Eds.), *Translation universals. Do they exist* (pp.51-63). John Benjamins Publishing Company.
- Chesterman, A. (2010). Why study translation universals. *Acta Translatologica Helsingiensia*, 1, 38-48.
- Chesterman, A. (2011). Translation universals. In L. van Doorslaer & Y. Gambier. *Handbook of translation studies* (pp .175-179). John Benjamins Publishing Company.
- Chesterman, A. (2016). *Memes of Translation*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Clerehan, R., & Buchbinder, R. (2006). Toward a more valid account of functional text quality: The case of the patient information leaflet. *Text & Talk*, 26(1), 39–68.
<https://doi.org/10.1515/TEXT.2006.003>
- Datapharm Ltd. *Electronic medicines compendium*. Retrieved February, 2023, from <https://www.medicines.org.uk/emc/>.
- De Metsenaere, H., & Vandepitte, S. (2017). Towards a theoretical foundation for explicitation and implicitation. *trans-kom*, 10(3), 385-419.
- Delaere, I. & de Sutter, G. (2013). Applying a multidimensional, registersensitive approach to visualize normalization in translated and non-translated Dutch, *Belgian Journal of Linguistics*, 27, 43-60.
- Diriker, E. (2008). Corpora. In M. Baker & G. Saldanha (Eds.), *Routledge Encyclopedia of Translation Studies* (pp. 59-62). Taylor & Francis Group.
- Englund Dimitrova, B. (2005). *Expertise and Explicitation in the Translation Process*. Philadelphia: John Benjamins Publishing Company.
- European Council. Directive 2001/83/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to medicinal products for human use.

- European Council. Directive 2004/27/EC of the European Parliament and of the Council of 31 March 2004 amending Directive 2001/83/EC on the Community code relating to medicinal products for human use.
- European Council. Guideline on the readability of the labelling and package leaflet of medicinal products for human use.
- European Council. ISO 1087:2019. Terminology work and terminology science. Vocabulary
- Faya, G., & Quijada, C. (2019). Technical and medical translation. In R. Vald  n &  . Vidal (Eds.), *The Routledge Handbook of Spanish Translation Studies* (pp. 288–310). United Kingdom: Routledge. <https://doi.org/10.4324/9781315520131-17>.
- Gonzalez Darriba, P. (2018). English to Spanish translated medical forms: A descriptive genre-based corpus study. *Translation & Interpreting*, 10(2), 122-141.
- Gudde-Kuiper, P., Brabers, A., Jong, J. de., Reitsma-van Rooijen, M., Zijlstra, C. (2012) *Angst: een bijwerking van de bijsluiter? Het effect van twee verschillende presentaties van bijwerkingen op angst, veronderstelde vatbaarheid en ernst*. Houten/Utrecht: Stichting Health Base, NIVEL.
- Han, B. (2020). Translation, from Pen-and-Paper to Computer-Assisted Tools (CAT Tools) and Machine Translation (MT). *Proceedings of the 14th International Conference on Interdisciplinarity in Engineering—INTER-ENG 2020*, 63(56), doi:10.3390/proceedings2020063056
- Heltai, P. (2005). Explication, redundancy, ellipsis, processing and translation. *Translation and Meaning, Part 8. Proceedings of the Lodz Session of the 4th International Maastricht-Lodz Duo Colloquium on “Translation and Meaning”, held in Lodz* (pp. 245-254).
- Hill-Madsen, A. (2015). Lexical Strategies in Intralingual Translation between Registers. *Hermes – Journal of Language and Communication in Business*, 54, 85-105.
- Hirsh, D., Clerehan, R., Staples, M., Osborne, R. H., & Buchbinder, R. (2009). Patient assessment of medication information leaflets and validation of the Evaluative Linguistic Framework (ELF). *Patient education and counseling*, 77(2), 248-254.
- House, J. (2008). Beyond intervention: Universals in translation. *Trans-kom*, 1(1), 6-19.
- Jensen, M. N., & Zethsen, K. K. (2012). Translation of patient information leaflets: Trained translators and pharmacists-cum-translators—a comparison. *Linguistica Antverpiensia, New Series—Themes in Translation Studies*, 11, 31-49.
- Jim  nez-Crespo, M. A. (2011). The future of general tendencies in translation: Explication in web localization. *Target. International Journal of Translation Studies*, 23(1), 3-25.

- Jiménez-Crespo, M. A. (2015). Testing explicitation in translation: triangulating corpus and experimental studies. *Across Languages and Cultures*, 16(2), 257-283.
- Jiménez-Crespo, M. A. (2017). Combining corpus and experimental studies: insights into the reception of translated medical texts. *The Journal of Specialized Translation*, 28, 2-22.
- Jiménez-Crespo, M. Á., & Tercedor Sánchez, M. (2017). Lexical variation, register and explicitation in medical translation: A comparable corpus study of medical terminology in US websites translated into Spanish. *Translation and Interpreting Studies*, 12(3), 405-426.
- Karwacka, W. (2015). Medical translation. In: Ł. Bogucki, S. Goźdz-Roszkowski & P. Stalmaszczyk (Eds.), *Ways to translation* (pp.271-298). Wydawnictwo Uniwersytetu Łódzkiego
- Kenny, T., Clark Sr, J., Moseley, D. V., Newton, L. D., Newton, D. P., Purves, I. N., & Wilson, R. G. (1998). A PIL for every ill? Patient information leaflets (PILs): a review of past, present and future use. *Family practice*, 15(5), 471-479.
- Keresztes, C. (2013). Genre-based teaching of medical translation. *JAHHR: Europski časopis za bioetiku*, 4(1), 533-543.
- Klaudy, K. (2001). The asymmetry hypothesis. Testing the asymmetric relationship between explicitations and implicitations. Paper presented to the Third International Congress of the European Society for Translation Studies. *Claims, Changes and Challenges in Translation Studies*.
- Klaudy, K. (2008). Explicitation. In M. Baker & G. Saldanha (Eds.), *Routledge Encyclopedia of Translation Studies* (pp. 104-108). Taylor & Francis Group.
- Klaudy, K., & Károly, K. (2005). Implication in translation: Empirical evidence for operational asymmetry in translation. *Across languages and cultures*, 6(1), 13-28.
- Krüger, R. (2013). A cognitive linguistic perspective on explicitation and implication in scientific and technical translation. *Trans-kom. Journal of Translation and Technical Communication Research* (2), 285-314.
- Krüger, R. (2015). *The Interface between Scientific and Technical Translation Studies and Cognitive Linguistics*. Berlin: Frank & Timme.
- Laviosa, S. (2002). *Corpus-based Translation Studies: Theory, Findings, Applications*. Rodopi B.V., Amsterdam – New York.
- Marco, J. (2012). An analysis of explicitation in the COVALT corpus: The case of the substituting pronoun one (s) and its translation into Catalan. *Across Languages and Cultures*, 13(2), 229-246.

- Mauranen, A. (2008). Universal tendencies in translation. *Incorporating corpora: the linguist and the translator*, 32-48.
- Medicines Evaluation Board. *Geneesmiddeleninformatiebank*. Retrieved February, 2023, from https://www.geneesmiddeleninformatiebank.nl/ords/f?p=111:1:0::NO:RP,1:P0_DOMA_IN,P0_LANG:H,NL.
- Meyer, T., & Webber, B. (2013). Implication of discourse connectives in (machine) translation. *Proceedings of the Workshop on Discourse in Machine Translation*, 19-26.
- Molés-Cases, T. (2019). Why typology matters: a corpus-based study of explicitation and implication of Manner-of-motion in narrative texts. *Perspectives*, 27(6), 890-907.
- Montalt, V. (2011). Medical translation and interpreting. In L. van Doorslaer & Y. Gambier (Eds.), *Handbook of translation studies* (pp. 79-83). John Benjamins Publishing Company.
- Montalt, V. (2013). Medical Translation. In C. Chapelle (Ed.), *The Concise Encyclopedia of Applied Linguistics* (pp. 1-5). Blackwell Publishing Ltd.
- Montalt, V., & Gonzalez-Davies, M. (2014). *Medical translation step by step: Learning by drafting*. Routledge.
- Montalt, V., Zethsen, K. K., & Karwacka, W. (2018). Medical translation in the 21st century-challenges and trends. *MonTI. Monografías de Traducción e Interpretación*, (10), 27-42.
- Montalt-Resurrecció, V., & Shuttleworth, M. (2012). Research in translation and knowledge mediation in medical and healthcare settings. *Linguistica Antverpiensia, New Series—Themes in Translation Studies*, 11, 9-29.
- Muñoz-Miquel, A. (2012). *From the original article to the summary for patients: Reformulation procedures in intralingual translation*, 187-206.
- Murtisari, E. T. (2013). A relevance-based framework for explicitation and implication in translation. An alternative typology. *Trans-kom6* (2), 315-344.
- Olohan, M., & Baker, M. (2000). Reporting that in translated English. Evidence for subconscious processes of explicitation?. *Across languages and cultures*, 1(2), 141-158.
- Øverås, L. (1998). In search of the third code: An investigation of norms in literary translation. *Meta*, 43(4), 557-570.
- Pápai, V. (2004). A universal of translated text?. In P. Kujamäki, & A. Mauranen (Eds.), *Translation universals. Do they exist* (pp. 143-164). John Benjamins Publishing Co.
- Pilegaard, M. (1997). Translation of medical research articles. In A. Trosborg (Ed.), *Text Typology and Translation* (pp. 159-184). John Benjamins Publishing Company.

- Pym, A. (2005). Explaining explicitation. *New trends in translation studies. In honour of Kinga Klaudy*, 29-34.
- Pym, A. (2013). On Toury's laws of how translators translate. In Pym, A., Shlesinger, M., & Simeoni, D. (Eds.), *Beyond Descriptive Translation Studied: Investigations in homage to Gideon Toury*. (pp. 311-328). John Benjamins Publishing Co.
- Raynor, D. T. (2007). The importance of medicines information for patients. *Prescriber*, 18(2), 60-62.
- Saldanha, G. (2008). Explication revisited: Bringing the reader into the picture. *Trans-kom*, 1(1), 20-35.
- Simonsen, H. K. (2014). Dangers in patient information leaflets and technical manuals: an issue for specialised translators? *The Journal of Specialized Translation*, 21(1), 2-18.
- Toury, G. (1978). The nature and role of norms in literary translation. In J. Holmes, J. Lambert, and R. van den Broeck (Eds.), *Literature and translation: new perspectives in literary studies, with a basic bibliography of books on translation studies*. (pp. 83-100). Acco Leuven.
- Van Dale Dictionary. <https://uleiden-vandale-nl.ezproxy.leidenuniv.nl/zoeken/zoeken.do>. Accessed between 9 February and 29 June 2023.
- van Dijk, L., Monteiro, S. P., Vervloet, M., de Bie, J., & Raynor, D. T. (2014b). *Study on the package leaflets and the summaries of product characteristics of medicinal products for human use. PIL's Study*. European Union.
- van Dijk, L., Vervloet, M., Monteiro, S. P., Burgt, S., & Raynor, D. K. T. (2014a). *Feasibility and value of a possible "key information section" in patient information leaflets and summaries of product characteristics of medicinal products for human use: the PILS-BOX study*. European Union.
- van Dijk, L., Hendriks, M., Zwicker, H., de Jong, J., & Vervloet, M. (2016). *Informatiebehoeften van patiënten over geneesmiddelen*. Utrecht, NIVEL.
- Vesterager, A. K. (2016). Implication in legal translation-A study of Spanish-Danish translation of judgments. *HERMES-Journal of Language and Communication in Business*, (55), 205-219.
- Vinay, J., & Darbelnet, J. (1995/1958). *Comparative Stylistics of French and English: A methodology for translation*. John Benjamins Publishing Company.
- Wright, S. E. (2011). Scientific, technical, and medical translation. In K. Malmkjær, and K. Windle (Eds.), *The Oxford Handbook of Translation Studies* (pp. 243-261). Oxford Academic.

Zethsen, K. K., & Askehave, I. (2010). PIL of the month: A study of best practice in EU patient information leaflets. *Journal of Applied Linguistics & Professional Practice*, 7(1).