

Master in Translation

# Language and translation in the medical field

The cases of people-first language and  
scientific versus lay terminology in Dutch

Master's thesis submitted by  
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## Abstract

In deze paper wordt er onderzoek verricht naar twee aspecten van taal in de medische wereld en hoe die worden vertaald naar het Nederlands. Om te beginnen wordt people-first language onder de loep genomen, een trend die is ontstaan in het Engels en die mensen met een beperking op de eerste plaats als mensen aanspreekt: in plaats van te spreken over een gehandicapte persoon, wordt er aangeraden om naar de persoon in kwestie te verwijzen als een persoon met een handicap, en een autist wordt liever een persoon met autisme genoemd. In de laatste decennia is dit specifieke taalgebruik zich langzaam maar zeker aan het verspreiden binnen het Engels en ook verscheidene Nederlandstalige voorstanders lijken het aan te moedigen. Academische bronnen over people-first language in het Nederlands zijn er evenwel niet te vinden en ook naar hoe ermee wordt omgesprongen in vertaling is het gissen. Daar wil verandering in worden gebracht met dit onderzoek.

Het tweede aspect van taal in de medische wereld dat uitgebreid aan bod komt, is het onderscheid tussen wetenschappelijke termen en lekertermen die naar eenzelfde medische aandoening verwijzen, denk bijvoorbeeld aan meningitis tegenover hersenvliesontsteking. Ook dit aspect zal in verband worden gebracht met vertaling naar het Nederlands. Ten slotte zullen beide concepten worden gekaderd binnen het Nederlands zoals het wordt gesproken door het grote publiek in Vlaanderen.



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Elaborating and writing this master's thesis was quite a project, it was challenging, that much is certain. It started with an idea, and then came another, and then another, and another. Sometimes, I lost sight of the wood for the trees and once in a while I had nightmares about medicalese. However, not once I thought of taking a step back, mostly because there was always someone to help me back on track. This leaves me with only one thing to do, and that is to express my gratitude to all the people who have assisted me on this inspiring journey I never grew tired of.

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## Chapter 1. Introduction

Not that long ago, someone very dear to me was diagnosed with borderline personality disorder or BPD for short. While looking for more information on its traits, I was unsettled by the language that is used to describe people with BPD. Countless articles report on *borderliners* being this or that, or *borderline sufferers* doing one thing or another, as if they are nothing more than that, a *borderliner*, a whole person reduced to a single diagnosis and excluded from 'normal' society by a label. I almost inevitably came across all sorts of blog posts and fora saturated with stigma, referring to people with BPD as *deeply troubled individuals* and *weirdos* one should avoid at any cost. So far for respect, I thought.

Calling someone *deeply troubled* is by no means destructive, but also equating someone with his or her medical condition can leave an individual with insecurity and a low self-image, since the many other attributes of that person are somehow invalidated (Blaska, 1993; Snow, 2007). Many people will assert that they 'do not mean it like that', that they 'said it without bad intention' and therefore see no harm in it. However, harm can be done regardless of the intention, for which reason people should choose their words with care, as Joseph Friedman underlines with the following:

In Alice in Wonderland, Humpty Dumpty states that "when I use a word, it means exactly what I choose it to mean." This is not correct. Words can hurt. We should use the terms based on how they are perceived, not how we think they should be perceived (Friedman, 2017, p. 9).

Instead of calling someone a *borderliner* or a *borderline person*, it is considered to be more thoughtful to refer to the respective individuals as people first, thus, to say *someone with BPD*, for example. This linguistic usage is called people-first language and was first introduced in English during the 1990s by people with disabilities themselves and American scholars who reinforced their argument. Although many have adopted the politically correct language over the last decades, the aforementioned articles on BPD demonstrate that there are still many occurrences in which this is not the case. What is more, according to an American study that was carried out in 2011, over 70% of the phrases that were used in contemporary newspaper articles when referring to people with disabilities, were found to be politically incorrect (Halmari, 2011).

I had read Halmari's paper some years before and while reading about people with BPD, the study crossed my mind again. I wondered to which extent this language shift had permeated my native language, Dutch, which is closely related to English and shares many linguistic and syntactic features. However, there are no academic sources to be found that report on this people-first approach in Dutch. That is why I decided to examine the language concept in my native language – and, more specifically, how it relates to translation – as part of my master's thesis.

While thinking about the concrete elaboration of the topic, I recalled another study I had read, which reported on the influence someone's choice of words can have on other people's reasoning and attitudes (Thibodeau & Boroditsky, 2011). Within the context of disabilities, I started wondering

whether the term that is used to name a medical condition can have such an impact as well. In Dutch – and probably in any other language – there often exist different terms to refer to one and the same condition: a scientific or technical term, and a lay equivalent that is known to the general public, for example *encefalitis* [encephalitis] versus *hersenontsteking* [brain inflammation]. Perhaps the choice of one term over the other has its consequences as well, I thought, which is interesting to know not only for physicians talking to patients, but also for journalists reporting on medical conditions and translators translating these articles afterwards.

In addition, when considering medical journalism directed at the general public, one could wonder which term is usually opted for: the scientific one, which is often more precise and accurate, or the lay one, which everyone understands? And, subsequently, if the author opted for a scientific term, does the translator respect this choice and use the corresponding medical term in the target language, or does he or she shift to lay terminology? What about the other way around? There are plenty of questions I would like to know the answer to and in this paper, I will discuss some of the ones that were mentioned in a restricted context so as to open the door for possible further and extensive research.

### 1.1. Background of the study

This study has been carried out as part of the master's programme in Translation at the Catholic University of Leuven in Brussels. The field of Translation Studies offers a wide variety of interesting topics to examine in a master's thesis and a list of suggestions was made available at the start of the academic year. However, none of the given subjects really caught my attention, so I decided to follow my own interests and to delve into the language that is used in the medical field of Flanders and how it relates to translation.

### 1.2. Theoretical framework

Since its emergence in the 1980s, political correctness has grown to become a rather polemic topic with connotations ranging from outright censorship to basic decency. There seems to be a consensus, however, when it comes to words like *cripple* and *imbecile* which are generally considered to be offensive and disrespectful when used to refer to someone with a physical or cognitive disability. Yet, also these words were once neutral terms that were used in standard language without causing so much as a raised eyebrow. The emotional value of words and phrases changes over time. The word *cripple* has been replaced by various neutral – or even euphemistic – alternatives and until recently, *a handicapped person* was one of them. *An epileptic*, *an autistic person*, *a depressed patient*, *a psychopath*, *a borderliner*, they were all neutral designations at some point, until they grew to be negative for many of the referenced individuals, who stood up and wanted to be treated as 'people first'. Emotional values keep evolving and it seems that we are in the midst of such a process.

People-first language has slowly been gaining ground in English: many government organisations explicitly started to use it, but as the aforementioned study by Helena Halmari (2011) points out,

the media seem not to have adopted this language shift as quickly. And although the idea of putting people first has spread to non-English cultures – at least to Belgium – very few academical sources are to be found that discuss this transmission across borders. This paper tends to alter the situation and examine exactly that: the transmission – or rather the translation – of people-first language from one language into another and the extent to which its use has spread among the population of the target culture, namely the Dutch speaking part of Belgium.

At the intersection where language, translation and the medical field meet, there is a lot more to examine. The subject of medical translation might be more or less universal – the anatomy of the human body does not exactly change across cultures, nor do certain diseases or disorders – but the terminology that is used is very diverse, even when referring to one medical condition within one and the same language. A distinction is often made between scientific terms and their lay equivalents and many words have already been shed on the impact the choice of one term over the other can have. However, those studies are often restricted to one language, mostly English, and translation processes are scarcely spoken about, yet translation is always near. If a potential new cure is discovered for a certain disease, the study is not only published in an academic journal using jargon that only scholars understand, journalists of popular science reporting will write an article that is directed at the general public as well, and local editorial offices might appoint a translator to translate that article into a vernacular language.

In fact, it all seems to come together in popular science reporting: experts in the matter as well as the general public and referenced individuals are involved, the subject is often highly scientific yet has to be understandable for all, and frequently a translation is carried out to be able to inform local audiences in their native language. It is therefore that all source material of this study is situated exclusively within this genre, with the exception of a survey that has been carried out and which was targeted at the general public of Flanders. More information on the source material will be given under 1.5. Methods and materials.

### 1.3. Hypotheses and research questions

Popular science reporting not only reports on people with disabilities, it also addresses them as part of the target audience. Therefore, it may well be expected that consideration is given to the way in which people with disabilities are referred to, and that phrases which are regarded as politically incorrect, are avoided. Assuming that this is the case in Dutch popular science reporting, one might speculate that when an article is translated into Dutch, any politically incorrect phrases in the source text are converted more often than not into politically correct phrases in the target text. Thus, in a certain way, the expectations of the target audience would be given priority over the loyalty to the source text. If this is true, the assumption can be made that, in general, politically correct phrases prevail in Dutch popular science reporting, irrespective of whether the articles are translated or not, and if so, from which source language.

When referring to medical conditions in popular science reporting, a balance has to be struck between the comprehensibility of the general public and the accuracy and authority of the article.

Since translators are usually no subject matter experts, one might presume that the source text influences the translation choices they make in terms of scientific versus lay terminology. That is, if a specific medical condition is referred to with a scientific term in the source text, it is presupposed that this is also the case in the Dutch target text. By contrast, if a lay term is used in the original article, the corresponding translation in Dutch is expected to be in lay terminology as well. If this presumption is correct, it is a very real possibility that the ratio between scientific and lay terms in translated articles differs from the one in non-translated articles, as foreign cultures might adopt a slightly more or less specialised language in popular science reporting.

The previously formulated hypotheses all concern the language that is used in Dutch popular science reporting. However, the lexicon of the Dutch speaking population in Belgium with regard to people with disabilities and medical conditions might look somewhat different. On the one hand, the strong probability exists that the use of people-first language is less present among the general public than in popular science reporting. On the other hand, the use of technical medical terms is presumably limited. However, it is not their use that is examined as a last element of this master's thesis, but the impact they have. Former research in English has demonstrated that when certain medical conditions are referred to in scientific language – in the medical field also called *medicalese* – they are considered to be more severe than when lay terminology is used (Young et al., 2008). One might expect, then, that the same applies to certain *medicalese* versus lay terms in Dutch.

In accordance with the hypotheses that have been put forward, a number of research questions and subquestions have been formulated. Initially, the focus lies on English as source language, since most translated popular science reporting in Dutch is translated from English, and English is, moreover, the language of origin of people-first language. Later on, a comparison is made with non-translated Dutch articles and articles that are translated from a source language other than English. Lastly, the lexicon of the Dutch speaking population of Belgium – i.e. the population of Flanders – is examined with regard to people with disabilities and medical conditions. The research questions and subquestions of this study are the following:

1. Which translation strategies are applied when translating references to medical conditions and people with disabilities from English into Dutch in popular science reporting?

More specifically, with PC standing for *politically correct* and non-PC for *politically incorrect*:

- 1a. When referring to people with disabilities, are non-PC phrases in the source language converted into PC alternatives in the target language or not?
- 1b. Similarly, are PC phrases transferred as such into the target language or do they become non-PC?
- 1c. And what about scientific versus lay terms when referring to medical conditions?

2. In contrast, how are medical conditions and people with disabilities referred to in Dutch popular science reporting that is not translated from English?
  - 2a. Are PC and non-PC patterns equally represented in non-translated Dutch articles as in English to Dutch translations?
  - 2b. What about in Dutch articles that are translated from a source language other than English?
  - 2c. And when referring to medical conditions, is there a difference in the use of scientific versus lay terms between popular science reporting that is originally written in Dutch as opposed to translated articles?
3. How does the lexicon of the general public in Flanders look like with regard to people with disabilities and medical conditions?
  - 3a. Does the general public refer to people with disabilities in a PC manner or not so much?
  - 3b. Do scientific terms, in comparison with their lay alternatives, have an impact on the perceived severeness of the referenced medical conditions?

#### 1.4. Objective of the study

This study is intended to serve as a steppingstone for further research, since academic sources on the topics that are covered are rather limited, at least for vernacular languages. By seeking answers to the research questions presented earlier, it is aspired to gain more insight into the spreading of people-first language across borders on the one hand, and the use and translation of scientific and lay terminology on the other. The research is conducted in a very restricted context for which the outcomes may not be entirely representative. However, obtaining definite results is not the objective of this master's thesis. Instead, it is aimed to set an example for other researchers in Translation Studies to carry out similar or further research. In addition, this study may simply serve as a source of information for people who are interested in the subjects that are dealt with. A general introduction to the concepts of political correctness and people-first language is provided as well as a thorough discussion on the impact of words.

#### 1.5. Methods and materials

As has been mentioned before, the source material of this study has been collected mostly within the genre of popular science reporting. In order to answer the first two overarching research questions, three corpora of articles are compiled. The first one is a bilingual parallel corpus of original English articles with their corresponding translations into Dutch, the second one is a monolingual corpus consisting of non-translated Dutch articles, and the third one, also a monolingual one, compiles Dutch articles translated from a source language other than English. The source of the Dutch articles is *Eos Wetenschap*, a popular science magazine published in

Dutch and directed at the general public of the Netherlands and the Dutch speaking part of Belgium. The English articles are exclusively published by the American popular science magazine *Scientific American*. Other than speaking a different language, both magazines are directed at the same target audience. For the third research question, a survey is set up that is targeted at the general public of Flanders – see chapter 3. Methodology for a full explanation on how this research has been carried out.

## 1.6. Strategy

After this introductory chapter and before proceeding to the actual research, an extensive literature overview will be given to situate the most prominent themes of this paper in a wider context. The first part is dedicated to the impact of words: a general orientation is provided, the concept of political correctness is discussed, and the trend of people-first language is examined in detail. The second part concentrates on the medical translation practice for one thing, and the impact of medical terminology for another. Thereafter, the research methods applied in this study are described, covering the data collection, selection of variables and data analysis. The fourth chapter reports on the obtained results for all research questions separately, after which they are discussed in the following chapter in terms of limitations and directions for further research. Lastly, a conclusion is formulated, a list of references is included, and the necessary appendices are provided.

## Chapter 2. Literature overview

### Part I. On the impact of words

#### 1. A general orientation

Words are powerful. They can hurt, they can please, sadden and console, they can mend hearts but more easily break them, they can offend, enrage and soothe, charm or amuse, express gratitude, they can simply inform, they can enrich, instruct, advise, warn, predict, suggest. A cliché-ridden, never-ending list one would say. Still, the impact of words can last for years, therefore people should use them wisely – another worn-out phrase.

In the following paragraphs I provide a general orientation in three different aspects of words: how they can carry out actions beyond the bounds of merely presenting information, how a carefully chosen word in a specific context can have all sorts of consequences and how many words in themselves carry an emotional value that has an impact on the attitude people adopt toward them.

Important to note is that the impact of words varies across borders of cultures, regions and also time. However, as the aim of this chapter is to give an overall introduction of the topic, I will not elaborate further on the differences between languages that undeniably exist and I will mostly stick to the operating language of this paper, namely English.

#### 1.1. The speech-act theory

Words can be used not only to reflect a meaning but also to perform an action: to present a request, for example, or to give an order. It was British philosopher of language John Austin who pointed out that someone who says “I promise to do that” is *doing* something – i.e. making a promise – rather than asserting something. This is what he calls a *performative utterance* in his posthumous work *How to Do Things with Words* (1962) in which he also introduces the contemporary use of the term *speech acts* to refer to verbal actions in general that accomplish something.

He distinguishes three levels at which such actions take place: *locutionary*, *illocutionary*, and *perlocutionary acts*. The first one concerns the actual performance of saying something with a grammatical structure and a literal linguistic meaning, whereas the second one implies the speaker’s intention of what is to be accomplished by the speech act, and the third one is viewed at the level of the effect the speech act has on the interlocutor and which is, therefore, in a way external to the performance (Austin, 1962). For example, if someone says: “Is there any window that can be opened?”, the illocutionary act is a request: “please open the window”, even though the literal sentence – the locutionary act – was to ask a yes or no question about the presence of a window which can be opened. The perlocutionary act – the actual effect – might be to cause somebody to open a window.

One of Austin’s students, John Searle, elaborated further on the *Speech-act Theory* and developed a classification of illocutionary speech acts, distinguishing *representatives*, *directives*, *commissives*,



*expressives* and *declarations*. However, I will not be discussing these classes further here as they are not directly related to this paper. Instead, I refer to Searle's paper *A Taxonomy of Illocutionary Acts* which was published in 1975.

## 1.2. The framing theory

Many researchers have delved deeply into what is called *the framing theory*. This theory was first introduced by Goffman (1974) and implies that the way in which a concept or an idea is presented to someone has an influence on the choices people make and how they process the given information. This concept is widely researched in the context of mass media, since in this field words are sometimes carefully chosen to intentionally influence the audience's line of thoughts. However, in everyday language people unwittingly shape their interlocutor's perception by using a specific string of words to convey a notion. When talking about complex or abstract ideas, for instance, people often rely on images without realising it – e.g. time is depicted as a valuable resource: you're *wasting* my time; an argument as war: he *attacked every weak point* in my argument, I could never *win* an argument with him (Lakoff & Johnson, 1980). One specific study on this metaphorical framing effect will be commented briefly to illustrate the impact such phrases can have.

In 2011, cognitive psychologist Paul Thibodeau and Lera Boroditsky – cognitive scientist and professor in the fields of language and cognition – conducted a study on the metaphorical framing effect. In other words, they examined the influence of metaphors on how we think and the way we reason. More specifically, Thibodeau and Boroditsky investigated whether – depending on the metaphor they came across – people reason differently and propose different solutions to solve a crime-related problem in a fictional city. They set up a series of experiments in which they focussed on two contrasting metaphors for crime: crime as a virus infecting the city and crime as a beast preying on the city.

Thibodeau & Boroditsky found that the answers people gave were highly influenced by the frame they had read – participants presented with the crime-as-beast metaphor, for example, were more likely to suggest a solution that had to do with enforcement than the participants presented with the crime-as-virus metaphor. What is more, the results show that metaphors not only affect how people propose solving the problem, but also how they gather more information concerning future problem solving (Thibodeau & Boroditsky, 2011).

In all experiments, people were asked to identify the most influential element of the report in regard to their decision. The vast majority ignored the metaphor and indicated crime statistics instead as the most influential component, which illustrates that the influence of metaphorical framing is covert: people do not recognize metaphors as an influential aspect in their line of reasoning. Of course, there are other factors as well that affect decision-making. People with contrasting political affiliations, for instance, generally have very different opinions on how to solve social problems like crime. Also gender yields systematic differences. However, the differences caused by metaphorical frames are considerably more prominent than those that exist between left and right, or between men and women (Thibodeau & Boroditsky, 2011).

### 1.3. The emotional value of words

In addition to their literal or *denotative* meaning, content words carry a proper emotional value which causes people to adopt a certain attitude towards them. These emotions and associations connected to a word are called the *connotative meaning* and can have an unmistakable impact in communication settings.

In general, the positive end of the spectrum is composed of euphemistic terms – such as the phrase *in between jobs* for *unemployed*, or the euphemistic use of the word *escort* for the taboo word *prostitute*. The negative end, on the other hand, consists of dysphemistic terms – for example the sarcastic name *cancer stick* for a *cigarette*, but also the offensive term *retarded* for someone with an *intellectual disability*.

#### 1.3.1. Euphemism

The term *euphemism* is generally understood to mean “a word or phrase used as an alternative to a dispreferred expression”, as Allan (2001, p. 148) defined it. However, according to Miguel Casas Gómez there is much more to it. In 2009, he dedicated an article specifically to the linguistic definition of *euphemism*.

As Casas Gómez (2009) explains, it is very difficult to linguistically define euphemistic uses of language. Instead of identifying the mechanism or linguistic nature of the process itself, most authors refer to the causes that produce the euphemism from a psychological point of view. The reasons being described are many – out of politeness, moral scruples or even religious fear, to avoid prohibited or taboo words as well as those that are unpleasant, annoying, inappropriate, offensive, dirty or shocking<sup>1</sup>. Yet, as has been pointed out, such definitions only inform people about the motivation of euphemism, but not about its linguistic resources.

Casas Gómez remarks that there are very few purely linguistic definitions. Bruneau wrote the following in 1952: “the euphemism consists of a conscious substitution, of a forbidden term or expression, by an indirect expression” (as cited in Casas Gómez, 2009) and also other authors describe the euphemism as a *lexical substitute* that replaces a forbidden word<sup>2</sup>. However, according to Casas Gómez these definitions confuse two different notions:

In these descriptions there is an evident confusion between the *substitute* and the *process*, that is, there is a frequent identification of the *euphemism* with the *euphemistic substitute* which consists of using the former, the euphemistic phenomenon, to indicate the term which replaces the forbidden word (the lexical substitute) and not the fact of the lexical substitution itself. (Casas Gómez, 2009, p. 729)

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<sup>1</sup> e.g. Hatzfeld, 1928; Lázaro Carreter, 1974; Moreno Fernández, 1998; Nyrop, 1913; as described by Casas Gómez, 2009.

<sup>2</sup> e.g. Alonso Moya, 1988, as described by Casas Gómez, 2009.

The first sentence of this section illustrates that most people make the same mistake. For the sake of clarity, Casas Gómez's distinction will be maintained in this paper: the word *euphemism* – or *dysphemism* in the next section – designates the actual process whereas the lexical substitute will be referred to as the *euphemistic term* – or *dysphemistic term* respectively. Moreover, it should be noted that the word *forbidden* in these descriptions sounds very restrictive but should not be interpreted as such. A forbidden word in this context can refer to any word with a negative connotation – from taboo words to merely unpleasant ones and everything in between.

Apart from the mistaken identification of the process with the substitute, the definitions mentioned earlier present more complications. Casas Gómez (2009) asserts that to avoid a forbidden word, sometimes non-lexical mechanisms are used, such is the case when people verbally modulate the forbidden term by apologising for what is said, or use intonation or tone of voice to do so. For example, imagine someone saying: “*Pardon the expression*, but I don't give a shit”, or someone indicating with a specific tone of voice that he or she disapproves of the taboo word in “She's a *hooker*”. In addition, Uría Varela mentioned in 1997 another problem in this regard: “there are forbidden realities which appear to lack a base, that is, which have only a euphemistic expression and in which, therefore, it is not appropriate to speak, at least synchronically, of substitution” (as cited in Casas Gómez, 2009). The word *afterlife* seems to have a euphemistic value, for example, but no forbidden term.

Casas Gómez furthermore adds that the euphemistic aspect of an expression ever depends on a variety of circumstances – such as the situation in time and place as well as the speaker's age, gender, social class, etcetera – and thus, what partially characterises euphemisms is their relativity. This implies that euphemisms are above all a social phenomenon and that there no longer exist euphemistic words, but only euphemistic uses of words, so he says.

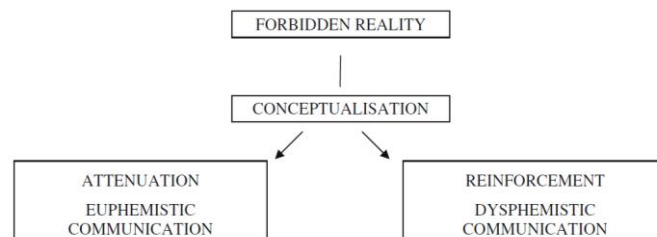
To sum up and considering all the remarks mentioned before, Casas Gómez defines the concept of euphemism as a cognitive process which starts, not from a supposedly forbidden term, but from a forbidden reality. What happens is that the language user conceptualises that forbidden reality in a euphemistic way using either lexical – which is most common – or non-lexical mechanisms from all linguistic levels. This enables him or her to attenuate the forbidden reality.

### 1.3.2. Dysphemism

The general public usually understands the term *dysphemism* as a word or phrase with unpleasant or offensive connotations. In the latter case, the word or phrase can be offensive to the people addressed or the concept it refers to, but also for the people overhearing the utterance, state Allan and Burridge (2006). However, again there is more to it.

Reconsidering Casas Gómez's definition of euphemism, the concept of dysphemism can easily be explained. In the same manner that language users can conceptualise a forbidden reality in a euphemistic way, they can also conceptualise it in a dysphemistic way. In this case, the forbidden

reality is not attenuated, but reinforced instead (Casas Gómez, 2009). See *Figure 1* for a schematic representation of his definition.



*Figure 1: Euphemistic and dysphemistic communication (Casas Gómez, 2009).*

### 1.3.3. Changing connotations

Connotations can change over time. When used redundantly or in specific contexts, the neutral or positive emotional value of a word can evolve to be a negative one. A term that used to be considered euphemistic can thus become dysphemistic (Halmari, 2011). People then start looking for an alternative to the dispreferred expression and so the entire process starts again. Halmari indicates that this often happens in the medical field. People try to camouflage the harsh realities of life by using euphemistic terms and over the years countless changes have taken place in the lexicon referring to disabilities. In the beginning of the previous century, for example, the *Committee on Classification of Feeble-minded* divided people with mental disabilities into three categories: *idiots*, *imbeciles*, and *morons* – words that are now considered unspeakable and have been replaced since then by numerous euphemistic alternatives which soon underwent the same process.

This aspect of changing connotations can be seen as the force behind *political correctness* which will be dealt with in the next chapter.

## 2. Political correctness

### 2.1. A heterogeneous concept

*Political correctness* seems to have permeated all means of language – from everyday oral communication over written discourse to broadcasted speech. If a politician, for example, makes a public comment that is believed to be discriminating against a certain minority group, the outcries of consternation are many. However, when it comes to defining the concept as such, no consistent explanation can be put forward. Paul Hollander (2013) remarks that there are no authorities providing rules or definitions on what exactly constitutes political correctness or its obverse, political incorrectness. A great part of political correctness is not really political and certain aspects are said to be a matter of taste, which makes its understanding and implementation even more arbitrary. Therefore, there exist many disagreements – even within the politically correct ‘community’ – as to what exactly is or is not politically correct.

According to Geoffrey Hughes in his book *Political correctness: a history of semantics and culture*, there is one unmistakable semantic fact about political correctness that cannot be disputed, that is, “the emergence of a whole new series of artificial substitutions” (2010, p. 14). Abstract and often euphemistic words and expressions are intentionally created in order to replace politically incorrect terms, for example, *waitron* as a gender-neutral substitute for *waiter* and *waitress*, or *herstory* as opposed to *history*. In addition, many already existing terms have been assigned new meanings, such as *green* implying *ecological*, and *challenged* indicating that a person has a *disability*.

However, the source of this ‘semantic engineering’ is very hard to identify, Hughes (2010) states. Unlike the case with many former social movements which can usually be traced back to one or a few leading figures – such as Martin Luther King for the Civil Rights Movement, or Steve Biko and Nelson Mandela heading the Internal Resistance to Apartheid – people behind politically correct language remain mysteriously unlocatable and anonymous. This makes the phenomenon even more complex and difficult to define. Herman De Dijn (2015) furthermore adds that it is not only about language, but also about attitudes that are, amongst others, said to be derogatory – e.g. men catcalling women on the street – or discriminating – e.g. employers refusing to hire people from a different background.

It can be stated that political correctness is a mindset rather than a coherent set of ideas or well-defined regulations, wherefore it is easier to recognise the phenomenon and its counter-phenomenon than to spell out a definition (Hollander, 2013). Moreover, of the few existing definitions, only a handful is neutral, most are either encouraging or disproving towards political correctness, Hughes (2010) remarks. For this reason, it is more appropriate to talk about contrasting views rather than actual definitions, which will be discussed under paragraph 2.4. Contrasting views on PC, but first the areas of concerns and the link with euphemisms will be set forth.

## 2.2. Areas of concerns

Political correctness – from now on called simply PC – generally focuses on certain inequalities and disadvantaged people in society. Prejudicial language is discouraged, and taboo topics are avoided. The word *taboo* is in this context not used in its traditional sense of ‘strictly forbidden’, but rather with a broad modern meaning of ‘highly inappropriate’, explains Hughes in his book on political correctness (2010). What follows are some of the main aspects of PC.

Race, culture and ethnicity were one of the first areas of concern – e.g. in the late 1980s a campaign was launched to replace the term *black* by *African-American* (Martin, 1991). Also other minority groups have been addressed over the years, such as homeless, poor, or unemployed people. It is said, for example, that instead of using *homeless* as an adjective, people should say *someone experiencing homelessness* (Park, 2016).

Another very prominent theme within the PC community is gender discrimination. As feminism grew stronger, a desired shift towards gender-neutral language emerged in order to reduce the dominance of the male gender (Hughes, 2010). Examples are the introduction of forms such as

*s/he* and the replacement of *man* by *person* as in *chairperson* and *spokesperson*. Not all new terms managed to establish themselves, some even became objects of satire such as *wimmin* and *herstory*, but they did raise consciousness, affirms Hughes.

In addition to the subject of gender, there is a lot of attention for sexual orientation as well. In the United States, the Committee on Lesbian and Gay Concerns (CLGC) was founded as early as 1980 and has considered issues of heterosexual bias in language ever since (American Psychological Association, n.d.). However, especially over the last ten years the LGBT community has become a widely discussed topic and the language concerned seems to evolve continuously. The word *queer*, for example, originally referred to something *odd*, *different*, *strange* or *not quite right* and was therefore offensive and derogatory when used by heterosexual people to describe a homosexual person. However, in the late 1980s, queer activists began to reclaim the word and started to use it as a self-affirming umbrella term ('Queer', n.d.). Also the acronym *LGBT* has seen various changes – *LGBT* became *LGBTQ* or *LGBT+* and recently it has been expanded even more to *LGBTIQA+*<sup>3</sup> in an attempt not to leave anyone out.

The area of concern this paper focuses on is the one of disability. History has known a lot of insensitive terms – *cripple*, *imbecile* and *insane* were once standard terms. In the course of the 1980s and especially the 1990s new politically correct forms were introduced to substitute the older stigmatic words – e.g. *a person with a cognitive disability* (Hughes, 2010). However, as has been mentioned before, new terms do not always receive general endorsement and that was definitely the case for many of them. “The semantic change was so rapid that the new forms attracted comment, irony, and derision”, Hughes remarks (2010, p. 196). For example, the forms of the artificial word *abled* combined with a preceding adverb, such as *differently abled*, have been widely criticised. Also the new form *challenged* – a euphemism that was introduced in 1985 to replace the negative vocabulary of disability – was soon an object of derision and people came up with ironic parodies such as *vertically challenged* when referring to a *person with dwarfism* (Hughes, 2010). The topic of politically correct language in the area of disability will be discussed in more detail in chapter 3. People-first language.

The most recently addressed topics are probably environmental issues and animal rights. In these contexts, it concerns politically incorrect – also called non-PC – behaviour rather than language. On the one hand, for example, those who claim that there is still uncertainty over whether global warming is actually occurring or not, are highly criticised by the PC community (Hunter, 2005). On the other hand, it is said that one of the most successful PC groups is the animal rights movement PETA<sup>4</sup> – a non-profit corporation that fights the fur industry, animal testing, animal abuse and many other related issues. A study on the influence of PC on marketing strategies and brand activity points out that no other product on the market has been singled out as politically incorrect as

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<sup>3</sup> LGBTIQA+ stands for *lesbian, gay, bisexual, transgender, intersex, queer/questioning, asexual* and many other terms (such as *non-binary* and *pansexual*), see <https://en.wikipedia.org/wiki/LGBT>

<sup>4</sup> PETA stands for *People for the Ethical Treatment of Animals*

resolutely as fur – not even cigarettes and alcohol – and the activities of PETA have everything to do with this (Prevel Katsanis, 1994).

As it becomes clear, the areas of concerns within the PC community are many and the suggested PC terms numerous. In some cases, it does not concern language but politically incorrect behaviour – such is *sexism*, *homophobia*, *buying fur*, etc. In other cases, a certain term is proclaimed politically incorrect, but the supposedly correct term fails to gain ground – e.g. *wimmin* – while other proposed alternatives do become established – e.g. *chairperson*. However, as Scholten et al. point out, “the appropriateness of terms is not absolute and indeed varies between cultures and regions and over time” (2017, p. 147). They state that communities should agree for themselves on what is ‘neutral’ and ‘respectful’. As a consequence, “the straightforward translation of an acceptable word in one language might result in a pejorative, stigmatizing, or disrespectful word in the other language” (2017, p. 149).

### 2.3. PC in conjunction with euphemism

Various examples provided in the previous paragraph clearly illustrate the fact that PC is closely related to the concept of *euphemism* – thoroughly discussed under paragraph 1.3. The emotional value of words. Euphemistic terms generally arise from the urge not to embarrass when talking about certain taboo topics such as *bodily functions*, *sex*, *death* or *God*. The same can be said about politically correct language which tries to avoid topics that are considered to be politically incorrect by using and sometimes creating abstract and often itself euphemistic words and expressions, for example the term *differently abled*.

As has been mentioned in the paragraph on the process of euphemism, the neutral or positive emotional value of a word can evolve and become a negative one. Hughes (2010) explains how negative emotive uses of a word can lead to *individual semantic change* which then in turn causes a term to become politically incorrect. This was, for example, the case for the word *black* which was introduced in the late 1960s as a better alternative for the term *negro* but became replaced by *African-American* during the late 1980s after it had been being used as an insult by white people and had turned into an offensive name (Martin, 1991). Once a term obtains a negative connotation, the PC community – or sometimes the target group itself – looks for an alternative and so the process begins all over.

### 2.4. Contrasting views on PC

As has been mentioned before, there exist very contrasting views on political correctness. While a certain number is highly supportive and encourages the use of politically correct language, some are of the opinion that it is merely “a concept invented by hard-rightwing forces to defend their right to be racist, to treat women in a degrading way and to be truly vile about gay people”, in other words, they make up these politically correct people so they can attack them (as cited in Hughes, 2010). Others state that it is a clear form of censorship, or even an effort to impose liberal thought

on society (Lewis, 1996). The following paragraphs give deeper insight into four main views on political correctness that have been developed over the last decades.

#### 2.4.1. In its original form

Political correctness is said to have started on university campuses in the United States during the 1980s (De Dijn, 2015; Hughes, 2010). In the context of left-wing politics and rising feminism, students associated themselves more than ever with multiculturalism and the fight for equality and against the discrimination of minorities. Hughes describes how disadvantaged and victimized groups – that do not usually speak up for themselves – became championed by other voices. A great emphasis on ‘inclusiveness’ emerged through the wish to create a society in which no one would be left out and everyone would be acknowledged and loved for who they are (De Dijn, 2015).

The pre-eminent way to achieve this goal was thought to be the use of correct language, explains De Dijn (2015), for people were convinced that by using correct language, they could positively change thoughts, attitudes and even their culture as a whole. Thus, all ‘hate speech’, discriminating or non-inclusive behaviour or expressions that could offend certain minorities were to be avoided. New, neutral, and unfamiliar lexical forms were introduced to replace judgmental and hurtful language. And so Hughes states that “linguistically it started as a basically idealistic, decent-minded, but slightly Puritanical intervention to sanitize the language by suppressing some of its uglier prejudicial features” (2010, p. 3). In essence, the phenomenon was about ‘renaming’ outsiders, he says.

According to De Dijn (2015) it, moreover, concerns a language that refuses to use judgmental terms or statements, because of the underlying idea that judgment can be – and often is – discriminatory. All autonomous choices made by individuals – which do not cause damage to third parties – must be tolerated and respected as such. However, Hughes points out that language is biased by definition. It is “a reflection of dominant ideologies, unhealthy prejudices, and limited notions of normality. Centuries of bias have become established, even entrenched, in prejudicial and stereotypical language” (2010, p. 16). What is more, although PC was well-received in the beginning, gradually attitudes shifted:

The attempt to reformulate such expressions in more neutral language [. . .] admirable though the motives were, has not received wholesale endorsement. After a period of initial acceptance, reactions ranged from measured criticism to outright hostility, ironic parody, and scornful rejection (Hughes, 2010, p. 16).

People started to feel oppressed and paralysed by the fear of saying something that might hurt the feelings of anyone belonging to a so-called victimized group. This provoked a counterreaction and it is said that at that point a new era of ‘mock’ politeness began (Suhr & Johnson, 2003), illustrated by the following quote: “I resent this ideological intrusion and its insolent dealings with our mother (perhaps I should say ‘parent’) tongue” (as cited in Hughes, 2010).



#### 2.4.2. A threat to free speech

“The entire ‘diversity’ movement has become a grand crusade to find offense in even the most innocent deeds”, so it is proclaimed (as cited in Lewis, 1996). In a recent article in which he highly criticizes what he calls the “flesh-eating bacterium of political correctness”, William Deresiewicz wrote that students no longer dare to speak freely among their peers and tend to keep quiet since there seems to be always something new people are not supposed to say “and worst of all, you often don't find out about it until after you have said it” (2017, p. 3).

According to Deresiewicz (2017), hate is not illegal, nor is giving offense. Moreover, it is all relative and subjective – what is hate to one person may not be hate to another, and what is offensive to someone might be another person’s deeply held belief. Suppressing the expression of such beliefs leads to self-censorship and this, in turn, suggests a genuine threat to free expression, he argues. There are other scholars as well who report that the concept of PC is by many people thought of as a form of censorship (Aston, 2011; De Dijn, 2015; Hughes, 2010; Lewis, 1996; Suhr & Johnson, 2003). Deresiewicz endorses that “free expression is an absolute; to balance it is to destroy it” (2017, p. 6), he constructs his idea on the following argument:

The test of your commitment to free speech as a general principle is whether you are willing to tolerate the speech of others, especially those with whom you most disagree. If you are using your speech to try to silence speech, you are not in favor of free speech. You are only in favor of yourself (Deresiewicz, 2017, p. 7).

#### 2.4.3. A utopian ideology

Many consider PC to be an ideology which disregards the actual reality. Paul Hollander definitely shares this view. He declares that “political correctness excludes the possibility that genuine differences may exist among groups of human beings that were not produced by morally reprehensible discriminatory attitudes, beliefs, or policies” (2013, p. 151-152). In this sense, the phenomenon can be seen as a form of perfectionism: reality must correspond to this idyllic image of absolute equality; and in order to achieve such correspondence, language policy is called upon. Everything seems to be solved by the choice of the ‘right’ words or the prohibition of incorrect language or symbols, while the real inequality – whether or not concealed – persists, so says De Dijn (2015). He additionally remarks that PC camouflages or ignores the diversity and sometimes harshness of reality in order to spare feelings, which indicates that it also concerns a form of sentimentalism. On these grounds, De Dijn asserts that political correctness is in a way the expression of a utopian mentality.

Part of this mentality, so states De Dijn (2015), is an attitude which implies that there are no degrees of ‘evil’: anything that deviates from the ideal is equally ‘bad’. Therefore, people who do not conform to the PC ideology, even in the smallest, are immediately associated with radically unacceptable behaviour. What is more, members of groups that are ‘suspected’ to make politically incorrect statements, often meet with prejudice or hostility, or as Deresiewicz (2017, p. 4) depicts it: “if you

are a white man, you are routinely regarded as guilty until proven innocent, the worst possible construction is put upon your words, and anything you say on a sensitive issue is received with suspicion at best". It is even stated that within the PC community, there exists an overall aversion to "groups, cultures, or values that are Western, white, heterosexual, or right-of-center" (Hollander, 2013, p. 152). On that account, Hughes (2010) states that there is a contradiction underlying PC: although its objective is liberal, often its practices are not.

As any ideology, political correctness can be taken to extremes: if there is an over-emphasis on its implementation, for example. When this strong mentality of PC becomes dominant in politics, entire civilizations evolve towards extreme political disruption and a counterreaction follows, De Dijn (2015) says, which can in fact be observed in current global news. However, the greater part of people adopts a moderate attitude towards the phenomenon. This will be elaborated on in the next section.

#### 2.4.4. Conveying good manners and social discretion

The majority of people that support and encourage PC does not try to stifle free speech and they do not believe in a perfectly equal world either. They equate political correctness with good manners and social discretion, which is close to the original intention. "Being PC simply means being sensitive to the meaning of the words we use", Joseph Friedman says (2017, p.9).

According to Thomas Roach it is most regrettable that the term has grown to convey so many negative connotations, "political correctness is a bad word for a good cause", he says (2017, p. 1). Not too long ago, people used certain terms that even the ones who now mock PC would probably find repellent, especially if it would concern their close relatives, Friedman (2017) says. This is often the case in the medical field, terms like *the crippled* or *retarded* were considered neutral in the past but became very offensive and condescending. As a result of PC, such words have been replaced: scholars now talk about a *person with a physical* or *cognitive disability* respectively, terms that show respect and do not define people by their disability. Thus, as Lewis (1996) puts it: "if being politically correct means using terms that are meant to empower people rather than to tear them down, then political correctness is a worthy goal", and it is this view that will be taken on in what follows.

### 3. People-first language

#### 3.1. Disability in society

According to statistics from the World Bank and the United Nations (World Bank, 2019; United Nations, n.d.), approximately one billion people, or 15 percent of the global population, experience some form of disability, which the *Americans with Disabilities Act* (ADA) defines as "a physical or mental impairment that substantially limits one or more major life activities" ('What is the definition of disability under the ADA?', n.d.). In this definition, 'major life activities' are to be interpreted as functions which form an integral part of people's daily lives such as performing manual tasks, caring

for one's self and bodily functions, for example: breathing, walking and talking, as well as immune system functions, digestion, etc. ('What are major life activities?', n.d.).

People with disabilities constitute a very large minority group which is highly inclusive and diverse: individuals of all ages, genders, ethnicities, religious backgrounds, socioeconomic levels, sexual orientations; they are all represented. "People who have been diagnosed with disabilities are all different from one another", Kathie Snow says, "the only thing they have in common is being on the receiving end of societal misunderstanding, prejudice, and discrimination" (2007, p. 1). What is more, as Snow points out, it is the only minority group that any person can join at any time: disabilities can be congenital, but also acquired as a result of an accident, illness or the aging process.

### 3.2. The impact of language in the area of disability

The language usage in the area of disability is packed with labels that stigmatise and convey prejudices towards a specific group of people. In educational settings, for example, children and adolescents were often labelled *learning disabled* or *mentally retarded* – terms that do not reflect the many other attributes of the child, but define a person's whole being by a disability, Guth and Murphy (1998, p. 115) remark. Joan Blaska (1993) states that spoken and written words and phrases as well as the order in which they are expressed largely affect the images that are formed about the people they refer to and consequently the resulting perceptions and attitudes. This assertion is underpinned by a study carried out by Granello and Gibbs (2016) on the effect of language and labels on tolerance toward people with mental illnesses. Participants who were presented with the non-PC term *the mentally ill* reacted differently than those presented with the postmodified phrase *people with mental illnesses*, that is, they responded with less tolerance toward people with mental illnesses. In addition, the label *the mentally ill*, they report, "resulted in much higher levels of authoritarian attitudes" (2016, p. 38).

What is more, not only other people's perception is affected, also "a person's self-image is strongly tied to the words used to describe her", Snow (2007, p. 4) points out. Individuals with disabilities are often portrayed as deviating from what is *normal*; they are *special* and require *special needs*, for example *special needs education* or *buitengewoon onderwijs* in Dutch. Being seen as special might be an honour for a fashion designer, but for people who have been singled out as not normal, excluded from participation and hidden away in special needs programs, being called *special* might only aggravate the situation, as Blaska (1993) argues. Perhaps some are not at all offended by the use of *special* – or any other label whatsoever – but this does not mean people should not be careful and respectful when referring to people with disabilities.

According to the United Nations, the media play a major part in the unremitting understanding gap and in stigma being reinforced:

Persons with disabilities are seldom covered in the media, and when they are featured, they are often negatively stereotyped and not appropriately represented. It is not uncommon to see persons with disabilities treated as objects of pity, charity or medical treatment that have to overcome a tragic and disabling condition or conversely, presented as superheroes who have accomplished great feats, so as to inspire the non-disabled (United Nations, n.d.).

A clear example of an expression that evokes feelings of pity and helplessness, is the phrase *confined to a wheelchair* – or *aan een rolstoel gekluisterd* in Dutch – which is, moreover, inappropriate as the wheelchair is actually a liberating vehicle that gives people part of their independence back (Blaska, 1993). On the other hand, stereotypes that portray successful individuals with disabilities as heroic overachievers, might serve as an inspiration for the general public, but for people in a similar situation they often raise false expectations (Research and Training Center on Independent Living, n.d.).

In order for people with disabilities to feel accepted in society, they need to hear and see themselves referred to in a respectful and accurate way. For that and other reasons, a purposeful shift in the English language was introduced in the 1990s to focus more on people's abilities rather than their disabilities and to not equate a person with a medical condition – it is this trend that constitutes the remainder of this chapter and a significant part of this paper as a whole.

### 3.3. People-first language

#### 3.3.1. Its origin

After examples such as the civil rights movement and the women's rights movement, the 1970s gave rise to the disability rights movement in the United States. To achieve a society for all, the human rights of people with disabilities were to be promoted in all aspects of social life. In the US this led to the *Americans with Disabilities Act* (ADA) that became law in 1990 (Research and Training Center on Independent Living, n.d.). According to James Kirszenbaum, it was the first time that self-advocacy by people with disabilities was involved:

Americans with disabilities demanded to be treated as “people first” before their disability. Tired of being misdefined by their “handicap” and judged by a set of misinformed stereotypes, some forward thinkers and self-advocacy groups proposed changing the language of disability, and reclaiming their own identity (Kirszenbaum, 2015, p. 5).

In those same lines, during the early 1990s, numerous articles started to be published in American literature on psychology and education in which scholars proposed a ‘people first’ approach: premodified nouns – such as *disabled people* – were to be replaced by postmodified nouns – *people with disabilities* – and older, dysphemistic terms were to be substituted by euphemisms or neutral terms (Halmari, 2011). Helena Halmari states that this proposal of people-first language is in line with the ideas of *linguistic relativism* by Benjamin Whorf, that is, that “the structure of a human

being's language influences the manner in which he understands reality and behaves with respect to it" (Whorf, 1976, p. 23). Thus, language was to be reformed in the hope that this would lead to a change in perception and attitudes towards the minority groups concerned.

Yet, by now, Whorf's hypothesis has been disproved by modern cognitive scientists and linguists, and so scepticism towards people-first language has increased (Kirszenbaum, 2015). However, according to Kirszenbaum, people-first language should be looked at in the other direction. The mere use of people-first language does not alter the attitude of the user, but it reflects a change of thinking that has occurred already. Taking the effort to consciously make word choices is an act of consideration and awareness of how language impacts others, and this can in fact lead to a change in attitude, he states.

### 3.3.2. Guidelines

As has been mentioned before, people-first language demonstrates respect for people with disabilities by putting the individual first and then referring to their disability if needed, and by dissociating the person from his or her medical condition instead of equating him or her with it (Blaska, 1993; Dickinson & Maryniuk, 2017; Guth & Murphy, 1998; Long, 1993). Mostly, a form of the verb *to have* is used to express the link between a person and a disability: it says what a person *has*, not what someone *is* (Snow, 2007).

However, people-first language is not restricted to only putting people first, there is much more to it. Over the years, various organisations and advocates have formulated different sets of guidelines for talking about disability which all put forward more or less the same prescriptions. Combining the ones suggested by the *American Psychological Association* as described in Halmari (2011), the ones described by Guth and Murphy (1998) and the ones published online by the *Research & Training Center on Independent Living* based at the University of Kansas (Research and Training Center on Independent Living, n.d.), I put together the following guidelines:

- I. As an overarching rule, put people first, not their disability: say *someone with a disability* instead of *a disabled person*.
- II. Do not label people with their disability, i.e. avoid equating an individual with his or her medical condition by using adjectives as nouns: use the phrase *a person with epilepsy* not *an epileptic*.
- III. Avoid emotionally biased language, i.e. state the facts in neutral terms so that there is no suggestion of helplessness and individuals are not portrayed as passive objects of pity and charity: use *someone who has* rather than *a victim of*, *someone who is afflicted with* or *someone who suffers from*, and say *someone who uses a wheelchair* instead of *someone who is confined to a wheelchair*.
- IV. Do not refer to a person's disability unless it is relevant to the context and particularly avoid statements in which a person is qualified *in spite of* his or her disability: say *Emma loves to*

*sing* instead of *Emma, who is in a wheelchair, loves to sing* and say *this student is very intelligent* not even though *this student is autistic, he is very intelligent*.

- V. When referring to people with disabilities, do so in an accurate way, i.e. do not overextend the severity or extend the scope of the disability, and do not present successful individuals with disabilities as superheroes: say *he has hearing loss* instead of *he is deaf*, and *he recovered from* not *he managed to survive*.
- VI. Lastly, respect is key; do not use offensive expressions such as *cripple*, *retard* or *freak* or condescending euphemisms such as *special* or *challenged*. Labels like these perpetuate negative stereotypes and beliefs and reinforce the idea that people with disabilities are not 'normal'.

Having a closer look at the preferred expressions, Halmari (2011) concludes that their syntactic form generally consists of a head noun plus a prepositional phrase starting with the preposition *with*, a participial phrase with *having* or a relative clause with *who* and a corresponding form of *have* or *use*. Alongside a change in the syntactic pattern, Halmari describes the introduction of new lexical euphemisms – such as *long term* for *chronic* – and the preference for abstract nominalisations – for example *paraplegia*. In this paper, lexical euphemisms will not be taken into consideration, instead, the focus will lie on the preferred syntactic patterns, concentrating especially on the first two guidelines – see chapter 3. Methodology for further explanation.

### 3.3.3. Research

Of all the research that has been done on people-first language in the English language, two studies stand out with regard to the spread of its usage: the one by Feldman, Gordon, White and Weber (2002) and the previously cited one by Halmari (2011). The former investigated the effects of people-first language and demographic variables on beliefs, attitudes and behavioural intentions toward people with disabilities and concluded, among other things, that individuals who have increased contact with people with disabilities generally use more current and PC language concerning disability. However, “while it appears clear the person-first language usage was known to the majority of the participants, there seems to be confusion as to the need for continual usage or perhaps toward the underlying purpose of the structured terminology” (Feldman et al., 2002, p. 24). The study used a sample population of more than 350 students involved in the field of counselling psychology and this makes the results even more problematic, Feldman et al. state. Only a minority used people-first language all the time and up to 20% of the participants never used the politically correct language at all. Of all the participants, master level students used people-first language most often while doctoral students were one of the groups scoring lowest, only slightly ahead of freshmen. A last important conclusion Feldman et al. obtained, implied that the participants who used less people-first language also “perceived greater professional-personal social distance between themselves and those with disabilities” (2002, p. 24), which suggests a different attitude about people with disabilities as well.

Halmari (2011) investigated how widely politically correct language has been adopted in everyday language usage. As has been mentioned before, people-first language was introduced in American literature on psychology and education and, over the years, many scholars in the respective fields and numerous government organisations explicitly started to use it. However, the language shift did not permeate contemporary newspaper articles as quickly. In the electronic archives from 2002 to 2007 of the *Houston Chronicle* – which is the seventh largest newspaper in the US and which generally takes a rather liberal viewpoint – over 70% of the phrases referring to people with disabilities are found to be non-PC, favouring premodification. “It is surprising that a prominent daily newspaper such as the *Houston Chronicle* would resort to a pattern deemed by many as insensitive”, Halmari remarks (2011, p. 837). Possible reasons, she believes, are the need for brevity in headlines as well as variation in expression and the aim to sell stories using ‘catchy’ and shocking phrases, which may indicate that editors consider it a bigger priority to make news than to use respectful and inclusive language.

However, the distribution of PC and non-PC phrases is not random, Halmari points out. The non-PC syntactic pattern tends to appear in contexts where the phrase refers to ‘undesirable’ societal elements – people in prison, for example – or “to fictional characters, whose feelings by definition cannot be hurt” (2011, p. 838) – which is the case, for instance, in movie descriptions. The PC forms, by contrast, are reserved for children and innocent adults. This, so she states, “reveals a hypocrisy of sorts according to which some groups are seen as more deserving of the ‘people first’ language than others” (2011, p. 838).

To make sure that the results found in the *Houston Chronicle* are not unique, Halmari compared the data to the language usage in the ideologically more diverse database *Google News* covering the same time period. Overall, the findings coincided and the same patterns appeared, although there were many more lexical elements found in the latter that are considered non-PC, such as the offensive term *retard*. As there were no such terms found in the *Houston Chronicle*, the newspaper “cannot be accused for blatant insensitivity”, Halmari says (2011, p. 832). Yet, the high percentage of non-PC phrases is baffling and cause readers to be continuously exposed to non-politically correct forms, which does not encourage the use of people-first language among the general public.

#### 3.3.4. In other languages

As disclosed in earlier paragraphs, people-first language has its origin in the United States, which is why until now the focus has been exclusively on English. However, the question arises whether the same or a similar language shift has taken place in other languages. Halmari (2011) briefly mentions how in Spanish there is no preference for one syntactic form over another as postmodification is already the norm: the non-PC phrase *retarded student* in English can be translated into the Spanish non-PC phrase *estudiante retardado* or the preferred *estudiante con deficiencia mental*, in both phrases people come first. Here, the main issue is lexical euphemism rather than any syntactic pattern.

Apart from this short note, however, there is very few data to be found on the spread of people-first language in other languages. One might guess that, by analogy with Spanish, other languages where postmodification is the norm also rely on lexical euphemisms to refer to people with disabilities in a politically correct way, but there does not seem to be any scientific underpinning. Languages that allow both pre- and postmodification are an even bigger question mark. And what about Asian languages like Thai or Chinese?

People-first language does seem to have found its way into Dutch, a language that is closely related to English and shares many linguistic and syntactic features. Although there are no academic sources to be found discussing people-first language in Dutch, there are various Dutch-speaking advocates who formulate similar if not the same guidelines for talking about disabilities in their language as the ones described earlier (Correct taalgebruik, n.d., Taalwijzer, n.d. and Willekens, 2016). Examples are *mensen met een handicap* [people with a disability] as opposed to the non-PC phrase *gehandicapte mensen* [disabled people] and the PC form *iemand met schizofrenie* [someone with schizophrenia] versus *a schizofreen* [a schizophrenic]. Yet, again there is no scientific support to indicate to which extent people-first language has become part of the Dutch language, at least until now. With this paper I hope to take a first step in roughly mapping the use of this politically correct language in Belgian Dutch. Before I proceed to do so, however, I will turn my focus away from people-first language and have a closer look at medical terminology and how it relates to translation, two other prominent aspects of this paper.



## Part II. Medical terminology and translation

### 1. The medical translation practice

Research in *Translation Studies* is wide-ranging. It covers a diversity of topics – including translation ethics and the process of translating itself. Also terminology constitutes an interesting and important part. Languages evolve continuously and so do the specific words and expressions that are used in relation to a certain subject or activity. The technical terms that are to be found in each field of expertise are numerous – while biologists may talk about *phospholipid bilayers*, economists discuss the *due diligence* of a company and physicians try to find a cure for *Fibrodysplasia ossificans progressiva*. It is the specialised language of the latter discipline that forms one of the main topics of this paper. Therefore, this chapter of the literature overview will give more insight into the medical translation practice as such, including a brief history, its characteristic features, a special part will be dedicated to medical terminology and also the profile of a medical translator will be discussed.

#### 1.1. A brief history

One of the oldest fields of translation is the one concerning medicine, for archaeological findings indicate that medical translation dates back up to 3200 BC. In their book *Medical Translation Step by Step*, Montalt and González-Davies (2007) explain how during the times of Ancient Mesopotamia, medical knowledge – along with chemical, mathematical and astrological information – was gathered in various languages on clay tablets by means of what is called cuneiform symbols. “These archaeological findings”, so they note, “suggest an intense translation activity long before paper and the alphabet were invented” (2007, p. 15).

The concept of translation evolved as centuries passed. Latin took on the role of *Lingua Franca* once scientists started to pursue a wider distribution of their work. At the same time the political importance of vernacular languages increased and so did the corresponding literature. Therefore, two translation tendencies became prominent: the one between Latin and vernacular languages, and the one between the vernacular languages themselves (Montalt & González-Davies, 2007).

As Montalt and González-Davies (2007) point out, the translation of scientific topics into Latin died out halfway the 18<sup>th</sup> century. The need for translation, however, did not. After languages as French and German took on increasing importance, soon English became the new *Lingua Franca* of distribution and a general trend towards globalisation followed. Yet, English is not the only language of production. “The existence of a lingua franca does not necessarily reduce the amount of translation. Most professional translation in the field of medicine or related areas involves English either as a source language or as a target language” (2007, p. 18).

In the *Handbook of Translation Studies* compiled by Gambier and Van Doorslaer (2010), Montalt explains this aspect further. In recent years, most research on medical topics is published in English and then exported to vernacular languages and cultures. Therefore, English is the main source language in medical translation. At the same time, it is a significant target language as “biomedical

researchers from all over the world need to publish their results in English if they want to make them known to the international community” (Montalt, 2010, p. 80). As a result, many studies originally written in a vernacular language, are being translated into the *Lingua Franca*, although with the increasing level of English among non-native speakers, more and more scholars all over the world now publish directly in English instead of their native language.

## 1.2. Characteristic features

All types of translation share certain features, such as the aim to facilitate communication between different linguistic communities and the difficulties encountered when dealing with cultural differences (Montalt & González-Davies, 2007). However, there are aspects that distinguish them from one another as well. What follows are the most important characteristic features of medical translation.

Fischbach (1986) initially underlines the universal character of the subject to be translated. The anatomy of the human body is practically the same across the globe and although there often exist variations of a specific disease or disorder, a Vietnamese cold is probably not exceedingly different from a Peruvian one. According to Fischbach this facilitates the medical translator’s work.

Another factor, as reported by Fischbach, that works to the advantage of the medical translator is the rich and highly documented history of medicine. “Health and disease are at the very core of our existence and, on a par with religion, have preoccupied man longer and more deeply than perhaps any other concern”, he says (1986, p. 20). As a result, medical translators can rely on a considerable amount of pertinent reference material that is widely available.

Furthermore, Fischbach points out one more factor that ought to simplify medical translation: the fact that most medical terminology is primarily of Latin and Greek origin and has spread all over the western world in its original linguistic form, since these languages were characteristic of the language of medicine during most part of recorded history. According to other scholars, however, this can in fact be a source of translation problems (Dobrić, 2013; Jiménez-Crespo & Sánchez, 2017; Montalt, 2010). Given that the specific terminology makes up a decisive part of medical translation – as well as the translation tendencies involved – this topic will be dealt with in a separate paragraph.

One of the main difficulties of medical translation is the required specialisation of the translator in many different fields. The discipline of medicine in its broadest meaning consists of an endless list of branches and specialties, such as neurology, pharmacology, paediatrics, endocrinology and haematology. Factual comprehension is essential, for “gaps in the translator’s medical knowledge of the different specialties often give rise to comprehension problems”, remark Montalt and González-Davies (2007, p. 20).

Having insight into the content of the source text is, moreover, not sufficient to generate reliable and adequate translations. Montalt (2010) notes how it is also necessary to understand how texts operate formally, socially and cognitively both in the source as in the target language and culture.

The spectrum of genres that is covered by medical translation is exceptionally broad, since it ranges from highly specialised articles – published in scientific journals – to information brochures for patients and documentaries about health. Consequently, medical translators have to deal with and master all sorts of registers and their corresponding terminology.

A final characteristic feature is the fact that medical translation is frequently affected by medical ethics and responsibility (Montalt & González-Davies, 2007). Medical translators must act with care as accuracy and reliability of information is of vital importance, as well as confidentiality and sensitivity towards patients (Montalt, 2010). This aspect will become more apparent in chapter 2. The impact of medical terminology.

### 1.3. Medical terminology

#### 1.3.1. Medicalese

Medical terminology has been evolving throughout the centuries. As mentioned before, a major part of the technical terms is derived directly from Latin or Greek – e.g. *nephritis* with the suffix *-itis* referring to *inflammation* and the entire word conveying the meaning *inflammation of the kidney* (Nephritis, n.d.). Usually, these words are adapted to the phonetic, orthographic or morphological norms of the languages in which they are used. Compare, for example, *nephrectomy* in English with its equivalents *nefrectomie*, *néphrectomie* and *nefrectomía* in Dutch, French and Spanish respectively. Sometimes, the opposite occurs and a Greek or Latin prefix or suffix is combined with a local root, as in *biofeedback* (Dobrić, 2013).

Currently, the field of medicine evolves rapidly: new medical concepts emerge and so do the corresponding terms, which makes medical terminology highly dynamic. Since the most influential medical journals are published in English, many new medical terms are exclusively of English origin, for instance *bypass* or *screening* (Dobrić, 2013). They are often considered to be part of a formal or technical register with a special medical status (Young, Norman & Humphreys, 2008). Many researchers use the term *medicalese* to refer to this form of specialised language in the field of medicine, both with regard to derivations from Latin or Greek, as well as English-based jargon. (Birnbaum, 2014; McGlade, Milot & Scales, 1996; Norman, Arfai, Gupta, Brooks & Eva, 2004; Young, Norman & Humphreys, 2008).

#### 1.3.2. Terminological issues

As discussed before, most research on medical topics is published in English and then exported to vernacular languages and cultures. During such translation processes most of the time is spent on detecting and solving terminological problems (Montalt & González-Davies, 2007). On the one hand, medical translators encounter similar problems to the ones other translators come across. There always exist certain linguistic and semantic areas that do not correspond between the source and target language – e.g. cultural references such as national institutions or organisations.

Sometimes a cultural equivalent in the target language can offer a way out, in other cases explanatory commentary is required, for example by means of a footnote (Rask, 2008).

On the other hand, however, there are some terminological difficulties that characterize the medical translation practice. As has been pointed out, new terms are constantly being introduced into the medical field, mostly in English. Surely at that point, these terms do not have a lexical equivalent yet in vernacular languages. Katja Dobrić – currently working for the Department of Foreign Languages at the University of Rijeka in Croatia – considers two main translation tendencies with respect to medical terminology: “if the concept is new and not yet employed in the target language one can either leave such terms in the original language in a translated text [...] or create a new term” (Dobrić, 2013, p. 500). In *Medical Translation Step by Step*, Montalt and González-Davies (2007) call these tendencies respectively *in vivo* terminology – the original medical term is used as a loan word in the vernacular language – and *in vitro* terminology – the term is adapted to the target language.

In 2013, Dobrić carried out a study to determine the respective approaches of two vernacular languages, namely German and Croatian. She found that in German the former principle of keeping the original medical term is more often applied, while in Croatian there seems to be a tendency towards the latter principle. Furthermore, Rask (2008) identified the main translation problems when translating a medical text from English into Swedish and underlines the importance of accuracy and therefore promotes the use of *in vitro* terminology – thus, adaptation to the target language, in this case Swedish – in order to achieve effective professional documentation and communication. According to Dobrić (2013), the question still remains whether it is more important to adapt medical terminology to the national languages in which they are used, or if the comprehensibility for the international medical community, the voice of which is English, should be given priority.

These two tendencies – using English terms to stick to the international medical community versus creating national equivalents – generate a great quantity of synonyms in medical language (Dobrić, 2013). Moreover, in addition to the medicalese or scientific terms – irrespective of whether it concerns *in vivo* or *in vitro* terminology – less specialised equivalents may be created in the local language or may already exist if the medical condition that is referred to, has only recently been described and treated as such while the concept has been known for a long time, for example *impotence* as opposed to *erectile dysfunction disorder* – see paragraph 2.2. Trend of medicalisation for more information. These less specialised equivalents are called lay terms and give rise to even more synonymy relations among words (Montalt, 2010).

Rask (2008) remarks that said abundance of synonyms makes the work of medical translators a lot harder since they have to determine which term – out of a wide variety of words – is the most adequate one to refer to a specific medical concept in a certain target culture. Sometimes, there is only one term in the source language while there exist both a scientific and lay equivalent in the target language. In addition, one and the same word – whether or not adapted to the phonetic, orthographic or morphological norms of the languages in which it is used – may be considered to

be lay in one culture and medicalese in another. For example, according to a study that was conducted by Jiménez-Crespo and Sánchez in 2017, a lot of terms of Latin origin that are considered to be medicalese in English, are used in non-specialised contexts in Spanish. This difference in register can be attributed to the fact that Spanish is more closely related to Latin than English. This way, if a Spanish health brochure for patients is to be translated to English, it would be incorrect to blindly take over a Latin term into the target text as this might produce a shift in register, a so-called *register mismatch* (Jiménez-Crespo & Sánchez, 2017).

#### 1.4. Profile of the medical translator

In the literature on medical translation, many words have been shed on the discussion as to who translates – or *should* translate – medical texts: traditional linguists or subject matter experts. In 2018, Ana Muñoz-Miquel carried out an empirical descriptive study surveying practicing medical translators which confirms that they do not have a uniform academic background. Translators with a linguistic background predominate, but “the high percentage of professionals who have studied Medicine or Biology proves how permeable medical translation is to different scientific academic profiles”, she says (Muñoz-Miquel, 2018, p. 47). Their subject matter knowledge works without any doubt to their advantage.

She compared said translators with a scientific or medical background (who she named TSBs) and translators with a linguistic background (TLBs) in terms of years of experience, difficulties encountered, documentation resources used, training needs, etcetera. The results show that TSBs have more years of experience in translating medical texts and Muñoz-Miquel attributes this result to the fact that the discipline of Translation Studies is a fairly young one. For a long time, no such academic programs existed to prepare students of Translation for the medical field. It is possible that for this reason, TSBs initially occupied the position of medical translator to meet the market demand (Muñoz-Miquel, 2018).

When it comes to the difficulties that both groups of translators encountered, there is a clear distinction. While TLBs refer to translation problems regarding conceptual and terminological aspects, TSBs report experiencing difficulties mastering their native language at the appropriate level, and having limitations with respect to technological tools (Muñoz-Miquel, 2018). Along the same lines, Muñoz-Miquel points out that both profiles appeal to self-teaching or postgraduate courses to “acquire the competences that their respective graduate qualifications would not have provided” (Muñoz-Miquel, 2018, p. 47).

Whoever it is that carries out the medical translation, it is certain that he or she bears a tremendous responsibility. It is not hard to confuse *abasia*, *aphagia* and *aphakia* – meaning respectively the inability to walk, the inability to swallow and the absence of the lens of the eye (Abasia, n.d., Aphagia, n.d. and Aphakia, n.d.) – but wrong translations can have far-reaching ramifications on many different levels. The next and last chapter of this literature overview will be dedicated to the overall impact of medical terminology.

## 2. The impact of medical terminology

### 2.1. Physician-patient communication

It can be stated that physicians and patients use different kinds of languages during consultations. In addition to their everyday speech, physicians fluently use medical language – often times referred to as *medicalese* (Birnbaum, 2014; McGlade, Milot & Scales, 1996; Norman, Arfai, Gupta, Brooks & Eva, 2004; Young, Norman & Humphreys, 2008). Patients, by contrast, only dispose of the non-technical terms they know – also called lay terms – as they are unfamiliar with the greater part of medical terminology (Birnbaum, 2014).

In his *Handbook of Analytic Philosophy of Medicine*, Sadegh-Zadeh (2012, p. 49) describes medical language as “an expansion of natural, everyday language by adding technical terms”. These terms are often difficult to grasp, and unheard-of by the general public. Therefore, when it comes to physician-patient communication, Nordby argues that “unless there is evidence to the contrary, a patient should be regarded as someone who does not know much about the meaning of special medical terminology” (2008, p. 358). According to Birnbaum (2014), however, this is not always the case in reality and physicians use patient-inappropriate language more often than they realise.

What is more, although it seems self-evident that printed health information addressed to the lay audience is written in patient-appropriate language, Kari Sand-Jecklin (2007) points out that most health-related literature is written at a level that is too difficult to understand for the general public. The results of her research suggest that the difficulty of a text decreases – but yet remains beyond the recommended level – when medical terminology is removed and replaced by everyday health terms.

Minimizing the medical jargon and using lay terms instead is no guarantee for successful physician-patient communication, says Nordby (2008). The idea that, when using non-technical vocabulary, physicians and patients typically understand each other is mistaken. “The problem with most lay health concepts is that they do not have standard definitions, [ . . . ] patients think they are entitled to understand them in ways that do not necessarily correspond to a professional understanding”, he explains<sup>5</sup> (2008, p. 359). Sadegh-Zadeh illustrates this notion with a clear example:

When did you last say to someone that you had a headache? Did the listener understand what you meant? If you now reply ‘yes’, how do you know that? Perhaps she usually means by the term ‘headache’ something different than you do. How can we find out whether or not this assumption is true? (Sadegh-Zadeh, 2012, p. 29)

For this reason, it is sometimes necessary for physicians to use medical terminology to provide adequate and precise health information. However, both Nordby (2008) and Birnbaum (2014) underline how important it is that physicians – when they first mention certain medical terms – explain them using common, everyday language. “Extensive use of *medicalese* [ . . . ] may lead to

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<sup>5</sup> An idea that has been put forward by Perloff, Bonder, Ray, Ray & Siminoff (2006) as well.

patients' incomplete or inaccurate understanding of information communicated in conversations with their physicians with subsequent inappropriate conceptualizations of disease", Birnbaum states (2014, p. 4).

The best approach is thus to use a combination of expressions. Communication does not necessarily fail when lay terms are used, on the contrary, it is every so often the most natural and convenient choice. However, if there is any uncertainty regarding the understanding of the lay terms concerned – as is often the case according to Nordby (2008) – physicians should fall back on medical terms. "Most patients accept, and sometimes prefer, the use of medical terminology", Birnbaum furthermore notes, provided of course that "these words are explained in parallel with lay terminology" (2014, p. 3).

## 2.2. Trend of medicalisation

Over the last decades there has been recorded an unmistakable trend of *medicalisation*, i.e. "a process by which nonmedical problems become defined and treated as medical problems, usually in terms of illness and disorders", explains Conrad in his book *The Medicalization of Society* (2007, p. 4). While, for example, attention-deficit/hyperactivity disorder (ADHD), post-traumatic stress disorder (PTSD) and premenstrual syndrome (PMS) are now commonly known conditions, there was no mention of such maladies forty or fifty years ago, he says. However, these problems have always existed, modern society was not stricken by a sudden epidemic of medical conditions. Extensive research, technology and new evidence, among other factors, have all contributed to the increasing knowledge and awareness within the medical field which made it possible to identify such problems.

As a result of this trend towards medicalisation, the number of medical terms in languages across the globe has increased significantly, remark Young, Norman and Humphreys (2008), since the shift from a general life problem to a medical condition often coincides with a shift from everyday language to medicalese. For example, in a professional setting where English is the operating language, a physician will not talk about *impotence* – a word that has been around in the English language for centuries – but about *erectile dysfunction* – which has been added as a draft to the *Oxford English Dictionary* in 2016 (Erectile dysfunction, 2016; Impotence, n.d.). This does not go without consequences. Research results suggest that using medicalese to label newly medicalised conditions can lead to a change in the public perception of the disorders or illnesses concerned (Norman, Arfai, Gupta, Brooks & Eva, 2004; Young et al., 2008).

Norman et al. (2004) found that people without professional knowledge as well as medical students accord medicalese terms special status – a value of prestige as it were – which has an impact on judgments of seriousness, amongst others. When a physician renders a diagnosis in medicalese, patients tend to take the news significantly harder and more serious, and this "appears to be attributed to prestige rather than to transfer-appropriate processing" (2004, p. S82). Also Young et al. (2008) report that people consider medicalese labels to be more serious than their lay terminology counterparts when describing recently medicalised disorders.

Moreover, both the studies of Norman et al. (2004) and Young et al. (2008) indicate that medical language in communication results in disorders and illnesses being perceived as less prevalent – i.e. more probable to be a rare condition – in comparison with everyday language. These findings “are consistent with previous literature demonstrating that conditions that are rated to be more serious, are also likely to be rated as less prevalent”, so note Young et al. (2008, p. 5). In addition, both studies demonstrate that medicalese can have an impact on judgments of likelihood of disease as well: people consider medical descriptions to be more representative of a condition. Thus, to give a specific example, if a patient is diagnosed with *adenopathy* s/he might think s/he is more severely ill, and suffers from a medical condition that is more rare and more representative of a disease than if s/he would have been diagnosed with *swollen glands*.

It should be remarked that the research results set forth regarding the impact of medicalese language are “not due to the difference in severity levels between the recognized medical disorders and recently medicalized disorders” (Young et al., 2008, p. 5). They are, however, particularly characteristic to the latter – the impact of medical terminology might be different for established medical conditions. Furthermore, according to Young et al. it is important to note that the correlation between the shift towards medicalese and the changing public perception might be two-directional, that is, it is possible that they influence each other.

### 2.3. Impact on individuals

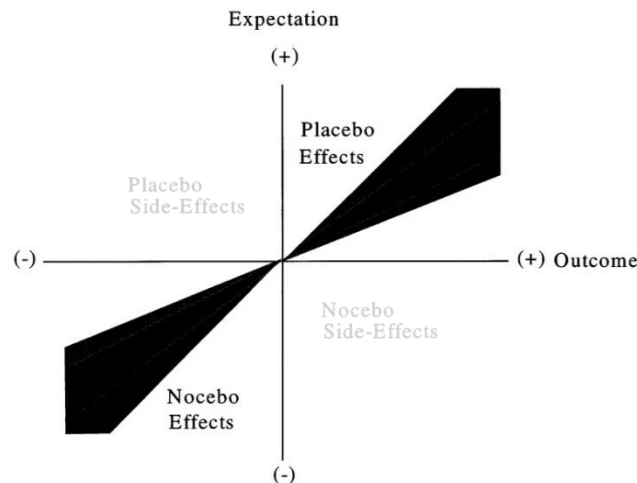
Already at the very beginning of this literature overview, it has been mentioned that words can hurt; this idea is very old and has been scientifically underpinned. Fact is that besides complicating the comprehension of communication and changing the public perception of medical conditions, medicalese can also have clear consequences for the patients themselves, as will be discussed in further paragraphs. Any consultation or medical treatment is perceived within a certain context – widely determined by the words, attitudes and behaviour of physicians and nurses – which can have an impact on a patient’s coping strategies and even the effectiveness of the treatment (Benedetti, 2002).

In the first place, a recent study suggests that the terminology used to identify a medical condition has an influence on whether as well as when patients seek medical care (D’Angelo, Humphreys, Li & Young, 2017). Especially for recently established disorders – of which the public perception is yet in progress – participants of the study indicated that they considered treatment more urgent when the diagnoses were described using medicalese than when they were presented in common language. These findings are in line with the results of Young et al. (2008) – see 2.2 Trend of Medicalisation – for they demonstrated that people consider newly medicalised conditions to be more serious when described with their medical label.

Secondly – leaving medicalese language aside for one moment and considering words in general – healthcare providers should be aware of the potential *nocebo effect* their words can induce. A *nocebo* – or negative placebo – effect is said to occur when a patient’s negative expectations with respect to a treatment in fact cause the treatment to have a more negative outcome than it was



supposed to have (Hahn, 1997). In the past, the commonly known placebo effect was distinguished from the nocebo effect only in terms of positive and negative outcomes, expectations were not taken into consideration. In doing so, nocebos were equated with placebo side-effects, but according to Hahn there is a clear distinction: “placebo side effects occur when expectations of healing produce sickness, i.e., a positive expectation has a negative outcome [ . . . ] In the nocebo phenomenon, however, the subject expects sickness to be the outcome, i.e., the expectation is a negative one” (1997, p. 607). *Figure 2* gives an overview of the relations between expectation and outcome for both the well-known placebo and the nocebo effect, and their side-effects respectively.



*Figure 2: The placebo and nocebo effect: relations between expectation and outcome. After the model used by Hahn (1997).*

In 2005, Elvira Lang and her team conducted a study on the question whether words can actually hurt. Their research results indicate that the answer is yes. Commonly held belief has it that it helps patients to guide them through medical procedures by warning them for possible upcoming painful sensations or unpleasant emotions – for example announcing a *sting* and a *burn* when applying local anaesthesia – and by sympathising with them after such events. However, Lang et al. (2005) report that this form of communication – using negatively-loaded language – provokes increased distress and worse pain as a result of the previously described nocebo effect. In addition, “sympathizing with the patient in such terms after a painful event did not increase reported pain, but resulted in greater anxiety”, they note (2005, p. 303). To avoid biasing patients toward perceiving more pain and anxiety, Lang et al. suggest the following:

We believe that prior to the procedure is the appropriate time to inform the patients of the possibility of discomfort and explain how it will be managed. During the procedure, standard pain scales and questions such as ‘what are you experiencing?’ instead of ‘did that hurt much?’ would then be more appropriate and neutral statements or ‘positive suggestions’ which focus on a competing sensation, a desired outcome, or provide distraction could be the focus of provider communication (Lang et al., 2005, p. 308).

In those same lines, Benedetti asks the question: “Does it make any difference whether the doctor gives the patient a painkiller and says ‘It may work’ or ‘It does work’?” (2002, p. 370). Again, the

answer is yes. In 1987, Kristen Thomas carried out a study comparing the effects of positive as opposed to negative general practice consultations in which no definite diagnosis could be made. In the positive encounters, patients were assured confidently that they would be better in no time and that either no prescription was required or that the prescribed treatment would most definitely work. In the negative encounters, by contrast, no firm assurance was given, and the physician said something in the lines of “I do not know for sure what your problem is”, adding either “therefore I will give you no treatment” or “I am not sure that the treatment I am going to give you will have an effect” (Thomas, 1987, p. 1200). The ‘treatment’ was a prescription for innocent tablets used as a placebo. Two weeks after the medical encounter, a significant difference was observed in recovery between the positive and negative groups of participants, but not between the treated and untreated ones. These results demonstrate that the words healthcare providers use, have a definite impact on the patient’s recovery and outcome.

The research described above shows that the impact of words is not to be underestimated and that people should choose their words wisely – whether it concerns assuring versus reticent words, or medical terminology versus lay language. The consequences of the terms and phrases used can be far-reaching and are related to a wide range of aspects – from comprehension to perception, and from decision-making to outcome, to only name a few. These results can, moreover, serve as a motivation to carry out more and further research, not only in English but also in any other modern language.

### 3. Conclusion

In this literature overview, I sought to provide the needed background in order to situate this paper within a broader context. Two overarching topics were addressed: the first part of this literature overview considered the impact a person’s choice of words can have, with a particular focus on the politically correct people-first language in the area of disability. The second part dealt with medical terminology, more specifically, the medical translation practice and the impact of scientific as opposed to lay terms. Various interesting considerations were covered, such as the implication that people-first language does not seem to be as prevalent in everyday language as one might expect, and the differences in perception when using medicalese in contrast with lay terminology.

However, it looks like there is a gap in research coverage, as the majority of the available studies predominantly concentrate on the English language. It is not clear, for example, whether and to which extent the trend of people-first language has found its way into non-English speaking cultures nor which influence the use of medicalese has in other languages. In this paper I provide some initial data on people-first language and medical terminology in Dutch – as it is spoken and used in Belgium – and how they relate to translation from English into Dutch. By doing so, I hope to open the door to further research and to encourage people to think about the impact their words can have.



## Chapter 3. Methodology

### 3.1. Data collection

#### 3.1.1. Corpora

In order to answer the first two research questions, relevant source material is needed. As expressed in the introductory chapter, three corpora of articles within the genre of popular science reporting were compiled. In the context of a translation internship as part of my Master course, I received full access to the archives database of *Eos Wetenschap*, a popular science magazine that informs the general Dutch-speaking public from Belgium and the Netherlands about scientific and technological achievements at local and international level. To be more precise, Eos is a multimedia platform – consisting of three printed magazines (*Eos Wetenschap*, *Eos Psyche & Brein* and *Eos Specials*), three websites and five weekly electronic newsletters – that publishes both original articles as well as translations of international publications. Eos works in collaboration with editorial offices in the United States, Germany, France, Spain and the United Kingdom, among others, which allows them to translate articles from eminent sources such as *The Conversation*, *Nature* and *Scientific American* into Dutch.

For the first corpus, 20 articles were selected, mostly published by *Eos Psyche & Brein* between 2010 and 2018 approximately. They are all translations from English articles published by *Scientific American*, or *Mind* more specifically, a magazine that concentrates on psychology and neuroscience, and relates to *Scientific American* as does *Eos Psyche & Brein* to *Eos Wetenschap*. The 20 corresponding English source texts were collected online – see *Appendix 1* for a list of the respective parallel headlines and their original author. The source and target texts were then aligned with the *AutoAligner* tool of *Wordfast Anywhere* and a parallel corpus was set up in the text analysis software *Sketch Engine*, with the English part counting 70,475 words and the Dutch part 64,689. However, as will be explained under paragraph 3.3.1., *Sketch Engine* has not been used to collect data from this corpus but served as a checking tool.

The second and third corpora are compilations of Dutch articles that are also mostly published by *Eos Psyche & Brein* between 2010 and 2018 approximately. The former consists of 50 non-translated and thus original Dutch articles and counts 89,589 words in *Sketch Engine*. The latter compiles 30 translated articles from source languages which are not English but German or Italian, for example. This corpus counts 85,787 words in *Sketch Engine*. The headlines of these articles together with their authors are listed under *Appendices 2* and *3*.

#### 3.1.2. Survey

In the context of the third research question, a Dutch survey was set up that was targeted at the general public of Flanders. The survey was built with the online survey development software *SurveyMonkey* and consisted of 17 questions: six personal questions about the participant's profile, ten substantive questions and an optional question asking for possible remarks on the survey. The personal questions were related to gender (Q1), age (Q2), province of Flanders where they primarily

grew up (Q3), highest diploma obtained (Q4), whether they know someone with a disability and if so, which disability this person has (Q5) and what their relationship is with him or her (Q6). The substantive questions can be categorised into two main types: there were six open questions with regard to political correctness and people-first language, and four ranking questions regarding medical jargon versus lay terms.

The six open questions, on the one hand, asked the participants how they call people with a certain disability, namely someone with autism spectrum disorder (Q8), a person who uses a wheelchair (Q10), a person with Down syndrome (Q11), someone with cystic fibrosis (Q12), a person with a mental disability (Q14) and a child with attention deficit hyperactivity disorder (Q15). After the survey had been launched, however, the decision was made not to include phrases referring to people using a wheelchair into this paper's research. That is why question Q10 is left aside and will not be discussed any further.

The ranking questions, on the other hand, asked participants to rank a list of diagnoses in order from what they found to be the most severe one to the least severe one. There were two sets of two parallel lists. Each list consisted of four scientific and four lay terms of which the corresponding lay and scientific terms respectively were to be found in the parallel list. Thus, to give an example, the first ranking question (Q7) contained *griep* [flu] as a lay term, its corresponding scientific term *influenza* was given as one of the diagnoses in the parallel list that was presented later on (Q13), and as the lay term *woordblindheid* for *reading disorder* was to be found in the second ranking question (Q9), its parallel list (Q16) contained *dyslexie* [dyslexia] as one of the scientific terms. The participants were not informed about the duality of the questions; to them they were presented as four different ranking lists. In addition, they were asked to answer instinctively and not to look up information about terms they might not know. This way, I sought to compare the perceived severeness of the referenced medical conditions.

## 3.2. Selection of variables

### 3.2.1. PC versus non-PC

Under paragraph 3.3.2. Guidelines of the chapter on people-first language of the literature overview, guidelines were given for talking about people with disabilities in a politically correct way in English. As mentioned later on in the same chapter, there are various advocates who formulate similar if not the same guidelines in Dutch. This study focuses on the two most prominent prescriptions, which are:

- I. Put people first, not their disability.
- II. Do not equate an individual with his or her medical condition.

More precisely, in order not to equate, relative clauses with a corresponding form of the verb *hebben* [to have] are preferred over the use of the verb *zijn* [to be], whether or not they contain a negation. Additionally, prepositional phrases starting with the preposition *met* [with] or its opposite *zonder* [without] are preferred over adjective phrases, compound words and lexical equations, and their

opposites with *niet-* [non-]. *Table 1* shows the PC phrases that are taken into consideration and which are reduced to simplified patterns with *x* referring to a person and *y* standing for a medical condition or symptom, examples in Dutch are formulated and a translation in English is provided. *Table 2* shows the same for the non-PC phrases:

PC pattern	Example in Dutch	Translation in English
<b>x heeft y</b>	persoon die schizofrenie heeft	person who has schizophrenia
<b>x met y</b>	persoon met schizofrenie	person with schizophrenia
<b>x zonder y</b>	persoon zonder schizofrenie	person without schizophrenia
<b>x met en zonder y</b>	mensen met en zonder schizofrenie	people with and without schizophrenia

*Table 1: PC patterns*

Non-PC pattern	Example in Dutch	Translation in English
<b>x is y</b>	hij of zij is schizofreen	he or she is schizophrenic
<b>y (adj) x</b>	een schizofrene persoon	a schizophrenic person
<b>y-x</b>	een schizofreniepatiënt	a schizophrenia patient
<b>y=x</b>	een schizofreen	a schizophrenic
<b>niet y (adj) x</b>	een niet-schizofrene persoon	a non-schizophrenic person
<b>niet y-x</b>	een niet-schizofreniepatiënt	a non-schizophrenia patient
<b>niet y=x</b>	een niet-schizofreen	a non-schizophrenic

*Table 2: non-PC patterns*

Two remarks have to be made on the PC and non-PC patterns. Firstly, the patterns *x heeft y* and *x is y* also include negative clauses, for example *persoon die geen schizofrenie heeft* [person who does not have schizophrenia] and *hij of zij is niet schizofreen* [he or she is not schizophrenic]. Secondly, in some cases *y* stands for more than one medical condition or symptom. For example, the hypothetical phrases *persoon met schizofrenie en diabetes* [person with schizophrenia and diabetes] and *de patiënt heeft hoofdpijn, koorts en huiduitslag* [the patient has a headache, fever and skin rashes] would be simplified to *x met y* and *x heeft y* respectively, not to *x met y and z* and *x heeft u, v and w* or something alike.

### 3.2.2. Medicales versus lay

For the research subquestions regarding medicales versus lay terminology, a defined glossary of Dutch terms to be investigated was compiled through a funnel-shaped process. The input and thus the foundation of the glossary comprises an extensive binary list of Dutch scientific medical terms and their popular equivalents, which was set up by *Ghent University* (Belgium) as part of a multilingual database, a project commissioned by the *European Commission*<sup>6</sup>.

<sup>6</sup> See <https://users.ugent.be/~rvdstich/eugloss/welcome.html>

In this study only nouns and noun phrases describing medical conditions and symptoms – for which both a scientific and lay term exists – are taken into consideration. Therefore, as a first step in the process, a thorough selection was carried out eliminating all terms related to human anatomy, pharmaceutical substances and medical procedures, such as *zenuwknoop* [ganglion], *braakmiddel* [emetic], *weefselonderzoek* [biopsy] and their scientific equivalents. Examples of terms that are preserved are *zenuwpijn* versus *neuralgie* [neuralgia] and *leveraandoening* versus *levercirrose* [liver disease] among the medical conditions, and *huiduitslag* versus *exantheem* [skin rash] and *ontsteking* versus *inflammatie* [inflammation] among the symptoms. Adjectives and verbs were eliminated altogether.

A second selection criterion is the need for one-on-one word pairs or very limited noun phrases. In the initial glossary, a lot of scientific words are explained by means of a paraphrase in lay words, for instance: *hyperaldosteronisme* [hyperaldosteronism] is explained as *verhoogde productie van hormonen door de bijnierschors* [increased production of hormones by the adrenal cortex]. Paraphrases like these are not of use for this study, therefore all scientific terms for which an explanation was given instead of a noun were erased and noun phrases were only preserved if they form a lexical unit that is used as such, for example *gebrek aan eetlust* [lack of appetite] and *hoge bloeddruk* [high blood pressure].

The third step of the selection process consisted of an interaction between the remaining entries and the compiled corpora. By using the concordance search tool in Sketch Engine, it was possible to identify word-pairs for which there were no hits in any of the corpora, not for the scientific nor the lay term. These word-pairs were eliminated from the list so as to be able to focus on the terms that do occur in the source material of this study. There is no use in drawing on a glossary of which two thirds of the entries do not result in any outcome whatsoever.

During the last step, the remaining entries were carefully revised. Some lay terms that appeared in the list were words that can be used in a non-medical context, such as *tekort* [deficit]. Such entries were erased as well as those of which the lay term differs from the medical one in scope of meaning, for example: *breuk* [fracture, rupture] which has a more extended meaning than the given scientific term *hernia*, and *geestelijke stoornis* [mental disorder] which is more than a *psychose* [psychosis]. Furthermore, a synonym was added occasionally in accordance with *Van Dale's Great Dictionary of the Dutch Language* (<https://www.vandale.be>) – such as *verwarring* to *verwardheid* [confusion] and *verstopping* to *hardlijvigheid* [constipation] – and eleven overall entries were added, consisting of terms that exist in the corpora and that have a clear and confirmed scientific or lay equivalent, for example: *agorafobie* and *pleinvrees* [agoraphobia], and *dyslexie* and *woordblindheid* [dyslexia].

The list of terms that remains is a glossary of 85 entries from which there will be no further deviations in this study, these terms will be investigated in order to formulate an answer to research questions 1c and 2c. The terms are listed as lemmas and will be examined as such, compound words with any of these words – for example, *ontstekingsreactie* [inflammatory response] – will not be included in the study. The complete glossary is listed under *Appendix 4*.

In the context of research subquestion 1c, an English parallel glossary was set up without difficulty, since the database that was used as foundation for the Dutch glossary also comprises an English glossary with the same collection of terms. Only the entries that appear in the Dutch list were preserved. Again, some synonyms were added – such as *nerve pain* to *neuralgia* and *neuroinflammation* to *nerve inflammation* – and the eleven entries added to the Dutch glossary, were included in the English one as well. An important difference between the two glossaries, however, is that while the Dutch terms are either medicalesse or lay, there is a third category in the English glossary, namely *hybrid*. This label implies that only one corresponding term in English is taken into consideration and no distinction is made between medicalesse and lay, for example *fibromyalgia* and *infection*. The English glossary is to be found under *Appendix 5*.

### 3.3. Data analysis

#### 3.3.1. English to Dutch translations in popular science reporting

As has been mentioned earlier, a parallel corpus has been set up in Sketch Engine comprising 20 automatically aligned source and target texts. However, journalistic translations often deviate from the source text – information may be added, removed or relocated within the article. Therefore, the quality of automatic alignment is very poor and, consequently, the results of a parallel concordance search in Sketch Engine as well. There are thus two options: aligning the source and target texts manually as to improve the quality of the parallel corpus in Sketch Engine, or carrying out the data analysis on the automatically aligned articles without the use of text analysis software. In this study, the latter option has been adopted.

By carefully going through the spreadsheets of the automatically aligned parallel texts, it has been possible to highlight the variables – as described in paragraph 3.2. Selection of variables – and to collect them according to occurrence in an aggregate table, together with their corresponding source or target formulations, if any. Subsequently, according the descriptions given in the previous section, all formulations have been simplified into patterns and lemmas and labelled *PC* versus *non-PC* or *med* versus *lay* (or *hybrid* in the case of some English terms). See *Table 3* for an illustration.

Hits in English	Simplified	Label	Hits in Dutch	Simplified	Label
agoraphobia	agoraphobia	hybrid	pleinvrees	pleinvrees	lay
autistic children	y (adj) x	non-PC	kind met autistische symptomen	x met y	PC
delirium	delirium	med	(-)	(-)	(-)
rashes	rash	lay	huiduitslag	huiduitslag	lay
mould patient	y-x	non-PC	SBS-patiënt	y-x	non-PC
others with (colitis)	x with y	PC	lotgenoten met (colitis)	x met y	PC

Table 3: Illustration data analysis (rq1)



Note that *colitis* is shown in brackets as it is a variable itself and will therefore be repeated in the next row. In addition, if a variable has no (relevant) source or target formulation, the indication (-) is assigned to the corresponding cells; this is, for example, the case when personal pronouns are used to refer to people with disabilities in order to avoid repetitions. By contrast, if an entire source or target segment is missing – because there is an extra paragraph, for example – any possible variables in that standalone segment are not included.

Once the variables were collected, filters were added to the table, which makes it possible to examine the different types of variables one at the time and to create pivot tables in order to collect results for the different subquestions.

### 3.3.2. Dutch popular science reporting that is not translated from English

#### a-b. References to people with disabilities

For the data analysis regarding research subquestions 2a and 2b, a similar method as the one described in the previous section was adopted; only this time, the source material was solely Dutch, and the focus was exclusively on the variables that correspond to the patterns explained under paragraph 3.2.1. All relevant variables were collected in an aggregate table after which they were simplified and labelled – see *Table 4* for an illustration. Again, pivot tables were set up to count the number of PC and non-PC phrases in the respective corpora.

Hits in Dutch	Simplified	Label
BIID-patiënt	y-x	non-PC
diabetici	y=x	non-PC
een kind dat autistisch is	x is y	non-PC
hij heeft ALS	x heeft y	PC
patiënt met fibromyalgie	x met y	PC
psychiatrische patiënt	y (adj) x	non-PC

*Table 4: Illustration data analysis (rq2a-b)*

#### c. References to medical conditions

In the case of research subquestion 2c, text analysis software was called upon. As explained formerly, two monolingual corpora were compiled using Sketch Engine. By means of an advanced concordance search, all terms of the glossary described in section 2.2 were searched for in both corpora, and their number of occurrences was consulted and annotated in respective tables. Two adjustments were to be considered in the process. On the one hand, the *query type* had to be set to *lemma* and the *part of speech* to *noun*, unless the term in question was a noun phrase, then the query type was set to *phrase*. On the other hand, the search term always had to be preceded by the indication (?i) in order to make it case insensitive, that is, to include terms irrespective of whether they are written with capital letter or not. *Figure 3* is an illustration of the concordance search interface of Sketch Engine as it should be adjusted.

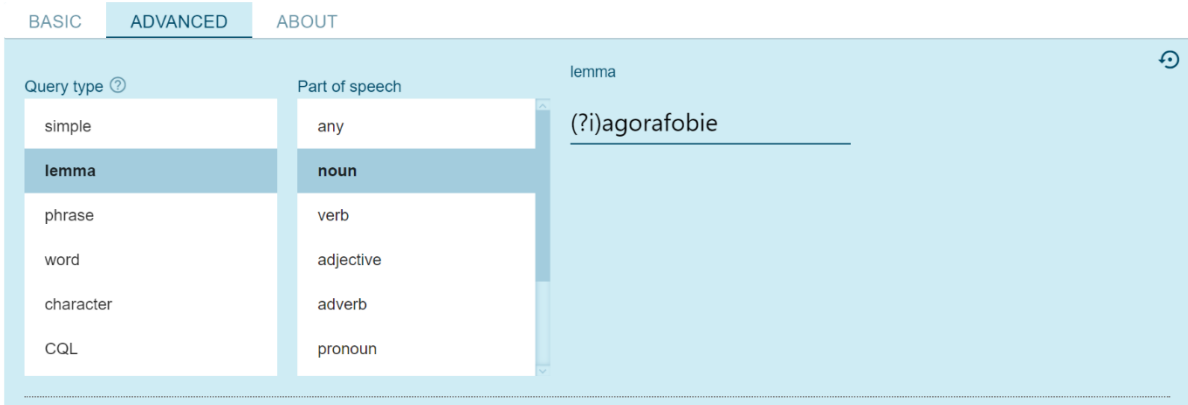


Figure 3: Illustration Sketch Engine (rq2c)

### 3.3.3. Lexicon of the general public in Flanders

As mentioned under paragraph 3.1.2. Survey, the online software *SurveyMonkey* was used to develop a survey in regard to the third research question. Not only does the software support the development of surveys, it has an analysis feature as well, which has proven to be very useful. For the ranking questions, on the one hand, question summaries were automatically rendered in the form of charts which can be customised, and data tables as well as basic statistics were provided.

Figure 4 shows illustrations of data analysis in SurveyMonkey.

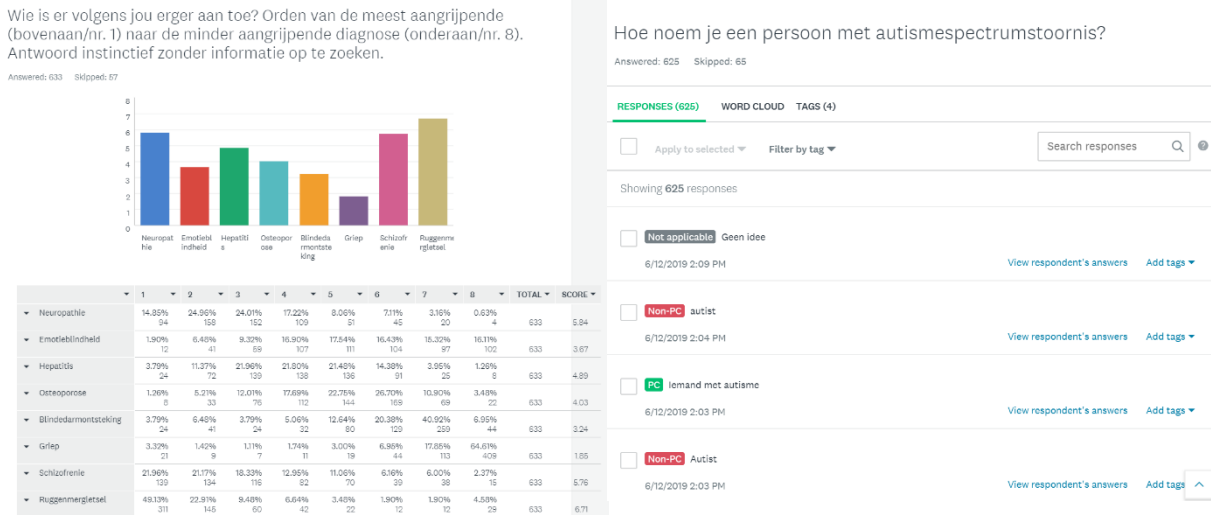


Figure 4: Illustration SurveyMonkey (rq3)

On the other hand, it was possible to label responses to open questions with the following tags: *PC* in green versus *non-PC* in red for all patterns described as such under paragraph 3.2.1., *hybrid* in orange for responses that contain patterns of both categories and *not applicable* in grey for everything else. Important to note is that no attention was paid to the substantive correctness of the responses, the focus was exclusively on the language that was used. For example, if someone responded *autistic* to the question ‘How do you call a child with attention deficit hyperactivity disorder?’, then that response was provided with the tag *non-PC* regardless of the inaccuracy of the content. After all responses had been labelled, rules were applied to filter, compare and show results to see trends.



## Chapter 4. Results

In the previous chapter, an overview was given on how the data analysis of this study was carried out. Consistent with the research questions and subquestions that were presented in the introductory chapter, the results of the data analysis will now be set forth. Note that the order of the questions has slightly changed and that they are combined according to their research subject. Firstly, the questions on people-first language will be dealt with, then the ones on medical conditions and, lastly, the results of the survey will be brought forward. In chapter 5, the obtained data will be discussed in terms of limitations and directions for further research.

### 4.1. People-first language in popular science reporting

#### 4.1.1. English to Dutch translations

In the beginning of this paper, a set of hypotheses was put forward surmising, among other things, that during the translation process of popular science reporting from English into Dutch, the use of people-first language in the target text may be given priority over the loyalty to the English source text to meet the expectations of the target audience, assuming that people-first language is rather widely adopted in Dutch popular science reporting. This would mean that any non-PC phrases in the source text would be converted more often than not into PC phrases in the target text and that original PC phrases would be transferred as such into Dutch. The following research subquestions were formulated:

Rq1a. When referring to people with disabilities, are non-PC phrases in the source language converted into PC alternatives in the target language or not?

Rq1b. Similarly, are PC phrases transferred as such into the target language or do they become non-PC?

Data analysis suggests that the hypothesis described earlier is false: loyalty to the source text usually seems to be given priority in the restricted context of this study. Of all non-PC phrases that are to be found in the 20 English source texts that were selected, 41% was translated by a corresponding non-PC phrase in Dutch and only 22% was converted into a PC alternative. The PC phrases, by contrast, were translated by a matching PC phrase in Dutch in almost 43% of cases and by a non-PC phrase in 21%. For both, the translations of the remaining 37% were neither non-PC nor PC according to the criteria of this research. *Table 5* shows the results to research subquestions 1a and 1b.

English	Dutch	Count	Percentage
non-PC	non-PC	19	41.30%
non-PC	PC	10	21.74%
non-PC	(-)	17	36.96%
<b>Subtotal</b>		46	100%
PC	non-PC	21	20.79%
PC	PC	43	42.57%
PC	(-)	37	36.63%
<b>Subtotal</b>		101	100%

(-)	non-PC	<b>27</b>	<b>60.00%</b>
(-)	PC	<b>18</b>	40.00%
<b>Subtotal</b>		45	100%
<b>Total</b>		<b>192</b>	

Table 5. Results rq1a-b

Important to note is that in the contexts where a variable is found in Dutch translation even though there is none in the English source segment, a 60% majority is non-PC. This suggests that when no influence is exerted by the source text and there is an unbiased choice between a PC or non-PC formulation, translators opt for non-PC phrases most of the time. The question arises whether the same applies to authors of originally Dutch articles and non-PC phrases generally prevail in Dutch popular science reporting. This question will be answered in the next paragraph.

#### 4.1.2. Dutch popular science reporting that is not translated from English

Previously, the hypothesis was set forth that the use of people-first language in the target text might be given priority over the loyalty to the source text. If this were the case and the hypothesis was to be expanded to translation in general, PC phrases would prevail in all Dutch corpora of this study, irrespective of whether the articles are translated or not, and if so, from which source language. On those lines, the following research subquestions were presented:

Rq2a. Are PC and non-PC patterns equally represented in non-translated Dutch articles as in English to Dutch translations?

Rq2b. And what about in Dutch articles that are translated from a source language other than English?

The results to research subquestions 1a and 1b demonstrated that the initial hypothesis on the priority of people-first language in Dutch is false. What is more, data analysis indicated that translators mostly opt for non-PC formulations when there is no influence from the source text, that is, when no variable is used in English. The question arose whether the same applies to authors of originally Dutch articles, which would refute the assumption that people-first language is rather widely adopted in Dutch popular science reporting.

After all corpora have been analysed, it is shown that in non-translated popular science reporting in Dutch, non-PC phrases indeed slightly prevail over PC phrases with 52% over 48%, while the opposite applies for English to Dutch translations in which PC phrases form a narrow majority with substantially the same difference in between. Also in Dutch articles that are translated from a source language other than English, it is the number of PC phrases that is a little higher with 55% as opposed to 45% of non-PC phrases. *Tables 6 to 8* show the exact numbers for the three different corpora.

NL	Count	Percentage
non-PC	<b>287</b>	<b>52.37%</b>
PC	<b>261</b>	47.63%
<b>Total</b>	<b>548</b>	<b>100%</b>

Table 6. Results rq2a (non-translated Dutch articles)

NL (EN)	Count	Percentage
non-PC	66	47.83%
PC	72	52.17%
<b>Total</b>	<b>138</b>	<b>100%</b>

Table 7. Results rq2a-b (English to Dutch translations)

NL (xx)	Count	Percentage
non-PC	122	44.85%
PC	150	55.15%
<b>Total</b>	<b>272</b>	<b>100%</b>

Table 8. Results rq2b (translations from SL other than English)

Seeing that PC phrases prevail in the corpora with translated articles while this is not the case in the non-translated corpus, and it was formerly suggested that translators tend to be loyal to the source text when translating references to people with disabilities, one might speculate that foreign cultures use more politically correct language than is used in Dutch popular science reporting. For the English source texts, this can be verified by calculating the percentage of non-PC versus PC instances, which indeed results in a vast majority of PC phrases in 69% of cases as opposed to 31% of non-PC phrases. Further research is needed to investigate whether the same applies to source languages other than English.

## 4.2. Medical conditions in popular science reporting

### 4.2.1. English to Dutch translations

Rq1c. Which translation strategies are applied when translating references to medical conditions from English into Dutch in popular science reporting?

In the case of translating references to medical conditions from English into Dutch in popular science reporting, the assumption was made that the source text influences the choice of the translator in terms of scientific versus lay terminology. That is, if a specific medical condition is referred to in medicalese in the English source text, it is presumed that this is also the case in the Dutch target text. By contrast, if a lay term is used in the original article, the corresponding translation in Dutch is expected to be in lay terminology as well.

Initially, data analysis seems to confirm this assumption. All lay instances that are to be found in the English source texts, are without exception translated by a Dutch lay alternative. Hits in medicalese are almost 60% of the time translated by the corresponding scientific term in Dutch, in 26% of cases translators have chosen for lay equivalents and in 14% of cases they opted for a different solution. See *Table 9* for the results to research subquestion 1c.

English	Dutch	Count	Percentage
lay	lay	39	100.00%
<b>Subtotal</b>		39	100%
med	lay	11	26.19%
med	med	25	59.52%
med	(-)	6	14.29%
<b>Subtotal</b>		42	100%
hybrid	lay	42	33.60%
hybrid	med	59	47.20%
hybrid	(-)	24	19.20%
<b>Subtotal</b>		125	100%
(-)	lay	29	65.91%
(-)	med	15	34.09%
<b>Subtotal</b>		44	100%
<b>Total</b>		<b>250</b>	

Table 9. Results rq1c

As has been explained in chapter 3, a number of English terms received the label *hybrid*, which means that no distinction is made between medicalese and lay. For 47% of hybrid terms, the corresponding scientific term in Dutch appears in translation, almost 34% is translated by a lay equivalent and for 19% a different solution was used. These results will be discussed in more detail in chapter 5.

In the Dutch segments that contain a variable while the source segment does not, lay terms form a vast majority with 66% as opposed to 34% of medicalese hits. Thus, it seems that if translators are not swayed by scientific or lay terms in the source language, they prefer to use lay terminology when referring to medical conditions in Dutch. Whether this trend exists among authors of Dutch popular science reporting as well, that will be dealt with under research subquestion 2c.

#### 4.2.2. Dutch popular science reporting that is not translated from English

Rq2c. When referring to medical conditions, is there a difference in the use of scientific versus lay terms between popular science reporting that is originally written in Dutch as opposed to translated articles?

The results to research subquestion 1c suggest that when popular science reporting is translated from English into Dutch, translators are to some extent influenced by the source text when it comes to using medicalese versus lay terminology. In the introductory chapter, the extended hypothesis was put forward that in that case, it is presumable that the overall ratio between scientific and lay terms in translated articles differs from the one in non-translated articles, as foreign cultures might adopt a slightly more or less specialised language in popular science reporting.

In order to decide whether this is true, first, the average ratio between medicalese and lay terms in non-translated popular science reporting was calculated. The results indicate that of all hits in the non-translated corpus, 48% is lay and 52% is medicalese. In the corpus with English to Dutch

translations, by contrast, 55% of all hits is lay and 45% is medicalese, thus, a difference in ratio is indeed observed – see *Tables 10* and *11* for the exact results.

NL	Count	Percentage
lay	139	47.60%
med	153	52.40%
<b>Total</b>	292	100%

*Table 10. Results rq2c (non-translated Dutch articles)*

NL (EN)	Count	Percentage
lay	121	55.00%
med	99	45.00%
<b>Total</b>	220	100%

*Table 11. Results rq2c (English to Dutch translations)*

The reason for this difference in ratio, however, is not what it was speculated to be. It was stated as a possible explanation that foreign cultures might adopt a slightly different use of medicalese and lay terms, which would influence the average ratio in the translated corpus because of the loyalty to the source text. If this were true, then the higher percentage of lay terms in English to Dutch translations would be explained by a high number of lay instances in the English source texts. Yet, this is not the case, only 19% of the hits in the English corpus is lay. The majority of variables are hybrid terms that constitute 61% of cases and these are, moreover, most often translated by a scientific term in Dutch as has been mentioned earlier.

What then could be a possible explanation? Firstly, it is worth noting that according to the results presented in the previous section, it never occurs that a lay term in English is translated by a scientific one in Dutch whereas the opposite does occur. In addition, the finding was brought forward that when translators have a non-biased choice between scientific and lay terms – that is, no influence is exerted by the source language as there is no variable used – they mostly opt for lay terminology. On this note, one could speculate that authors of original Dutch articles also prefer the use of lay terms as they generally have a non-biased choice. However, the results in *Table x* show the opposite: in non-translated articles medicalese terms slightly prevail.

These findings might, in fact, be an indication that translators tend to use less specialised language in their Dutch translations of popular science reporting than do authors in articles that have been originally written in Dutch. If this is true, lay terminology would generally prevail in all translated popular science reporting in Dutch, irrespective of the source language. After consulting the third corpus of this study, this seems to be the case indeed: 52% of the variables to be found are lay terms while 48% are medicalese – see *Table 12*.

NL (xx)	Count	Percentage
lay	197	52.25%
med	180	47.75%
<b>Total</b>	377	100%

*Table 12. Results rq2c (translations from SL other than English)*



### 4.3. Lexicon of the general public in Flanders

As has been announced previously, a survey was launched targeted at the general public in Flanders to learn more about the lexicon of the Dutch speaking population in Belgium with regard to people with disabilities and medical conditions. The survey ran from June 6 to June 21, 2019 and reached a total of 690 respondents. However, 167 responses were not complete and, therefore, disqualified, which means that a total of 523 responses was analysed. 23% of these respondents are men whereas 77% are women. They are people of all educational backgrounds who are between 15 and 86 years old and who mostly grew up in one of the five provinces of Flanders.

#### 4.3.1. References to people with disabilities

Rq3a. Does the general public refer to people with disabilities in a PC manner or not so much?

In order to gain some initial insight into the use of people-first language among the Dutch speaking population in Belgium, the survey respondents were presented with five questions in which they were asked how they call people with a certain medical condition, i.e. autism spectrum disorder, Down syndrome, cystic fibrosis, a mental disability and attention deficit hyperactivity disorder. In comparison with Dutch popular science reporting, it was presumed that the use of people-first language is less present among the general public of Flanders.

The data analysis of the survey shows that the ratio between PC and non-PC responses varies significantly between questions. To the question related to autism spectrum disorder, 72% of participants responded with a non-PC formulation and only 18% with a PC equivalent. The question on Down syndrome, by contrast, received a non-PC response in 41% of cases and a PC one in 45%. People with cystic fibrosis are in 60% of responses referred to with a non-PC phrase and in 18% with a PC one, and people with a mental disability in 57% and 31% respectively. Lastly, to the question related to ADHD, 64% of participants responded in a non-PC manner while 23% did so in a PC way. Thus, in four out of five questions, non-PC phrases prevail – all results are to be consulted in *Tables 13 to 17*.

Q8	Count	Percentage
non-PC	<b>377</b>	72.08%
PC	<b>92</b>	17.59%
hybrid	8	1.53%
not applicable	46	8.80%
<b>Total</b>	523	100%

Table 13. Results rq3a (ASD)

Q11	Count	Percentage
non-PC	<b>216</b>	41.30%
PC	<b>233</b>	44.55%
hybrid	15	2.87%
not applicable	59	11.28%
<b>Total</b>	523	100%

Table 14. Results rq3a (Down syndrome)

Q12	Count	Percentage
non-PC	<b>313</b>	59.85%
PC	<b>94</b>	17.97%
hybrid	1	0.19%
not applicable	115	21.99%
<b>Total</b>	523	100%

Table 15. Results rq3a (cystic fibrosis)

Q14	Count	Percentage
non-PC	<b>296</b>	56.60%
PC	<b>163</b>	31.17%
hybrid	6	1.15%
not applicable	58	11.09%
<b>Total</b>	523	100%

Table 16. Results rq3a (mental disability)

Q15	Count	Percentage
non-PC	<b>336</b>	64.24%
PC	<b>119</b>	22.75%
hybrid	9	1.72%
not applicable	59	11.28%
<b>Total</b>	523	100%

Table 17. Results rq3a (ADHD)

In addition, it is worth noting that only 4% of all participants used people-first language in all five cases whereas 17% responded five times in a politically incorrect manner. Moreover, among the responses that are labelled non-PC, there is a lot of offensive language to be found. The number of times a person with Down syndrome is referred to as a *mongool* [mongoloid] are many, and someone with a mental disability is oftentimes depicted as a *debiel*, *zwakzinnige*, *achterlijke* or *gestoorde*, labels that can more or less be translated by *imbecile*, *moron*, *retard* and a *disturbed person*.

#### 4.3.2. Perceived severeness of medical conditions

Rq3b. Do scientific terms, in comparison with their lay alternatives, have an impact on the perceived severeness of the referenced medical conditions?

As has been explained earlier, former research has demonstrated that medical conditions are in some cases considered to be more severe when referred to in medicalese than when lay terminology is used. Four questions of the survey were meant to examine whether this applies to medicalese versus lay terms in Dutch as well. In two times two parallel lists of eight diagnoses, respondents were asked to rank a total of 16 medical conditions in order from what they found to be the most severe one to the least severe one – see paragraph 3.1.2. Survey of chapter 3 for a more elaborate explanation. Note that only 15 word pairs are included in the data analysis for there has been a mix-up in the original survey: the scientific term *neuropathie* [neuropathy] was paired with the lay term *zenuwpijn* [nerve pain], yet the lay equivalent of the former is *zenuwziekte* [nervous system disorder] and the medicalese term for the latter is *neuralgie* [neuralgia].

For each word pair, their respective means were calculated. For example, *faryngitis* [pharyngitis] was considered to be most severe and thus put on the first place by 13 people, on the second place by 65, on the third place by 75, on the fourth by 93, the fifth by 98, sixth by 43, seventh by 39 and eighth by 97. This results in a mean of 4.85, which can then be compared to the mean of its lay equivalent *keelontsteking* [throat infection], which is 6.70. The lower the mean, the more severe the medical condition in question is considered to be. See *Table 18* for all results.

MED term	Mean	LAY term	Mean
meningitis	<b>1.98</b>	hersenvliesontsteking	<b>1.74</b>
dwarslaesie	<b>2.66</b>	ruggenmergletsel	<b>2.19</b>
epilepsie	<b>2.82</b>	vallende ziekte	<b>3.21</b>
bipolaire stoornis	<b>2.86</b>	manisch-depressieve stoornis	<b>3.05</b>
schizofrenie	<b>3.18</b>	gespleten persoonlijkheid	<b>3.86</b>

ziekte van Pfeiffer	<b>4.01</b>	klierkoorts	<b>5.00</b>
hepatitis	<b>4.14</b>	leverontsteking	<b>3.85</b>
faryngitis	<b>4.85</b>	keelontsteking	<b>6.70</b>
osteoporose	<b>4.96</b>	botontkalking	<b>5.09</b>
apendicitis	<b>5.21</b>	blindedarmonsteking	<b>5.83</b>
alexithymie	<b>5.48</b>	emotieblindheid	<b>5.40</b>
mysofobie	<b>5.62</b>	smetvrees	<b>6.23</b>
agorafobie	<b>5.98</b>	pleinvrees	<b>5.72</b>
dyslexie	<b>6.35</b>	woordblindheid	<b>5.90</b>
influenza	<b>6.48</b>	griep	<b>7.16</b>

Table 18. Results rq3b

In nine out of 15 word pairs, the medical term has a lower mean than its lay equivalent, which suggests that they are indeed perceived as more severe. Nonetheless, overall, the differences in means are fairly small. In fact, there is only one instance in which the difference exceeds one, and that is in the formerly mentioned word pair *faryngitis* versus *keelontsteking*. In order to determine whether there is a significant difference between the respective means, statistical support is needed but cannot be provided in this paper. In the next chapter, all results will be further discussed in terms of limitations, possible interpretations and directions for future research.

## Chapter 5. Discussion

In the previous chapter, the formulated research questions were answered and possible interpretations of the results were brought forward. However, as this research is carried out in a very restricted context, there are many limitations to be considered as well as factors that could have influenced the obtained results. These will be dealt with in the following paragraphs and while doing so, possible directions for further research will be hinted at.

### 5.1. Popular science reporting in Dutch

#### 5.1.1. Final interpretations of the results

Before proceeding to the limitations and possible influencing factors of this study, a brief and simplified summary is provided on the final interpretations of the results that were set forth in the previous chapter with respect to references to people with disabilities and medical conditions in Dutch popular science reporting.

On the one hand, it was suggested that foreign cultures might adopt people-first language more frequently in popular science reporting than it is used in the same genre in Dutch. This deduction is drawn from the findings that, usually, translators seem to be rather loyal to the source text when translating references to people with disabilities, and that PC phrases generally prevail in the corpora with translated articles whereas non-PC phrases form a narrow majority in the corpus with non-translated articles.

On the other hand, it was suggested that translators tend to use less specialised language in their Dutch translations of popular science reporting than do authors in articles that have been originally written in Dutch. This assumption is based on the findings that although it initially seems that translators are loyal to the source text when translating references to medical conditions, further investigation indicates that the ratio between scientific and lay terms in the translated corpus, is not in line with the ratio in the source texts, nor is it comparable to the ratio in the non-translated Dutch corpus. Translators show an overall preference for lay terminology whereas hybrid and medical terms prevail in the English source texts and non-translated Dutch articles respectively.

#### 5.1.2. Limitations and influencing factors

As has been mentioned before, this study has various limitations. First of all, seeing that the first two corpora that are used for this research are compiled of a specific collection of articles pertaining to only two sources within one specific genre, the results cannot be extended to or generalised for language outside of this restricted context and various influencing factors have to be taken into consideration. The language that is adopted in *Scientific American* with regard to references to people with disabilities and medical conditions might differ from the language usage in the British magazine *The Conversation*, and the same applies to the magazine *Eos Wetenschap* in comparison with other popular science reporting in Dutch. Moreover, the corpus compiled of Dutch articles translated from a source language other than English, might be based on sources that slightly differ in register and level of expertise, which may influence the language usage.

However, as it does not seem very likely that any of the magazines in question have certain guidelines or norms concerning people-first language and scientific versus lay terms, it is plausible that the language usage in the articles is mostly a matter of personal choice and thus depends entirely on the people who are involved in the production process. If two or three translations into Dutch are carried out by people who are determined to use clear, that is, lay terminology, this might already have an influence on the overall outcomes. Similarly, if the editor in chief of *Scientific American* is more concerned with using people-first language than is her colleague at the editorial office of *Eos Wetenschap*, then this could be a decisive factor as well.

In addition, the number of articles in the corpora is limited, for which reason they all have a considerable impact. What is meant to say is that if a certain article reports, for example, on one specific medical condition and its medical term is consistently used throughout the text without its lay equivalent being mentioned, then this, most definitely, shapes the final outcomes. Similarly, if in a number of articles, direct speech is used and people are quoted who predominantly use politically incorrect phrases, then this would have contributed to the findings as well. This way, if five articles were to be eliminated from the corpora and five other ones would be added, perhaps, different conclusions would be drawn.

It is important to note, moreover, that the selection of variables was extremely narrow, while generally a lot of variation in expression is used in journalistic genres. In the case of political correctness, for example, this study focussed on only two of the six guidelines that were prescribed in the chapter on people-first language of the literature overview. This means that there is undoubtedly much more non-PC language used in the articles examined. Emotionally biased language is very present, for example, such as the phrases *mensen kampen met*, *lijden aan* and *worden getroffen door*, which can be translated by *people struggle to cope with*, *suffer from* and *are affected by*. Also in respect to medical and lay terminology, journalists are very creative, using paraphrases to describe a certain disorder, for instance, which can be considered as lay terminology. If the selection of variables was to be extended, it is possible that different ratios would be obtained between PC and non-PC phrases, and scientific and lay terms, which in turn might lead to different conclusions.

Overall, the glossary of medical versus lay terminology needs some commenting. As has been explained in chapter 3 on the methodology of this study, the input and thus the foundation of the glossary comprises a binary list of Dutch scientific and lay equivalents that was set up as part of a project at *Ghent University*. As I personally lack the expertise to be able to detect mistakes, the source was implicitly trusted and almost no adjustments were made, except for some synonyms that were added in accordance with *Van Dale's Great Dictionary of the Dutch Language* and a few unmistakable word pairs that were missing. However, it may well be possible that some entries of the glossary could be improved, added or should be removed altogether. It was not my objective to generate a flawless glossary of scientific and lay terms. Instead, a defined list was needed in order to be able to make comparisons between different corpora and this one served this purpose. Of

course, a different list might lead to different outcomes, but then again, this paper is meant as an introduction to a certain topic, not as a record of definite results.

A separate comment must be made as well on the label *hybrid* within the context of medical conditions in English. It is said that in the case of hybrid words, no distinction is made between medicalese and lay. However, in essence, there do exist differences between the words in terms of origin, register and comprehensibility. By way of example, compare the terms *side effect* and *osteoporosis*. Both are considered hybrid in the English glossary, but instinctively one would say that the former is a lay term while the latter is a scientific one. The results to research subquestion 1c show that within the context of this study, hybrid words are translated by a Dutch scientific term in 47% of cases, while a lay term is opted for in 34% of cases. Under the hypothesis that the source text does influence the translation choices of the translator to some extent, one might presume that the majority of the hybrid terms in the English glossary pertain to a more specialised register. However, further research is needed to gain more insight into these hybrid words and to confirm or refute this presumption.

Lastly, it must be noted that most data analysis has been carried out manually by going through the articles one by one and thus collecting the variables. Random sampling has been carried out numerous times in order to verify the results. However, certain words and phrases are easily overlooked and a sole variable may have remained unnoticed. As this would be very exceptional, it is not expected that the final results would be decisively affected.

## 5.2. Survey on the lexicon of the general public in Flanders

The survey results indicate, on the one hand, that the general public of Flanders seems to refer to people with disabilities mostly in a politically incorrect way, i.e. people-first language seems to be adopted only in a minority of cases, although this highly depends on the person that is referred to. What is more, among the non-PC responses, a lot of offensive language is found along the lines of *imbecile*, *moron*, *retard* and *mongoloid*. On the other hand, the results suggest that in nine out of 15 cases, the medicalese term of a medical condition is perceived as more severe in comparison with its lay equivalent. However, statistical support is needed to determine whether the differences are significant. This is, moreover, the case for all results in this paper.

There are various factors that might have influenced the results of the survey, with in the first place the personal backgrounds of the respondents. Initially, data analysis of the results suggests, for instance, that men use significantly more politically incorrect language than women. However, with 77% of respondents being women and only 23% men, the gender distribution is remarkably unbalanced and further research is needed to examine the influence of gender on the use of people-first language more closely. Next to gender, also age may influence the language usage of respondents, and the province of Flanders where they primarily grew up might be an influencing factor as well, as the use of people-first language might be linked to regional areas. In addition, it is presumable that people who have a disability themselves or who know someone with a disability, respond differently to certain questions depending on the medical condition in question and the

relationship they have with the other person, whether it is a close relative or a casual acquaintance for example. All these factors constitute directions for further research.

Regarding the open questions on people-first language, various respondents remark that their language usage differs according to the context. The language they use in formal settings, for instance, is different from the language they use at a gathering of friends. Some participants nuanced their responses, saying that they use the label *mongool* [mongoloid] without bad intentions, for example, or that even though they use crude language, they mean well.

As to the ranking questions on the impact of scientific versus lay terminology, a few restraints have to be mentioned. Firstly, even though participants were asked to answer instinctively and not to look up information about terms they might not know, it is inevitable that some people quickly run a word through Google or another search engine. In addition, even if someone knows all medical terms and lay terms, there is no guarantee that they order the diagnoses of the parallel lists identically as they might have forgotten how they did it the first time and they are not allowed to go back. Furthermore, some people consistently put a term on the last place if they do not know it, which has an influence on the overall means. And lastly, a small number of people made the mistake of putting the diagnose that they found to be the most severe one on the eighth place and the least severe one on the first place while it should be the other way around. This, of course, has an influence as well on the final outcomes.

### 5.3. Possible directions for further research

In the previous paragraphs, some directions for further research have been hinted at already. However, the possibilities seem to be endless. Within the context of Translation Studies, the observed tendency among translators to use less specialised language may be given a closer look. Also the influence of the source text when translating references to people with disabilities and medical conditions constitutes an interesting topic for further investigation. What is more, similar research could be conducted for Dutch, but in a different context – considering different genres of texts – to gain insight in the use and translation of people-first language outside of popular science reporting, for example. Contrarily, similar research within the same restricted context could be carried out for different languages. Furthermore, a number of medical terms and lay terms may be looked at regarding the contexts and registers in which they appear in various languages, seeing that one and the same word – whether or not adapted to the phonetic, orthographic or morphological norms of the languages in which it is used – may be considered to be lay in one culture and medical in another. In addition, further research could be carried out to investigate whether the use of many scientific terms in Dutch negatively influences the reading comprehension of the general public. Various factors that may influence the use of people-first language among the general public could be taken into consideration as well as the impact the choice of one term over another might have in Dutch with regard to scientific and lay terminology in terms of coping strategies and comprehensibility, for instance. Moreover, research may be dedicated to how the referenced individuals feel about the use or non-use of people-first language themselves. As already stated, the possibilities are many.

## Chapter 6. Conclusion

This master's thesis aimed to gain some initial insight into the spreading of people-first language across borders on the one hand, and the use and translation of scientific and lay terminology on the other, two topics that firstly have been set out in detail in an extensive literature overview. The research of this paper was carried out in a very restricted context, that is, mostly within the genre of popular science reporting in Dutch as compared to English. In addition, a survey was set up in order to examine the lexicon of the Dutch speaking population in Belgium with regard to political correctness when referring to people with disabilities, and the impact of scientific versus lay terms on the perceived severeness of the referenced medical conditions.

At the beginning of the study, various hypotheses were set forth. First of all, assuming that people-first language is rather widely adopted in Dutch popular science reporting, it was expected that in translation from English into Dutch, the use of people-first language in the target text would be given priority over the loyalty to the English source text. On those same lines, the assumption was made that PC phrases prevail over non-PC phrases in Dutch popular science reporting, irrespective of whether the articles are translated or not, and if so, from which source language. Secondly, it was speculated that in translation from English into Dutch, the English source text might influence the translation choices that are made by translators regarding the use of scientific versus lay terminology. It was stated, moreover, that if this would prove to be the case, the ratio between scientific and lay terms in translated articles might differ from the one in non-translated articles, as foreign cultures might adopt a slightly more or less specialised language in popular science reporting. Lastly, concerning the lexicon of the Dutch speaking population in Belgium, it was presumed, on the one hand, that the use of people-first language is less present among the general public than in popular science reporting, and on the other hand, the possibility was examined that when certain medical conditions are referred to in scientific language in Dutch, they might be considered to be more severe than when lay terminology is used.

The results were quite different. For one thing, they indicated that loyalty to the source text is given priority over the use of people-first language and that, therefore, the ratio between PC and non-PC phrases does depend on whether the articles are translated or not. What is more, foreign cultures seem to adopt people-first language to a greater extent than is the case in Dutch popular science reporting. Secondly, although it initially seems that translators are loyal to the source text when translating references to medical conditions, further investigation indicates that the ratio between scientific and lay terms in the translated corpus is not in line with the ratio in the source texts, nor is it comparable to the ratio in the non-translated Dutch corpus. While hybrid and medicalese terms prevail in the English source texts and non-translated Dutch articles respectively, lay terms prevail in the translated articles, which suggests that there is a tendency among translators to use less specialised language in their Dutch translations of popular science reporting than do authors in articles that have been originally written in Dutch. Lastly, the survey results seem to confirm the hypothesis that the use of people-first language is less present among the general public of Flanders than in Dutch popular science reporting. What is more, among the non-PC responses, a



lot of offensive language is found along the lines of *imbecile*, *moron*, *retard* and *mongoloid*. Regarding the references to medical conditions, the survey results indicate that in nine out of 15 cases, the medical term is perceived as more severe in comparison with its lay equivalent. However, statistical support is needed to determine whether the differences are significant.

In a conclusive remark, it must be noted that this study has been subject to various limitations as well as influencing factors since the research was carried out in a very restricted context. However, it was not the objective of this master's thesis to obtain definite results whatsoever. Instead, this paper was intended to introduce the topics that are covered to anyone who might be interested and to serve as a steppingstone for possible further research.

## References

- Abasia. (n.d.). In *Oxford English dictionary*. Retrieved from <https://www-oed-com.kuleuven.ezproxy.kuleuven.be/view/Entry/109?redirectedFrom=Abasia#eid>
- Allan, K. (2001). *Natural Language Semantics*. Oxford: Blackwell.
- Allan, K. & Burridge, K. (2006). *Forbidden words: Taboo and the censoring of language*. Cambridge: Cambridge university press.
- American Psychological Association. (n.d.). Avoiding Heterosexual Bias in Language. Retrieved from: <https://www.apa.org/pi/lgbt/resources/language> (Original work published 1991).
- Aphagia. (n.d.). In *Oxford English dictionary*. Retrieved from <https://www-oed-com.kuleuven.ezproxy.kuleuven.be/view/Entry/249035?redirectedFrom=Aphagia#eid>
- Aphakia. (n.d.). In *Oxford English dictionary*. Retrieved from <https://www-oed-com.kuleuven.ezproxy.kuleuven.be/view/Entry/9101?redirectedFrom=Aphakia#eid>
- Aston, E. (2011). Editorial: On Censorship, Political Correctness, the Diagnostic and Community Building. *Theatre Research International*, 36(2), 99-101. doi:10.1017/S0307883311000186
- Austin, J. L. (1962). *How to do things with words: The William James Lectures delivered at Harvard University in 1955*. Oxford: Clarendon.
- Benedetti, F. (2002). How the Doctor's Words Affect the Patient's Brain. *Evaluation & the Health Professions*, 25(4), 369-386. doi:10.1177/0163278702238051
- Birnbaum, L. M. (2014). *The Influence of Medicaese on Patient Relevant Outcomes*. (dissertation University of Illinois). Retrieved from <https://dspace-prod.lib.uic.edu>
- Blaska, J. (1993). The power of language: Speak and write using 'People First Language'. *Perspectives on disability*, 2, 25-32. Retrieved from <https://www.lusd.org/cms/lib6/CA01001399/Centricity/Domain/855/PeopleFirstLanguage.PDF>
- Casas Gómez, M. (2009). Towards a new approach to the linguistic definition of euphemism. *Language Sciences*, 31(6), 725-739. doi:10.1016/j.langsci.2009.05.001
- Conrad, P. (2007). *The medicalization of society: On the transformation of human conditions into treatable disorders*. Baltimore: Johns Hopkins university press.
- Correct taalgebruik [Blog post]. (n.d.). Retrieved from: <https://handicapenarbeid.be/dossiers-a-d/correct-taalgebruik/>
- D'Angelo, M. C., Humphreys, K. R., Li, T., & Young, M. E. (2017). The Impact of Medical Terminology in Self-Triage Decision-Making. *Frontiers in Communication*, 2(2), 1-9. doi:10.3389/fcomm.2017.00006
- De Dijn, H. (2015). Politieke correctheid. *Internationaal Katholiek Tijdschrift Communio*, 40(2015), 322-332. Retrieved from <http://communio.nl>
- Deresiewicz, W. (2017). On Political Correctness. *The American Scholar*, 30-42. Retrieved from <https://search-proquest-com>
- Dickinson, J., & Maryniuk, M. (2017). Building Therapeutic Relationships: Choosing Words That Put People First. *Clinical Diabetes : A Publication of the American Diabetes Association*, 35(1), 51-54. doi:10.2337/cd16-0014

Dobrić, K. (2013). Creating medical terminology: from Latin and Greek influence to the influence of English as the current lingua franca of medical communication. *JAHHR*, 4(1), 493-502. Retrieved from <https://hrcak.srce.hr/110369>

Erectile dysfunction [Draft additions]. (2016, June) In *Oxford English dictionary*. Retrieved from <https://www-oed-com.kuleuven.ezproxy.kuleuven.be/view/Entry/63928?redirectedFrom=erectile+dysfunction#eid1211293740>

Feldman, D., Gordon, P., White, M., & Weber, C. (2002). The effects of people-first language and demographic variables on beliefs, attitudes and behavioral intentions toward people with disabilities. *Journal of Applied Rehabilitation Counseling*, 33(3), 18-25. Retrieved from <https://search-proquest-com>

Fischbach, H. (1986). Some Anatomical and Physiological Aspects of Medical Translation: Lexical equivalence, ubiquitous references and universality of subject minimize misunderstanding and maximize transfer of meaning. *Meta*, 31(1), 16-21. <https://doi.org/10.7202/002743ar>

Friedman, J. (2017). Political Correctness. *Rhode Island Medical Journal*, 100(3), 8-9. Retrieved from <https://search-proquest-com>

Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Cambridge, MA, US: Harvard University Press.

Granello, D., & Gibbs, T. (2016). The Power of Language and Labels: “The Mentally Ill” Versus “People With Mental Illnesses”. *Journal of Counseling & Development*, 94(1), 31-40. doi:10.1002/jcad.12059

Guth, L., & Murphy, L. (1998). People First Language in Middle and High Schools: Usability and Readability. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 72(2), 115-117. doi:10.1080/00098659809599607

Hahn, R. (1997). The Nocebo Phenomenon: Concept, Evidence, and Implications for Public Health. *Preventive Medicine*, 26(5), 607-611. doi:10.1006/pmed.1996.0124

Halmari, H. (2011). Political correctness, euphemism, and language change: The case of ‘people first’. *Journal of Pragmatics*, 43(3), 828-840. doi:10.1016/j.pragma.2010.09.016

Hollander, P. (2013). Peer Review, Political Correctness, and Human Nature. *Academic Questions*, 26(2), 148-156. doi:10.1007/s12129-013-9349-4

Hughes, G. (2010). *Political correctness: A history of semantics and culture* (The language library). Malden: Wiley-Blackwell.

Hunter, P. (2005). Is political correctness damaging science? *EMBO Reports*, 6(5), 405-407. doi:10.1038/sj.embor.7400395

Impotence. (n.d.). In *Oxford English dictionary*. Retrieved from <https://www-oed-com.kuleuven.ezproxy.kuleuven.be/view/Entry/92644#eid886070>

Jiménez-Crespo, M. Á. & Sánchez, M. T. (2017). Lexical variation, register and explicitation in medical translation: A comparable corpus study of medical terminology in US websites translated into Spanish. *Translation & Interpreting Studies: The Journal of the American Translation & Interpreting Studies Association*, 12(3), 405-426. <https://doi-org.kuleuven.ezproxy.kuleuven.be/10.1075/tis.12.3.03jim>

- Kirszenbaum, J. (2015). *Person First Planet: A Comprehensive Review of Person First Language*. (dissertation Portland State University). Retrieved from <https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?referer=https://scholar.google.be/&httpsredir=1&article=1246&context=honorsthesis>
- Lakoff, G., & Johnson, M. (1980). Conceptual Metaphor in Everyday Language. *The Journal of Philosophy*, 77(8), 453-486. doi:10.2307/2025464
- Lang, E. V., Hasiopoulou, O., Koch, T., Berbaum, K., Lutgendorf, S., Kettenmann, E., Logan, H. & Kaptchuk, T. J. (2005). Can words hurt? Patient–provider interactions during invasive procedures. *Pain*, 114(1-2), 303-309. <https://doi.org/10.1016/j.pain.2004.12.028>
- Lewis, J. (1996). Political Correctness. *The Family Journal*, 4(1), 44-45. doi:10.1177/1066480796041007
- Liénard, A., Merckaert, I., Libert, Y., Delvaux, N., Marchal, S., Boniver, J., Etienne, A. M., Klastersky, J., Reynaert, C., Scalliet, P., Slachmuylder, J. L. & Razavi, D. (2006). Factors that influence cancer patients' anxiety following a medical consultation: impact of a communication skills training programme for physicians. *Annals of Oncology*, 17(19), 1450-1458. <https://doi.org/10.1093/annonc/mdl142>
- Long, T. (1993). Editorial: People-First Language. *Pediatric Physical Therapy*, 5(2), 53. Retrieved from <https://oce-ovid-com>
- Martin, B. (1991). From Negro to Black to African American: The Power of Names and Naming. *Political Science Quarterly*, 106(1), 83-107. Retrieved from <https://www.jstor.org/stable/2152175>
- McGlade, L. M., Milot, B. A. & Scales, J. (1996). Eliminating jargon, or medicalese, from scientific writing. *The American Journal of Clinical Nutrition*, 64(2), 256-257. <https://doi.org/10.1093/ajcn/64.2.256>
- Montalt, V. & González-Davies, M. (2007). *Medical Translation Step by Step*. London: Routledge.
- Montalt, V. (2010). Medical translation and interpreting. In Y. Gambier & L. Van Doorslaer (Eds.), *Handbook of Translation Studies* (pp. 134-140). Amsterdam: John Benjamins.
- Muñoz-Miquel, A. (2018). Differences between linguists and subject-matter experts in the medical translation practice. *Target*, 30(1), 24-52. <https://doi.org/10.1075/target.14130.mun>
- Nephritis. (n.d.). In *Oxford English dictionary*. Retrieved from <https://www-oed-com.kuleuven.ezproxy.kuleuven.be/view/Entry/126129?redirectedFrom=nephritis#eid>
- Nordby, H. (2008). Medical explanations and lay conceptions of disease and illness in doctor–patient interaction. *Theoretical Medicine and Bioethics*, 29(6), 357-370. doi:10.1007/s11017-008-9080-2
- Norman, G. R., Arfai, B., Gupta, A., Brooks, L. R. & Eva, K. W. (2004) The Privileged Status of Prestigious Terminology: Impact of “Medicalese” on Clinical Judgments. *Academic Medicine*, 78(10), S82-S84. Retrieved from <https://journals.lww.com>
- Park, J. (2016, December 8). Is 'Homeless' The Right Word For Those Living On The Street? [Blog post]. Retrieved from: <https://hoodline.com/2016/12/is-homeless-the-right-word-for-those-living-on-the-street>
- Perloff, R. M., Bonder, B., Ray, G. B., Ray, E. B., & Siminoff, L. A. (2006). Doctor-Patient Communication, Cultural Competence, and Minority Health: Theoretical and Empirical Perspectives. *American Behavioral Scientist*, 49(6), 835-852. doi:10.1177/0002764205283804

- Prevel Katsanis, L. (1994). The Ideology of Political Correctness and Its Effect on Brand Strategy. *Journal of Product & Brand Management*, 3(2), 5-14. doi:10.1108/10610429410061861
- Queer. (n.d.). In *Oxford English dictionary*. Retrieved from <https://www-oed-com.kuleuven.ezproxy.kuleuven.be/view/Entry/156236?rskey=05R1PS&result=2&isAdvanced=false#eid>
- Rask, N. (2008). *Analysis of a Medical Translation: Terminology and cultural aspects*. (dissertation School of Humanities). Retrieved from <http://www.diva-portal.org>
- Research and Training Center on Independent Living. (n.d.). Guidelines: How to write and report about people with disabilities, 9<sup>th</sup> edition. Retrieved from: <http://rtcil.org/guidelines-9th-edition>
- Roach, T. (2017). Political Correctness. *Rock Products*, 120(7), 48. Retrieved from <https://search-proquest-com>
- Sadegh-Zadeh, K. (2012). *Handbook of Analytic Philosophy of Medicine*. doi:10.1007/978-94-007-2260-6
- Sand-Jecklin, K. (2007). The Impact of Medical Terminology on Readability of Patient Education Materials. *Journal of Community Health Nursing*, 24(2), 119-129. doi:10.1080/07370010701316254
- Scholten, W., Simon, O., Maremmanni, I., Wells, C., Kelly, J. F., Hämmig, R. & Radbruch, L. (2017). Access to treatment with controlled medicines rationale and recommendations for neutral, precise, and respectful language. *Public Health*, 153, 147-153. doi:10.1016/j.puhe.2017.08.021
- Searle, J. R. (1975). A Taxonomy of Illocutionary Acts. *Language, Mind and Knowledge*, 344-369. Retrieved from <https://scholar.google.be>
- Sieff, E. (2003). Media frames of mental illnesses: The potential impact of negative frames. *Journal of Mental Health*, 12(3), 259-269. doi:10.1080/0963823031000118249
- Snow, K. (2007). *People first language*. Retrieved from <https://scholar.google.be>
- Suhr, S., & Johnson, S. (2003). Re-visiting 'PC': Introduction to Special Issue on 'Political Correctness'. *Discourse & Society*, 14(1), 5-16. doi:10.1177/0957926503014001926
- Taalwijzer. (n.d.) Retrieved from: <http://www.handiwatch.be/node/50>
- Thibodeau, P.H. & Boroditsky, L. (2011). Metaphors We Think With: The Role of Metaphor in Reasoning. *PLoS ONE* 6(2): e16782. doi:10.1371/journal.pone.0016782
- Thomas, K. (1987). General practice consultations: Is there any point in being positive? *British Medical Journal*, 294(6581), 1200-1202. doi:10.1136/bmj.294.6581.1200
- United Nations. (n.d.). Disability and the Media. Retrieved from: <https://www.un.org/development/desa/disabilities/resources/disability-and-the-media.html>
- Vranceanu, A. M., Elbon, M., Adams, M. & Ring, D. (2012). The Emotive Impact of Medical Language. *HAND*, 7(3), 293-296. <https://doi.org/10.1007/s11552-012-9419-z>
- What are major life activities? (n.d.). Retrieved from: <https://adata.org/faq/what-are-major-life-activities>
- What is the definition of disability under the ADA? (n.d.). Retrieved from: <https://adata.org/faq/what-definition-disability-under-ada>

Whorf, B.L. (1976) *Language, thought, and reality: selected writings of Benjamin Lee Whorf*. (Edited by John B. Carroll.). Cambridge, Massachusetts: the MIT press.

Willekens, S. (2016, January). Mindervalide, beperking of handicap? Wat is het nu? KVG roept op tot correct woordgebruik. *Handiscoop*, 18. Retrieved from: [https://kvg.be/wp-content/uploads/2016/01/Handiscoop\\_2016.01-Mindervalide-beperking-of-handicap-Wat-is-het-nu-KVG-roept-op-tot-correct-woordgebruik.pdf](https://kvg.be/wp-content/uploads/2016/01/Handiscoop_2016.01-Mindervalide-beperking-of-handicap-Wat-is-het-nu-KVG-roept-op-tot-correct-woordgebruik.pdf)

World Bank. (2019, April 4). Disability inclusion. Retrieved from: <https://www.worldbank.org/en/topic/disability>

Young, M. E., Norman, G. R. & Humphreys, K. R. (2008). The Role of Medical Language in Changing Public Perceptions of Illness. *PLoS ONE* 3(12), e3875. <https://doi.org/10.1371/journal.pone.0003875>



	Source texts in English	Translations in Dutch	Author
1	The risk of going under	Anesthesie	Andrea Anderson
2	Antidepressants	Antidepressiva	Leah Shaffer
3	The only emotions I can feel are anger and fear	Blind voor gevoelens	Emma Young
4	The evolution of dance	Dansen	Thea Singer
5	When arousal is agony	De lust die een last wordt	Cat Bohannon
6	Obsessive-compulsive disorders	Een hond met een dwangstoornis	Shayla Love
7	The new group therapy	Een nieuwe vorm van groepstherapie	Tegan Cruwys, Alexander Haslam, Genevieve Dingle
8	When eating becomes an illness	Eetstoornissen	Hal Arkowitz, Scott Lilienfeld
9	Is there really an autism epidemic?	Epidemie autisme	Scott Lilienfeld, Hal Arkowitz
10	The stamp of poverty	Getekend door armoede	John Gabrieli, Silvia Bunge
11	Can herbs ease anxiety and depression?	Kruiden bij angst en depressie	Hal Arkowitz, Scott Lilienfeld
12	Walking 2.0	Lopen	Amanda Boxtel
13	The power of reflection	Meester over je gedachten	Stephen Fleming
14	Self-compassion	Omarm jezelf	Marina Krakovsky
15	Cracking the Parkinson's puzzle	Parkinson-detectives	Jon Palfreman
16	Sick building syndrome	Sickbuildingsyndroom	Shayla Love
17	Male and female responses to stress	Stress kraakt vooral vrouwen	Debra Bangasser
18	Why psychiatry needs neuroscience	Waarom de psychiatrie de hersenwetenschap nodig heeft	Daniel Barron
19	Fear not, child	Wees maar niet bang	Jerry Bubrick
20	That missing feeling	Zoekgeraakte gevoelens	Tori Rodriguez



## Appendix 2. Non-translated Dutch articles

50	Non-translated Dutch articles	rq2 - NL
	Article	Author
1	Afkickcentrum voor baby's	Teake Zuidema
2	Body Integrity Identity-stoornis	Anouk Bercht
3	Chirurgen	Leen Lampo
4	Communicatie brein	Celine Maes
5	Computer herkent zelfmoordgedachten	Melissa Vanderheyden
6	De kracht van falen	Imco Lanting
7	Depressie	Marieke Helmich
8	Dyslexie	Liesbeth Tilanus
9	Een autistische opvoeding	Froukje Wiendels
10	Een beetje getikt zijn we allemaal	Liesbeth Gijssel
11	Een pilletje tegen eenzaamheid	Wim Swinnen
12	Eerste Hulp Bij Psychische Problemen	Melissa Vanderheyden
13	Er zal nooit één behandeling voor autisme zijn	Liesbeth Gijssel
14	Erkenning voor kinderen uit een autistisch gezin	Liesbeth Gijssel
15	Hackers kraken het brein	Wim Swinnen
16	Hokjesdenken	Hanneke Hulst
17	Hoogsensitiviteit	Inge Taucher
18	Hulpverlener in je broekzak	Vittorio Busato
19	Iedereen een robotbrein	Teake Zuidema
20	Je gezicht verraadt je genen	Liesbeth Gijssel
21	Kunstmatige intelligentie	Teake Zuidema
22	Laat de blinden zien	Wim Swinnen
23	Leve de na-apers	Charles Vecht
24	MDMA	Karst Tjoelker
25	Mentale stoornissen bij gevangenen	Griet Vandermassen
26	Migraine is geen ziekte, maar een hersenstoornis	Griet Vandermassen
27	MS	Anouk Bercht
28	MS-patiënten hebben oudere stamcellen	Anouk Bercht
29	Narcisme	Anouk Bercht
30	Neurostimulatie	Liesbeth Gijssel
31	Onderwijsmogelijkheden voor chronisch zieke kinderen	Sofie Prikken
32	Onze maatschappij staat op springen	Wim Swinnen
33	Pijn	Liesbeth Gijssel
34	Pillen tegen alcoholverslaving	Anneke Meyer
35	Psychische stoornis vergroot kans op een tweede	Anouk Bercht
36	Psychologie als vredesduif	Melissa Vanderheyden
37	Puberteitsremmers	Mathilde Kennis
38	Rechtspraak is niets anders dan toegepaste psychologie	Vittorio Busato
39	Rijkdom maakt angstig	Anouk Bercht
40	Simpele oplossingen voor depressie	Paul Koeck
41	Slaap	Raf Scheers
42	Slimme pil kan aanval epilepsie voorkomen	Liesbeth Gijssel
43	Sociale brein	Charles Vecht

44	Suiker en het brein	Thomas Detombe
45	Uitstelgedrag	Wim Swinnen
46	Veel ouders zijn dankbaar voor hun afwijkende kind	Griet Vandermassen
47	Vrijheid is een last	Leen Lampo
48	Waarom maakt liefde blind	Anouk Bercht
49	Weerstand tegen dementie	Griet Vandermassen
50	Wie ben ik zelf	Vittorio Busato

Appendix 3. Dutch articles translated from a source language other than English

<b>30 Dutch articles translated from non-English source text</b>		<b>rq2 - NL (xx)</b>
	<b>Article</b>	<b>Author</b>
1	Als gezond eten je ziek maakt	Romina Rinaldi
2	Antidepressiva voor kinderen	Nele Langosch
3	Bang zijn voor het geluk	Hanna Drimalla
4	Behandeling Parkinson	Stefanie Reinberger
5	Borderline	Inga Niedtfeld, Christian Schmahl
6	Buitenlands accent	Christiane Gelitz
7	Burn out	Martin Reuter
8	Doorwaakte nacht bij depressie	Christoph Nissen, Marion Kuhn
9	Een psychische stoornis komt nooit alleen	Jan Osterkamp
10	Ergotherapie	Verena Ahne
11	Geheim brein	Ulrike Gebhardt
12	Genezen met spiegels	Vilayanur Ramachandran, Diane Rogers-Ramachandran
13	Gevoelige zieltjes	David Gourion
14	Hallucinaties	Patrick Verstichel
15	Hoe kunst het brein heelt	Fabrice Chardon, Hervé Platel
16	Hoe omgaan met psychose	Mathias Zink, Franziska Rausch, Sarah Eifler
17	Kink in de kabel	Christina Haubrich
18	Kwaal komt zelden alleen	Phoebe Cyra Fleischer, Frank Jacobi
19	Leren leven met pijn	Frank Henry, Chantal Wood
20	Mannen- en vrouwenstoornissen	Theodor Schaarschmidt
21	Nieuwe medicijnen voor ALS	Ulrike Gebhardt
22	Omgaan met dementie	Clarissa Giebel
23	Pijn die bijblijft	Bernard Calvino
24	Verraderlijke hulpmiddelen	Rüdiger Holzbach
25	Verse hersencellen	Kathrin Hemmer, Jens Schwamborn
26	Verslaafd aan cannabis	Helmut Kuntz
27	Vitaminetekort	Alexis Bourla, Florian Ferreri, Stéphane Mouchabec
28	Vriendschap wetenschappelijk verklaard	Ádám Miklósi
29	Zeg het eenvoudig	Markus Reiter
30	Ziek van pillen	Francesco Cro

Appendix 4. Dutch glossary

MEDICALESE	LAY TERM
acathisie	rusteloosheid
accumulatie	opeenhoping
achondroplasia	dwerfgroei
addictie	verslaving
agorafobie	pleinvrees
alcoholisme	drankzucht
amnesie	geheugenverlies
anomalie	afwijking
anorexia	magerzucht, gebrek aan eetlust
anoxie	zuurstofgebrek
apathie	lusteloosheid
asthenie	krachteloosheid
boulimia, boulimie	vraatzucht
cardiopathie	hartziekte
cataract	grijze staar
cefalalgie	hoofdpijn
cerebro vasculair accident, CVA	beroerte, herseninfarct, hersenbloeding
cirrose, levercirrose	leveraandoening
colitis, enterocolitis	darmontsteking
confusie	verwardheid, verwarring
constipatie	hardlijvigheid, verstopping
degradatie	afbraak
delirium, delier	waaninnigheid
diabetes	suikerziekte
diarree	buikloop
dwarslaesie	ruggenmergletsel, letsel aan het ruggenmerg
dyslexie	woordblindheid
dyspepsie	problemen met de spijsvertering, maagklachten
encefalitis	hersenenontsteking
encefalopathie	hersenziekte
epilepsie	vallende ziekte
exantheem	huiduitslag
fibromyalgie	spierreuma
glaucoom	groene staar
graviditeit	zwangerschap
hallucinatie	drogbeeld, drogwaarneming, waanvoorstelling
hepatitis	leverontsteking
hypertensie	verhoogde bloeddruk, hoge bloeddruk
hypotensie	verlaagde bloeddruk, lage bloeddruk
infectie	besmetting
inflammatie	ontsteking
influenza	griep
insomnia	slapeloosheid
interferentie	verstoring

lassitudo	vermoeidheid
leukemie	bloedkanker
megalomanie	grootheidswaan
meningitis	hersenvliesontsteking
menopauze	overgangsjaren, overgang
migraine	schele hoofdpijn
mucoviscidose	taaislijmziekte
myalgie	spierpijn
mysofobie	smetvrees
nausea	misselijkheid
nervositeit	zenuwachtigheid
neuralgie van Horton	clusterhoofdpijn
neuralgie, neuropathische pijn	zenuwpijn
neuritis	zenuwontsteking
neuropathie	zenuwziekte
neveneffect	bijwerking
obesitas	vetzucht
obsessie	dwangvoorstelling, dwangbeeld, dwanggedachte
oedeem	waterzucht, zwelling
osteoporose	botontkalking
paralyse	verlamming
paranoia	achtervolgingswaan
parotitis	bof
pneumonie	longontsteking
pruritus	jeuk
pyrexie	koorts
regressie	achteruitgang
retinopathie	netvliesandoening
rigiditeit	stijfheid
rubella	rodehond
schizofrenie	gespleten persoonlijkheid
somnolentie	slaperigheid
stenose	vernauwing
surditas	doofheid
thrombus	bloedprop
tic	zenuwtrekking
tinnitus	oorsuizen
tumor	gezwel
vertigo	duizeligheid
vigiliteit, vigilantie	waakzaamheid
xerostomie	droge mond

Appendix 5. English glossary

MEDICALESE (EN)	LAY TERM (EN)
accumulation	build-up
achondroplasia	achondroplasia
addiction	addiction
agoraphobia	fear of open public spaces
akathisia	restlessness
alcoholism	alcoholism
amnesia	amnesia
anomaly	deviation
anorexia	anorexia
anoxia	lack of oxygen
apathy	apathy
asthenia	weakness
bulimia	bulimia
cardiopathy	heart disease
cataract	cataract
cephalalgia	headache
cerebrovasculair accident, CVA	stroke
cirrhosis	liver disease
cluster headache	cluster headache
colitis	colon inflammation
confusion, disorientation	confusion, disorientation
constipation	constipation
cystic fibrosis	cystic fibrosis
degradation	break-down
delirium	being delirious
diabetes	diabetes
diarrhoea	diarrhoea
dyslexia	dyslexia
dyspepsia	indigestion, problems with digestion, stomach complaints, stomach upset
encephalitis	brain inflammation
encephalopathy	brain disease
epilepsy	epilepsy
exanthema	rash, skin rash
fibromyalgia	fibromyalgia
glaucoma	progressive blindness
gravidity	pregnancy
hallucination	hallucination
hepatitis	hepatitis
hypertension	high blood pressure
hypotension	low blood pressure
infection	infection
inflammation	inflammation
influenza	flu

insomnia	sleeplessness
interference	interference
lassitude	weariness, fatigue
leukaemia	leukaemia
megalomania	megalomania
meningitis	meningitis
menopause	menopause
migraine	migraine
myalgia	muscle pain
mysophobia	contamination fear, fear of contamination
nausea	feeling sick
nervousness	nervousness
neuralgia, neuropathic pain	nerve pain
neuritis	nerve inflammation, neuroinflammation
neuropathy	nervous system disorder
obesity	obesity
obsession, obsessive thoughts	obsession, obsessive thoughts
oedema	swelling due to fluid
osteoporosis	osteoporosis
paralysis	paralysis
paranoia	paranoia
parotitis	swollen glands, mumps
pneumonia	pneumonia
pruritus	itching
pyrexia	fever
regression, regression, decline, deterioration	regression, regression, decline, deterioration
retinopathy	eye-disease
rigidity	stiffness
rubella	German measles
schizophrenia	schizophrenia
side effect	side effect, side-effect
somnolence	sleepiness, drowsiness
spinal cord lesion, spinal cord injury	spinal cord lesion, spinal cord injury
stenosis	duct narrowing
surdity	deafness
thrombus	blood clot
tic	tic
tinnitus	ringing in the ears
tumour	tumour
vertigo	dizziness
vigilance, state of alert, alertness	vigilance, state of alert, alertness
xerostomia	dry mouth