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Was it written for your audience?

Readability analyses of the information provided in English on a Swedish municipality's website

Degree project in English Studies ENA309

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Abstract

In today's multicultural society it is increasingly important that information is made available in a way that allows it to reach as many people as possible. The present study investigates the readability of the information provided in English on a Swedish municipality's website. While Umeå Municipality sets a good example when it comes to providing information in foreign languages, the question is how easy the information is to read. The methods used to measure the readability of the texts were three automated readability formulas as well as additional analyses focusing on sentence structure and the number of clauses per word.

The results show that despite obvious efforts to follow the guidelines for providing public information, more attention needs to be given to the form of the texts themselves. The complexity of the texts as gauged by the reading formulas was in all cases greater than what is recommended for information written for the general public. Some of the texts would seem to require the reader to have a college degree to fully comprehend the information. The supplementary analyses, especially when it comes to the number of clauses per sentence, confirmed the complexity of the texts. The importance of 'writing for your audience' thus seems to have been neglected for parts of the analysed material, which implies that some readers may not fully understand their rights and responsibilities regarding the areas addressed on the municipality's website.

Keywords: readability, readability formulas, sentence structure, clauses per sentence, plain language, municipal information, English, Sweden

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1. Introduction

In 2009, Sweden's first official Language Act came into effect. The Act declares that "The language of the public sector is to be cultivated, simple and comprehensible" (SFS 2009:600, section 11). This aim corresponds to that of *Plain Language*, which is a concept and a movement based on a set of standards for public information to reach as many citizens as possible. Governments all over the world are implementing plain language standards in order to meet the needs of an increasingly diverse population. In Sweden, approximately 20% of the population have a foreign background and most of these have a different mother tongue than Swedish (Språkrådet, 2012, p.5).

To help government agencies, such as municipalities, to interpret and adhere to the Language Act, Språkrådet, the Language Council of Sweden, created a set of guidelines named *Vägledningen för flerspråkig information – praktiska riktlinjer för flerspråkiga webbplatser* (Språkrådet, 2012).[1] The guidelines make it clear that the Language Act poses demands on authorities and other official entities to reach out to all citizens, regardless of their mother tongue, notably with information regarding public services (Språkrådet, 2012, p.5). However, many Swedish authorities still seem to have difficulties interpreting or applying the provisions of the Act, especially in languages other than Swedish. This becomes apparent when perusing various authorities' websites and seeing how differently they all deal with translations and the information made available in other languages.

Against this background, the present study will focus on researching the English version of one Swedish municipality's website, namely that of Umeå Municipality. At the time of writing, Umeå is one of few Swedish municipalities to provide an English version created by a human translator. (A majority of the other municipalities seem to offer only a machine translation service, usually Google Translate, for their websites.) At first glance, the English versions on Umeå's website appear to adhere to most of the guidelines from Språkrådet and the texts are well written. With that in mind I will attempt to answer the following research question:

 Is the material provided in English easy for the intended target audience to read and understand?

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[1] There is no official translation of this title, but its literal translation would be 'Guidelines for multilingual information – practical guidelines for multilingual websites'.

To determine that, automated readability analyses were used, which calculate readability based on sentence length and word length. To complement that, additional analyses have been carried out, with the focus on sentence complexity and number of clauses per sentence.

2. Background

2.1 Plain language

Whether it is the official US guidelines, the European Commission's guidelines or the Swedish guidelines regarding plain language, they all start out by stressing the importance of focusing on and writing for the target audience, for example "Use language your audience understands and feels comfortable with" (plainlanguage.gov, n.d, n.p.). Bivins (2008) states that legal documents are often written with little concern for the target audience, which may result in laypeople not fully understanding their rights and responsibilities (p.1). Bivins found in her study that "even if language in contracts and agreements tends to be more understandable than in the past, portions of these documents can still be difficult for a layperson to understand" (p.116). One of the main problems she points to is lengthy sentences with several subordinate clauses, some of which my separate the subject of the main clause from its verb, which makes it difficult for the reader to quickly determine the sentence's meaning (Bivins, 2008, p.79).

The guidelines by and for the European Commission state, in the introduction, that all staff should write clear texts that are easily and quickly understood, whatever the type (Field, 2016). These guidelines are meant to help achieve this regardless of whether authors write in their first language or any of the other official EU languages. Among the more concrete pieces of advice are: "keep it short and simple", "structure your sentence", "cut excess nouns", and "use active verbs" (Field, 2016, p. 6-9).

Bivins (2008) mentions that there are numerous versions of plain language guidelines, and that one needs to be aware of the target audience, since what is plain language for one type of audience might not function as such for another. There are, however, a set of primary guidelines that that can be applied when writing for any type of audience, namely:

- Write in reasonably short sentences.
- Prefer active voice.

- Use clear, informative headings.
- Use logical organization.
- Omit unnecessary words.
- Have a readable design.

These guidelines were provided by the Center for Plain Language (cited by Bivins, 2008, p.8) and are in accordance with those offered by the European Commission.

Note that the last point in the list above is about design issues such as formatting and layout. However, that aspect will not be discussed further in the present study, which focuses on linguistic features.

2.1.2 Plain language in Sweden

Plain language has a long history in Sweden (Ehrenberg-Sundin & Sundin, 2015). However, it was in the 70's, with the decade's democratic spirit, that it gained momentum. Journalists, writers and linguists spoke up, and respect for the individual's right to comprehensible information soon became a requirement rather than a request. Research regarding the population's literacy rates was carried out and the Government hired language experts (Ehrenberg-Sundin & Sundin, 2015). In an attempt to encourage the country's authorities to carry out their own plain language projects, the Government appointed, in 1993, a Plain Swedish Group, which later became the Language Council.

The Language Council of Sweden is a department of the Swedish Government agency, the Institute for Language and Folklore. This agency is responsible for language policy and language planning, especially when it comes to Swedish, Swedish Sign Language and the national minority languages. The Language Council monitors the implementation of the Swedish Language Act, the purpose of which is "to specify the position and usage of the Swedish language and other languages in Swedish society. The Act is also intended to protect the Swedish language and language diversity in Sweden, and the individual's access to language" (SFS 2009:600, section 2). Most importantly, in the present context, the Council encourages the use of plain language by public agencies, to meet the demands on "the individual's access to language" (Institutet för språk och folkminnen, 2017a, n.p.).

Though most of its work concerns the Swedish language, the Council is also concerned with how public agencies provide information in other languages. They point out that "Until a few decades ago, Sweden was a society where the Swedish language was the only mother tongue considered to be of importance. Today, there are 150 different native languages spoken in Sweden and the importance of the English language is growing" (Institutet för språk och folkminnen, 2017b, n.p.). To help the various government agencies, municipalities etc. to provide information in a way that everyone can understand, the Language Council developed guidelines regarding translation and plain language and how to implement the Language Act (Språkrådet, 2012).

2.1.3 Språkrådet's Guidelines for Multilingual Information

The Guidelines for Multilingual Information (Språkrådet, 2012) include advice regarding Sweden's official minority languages, the Swedish Sign Language and foreign languages in Sweden. Since the focus of the present study is the English language, this section will only address the parts regarding foreign languages.

It is explained at the beginning of the guidelines that their main aim is to increase the understanding of the need for multilingual information. The guidelines are also intended to provide support and tools in the writing process (Språkrådet, 2012). However, providing information in other languages can prove to be a challenge. The recommendations are to identify the most common languages in the geographical area for which the information is relevant and provide adapted texts in those languages. It is up to each municipality to establish, through demographic research, which the most common native languages are (p.20). The type of information the municipality should try to provide in other languages than Swedish should mainly be based on the needs of newly arrived immigrants, who are generally the group with the most extensive needs. The suggested topic areas are:

- basic municipal information to immigrants
- information regarding public services such as childcare, schools and elderly care
- information about important electronic functions such as how to electronically order forms, fill in forms and search the database
- information about the organisation itself, in this case the municipality in question, and how it works

- how to contact the organisation and how to get further information in other languages.

<div align="right">(Språkrådet, 2012, p.21, my translation)</div>

The recommendation is to select and adapt the information to be provided in the various languages, not necessarily to translate directly from existing texts. Translations can be costly and by translating a text that is written for a Swedish audience, there is a risk that the information will be lost (p.22). People that are new to a country might not be familiar with the terminology, how different entities function and so on. Translations are not automatically easy to read just because they are translated from a source text written in plain language. With that in mind, the guidelines recommend considering the following points, among others, with regard to language use:

- Either edit the existing source text or write an entirely new text before translating it.
- Adjust vocabulary and content: use general and simple words and provide explanations for culture specific terms and terminology specific to the organisation. Use well defined terms and translate them into accurate corresponding terminology. It is recommended to keep the Swedish term in parentheses next to the translated word. This will help the reader when asking for further assistance from Swedish staff.
- Headings on applications and other forms are preferably written in both the source and the target language.
- Be generous with clarifying linking words.

<div align="right">(Språkrådet, 2012, p.25, my translation)</div>

One good point to keep in mind is that many immigrants are multilingual and know commonly spoken international languages such as Arabic, English, French, Portuguese, Russian or Spanish (p.22). Therefore, it is of particular importance that attention is given to the quality of the information provided in, for example, English.

Another recommendation in the guidelines is to use machine translations with caution. Such services are meant to provide support to readers who need to engage with texts written in languages they do not know. In my cases, machine translation does not produce good translations yet. The quality can also vary considerably depending on the language pair (Språkrådet, 2012, p.26).

2.2 Readability

Plain language and readability are two closely related concepts. Plain language in writing implies writing in a way that people can understand, ideally the first time they read the text (plainlanguage.gov, n.d.). Readability is how easy something is to understand. The online dictionary Lexico gives two definitions of readability: "The quality of being legible or decipherable" and "The quality of being easy or enjoyable to read" (lexico.com, n.d.). It is the second of these meanings that is of relevance here.

Readability has been a research field since the second half of the 19th century. Lucius Sherman was one of the first to examine texts with a focus on sentence length and complexity. His aim was to examine how the writing style had changed between the pre-Elizabethan and the Elizabethan period. According to Sherman, the older texts contained such long sentences that they were often painful to read, and it took the readers several tries to understand them (Sherman cited in Clark Briggs, 2014, p.3-4). The results showed that the sentences were indeed getting shorter over time but still remained fairly long, dropping from an average of 44 words per sentence to around 25 by the end of the period studied. This study was one of the first attempts at measuring readability.

The need for producing readable texts increases with advancements in technology. The internet, for example, has given people access to news media from countries all over the world, which means that "readership for a US newspaper may extend well beyond the country's borders" (Rollins & Lewis, 2013, p.149). With that in mind, a journalist is not only writing for a homogeneous local audience anymore, and attention must be payed to a number of factors such as readers' varying cultural experiences and educational backgrounds, further explained in section 2.2.1. The rise in global travel and the increase in migration obviously play a role, too. A country like the US has a very diverse population not only in terms of ethnicities, but also in terms of reading abilities; hence the importance of more readable text (Rollins & Lewis, 2013). The same situation exists in Sweden, especially after the refugee crisis in 2015, when the number of asylum seekers in the country doubled compared to the previous year (migrationsinfo.se, 2016).

As stated in section 2.1.2, readability and plain language have been in focus for a long time in Sweden when it comes to the Swedish language, but not with regard to information provided in other languages. A democratic society poses great demands on its citizens to keep themselves informed, but that presupposes that everybody has access to the necessary information (Språkrådet, 2012). Marnell (2008) points to this issue when he explains how organisations in the US were successfully sued due to providing public documents that were too hard to read and understand. The plaintiffs had claimed that "they had been disadvantaged by an inability to understand certain public documents" (p.2-3). This led to the development of guidelines regarding minimum readability for public documents provided by the government and other entities (Marnell, 2008). To use readability formulas when developing texts for the general public appears to be important. A study from 2003 cited in Clear Language Group (2019), claimed that 43% of the adults living in the US had basic or below basic literacy skills, according to the most recent assessment at the time, and that an audience with limited literacy skills needs texts to be written at the 6th grade level or lower (clearlanguagegroup.com, 2019, n.p.). It is also important to know that the average American reads and fully comprehends information at a basic 8th (or even 7th) grade level (U.S. Department of Education, n.d.). A more recent study is the survey of adult skills which is a part of the *Programme of international Assesment of Adult Competencies* (PIAAC) conducted by The OECD in 2013. The results of this study placed the U.S. 16 out of 23 countries regarding literacy while Sweden raked top four. (National Center On Education and The Economy, 2019, n.p.)

2.2.1 Readability formulas

To help writers create texts that meet the readers' needs, a range of readability formulas have been developed over the years. DuBay (2007) explains that in the 1920's, educators started using formulas based on sentence length and word difficulty to predict the level of reading skill required to read a text. Based on that they could then decide what teaching materials were suitable for each school grade. By the 1980's there were approximately 200 different formulas and by 2007 readability formulas were widely used in education and health care, among other fields (DuBay, 2007, p.6). There are, however, important factors to consider when using these tests. Kouamé claims that "good research practice suggests that we use several methods for testing because error is inevitable. Using more than one test provides greater insight into the document" (2010, p. 136).

Kouamé also brings up the importance to continue readability testing due to the multiple layers of reading capability within our diverse society (p.138).

Fry (2006) explains that readability formulas are objective mathematical tools that measure readability based on, for example, sentence length and word length. The formulas can be applied automatically on a computer or by hand. The formulas used in the present study, the Flesh-Kincaid Grade Level formula, the SMOG index, and the Automated Readability Index, all yield scores in the form of grade levels, i.e. an estimate of how many years of schooling are required to read and understand the analysed text with ease. It is important to note that these grade levels were originally designed for grade native speakers which can be limiting. The grade levels refer to the US school system. If, for example, the text gets a score of 9, it means that the reader needs to have nine years of education to understand it easily. Students in grade nine are 14-15 years old. This should be related to the fact that compulsory schooling in the US is usually twelve years. Students generally start kindergarten or grade 1 at the age of six and complete grade 12 at the age of 17 (Just landed, n.d.).

2.2.1.1 The Flesh-Kincaid Grade Level formula

Developed in 1976 by the US Navy, The Flesh-Kincaid Grade Level (FKGL) formula was an improvement of the earlier Flesh Reading Ease (FRE) formula. Rudolf Flesh was a supporter of the Plain English Movement and developed the FRE formula in 1948 and co-authored the Flesh-Kincaid Grade Level Readability formula together with John P. Kincaid. The FRE formula is used as a standard formula by many US Government Agencies and might seem like the obvious choice to use in this study (readabilityformulas.com, n.d.). However, since FRE scores the text on a scale of 1-100, it is more abstract than the FKGL, which scores the text's readability by showing how many years of education the readers need to understand the text. The mathematical formula is written and explained as follows:

FKRA = (0.39 × ASL) + (11.8 × ASW) - 15.59

FKRA = Flesch-Kincaid Reading Age

ASL =Average Sentence Length (i.e., the number of words divided by the number of sentences)

ASW = Average number of Syllable[s] per Word (i.e., the number of syllables divided by the number of words)

<div align="right">(Readability Formulas, n.d.)</div>

2.2.1.2 The SMOG index

Just like the FKGL formula, the SMOG formula, or index, measures readability in terms of how many years of education the readers need to understand the text. SMOG, an acronym for Simple Measure of Gobbledygook, was developed by G. Harry McLaughlin in 1969 and is widely used for health and medical texts. According to McLaughlin, word length is associated with precise vocabulary, which means that the readers must put more effort into understanding the word (McLaughlin, 1969, p.640). The SMOG mathematical formula is:

$$Grade = 1.0430 \sqrt{total\ complex\ words \ \times \left(\frac{30}{total\ sentences}\right)} + 3$$

<div align="right">(Readability Formulas, n.d.)</div>

Total complex words refers to words that contain three or more syllables, also known as polysyllabic words.

2.2.1.3 The Automated Readability Index

What sets this readability formula apart from the previously mentioned ones, is that instead of considering the number of syllables per word, it is based on the number of characters per word. Other than that, it does have the same purpose and the same kinds of scores as FKGL and SMOG. This formula is written and described as follows:

$$4.71 \left(\frac{\text{characters}}{\text{words}}\right) + 0.5 \left(\frac{\text{words}}{\text{sentences}}\right) - 21.43$$

<div align="right">(Readability Formulas, n.d.)</div>

Characters are the number of letters and numbers.

2.2.1.4 Criticism of readability formulas

When discussing his results, Jonson (2018) points to the fact that the merits of readability formulas have been debated and that their results cannot be seen as absolute measures of a text's readability (2018, p.19). One problem, according to Stossel et al. cited by Jonsson (2018), is that "the FKGL formula has been claimed to potentially underestimate the textual difficulty" (p.4). Jonsson states that regardless of whether this is accurate or not, it is advisable to use more than one formula. The formulas are as mentioned best to be seen as an indication of the text's readability. Kouamé (2010) states that "despite the limits of readability formulas, they remain a unique way to predict the extent to which documents can be comprehended by their intended target" (p.138).

Readability scores are, as explained in 2.2.1, based on sentence length and different measures of word length, yet Marnell (2008) claims that readability is a much more complex concept. By stating how "the measures of readability have to take into account the reader as well as the text" (Marnell, 2008, p.7). Lenzner (2014) also points to how the formulas have received criticism because "they are predominately based on only two variables […] that may not be appropriate predictors of language difficulty" (p. 677)

Regarding the reader, Fry (2006) argues that any readability formula must be used along with subjective judgment. Formulas do not consider, for example, motivation, appropriateness and readers' backgrounds. Motivation is about whether the reader is really interested in the subject and/or whether there are other incentives to understand the text. Appropriateness means that the content may or may not be appropriate for the grade level readability score given. The reader's background refers to the cultural background, the educational experience and the social or ethnic class the reader belongs to. This includes the possibility that some readers have mixed backgrounds (2006, p.2).

Regarding the text, Marnell (2008) points to the issue of sentence length. While a long sentence tends to be harder to read, it is also a matter of how it is constructed. In fact, there is no guarantee that short sentences are easy to read. Marnell gives the example of "The cat shook. It sat. It licked. It hissed. Then it slept" (2008, p.4). This makes for rather choppy reading that can make processing hard. Simple measures of sentence and word length ought to be complemented by considerations of sentence complexity and other structural aspects.

2.4 Sentence complexity

Ballard (2007) defines a sentence as "the largest unit of syntactic structure" (p.146). A sentence must contain at least one clause (a main clause) to be grammatically complete. Each lexical verb in a sentence indicates a clause, and the most central feature of a clause is the verb element, which provides information on tense, aspect, voice etc. Ballard's definition of a main clause is "Any clause which has the potential to stand alone" (p.132). A main clause can be as short as two words, as in Marnell's (2008) example in the section above: "The cat shook. It sat. It licked. It hissed". These are all simple sentences in terms of structure, since they consist of only one main clause. In other words, there is a subject, the verb phrase is finite, and each sentence can stand alone grammatically.

In contrast, subordinate or dependent clauses cannot stand on their own. A subordinate clause depends on a main clause to form a grammatically complete sentence (Ballard, 2008). Two signs that a clause is dependent are a non-finite verb phrase and/or a subordinating conjunction at the beginning.

There are many ways of combining main clauses and subordinate clauses to form longer sentences. This will be illustrated in the following sections, which also describe the three other possible types of sentence structure apart from the simple one: compound, complex and compound-complex.

2.4.1 Simple sentence

A simple sentence consists of only one main clause and no subordinate clauses (with an exception discussed below). However, to call one-clause sentences simple can be deceiving. Ballard (2007) provides the following examples:

	S	V			
(1)	*Someone*	*coughed.*			

	A	S	V	A	A
(2)	*Suddenly*	*someone*	*coughed*	*loudly*	*in the next room.*

	S	V	O		
(3)	*I*	*know*	*a man who has an irrational fear of spiders.*		

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Example 1 is a basic main clause containing the subject *someone* and a lexical verb *coughed*. Example 2 contains the same subject and verb, but the sentence has been rendered more than twice as long with the help of adverbials. These particular adverbials are not clauses in themselves (Ballard, 2007, p.162). The adverbials provide potentially important additional information, but they also make the sentence harder for the reader to process and pick out the most important information.

Example 3 above can prove to be even more complicated for the reader despite being defined as structurally simple. Two verbs can be identified, *know* and *has*. Since each verb phrase in a sentence indicates a new clause, this sentence must contain two clauses. However, the subordinate clause *who has an irrational fear of spiders* functions as a postmodifier in the object noun phrase *a man who has an irrational fear of spiders*, i.e. the sub-clause does not function as one of the major clause elements in itself. Since that, however, is a precondition for making a sentence complex (see 2.4.3), sentence 3 above remains structurally simple.

2.4.2 Compound sentence

A compound sentence is marked by the use of one or more coordinating conjunctions (CCJ) "to link two or more clauses on an equal basis so neither is dependant of the other" (Ballard, 2007, p.164). The most central coordinating conjunctions are *and, but* and *or*. Example 4, provided by Ballard (p.164), is a compound sentence with the coordinator and:

	S	V	O	CCJ	S	V	O
(4)	*I*	*read*	*a book*	*and*	*she*	*watched*	*a film.*

Coordinating conjunctions can help increase the readability of a text. Consider two of the sentences (Examples 5 and 6) provided by Marnell (2008, p.4) in section 2.4: "The cat shook. It sat." adding the coordinator *and* to these choppy short sentences can make them easier to read:

	S	V	CCJ	V
(5)	*The cat*	*shook*	*and*	*sat.*

Since this sentence is rather short it is easy to read and comprehend, even though it is compound. However, that would partly be due to the vocabulary and the fact that people are likely to know about cats and how they behave. They can relate to the information provided. The method of adding a coordinator is making the sentence easier to read. That said, Example 5 also illustrates another relevant phenomenon, namely ellipsis. Ellipsis is the omission of retrievable information (Ballard, 2007, p.167). In this case, the subject has been left out in the second main clause. According to Ballard, ellipsis is very common in compound sentences. It is an example of the economy we practice in language and helps us to not have to reiterate information when it is not needed for the purpose of emphasis. A more complete but less idiomatic version of the sentence would have been:

	S	V	CCJ	S	V
(6)	*The cat*	*shook*	*and*	*the cat*	*sat.*

In the present study, sentences like the ellipted version *The cat shook and sat* are counted as compound sentences, even though the second main clause has become *dependent* on the first main clause due to the ellipsis.

2.4.3 Complex Sentence

A complex sentence, just like a compound one, contains at least two clauses, but while a compound sentence consists of coordinated main clauses, a complex sentence has the clauses placed in an unequal relationship. At least one clause is grammatically dependent on another and constitutes an entire element of the main clause, as in Examples 7-9:

Clause as a subject

	S	V	C
(7)	*That Brian has the flu*	*is*	*obvious to everyone.*

Clause as object

	S	V	O
(8)	*Guy*	*knows*	*that Brian has the flu.*

Clause as complement

	S	V	C

(9) *The problem   is   that Brian has the flu.*

<div align="right">(Ballard, 2007, p.168)</div>

These examples each include one subordinate clause and might not be too hard to comprehend despite the complex structure. However, a complex sentence can consist of, for example, coordinated subclauses which can make it harder for the reader to make out what is the most important information in the sentence. Consider Example 10:

(10) <u>*Heidi wanted a new bike*</u>   <u>*if she could afford it*</u>   <u>*and*</u>   <u>*if she saw one she liked.*</u>
    main clause   subordinate clause   CCJ   subordinate clause

<div align="right">(Ballard, 2007, p.173)</div>

The subordinate clauses are, by definition, dependent on a bigger unit and cannot, grammatically, stand on their own. In these cases, they act as obligatory clause elements in the main clause, which means that the sentences are not grammatically complete without them. However, a subordinate clause can also function as a non-obligatory clause element, e.g. an adverbial as in Example 11:

    A   S   V   O   A
(11) *When Brian recovers from the flu*   *he*   *will ride*   *his bike*   *again.*

The above sentences are all very straightforward, textbook examples of complex sentences. However, real-life specimens can be a lot longer with more than one subordinate clause included.

2.4.4 Compound-Complex Sentence

A compound-complex construction is a combination of the two previously mentioned sentence structures. Ballard (2007, p.172) provides an example for this category as well:

(12) <u>*Sara wanted a new bike*</u> <u>*and*</u>   <u>*Heidi wanted one too if she could afford it.*</u>
    main clause   CCJ   main clause   subordinate clause

Example 12 illustrates one version of a compound-complex sentence. It has two coordinated main clauses and the second main clause contains a conditional clause that expresses, as the name suggests, a condition, in this case for Heidi wanting a new bike. However, there are several

other possible combinations and, as mentioned before, real-life sentences are rarely this straightforward.

2.4.5 Clauses per sentence

The mere number of clauses in a sentence, regardless of their relationships to each other, represents another possible measure of syntactic complexity – and thus readability. The plain language guides mentioned in section 2.1 all recommend using shorter sentences. Of course, not all short sentences are easy to read, as seen in 2.4.1, but long sentences will, on average, be more difficult to process than shorter ones: "Long sentences nearly always have complex grammatical structure, which is a strain on the reader's immediate memory because he has to retain several parts of each sentence before he can combine them into a meaningful whole" (McLaughlin, 1969, p.640).

Bivins (2008) points in the same direction by stating that "Lengthy sentences with excess words and subordinate and conjoined clauses are difficult to comprehend" (p.79). Example 13, provided by Ballard (2007), represents such a sentence:

S
(13) *The venerable precentor of Gloucester Cathedral whom I met last summer*

V   O
has been organizing   a musical tour of antipodean churches.
                                        (Ballard, 2007, p 162)

In this example, the subject contains both pre- and post-modifiers including the relative clause *whom I met last summer*, which is a subordinate clause within the subject noun phrase. Regardless of this sentence's obvious complexity, it is still classified, structurally, as a simple sentence, according to Ballard's definition of simple sentences, explained in 2.4.1. Yet by acknowledging that it does, in fact, consist of two clauses, it can at least be considered as more complex than a simple sentence consisting of just one clause. Of course, the formal, polysyllabic words contained in Example 13 further add to the challenge it constitutes for the reader.

3. Methods and material

As stated in the introduction, this study will focus on the English versions of the information provided on Umeå Municipality's web site. This section will present the material used in the study and explanations will be provided for the methods used to analyse the material.

3.1 Umeå Municipality

Umeå Municipality is the eleventh largest of Sweden's 290 municipalities, in terms of population. With 127 119 inhabitants in Dec 2018 (SCB, 2018), Umeå as a city is the largest in the northern part of Sweden called Norrland and is also one of Sweden's fastest growing cities. In such a city the need for information in other languages than Swedish is very pronounced, since a large share of the new inhabitants of a growing Swedish city tend to be foreigners. In 2018 alone, the population of Umeå grew with just over 2000 people, partly due to immigration from abroad. At the beginning of the new millennium, there were 8 200 people residing in Umeå who were not born in Sweden, while at the end of 2018, the number had increased to 14 600. These numbers only represent people registered as residents by the Swedish Tax Agency and do not include tourists, temporary workers or students from other countries.

According to the most recently updated information on their website (Umeå kommun, 2018a), the largest foreign nationalities represented in Umeå are Finland, Iran, Iraq, Somalia, Syria and Afghanistan. People are only required to be registered citizens if they are planning to stay for one year or more. However, many students do not stay for more than one or two terms when studying at a foreign university and are therefore not accounted for. In this context, it deserves to be pointed out that one of Sweden's leading universities is located in Umeå, with more than 60 different nationalities represented there at the time of writing (Umeå University, (n.d.)).

3.1.1 Umeå Municilality's website

The official website of Umeå Municipality is www.umea.se/umeakommun. This is where information regarding the municipality's services, events, as well as rules and regulations are made available to the public. The information is mainly in Swedish, though they also provide versions in the national minority languages (which include Finnish) as well as plain text. At the time of writing they are in the process of developing videos in sign language (Umeå kommun,

2018b). In accordance with the guidelines by Språkrådet (2012), described in section 2.1.3, the website also provides information in some of the other most commonly used languages in the municipality: Arabic, Farsi, Somali, and Sorani, as well as English and French. As stated in 2.1.3, many immigrants are multilingual and know at least one of the larger international languages. According to a representative at the municipality's communications office, these texts are provided by hired professional translators and/or handled as in-house projects, written by their own employees (personal communication, February 2019, Appendix 1). Visitors to the site can also select additional languages in the machine translation service linked to the start page, Google Translate, which provides automatic translations into approximately 100 languages. The municipality consults Språkrådet's guidelines together with their own language policy for guidance when handling issues regarding translations and what information to provide in other languages. However, their decisions are primarily based on the actual needs.

Another aspect that appears to be in accordance with Språkrådet's guidelines is the nature of the non-Swedish versions, which seem to be adjusted to their specific audiences. The English versions are not direct renderings of the corresponding Swedish texts, which implies that the translator either edited the source text before translating or that an entirely new text was created. Regarding terminology, it can be discussed whether it has been simplified and adjusted for the target group. However, a glossary containing the most commonly used words is provided.

3.1.2 Text selection and limitation

The material studied consists of twenty different English texts. Each text represents one page on the web site. The texts were chosen based on their content being especially important to new immigrants. According to Språkrådet's guidelines for multilingual information (2012, p.21), the most important information to provide in other language is, as previously mentioned, basic municipal information to immigrants, information regarding public services such as childcare, schools and elderly care, as well as information about the municipality itself and how it is run.

Texts 1-5 contain information about the school system. Text 6 is about the right to receive education in one's mother tongue and is grouped together with texts 7 and 8, which provide an introduction for refugees. Texts 9-13 provide health care information, with foci such as elderly care and care for the functionally impaired. Texts 14 and 15 provide information about cultural

activities and services such as libraries, which are important for integration. Text 16 provides information about the labour market and text 17 about building permits, which might be important for house owners. Finally, texts 18-20 feature information about how the municipality is run and how citizens can affect the democratic process.

The guidelines also mention contact information and electronic services as important to focus on, but that kind of material was excluded from this study since it does not come in the form of continuous texts. The focus was to examine if the English texts are easy to read and comprehend and therefore it was only the body of text that was analysed. Headlines and texts shorter than 150 words per page were also excluded.

3.2 Calculating formula scores

The readability formulas used in the present study are those introduced in sections 2.2.1.1-2.2.1.3: FKGL, SMOG and ARI. The reason to use these formulas was to obtain straightforward indications of the readability level of each text. These formulas were applied through an automatic readability checker provided on readabilityformulas.com (n.d.). The site was created by freelance writer Brian Scott and provides several tools for measuring readability. Each text selected Umeå Municipality's website was entered into and processed by the automatic readability checker, which then provided scores based on each mathematical formula. A mean was calculated by adding all the scores provided by each formula and dividing them by the number of texts. The readability checker also counts the number of sentences per text, which I could add up to arrive at the total number of sentences in all texts, which was 281.

The texts are numbered 1-20 in the order they were analysed and also depending on the categories explained in section 3.1.2. The scores from each formula were then entered into separate tables (Table 1-3) and a combination of the formula scores was entered into a graph (Figure 1) to show trends and relevant information for each category.

Also, an average score for each text category was calculated. First, an average score for each text was calculated by summing up the scores from the three formulas for that text and then dividing this sum by three. To get an average for a category, the average scores for the texts in that category were added and then divided by the number of texts in the category.

3.3 Analysing sentence structure

While the readability scores were calculated automatically, sentence complexity was analysed manually. The four types of sentence structure identified in this study were: simple, compound, complex and compound-complex, each described in sections 2.4.1–2.4.4. Each type was marked with a certain colour in the texts. Due to the many possible ways to construct sentences, it was necessary to look at each sentence on its own and identify its structural type. For example, as demonstrated in section 2.4.1, a simple sentence consists of one main clause, though it can feature more than one verb element. Since each verb element indicates a new clause, it was important to look closer at the function of each clause: Does it function as a clause element, which would make the sentence complex, or does it function as a lower-level syntactic unit, for example a postmodifier in a noun phrase, which would *not* make the sentence complex? Since the recommendation is to write short and simple sentences, there was some extra focus on those sentences in this analysis. The raw data from this process was recorded in a spreadsheet.

The numbers of sentences in each category (simple, complex, etc.) were added and are displayed in a graph that also shows the total number of sentences per text (see Figure 2), as well as in percentages (Figure 3).

3.4 Counting clauses per sentence

While analysing sentence complexity in the form of sentence structure, it was necessary to consider the type and function of every clause. However, this analysis also yielded the mere *number* of clauses in each sentence. These were then categorised in different ways in different charts. In the first chart, the categories were 1-9, corresponding to the number of clauses per sentence. These categories were entered into a chart (Figure 5) and contrasted with the total number of sentences in the texts. (The number of sentences per text was already provided by the readability checker described in 3.2.)

The next step was to identify how many of each category, number of clauses per sentence, were represented in each text. These categories were then given colours to represent them in a chart (Figure 6)

3.5 Combining sentence structure with clauses per sentence

Eventually, the two last analyses were combined. By adding the colour codes given to the different sentence structures to Figure 5, a new chart was created (Figure 7), providing another illustration of the complexity of the different sentences.

4. Result

In this section, the results derived from the methods described in section 3 are presented in the following order: the readability formula scores, the sentence structure analysis, and the number of clauses per sentence.

4.1 Readability formula scores

The results from the three formulas used to measure readability in this study are presented in Tables 1-3. The mean is the average for all texts combined. As explained in section 2.2.1, the scores in these formulas indicate how many years of education the reader would need to have gone through to understand the texts. Table 1 presents the scores from Flesh Kincaid Grade Level formula (FKGL).

Table 1: FKGL scores

Text	1	2	3	4	5	6	7	8	9	10	
Score	9	9	12	13.9	11.2	11.7	15.2	12.7	12.4	14	
Text	11	12	13	14	15	16	17	18	19	20	Mean 1-20
Score	10.3	14.9	13	13.1	12.8	13.6	14.7	15.3	17.4	11.9	12.1

The lowest FKGL score for any of the texts is 9 (for texts 1 and 2), which corresponds to nine years of education in the US. Text 19 received the highest score of 17.4, which means that a person reading that text would need to be at least a college graduate to fully understand it. The mean of the scores is 12.09. This is higher than what is recommended for texts written for the

general public in the US, which is grade level 8. The recommendations to write for people with limited literacy skills are even lower (see section 2.2).

Table 2 presents the scores according to the SMOG readability index.

Table 2: SMOG scores

Text	1	2	3	4	5	6	7	8	9	10	
Score	9	9	10.8	12.4	10.3	10.3	12.7	11	11.6	12	
Text	11	12	13	14	15	16	17	18	19	20	Mean 1-20
Score	10.2	12.9	12.1	12	12.3	12.5	11.7	13.5	15.6	10.6	11.6

Just like the FKGL, the SMOG readability index indicates how many years of education are needed to understand a text. The calculations themselves are similar to the FKGL, too, in so far as they are based on syllables per words and sentence length (sections 2.2.1.1-2). However, while the SMOG scores presented in Table 2 follow the same trend as the FKGL ones in Table 1, the former are generally 1-2 points lower for each text, and the SMOG mean is 1.28 points lower than the FKGL mean. The lowest recorded SMOG score is 9, for texts 1 and 2, while text 19 had the highest score once again.

Table 3 provides the results from the Automated Readability Index (ARI).

Table 3: ARI scores

Text	1	2	3	4	5	6	7	8	9	10	
Score	9.8	9.8	11.3	13.1	11.2	13.1	14.3	12.6	12.6	14.9	
Text	11	12	13	14	15	16	17	18	19	20	Mean 1-20
Score	11.5	16.1	13.8	13.7	13.7	14.6	16.5	14.4	17.6	10.7	13.3

As stated in section 2.2.1.3, what sets ARI scores apart from the previous two sets is that the calculations are based on characters per word instead of syllables per word. As a result, 13 of the texts received a higher score than they did through FKGL and SMOG. The mean is 13.29.

Nevertheless, the ARI scores generally follow the same trend as the other two sets when it comes to which texts scored higher and which scored lower. This can be seen more clearly in Figure 1. Table 4 shows the average score for each category of text.

Table 4: Average score per category

Category:	Education	Immigration	Healthcare etc.	Culture	Jobs/ Building	Municipality/ Politics
Average:	10.94	13.03	10.68	12.93	13.93	14.11

The categories with the lowest scores are the ones containing information about Education and Healthcare, while the texts with the highest scores are about the Municipality and Politics. All the categories have higher average scores than what is recommended for public information (see section 2.2.1).

The combined results from all three formulas used in this study are presented in Figure 1 below.
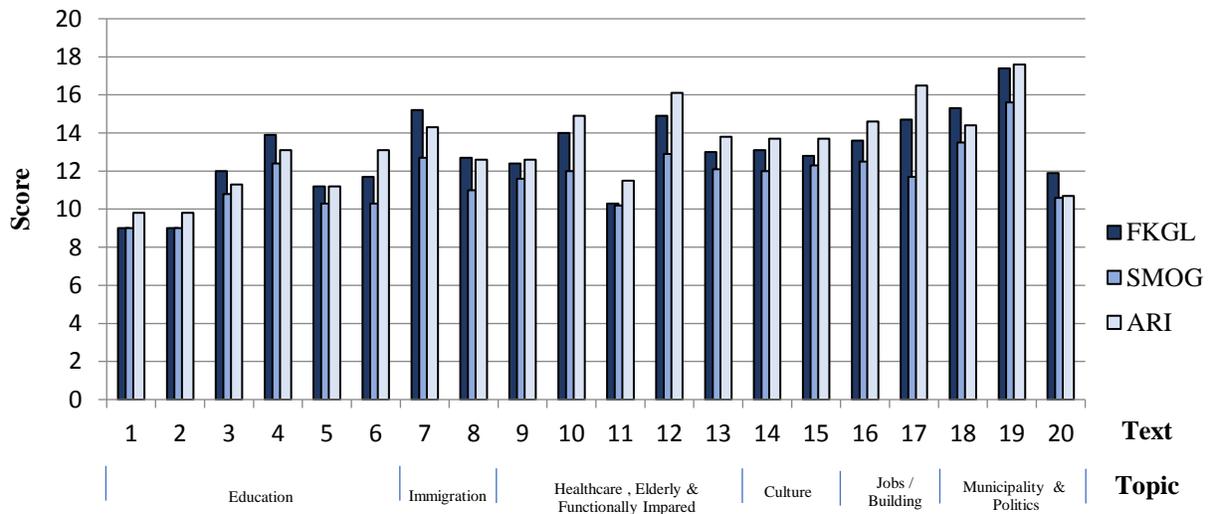
Figure 1: Readability scores for all three formulas combined

Figure 1 visualises and thereby confirms the trends mentioned above. All three score sets follow a similar curve, the differences between the formulas are relatively consistent, yet the average readability of the texts in each category is rather unequal.

The scores, as previously described (see section 2.2.1), represent how many years of school (in the US education system) a person needs to have to understand the texts. With that in mind, it is noteworthy that approximately half of the texts are graded 12 or over. The mean score yielded for the twenty texts by each formula is as follows: FKGL 12.9; SMOG 11.6; ARI 13.3. This means that, according to the claims made for the formulas, a person with a US education would need additional education beyond what is compulsory (usually 12 years) to be able to understand all of the texts. Text 19, for example, would require a college degree according to all three formulas applied.

4.2 Sentence structure

This section presents the scores from the sentence structure analysis, which is a way to assess sentence complexity. The first results, in terms of absolute numbers, are shown in Figure 2. Figure 3 provides essentially the same information but shows the sentence structures as shares in percent for each text.
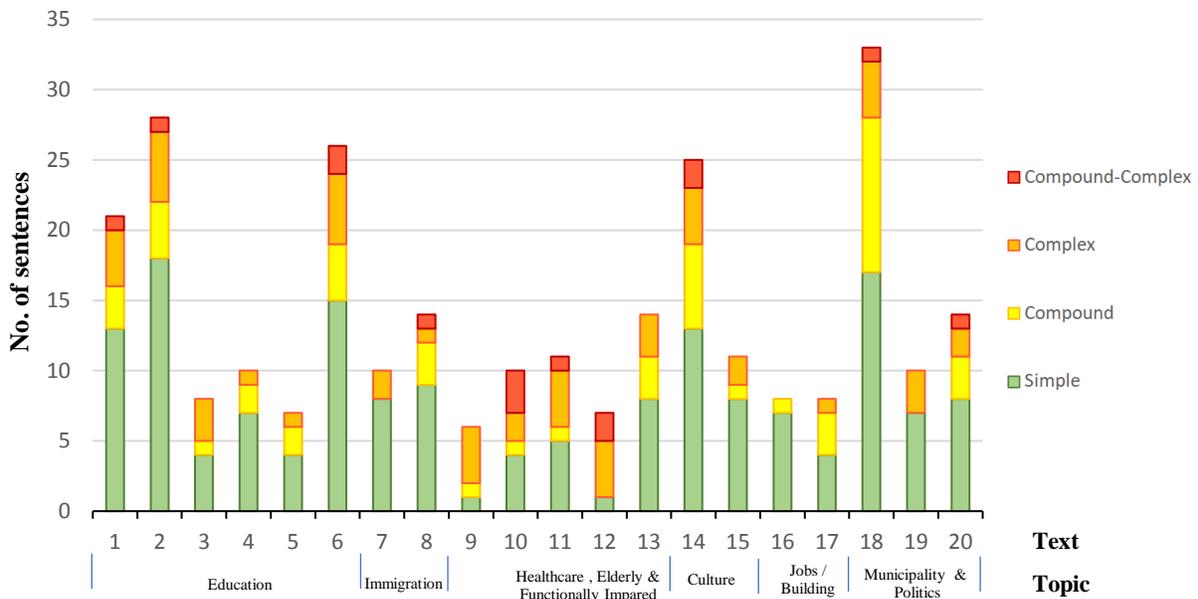
Figure 2: Sentence structures in each text (absolute numbers)
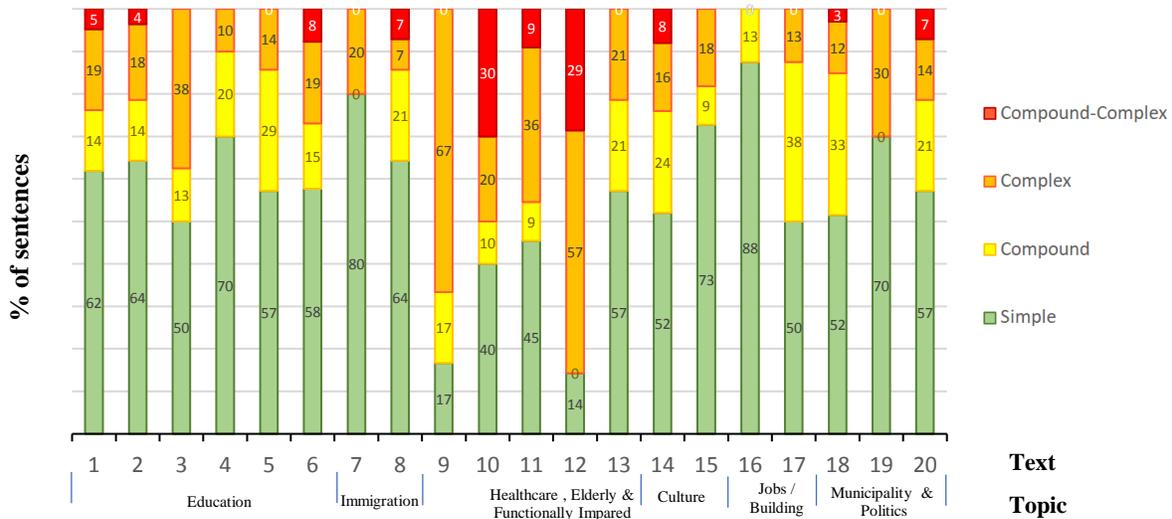

Figure 3: Sentence structures in each text (in percent)

The majority of the texts contain less than 15 sentences, but five of the texts have more than 15 sentences, including the longest text, no. 18, which contains 33. Simple sentences represent 50% or more of the sentences in the majority of the texts (see Figure 3). Only texts 9-12, all of which fall into the Healthcare category, contain less than 50% simple sentences, and two of these, 9 and 12, contain unusually many complex sentences. Compound sentences occur in all sentences but three, namely no. 7, 12 and 19. Compound-complex sentences are present in only 50% of the texts, and generally constitute less than 10% of the sentences where they occur at all, the exceptions being the rather short texts 10 and 12. Complex sentences are present in all texts but one, text 16. This text is in the Job/Building category and consists of 88% simple sentences. With the exception of the Healthcare category, the different groups of texts have a somewhat similar spread between the sentence structure types.

4.3 Clauses per sentence

There are many ways of looking at the results from counting clauses per sentence. Figure 5 provides a general idea of the number of sentences with the given number of clauses within them, for all the texts taken together.
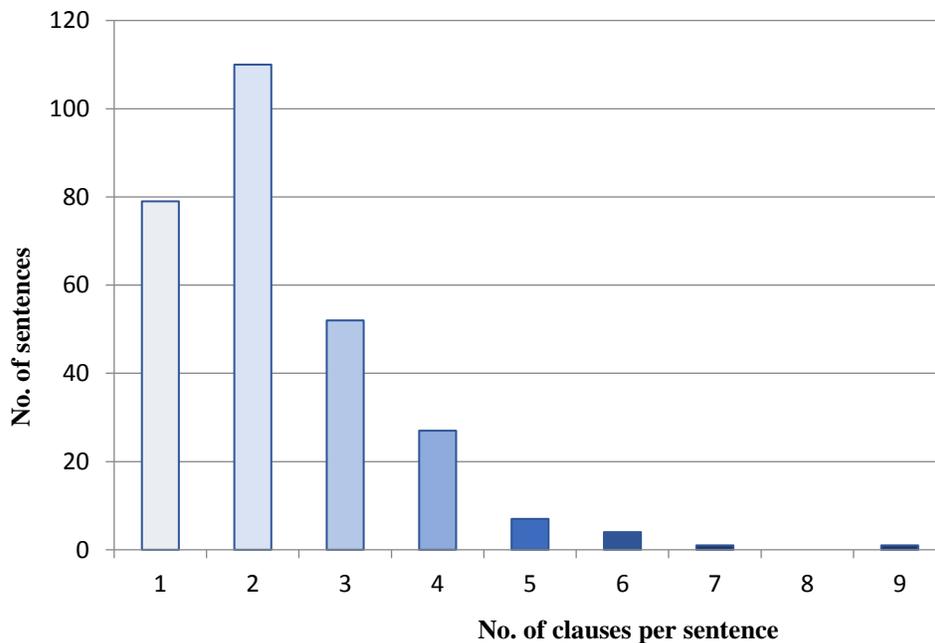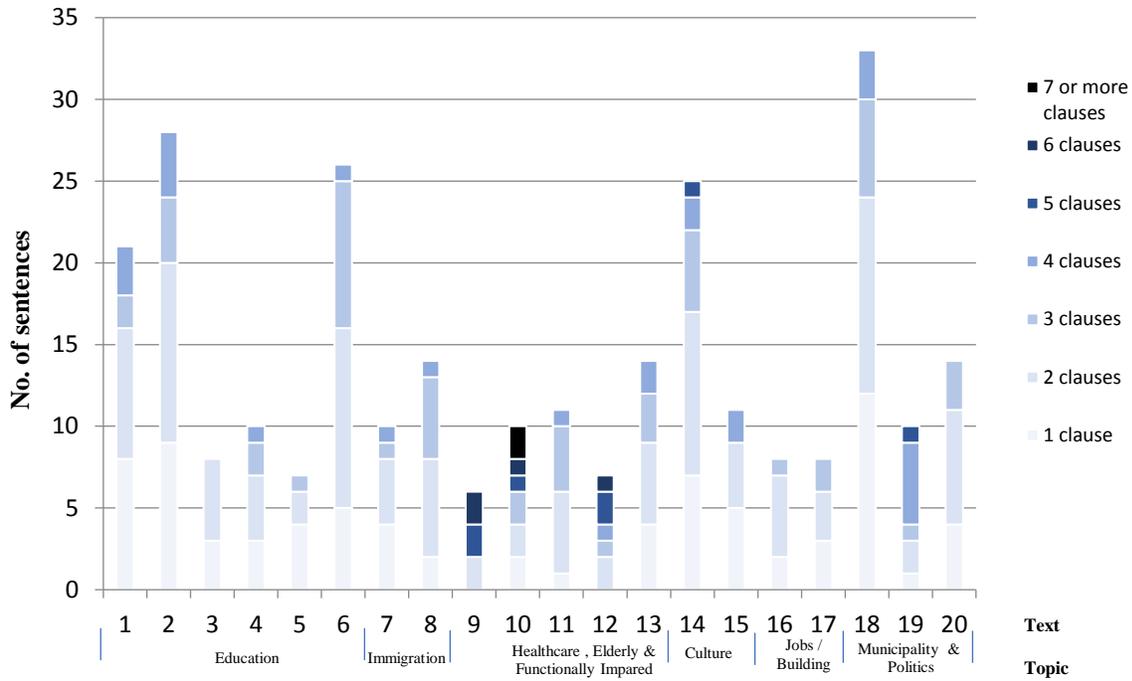

Figure 5: Number of clauses per sentence (all texts)

Figure 5 is designed to be read in combination with Figure 7 since the combined results give a clearer picture of the overall sentence complexity. As can be seen in Figure 5, a majority of the sentences consist of just 1 or 2 clauses, but the sentences containing 3 or more clauses, which can be expected to be rather hard to read and understand, still represent 33% of the total. Remember, in this context, that sentences with only one clause are by definition simple, though simple sentences can feature more than one clause too (subordinate clauses that are not clause elements), as in the following example from text 4: *Special needs adult education is for individuals over the age of 20 who have a developmental disability, autism or suffered a brain injury as an adult.* This sentence is by Ballard's definition (section 2.4.1) a simple one, though it comprises a coordinated relative clause functioning as a postmodifier of a noun phrase.

Figure 6 presents more detailed information regarding the number of clauses per sentence, for each text.

Figure 6: Number of clauses per sentence for each text

What stands out in Figure 6 are texts 9, 10 and 12, which are short, with no more than 10 sentences overall, but which contain several sentences each with 5 clauses or more. Text 19 is also rather short, but more than 50% of its sentences contain 4 clauses or more. This is a also the text that score unusually high in the readability tests (4.1).

4.4 Combining sentence structure and clauses per sentence

This section presents the outcome of a combined sentence structure and clauses-per-sentence analysis. Figure 7 provides the details.
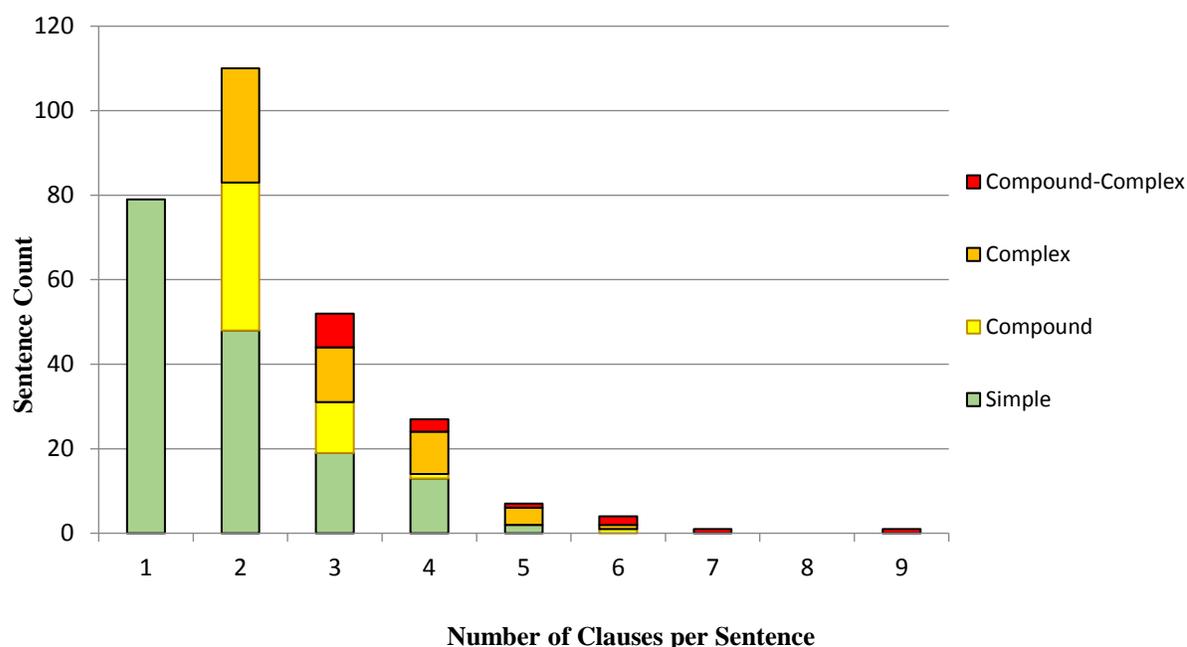
Figure 7: Number of clauses per sentence in relation to sentence structure

One of the main findings illustrated in Figure 7 is the distribution of simple sentences. As mentioned in section 2.4.1, simple sentences can have only one main clause, but there are cases where the inclusion of subordinate clauses does not make a sentence complex. This is reflected by the presence of simple sentences in the bars for 2-5 clauses per sentence. The simple sentences make up 161 of the sentences presented but only 79 of these contain only one clause. Note also that just as one-clause sentences can only be simple, two-clause sentences cannot be compound-complex, as this type requires at least three clauses. A complex sentence does not need to be hard to read but it certainly can be. Consider the following example from text 6: *The aim of mother tongue tuition is to enable the student to best utilise their work in school while at the same time developing their bilingual identity and skills.* This sentence contains three subordinate clauses in total, on different levels. The sentences containing two or more clauses represent 202 of the all 281 sentences. Of particular interest in the material is a compound sentence containing 6 clauses and a compound-complex sentence containing 9 clauses.

5. Discussion

In this section, I will discuss the results obtained from the different methods used, in the same order they were presented in section 4, as well as in combination.

5.1 Readability formula scores

The most striking result is the supposed level of readability of the texts, according to the formulae, keeping in mind that the readability tests originally were designed for native English speakers. The lowest score overall was 9, suggesting that the reader would need nine years of education to fully understand the text. The text scoring the highest got an average of 16.9 from the three formulas combined, which indicates that the reader would need at least a college degree to fully understand it. This is remarkably high, considering that the texts are written for the general public and thus should be written at grade level 8 or lower, according to Clear Language Group (2019, n.p.). Even the lowest score of 9 is higher than the recommendations.

When deciding to divide the texts into categories based on content, I expected that there would be a bigger difference between the categories. The highest scoring text was a part of the Municipality and Politics category. This was expected since texts within that kind of topic are most often formal and thus more difficult. However, the information geared specifically towards immigrants also scored high.

It is also important to remember that the recommendations relate to the US education system rather than English speakers living in a Swedish municipality, who could be anything from university professors with English as their native language, to poorly educated refugees with other first languages. Immigrants often know some English as a second language (Språkrådet, 2012) and would have to rely on it for information not available in their native languages. Rollins & Lewis (2013) point to the importance of paying attention to the readers' background, including education and culture. Since the recommendation according to Clear Language Group (2019) is that texts written for people with limited literacy skills should be written at grade level 6, it would seem that the texts analysed in this study are far too difficult for parts of the intended readership.

However, readability formulas have been criticized and cannot be seen as absolute measures of a text's readability (Jonsson, 2018), as average sentence and word length do not provide a full idea of a text's complexity.

The results from the readability formulas, the Flesh-Kincaid Grade Level formula, the SMOG index and the Automated Readability Index, all showed a similar trend regarding the level of readability of each text, in the sense that the texts that scored low according to one formula also scored low according to the other two, and vice versa. However, the ARI yielded a higher mean than both FKGL and SMOG. Since FKGL has received criticism for potentially underestimating the textual difficulty (Jonsson, 2018, p.4), it was surprising to see that, with a mean of 12.09, it generally yielded higher scores than the SMOG, with a mean of 11.63. Jonsson found that the results in his study did not align and that would imply that to measure readability through these formulas is no exact science and not fully accurate (Jonsson, 2018, p.23).

The fact that the ARI formula used in this study yielded higher scores than both FKGL and SMOG may be related to the fact that the ARI based the calculation on character per word instead of syllables per word., though exactly how and why would remain for a follow-up study to explore.

Marnell (2008), for example, points out how long and short sentences can be equally hard to read and comprehend, depending on how they are constructed. Therefore, I decided to complement the readability analysis with a sentence structure analysis.

5.2 Sentence structure

The European Commission's guidelines require writers to "keep it short and simple" (Field, 2015, p. 6), but what does "simple" mean? A simple sentence as defined in this study consists of only one main clause and conveys only one message. However, consider the difference between the following examples found in the analysed material: *A drama festival takes place in May every year* and *Any child attending pre-school class or grade 1-6 who needs care before and after the school day can be given a place at a leisure-time centre or a family day-care home.* Both these sentences are simple sentences in the sense that they consist of only one main clause. However, the latter sentence contains a very long subject with postmodifiers, including a relative

clause, as well as lengthy adverbials, all of which make processing it much harder than the first sentence.

By conjoining two main clauses into a compound sentence, the writer can create a better flow in the text (see 2.4.2). In the texts analysed, an average of approximately 20 percent were compound sentences. This could thus improve readability, though listing too many things with the help of coordinators or making a sentence very long can obviously have the opposite effect, too. The following sentence is an example of a compound sentence found in the analysed material: *Mother tongue tuition is its own subject in compulsory school and upper secondary school and is provided for either 40 minutes a week (compulsory school) or 70 minutes a week (upper secondary school).* By eliding the subject from the second main clause, the sentence as a whole becomes a bit shorter. However, it is making it harder for the reader to process and the sentence is already quite hard to follow, especially for a non-native speaker. It contains a lot of information for one sentence and could benefit from being divided into two separate sentences.

Complex sentences are often, just as the name suggests, complex even beyond the structural aspect. A textbook example might be fairly easy to understand, but real-life texts can be quite long and complicated, including this example from the material: *The aim of mother tongue tuition is to enable the students to best utilise their work in school while at the same time developing their bilingual identity and skills.* This example and the preceding one both provide information regarding mother tongue tuition, meaning that potential readers are likely to have a native language other than Swedish or English. The importance of 'writing for your audience' thus seems to have been neglected here and in many other parts of the analysed material, with the possible outcome that readers may not fully understand their rights and responsibilities. Bivins, when summarising her findings, concluded that there are still many lengthy sentences in important legal documents, with subordinate clauses that may distract from the main message (2008, p.116).

Finally, the mere existence of compound-complex sentences is a cause for concern. They contain at least three clauses and will be comparatively hard to process due to that circumstance alone.

5.3 Clauses per sentence and combined results

The clause count showed that approximately 30 percent of all the sentences contained three clauses or more, which ought to affect reading ease negatively for many readers. There were two sentences containing 6 and even 9 clauses. Regardless of their function within the texts, this is a reminder of the pre-Elizabethan period, when sentences were generally long and painful to read and it took the readers several tries to understand them (cf. Clark Briggs, 2014). The readability scores confirmed this and showed that all the texts analysed were more difficult for the intended audience than what is recommended.

The sentence structure analysis showed that 161 of the sentences were simple; however, even sentences defined as simple are not necessarily straightforward. Only 79 of the simple sentences consisted of only one clause, which seems like a low share for texts containing important information written for the general public. Sentences with two or more clauses thus make up 202 of the entire material. Two-clause sentences might in many cases add to the readability of a text and might not need further discussion. However, a sentence that contains three or more clauses is, as mentioned, harder to process regardless of how it is structurally defined. McLaughlin (1969) stated that complex structures pose a strain on the immediate memory (p.640). So, why are there so many sentences with three or more clauses and why are sentences with six or more clauses present in the text? One explanation could be that the writer was influenced by the original Swedish text. Even though the provided English texts are not precis translations they are still the foundation for the new text. Another explanation could be that the writer is trying to list many items or tasks in one sentence. The texts contain a lot of information regarding what people need to do, for example to apply for a grant or similar. There are many steps to the process and instead of listing these steps in short sentences, the writer has listed them in one long sentence with the help of coordinating conjunctions. To combine two or possibly three things in a one sentence string could be helpful but, in these cases, it becomes hard to follow.

6. Conclusion

The present study shows that the readability of the texts analysed is considerably lower than what is recommended for texts written for the general public. The structure analysis combined

with the numbers of clauses per sentences confirms the difficulty suggested by the reading formulas. Of course, additional textual analyses could be carried out to further test, and presumably support, this conclusion. For example, many of even the shortest and most simple sentences in the material were in the passive voice, which is generally assumed to make it harder for the reader to make out who is doing what in a sentence (Bivins, 2008, p.9), and thus to fully comprehend the text. Even though the Umeå Municipality website adheres to many of the recommendations (cf. Språkrådet, 2012) in terms of providing information in languages other than Swedish, providing relevant content as well as a glossary etc., more attention needs to be paid to how the individual English texts are written, to ensure its suitability for the intended audience.

One reason for the widely varying properties of the analysed texts may be that Umeå Municipality do some of the translations and writing themselves and at other times hire professional translators. Then again, many municipalities in Sweden no longer offer translations made by a human at all, instead relying solely on electronic services such as Google Translate. This type of service is often criticized for yielding poor quality translations (cf. Språkrådet, 2012). A suggestion for a follow-up study would thus be to compare human-made translations provided by Umeå or some other municipality to the translation one would get by using a machine translation program.

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Appendix 1: E-mail interview with Umeå Municipality

1) I dagsläget erbjuder Umeå kommun översättningar på Engelska. Är det något ni har för avsikt att fortsätta med?

Ja, det tror jag vi kommer att fortsätta med.

2)   Hur brukar informationen på kommunens hemsida översättas?

•   Av kommunanställda

•   Av professionell översättare.

•   Med hjälp av Google Translate

•   Genom en intresseorganisation eller ett riksförbund

•   Med hjälp av standardmallar tagna från myndigheters hemsidor

•   Annat sätt

Berätta gärna lite om valet:

Det är en blandning av köpt (professionell) översättning (för många språk) och egen översättning av medarbetare om det handlar om engelska och finska. Vid egen översättning till engelska är det inte ovanligt att medarbetare tar hjälp av Google translate och sedan rättar översättningen manuellt. Vi har anställda minoritetssamordnare för samiska och finska som fixar översättning. Till finska översätter vi regelbundet, men till samiska mer av symboliska skäl. Samer som minoritet efterfrågar inte översättning till samiska i samma omfattning som sverigefinnar efterfrågar översättning till finska. Känner inte till att vi har anlitat intresseorganisationer/förbund eller använt nämnda mallar för att översätta.

3)   Vilka riktlinjer utgår kommunen från när information på hemsidan ska översättas från svenska till andra språk?

•   Kommunens egna kommunikations- eller informationsriktlinjer

•   Språklagen och lagen om nationella minoriteter och minoritetsspråk

•   Vägledningen för flerspråkig information – praktiska riktlinjer för flerspråkiga webbplatser från Språkrådet

•   Annat:

Vi lutar oss mot alla dessa, men framför allt utgår det från behov när det handlar om vilka språk vi översätter till och också från samråd när det handlar om samiska, finska och andra minoritetsspråk.

4)   Vilket är det främsta skälet till att kommunen har valt att inte endast använda Google Translate för översättning?

•   Kvalitetsskäl

•   Google Translates användarvillkor (regler om informationshantering, copyright osv.)

•   Tekniska skäl

•   Annat:

Vi använder Google translate eftersom ger stora möjligheter att översätta till många språk med ändå hyfsat resultat. Att också erbjuda egna fasta översättningar är en kompromiss för att säkra kvalitet och visa att vi inte bara förlitar oss på maskinell översättning. Vi tycker det är en bra kompromiss, men det är en utmaning att hålla fasta översättningar uppdaterade och i trim, det är arbetskrävande och dyrt och vi lyckas inte fullt ut med den ambitionen.

www.umea.se/kommun

UMEÅ KOMMUN

Appendix 2: Links to the analyzed texts

All texts retrieved 190320

Text 1. Education and Childcare

https://www.umea.se/umeakommun/funktionsmappar/sprak/languages/english/educationandchild
care/preschoolandchildcare.4.bbd1b101a585d704800067885.html

Text 2. Compulsory school

https://www.umea.se/umeakommun/funktionsmappar/sprak/languages/english/educationandchild
care/compulsoryschool.4.4abd289214afe982c9915c76.html

Text 3. Upper secondary school

http://xn--ume-
wla.se/umeakommun/funktionsmappar/sprak/languages/english/educationandchildcare/uppersec
ondaryschool.4.bbd1b101a585d704800067924.html

Text 4. Special needs school

http://xn--ume-
wla.se/umeakommun/funktionsmappar/sprak/languages/english/educationandchildcare/uppersec
ondaryschool.4.bbd1b101a585d704800067924.html

Text 5. School of music

http://xn--ume-
wla.se/umeakommun/funktionsmappar/sprak/languages/english/educationandchildcare/schoolof
music.4.4abd289214afe982c9915e8b.html

Text 6. Mother tongue, newly-arrived children and students

https://www.umea.se/umeakommun/funktionsmappar/sprak/languages/english/educationandchild
care/mothertonguenewlyarrivedchildrenandstudents.4.4abd289214afe982c9915d94.html

Text 7. Introduction of refugees

https://www.umea.se/umeakommun/funktionsmappar/sprak/languages/english/introductionofrefugees.4.7cd2414c121821b491980002025.html

Text 8. Preparatory training programmes and Swedish language training for immigrants and refugees

http://xn--ume-wla.se/umeakommun/funktionsmappar/sprak/languages/english/educationandchildcare/preparatorytrainingprogrammes.4.bbd1b101a585d704800067903.html

Text 9 Support and care of elderly

http://xn--ume-wla.se/umeakommun/funktionsmappar/sprak/languages/english/socialservices/supportandcareofelderly.4.bbd1b101a585d704800068654.html

Text 10. Support and care of the functionally impaired

http://xn--ume-wla.se/umeakommun/funktionsmappar/sprak/languages/english/socialservices/supportandcareofthefunctionallyimpaired.4.bbd1b101a585d704800068661.html

Text 11. Support for children and young people

http://xn--ume-wla.se/umeakommun/funktionsmappar/sprak/languages/english/socialservices/supportforchildrenandyoungpeople.4.bbd1b101a585d704800068668.html

Text 12. When a child is in need of assistance

http://xn--ume-wla.se/umeakommun/funktionsmappar/sprak/languages/english/socialservices/whenachildisinneedofassistance.4.bbd1b101a585d704800068676.html

Text 13. Housing adaptions

http://xn--ume-wla.se/umeakommun/funktionsmappar/sprak/languages/english/communityservices/housingadaptions.4.bbd1b101a585d704800068066.html

Text 14. Cultural activities

http://xn--ume-wla.se/umeakommun/funktionsmappar/sprak/languages/english/culturalactivitieslibraries/culturalactivities.4.bbd1b101a585d704800068155.html

Text 15. Library services

http://xn--ume-wla.se/umeakommun/funktionsmappar/sprak/languages/english/culturalactivitieslibraries/libraryservices.4.bbd1b101a585d704800068167.html

Text 16. Labour market

http://xn--ume-wla.se/umeakommun/funktionsmappar/sprak/languages/english/labourmarket.4.bbd1b101a585d704800068473.html

Text 17. Building permit and notification of construction

http://xn--ume-wla.se/umeakommun/funktionsmappar/sprak/languages/english/communityservices/buildingpermitnotificationofconstruction.4.bbd1b101a585d704800067972.html

Text 18. This is how Umeå is governed

http://xn--ume-wla.se/umeakommun/funktionsmappar/sprak/languages/english/howumeaisgoverned.4.bbd1b101a585d704800068431.html

Text 19. General elections

http://xn--ume-wla.se/umeakommun/funktionsmappar/sprak/languages/english/howumeaisgoverned/generalelections.4.bbd1b101a585d704800068438.html

Text 20. Ways to affect the democratic process

http://xn--ume-wla.se/umeakommun/funktionsmappar/sprak/languages/english/howumeaisgoverned/waystoaffectthedemocraticprocess.4.bbd1b101a585d704800068459.html