

MASTEROPPGAVE

A statistical analysis of the differences in transitivity between English learner language texts from Norwegian universities and native British (A-levels) and American student texts.

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Abstract

This thesis presents a transitivity analysis, from a systemic functional perspective, of learner language texts from several Norwegian universities/colleges and texts written by native British and American students. Furthermore, a comparative discussion takes place, which aim is to investigate differences and similarities between the texts. Mainly drawing on theoretical frameworks provided by Thompson (2004) and Halliday and Mathiessen (2014), the analyses show that there are differences between the (Norwegian) English learner language texts and the English and American native texts in terms of transitivity, more explicitly in the use of different process types. Further, since the format of the thesis does not allow for an analysis of the entirety of the vast amount of data collected, the material that has not been dealt with is included in an appendix for others to explore.

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1. Introduction

1.1 Background

Systemic Functional Grammar (SFG) is a functionalist grammatical approach from a meta-perspective (Halliday & Mathiessen, 2014), and is closely related to Communicative Competence (CC), a term coined by Dell Hathaway Hymes in 1971 (Hymes, 1971). The Council of Europe defines CC in the following way: “The ability to organize sentences to convey meaning [...]” (Council of Europe, 1995). There is a widespread focus on CC in Norwegian schools, and SFG offers a unique perspective for analyzing meaning in language, a perspective that fits well with CC. In this thesis, there is one aspect in particular, within the system of functional linguistics, that is used as a framework for the analyses, namely the system of transitivity. This system is often used to distinguish whether verbs have objects or not (Thompson, 2004). Halliday and Mathiessen (2014) define transitivity as “a configuration of elements centred on a process” (p. 213). This means that the verbal group is still in focus, but that it is important to look at the relationship between the verbal group and the rest of the clause (Thompson, 2004).

1.2 Aim and Research Question

In this thesis, I perform a corpora-based quantitative transitivity analysis of English learner language texts from different corpora; Norwegian universities (Granger, Dagneaux, Meunier, & Paquot, 2009), native texts from American universities (Université catholique de Louvain, 2015) and A-level texts from British universities (Université catholique de Louvain, 2015). The hypothesis put forward in this thesis is that the results will show differences in terms of transitivity between the texts from Norway and the texts from U.K./U.S. Explicitly, it is hypothesized that there will be differences both in the distribution of process types, but also in word frequency lists sorted by these process types consequently. In the texts gathered from the ICLE corpus (Granger, Dagneaux, Meunier, & Paquot, 2009) (Norway), there will be less variation in the distribution of process types and in the frequency of processes within specific process types.

In terms of structure, the thesis first introduces the study, with its aim, material and method, followed by a brief explanation of the theoretical framework used for the analyses. The largest part of this thesis is the results section, which is presented mainly in tables and graphs followed by brief explanations. In the end, there is a comparative discussion based on the

results, as well as a summary of aims, results and discussion. Further, since the format of the thesis does not allow for an analysis of the entirety of the vast amount of data collected, the material that has not been dealt with is included in an appendix for others to explore.

The research questions that this study aims to answer are:

1. What kind of processes are found in English learning language texts from Norway?
2. How do these processes differ from processes in texts by native American and native British (A-levels) texts in terms of transitivity?

1.3 Structure of the thesis

In terms of structure, the thesis first introduces the study, with its aim, material and method, followed by a brief explanation of the theoretical framework used for the analyses. In the end, there is a comparative discussion based on the results, as well as suggestions on how this information can be used in school. The thesis concludes with a summary of aims, results and discussion.

2. Theoretical framework

Theories and definitions by Thompson (2004) and Halliday and Mathiessen (2014) serve as the main theoretical framework for this thesis. Halliday and Mathiessen's terminology and definitions will consequently be drawn upon, as well as simplified explanations from Thompson, both when introducing the systemic functional approach to transitivity analysis and in the discussion of the results.

2.1 Communicative Competence

Although the term CC was coined already in 1971 by Hymes, it was first in the late 20th century that the schools' focus has been drawn to the approach. One reason for this might be the vast globalization. There is a need for global understanding and communicative effectiveness. Thus, there is a need for a focus on meaning, in addition to a focus on form. The Council of Europe (1995) claims that a central aspect of communicative competence is "The ability to organize sentences to convey meaning" (p. 115). Systemic functional grammar

is such a meaning-based approach, as will be explained in the sub-chapter below.

2.2 Systemic Functional Grammar

SFG is a meta-perspective on language that is divided into three metafunctions. Halliday and Mathiessen describe the ideational metafunction in the following statement: “language provides a theory of human experience, and certain of the resources of the lexicogrammar of every language are dedicated to that function” (2014, p. 30), or in short, “language as reflection” (p. 30).

Halliday and Mathiessen describe the interpersonal metafunction as being about “enacting our personal and social relationships with the other people around us” (p.30). Further, they claim that

the clause of the grammar is not only a figure, representing some process – some doing or happening, saying or sensing, being or having – together with its various participants and circumstances; it is also a proposition, or a proposal, whereby we inform or question, give an order or make an offer, and express our appraisal of and attitude towards whoever we are addressing and what we are talking about (p.30).

In short, the interpersonal metafunction may be labeled as “language as action” (p.30).

SFG also includes an enabling function, as both the ideational and the interpersonal metafunction “depend on being able to build up sequences of discourse, organizing the discursive flow, and creating cohesion and continuity as it moves along” (pp. 30-31). This metafunction is called “the textual metafunction” (p.30).

This linguistic system is mainly a problem-oriented system. Per Halliday and Webster (2009), SFG “is designed to assist towards identifying and tackling problems that arise from outside itself – that is, not problems that the theory identifies for itself” (2009, p. 61). Thus, texts are assessed from a metaperspective rather than looking at singular problems. Furthermore, this system is oriented towards specific goals (2009, p.60). The system used for the analyses in this thesis is designed for a specific goal, which is to identify problems related to transitivity in (Norwegian) English learner language text, using native American and native British (A-level) texts as reference.

2.3 The Ideational (experiential) Metafunction

The ideational metafunction is the most relevant metafunction for the purpose of this thesis. Looking at language from the perspective of the ideational metafunction provides information about processes (main verbs) and participants (the ones affected by the processes), and their relation to each other (who did what to whom?). The ideational perspective only considers the relationship between the participant and the process, and is thus blind to the differences between statement and question, modal and auxiliary verbs, and other interpersonal elements, for example finites (Thompson, 2004, pp. 86-87). From the ideational perspective, it is the process that is considered the core in the clause, and it is typically realized by the verbal group. For example, the sentence “They unlocked the front door” is primarily about the event of unlocking the door (unlocked=process). The action of unlocking involves two participants, the doer (they) and the done-to (the door). As in this example, all major clauses normally include at least one participant (two in the above example), and this participant is usually realized by a nominal group (usually the subject in interpersonal terms) (Thompson, 2004, pp. 86-87). Furthermore, it must be pointed out that in some cases, the participant can be missing from the clause, but is still understood as part of the experiential meaning. As an example, in imperative clauses, “you” is understood as the participant (Thompson, 2004, pp. 87-88).

2.4 Transitivity

In traditional terms, transitivity is a term used to distinguish “between verbs according to whether they have an Object or not” (Thompson, 2004, p. 88). In systemic functional linguistics (SFL) however, “it refers to a system for describing the whole clause, rather than just the verb and its Object” (Thompson, 2004, pp. 88-89). It still focusses on the verbal group, as the participants are labelled according to what type of process the clause has. For example, “the ‘doer’ of a physical process such as kicking is given a different label from the ‘doer’ of a mental process such as wishing” (Thompson, 2004, p. 89). So, there are different process types, and there are different participant types, and these must relate to each other in a logical way. Thompson makes a fair point when it comes to analyzing in these terms: “As with any linguistic categories, some cases will fall more neatly into a category, whereas others will be more marginal” (Thompson, 2004, p. 90).

2.5 Types of processes

According to Halliday and Matthiessen (2014), experience “consists of a flow of events, or ‘goings-on’.” (p. 213). Furthermore, they state that

[t]his flow of events is chunked into quanta of change by the grammar of the clause: each quantum of change is modelled as a figure – a figure of happening, doing, sensing, saying, being or having. All figures consist of a process unfolding through time and of participants being directly involved in this process in some way (p.213).

Based on this figure, Halliday and Mathiessen (2014) introduced six different process types: material, behavioral, mental, verbal, relational and existential. There are many more process types if one includes sub-divisions. However, for this thesis, focusing on the following main process types will suffice: (i) material processes, (ii) mental processes, (iii) relational processes, (iv) verbal processes and (v) experiential processes. The reason for not including behavioral processes in my analyses is that UAM CorpusTool does not have support for tagging them, and as this is a quantitative study, it is not possible to tag them manually either. It is essential to look at different process types as each type of process has different types of participants. To understand the relations between the participants and the processes, we need to know which type of participant follows which type of process. This will be elaborated on in the following sub-sections (2.5.1-5).

2.5.1 Material processes: doing & happening

Halliday and Mathiessen (2014) point out that material clauses are clauses of doing or happening. For the clause to be a material clause, it needs some input of energy (p. 224). For example, in the sentence “I ran as fast as I could, but I still couldn’t jump over the hedge”, there are two material processes, ‘ran’ and ‘jump’, both requiring energy to be performed. This idea fits well with the more traditional definition that a verb is ‘a doing word’. The ‘doer’ in material clauses is called the ‘Actor’. Furthermore, this Actor does not need to be explicitly mentioned in the clause, as it may be understood, implicitly, as part of the experiential meaning. A material clause also often has a ‘done-to’ participant, and this is called the ‘Goal’. The Goal is the participant that the process or action is directed towards (Thompson, 2004, p. 90). As an example of a material clause, in the sentence ‘I crashed the car’, ‘I’ am the Actor, ‘crashed’ is the process and ‘the car’ is the Goal. As an example of a material clause with an implicit actor, in the sentence ‘The car was crashed’, ‘The car’ would be the Goal, ‘was crashed’ would be the process and implicitly we can understand that someone (the Actor) crashed the car.

Thompson states that “[m]aterial processes form the largest and most diverse category in transitivity; and there are many different suggestions for ways in which they can be sub-categorized at more delicate levels.” (Thompson, 2004, p. 91). These sub-categories include separations between creative and transformative processes, and intentional and involuntary processes. However, as this study is based on analyzing corpora through the program UAM CorpusTool, it will be impossible to include these sub-categories, as the program does not have support for these.

2.5.2 Mental processes

Differing from material processes, mental processes are not ‘doing-words’. While material processes are about “something that goes on in the external world” (Thompson, 2004, p. 92), mental processes take place in “the internal world of the mind” (p. 92). Thinking, wishing, desiring, seeing, hating, choosing are some examples of mental processes. These only take place inside our minds, and they are not acted upon unless a different clause type intervenes (for example a material clause). Considering that these processes do not contain actions, it may be inappropriate to use the terms Actor and Goal to describe the participants in mental clauses (p. 92). A more logical way of describing these participants labels them as ‘Sensors’ and ‘Phenomenons’. The Sensor is “[t]he person in whose mind the mental process occurs...” (p. 92), while the Phenomenon is the entity that is sensed. Furthermore, the Phenomenon is not as restricted as the participants in material clauses. The Phenomenon can be a person, a concrete object, an abstraction, a fact, and so on (p. 93). As an example, in the clause ‘I couldn’t hear you’, ‘I’ would be the Sensor, ‘couldn’t hear’ would be the mental process and ‘you’ would be the Phenomenon (the one I am sensing – although in this particular example, the one I am not sensing). As explained earlier, modals do not change the ideational relation.

Mental processes can be divided into four different categories, based on the type of mental process in the clause. These categories include processes that are based on emotion, cognition, perception and desideration. However, as with material processes, it will not be possible at this time to include such sub-categories in the analyses of the corpora texts.

2.5.3 Relational processes

To exemplify the need for the category of relational processes, let us have a look at the clause ‘She is beautiful’. This can neither be identified as a material process, as there is nothing

happening here, nor can it be identified as a mental process, as there is no senser here. 'She' is simply given the attribute 'beautiful'. It would be awkward to label 'She' as Senser/Phenomenon or Actor/Goal, thus new participant types need to be introduced. However, it is difficult to label the participants in relational processes in general terms, thus we need to look at the sub-categories of relational processes before we can decide what type of participants there are. The example above was an attributive relational clause. In these clauses, there is a Carrier (She) and an Attribute (beautiful). Another type of relational process is the identifying one. In an identifying relational clause, the participants are labeled 'Token' and 'Value'. Thompson (2004) points out that "[t]he Predicator in identifying processes is equivalent in a way to an equals sign '='" (p. 96). In addition, identifying relational clauses are reversible (if $x = y$, then $y = x$) (p. 97). As an example, in the identifying clause 'The aim of this thesis is to present a statistical analysis', 'The aim of this thesis' would be the Value, 'is' would be the identifying relational process and 'to present a statistical analysis' would be the Token. The Token is identified as the one representing the value. In the example above, 'to present a statistical analysis' **represents** 'The aim of this thesis'. 'The aim of this thesis' cannot function as a token, as it **cannot represent** 'to present a statistical analysis'.

2.5.4 Verbal processes

Verbal processes are verbs of 'saying', and are closely related to both material and mental processes; to material processes because the act of saying is a physical action that requires energy, and to mental processes because the act of saying reflects mental operations (Thompson, 2004, p. 100). Verbal processes can have three different participant types; Sayer, Receiver, Target. The Sayer is the one participant that exists in all verbal processes, although it does not need to be explicitly mentioned in the clause. For example, in the clause 'I was reproached for not noticing anything' (Thompson, 2004, p. 101), we can, implicitly, understand that there is a Sayer (the one reproaching). Another type of participant in verbal processes is the Receiver. The Receiver is "the participant to whom the saying is addressed" (Thompson, 2004, p. 101). As with the Sayer, the Receiver does not need to be explicitly mentioned, as it can be understood as an inherent part of the meaning. For example, in the clause "'And I'm leaving tomorrow', he added", we know that there is a receiver (the one(s) he addresses). The Sayer and the Receiver are the most frequently used verbal processes, but in certain cases the process "may be directed at, rather than addressed to, another participant." (Thompson, 2004, p. 101). In such cases, the participant is called the Target. The Target can

be used when it is unnatural to use a Receiver, for example when the ‘Receiver’ is not human: “The report sharply criticizes *Lilly’s quality-control procedures*” (Thompson, 2004, p. 101). The Target differs from the Receiver both because the Target does not need to be human, as shown above, and because the person addressed and the entity the message is directed at, may differ from one another, as shown in this example: “She keeps rubbishing me to the other people in the office.” (Thompson, 2004, p. 101). In this example, the message is *directed at* ‘me’, but the receivers of the message are ‘the other people in the office’.

Another participant in verbal processes is the message itself. When “...[t]he message can be summarized in the form of a nominal group” (2004, p. 101), the message is called the Verbiage. When the message does not meet these criteria, it can either be a Matter (circumstance) or a projection. We can use the label Matter when the message is given in a prepositional phrase, for example in “I was reproached *for not noticing anything*” (p. 101). Projection is the equivalent of reported speech in traditional grammar systems, and if a projected clause is used, it is not treated as a participant at all (neither verbiage). Typically, these projected clauses start with ‘to’ or ‘that’, or consist of imperative clauses. As an example, the sentence ‘She told me to stay’ has two clauses; a projecting clause and a projected clause. In the projecting clause, ‘She’ would be the Sayer, ‘told’ would be the verbal process and ‘me’ would be the Receiver, while ‘to stay’ is treated as a projected clause (separate from the verbal process).

2.5.5 Existential processes

The final process type to be analyzed is one that simply “expresses the mere existence of an entity, without predicating anything else of it” (Thompson, 2004, p. 104). This process is called an existential process, and there is only one participant here: the Existent. Existential clauses need the word ‘there’ as Subject. This Subject has no experiential/ideational meaning, so it is not counted as any part of the existential process. For example, in the clause ‘Maybe there’s some more food’, the ‘s’ is the existential process and ‘some more food’ is the Existent.

3. Material and method

For the analysis, argumentative texts written by students at Østfold University College (HiØ), University of Oslo (UiO), Oslo and Akershus University College (HiOA) and University of

Bergen (UiB) (Granger, Dagneaux, Meunier, & Paquot, 2009) are compared with argumentative texts written by British university A-level students and American university students (Université catholique de Louvain, 2015).

3.1. The learner language texts (Norway)

The learner language texts are collected from the ICLE corpus (Granger, Dagneaux, Meunier, & Paquot, 2009), which is an international corpus of learner English. The texts selected to extract from this corpus are written by students at several Norwegian universities and university colleges. In total, 27 texts from UiB are analyzed, 45 texts from HiØ, 46 texts from HiOA and 143 texts from UiO. There is a wide variety of topics in these texts:

Table 3.1.a: Topics in the Norwegian learner language texts

| | |
|---|--|
| <ul style="list-style-type: none"> - Crime does not pay - The prison system is outdated. No civilised society should punish its criminals: it should rehabilitate them - Most university degrees are theoretical and do not prepare students for the real world. They are therefore of very little value. - A man/woman's financial reward should be commensurate with their contribution to the society they live in. - The role of censorship in Western society. - Marx once said that Religion was the opium of the masses. If he was alive at the end of the 20th century, he would replace religion with television - All armies should consist entirely of professional soldiers: there is no value in a system of military service. | <ul style="list-style-type: none"> - The Gulf War has shown us that it is still a great thing to fight for one's country. - Feminists have done more harm to the cause of women than good. - In his novel Animal Farm, George Orwell wrote "All men are equal: but some are more equal than others". How true is this today? - In the words of the old song "Money is the root of all evil" - Europe: loss of sovereignty or birth of a nation? - In the 19th century, Victor Hugo said: "How sad it is to think that nature is calling out but humanity refuses to pay heed." Do you think it is still true nowadays? - Some people say that in our modern world, dominated by science technology and industrialisation, there is no longer a place for dreaming and imagination. What is your opinion? |
|---|--|

The reason for including the topics here is to have some control over discrepancies in the results, i.e. if some of the processes in the frequency lists clearly are there due to topic choice. If there are any such cases, they cannot be compared to the other texts, as they have different topics. However, all essays analyzed are argumentative, and top 20 of any process type should be related to being an argumentative text rather than following the topic.

With this corpus, there also comes a program for analyzing the texts. However, the UAM CorpusTool was used for the analysis (more about this below). Thus, only the text files needed from the ICLE corpus were extracted and inserted into the UAM CorpusTool project.

CorpusTool can both parse (in-built SFL:Transitivity parser) and provide very useful information in regard to a systemic functional analysis, it is therefore an excellent tool for text analysis.

3.2 The native British texts (A-levels)

These texts are extracted from the LOCNESS corpus (Université catholique de Louvain, 2015), and the selected texts are argumentative essays written by (native) British university A-level students. A total of 114 texts from this corpus were inserted into the UAM CorpusTool project. The topics include ‘boxing’, ‘transport’, ‘fox hunting’ and ‘parliamentary system’. A complete list of topics given was not provided for this particular corpus.

3.3 The native American texts

These texts are extracted from the LOCNESS corpus (Université catholique de Louvain, 2015), i.e., argumentative essays written by (native) American university students. A total of 176 texts were extracted from this corpus and inserted into the UAM CorpusTool project. The texts come from the Marquette University (Milwaukee, Wisconsin), Indiana University at Indianapolis, Presbyterian College in South Carolina, University of South Carolina, and the University of Michigan. In the LOCNESS description file, it is stated that these texts are written by (mostly) fully English native speakers (both parents with English mother tongue). Furthermore, there is a wide variety of (argumentative) topics in this corpus: (Marquette, Indiana, Presbyterian, South Carolina, Michigan)

Table 3.3.a: Topics in the native American texts

| | |
|--|---|
| -euthanasia -controversy in the classroom -capital punishment -does affirmative action work? -yoga -nuclear power -values and consequences of school interaction -pride or segregation -surrogate motherhood -can we afford wellness -prozac: the wonder drug -homosexuality -animal testing -prayer in schools -praying for a miracle | -sex equality -teenagers -aids -orphanages -profit: good or evil -freedom of the press -sex in schools -welfare reforms needs a return to family values -the cost of grass -abortion -ethics -would anyone care for a drink -cheating in colleges -O.J Simpson -suicide |
| -Money is the root of all evil -Crime does not pay -A man / woman’s financial reward should be commensurate with their contribution to the society in | -Adolescent suicide -Water pollution -Legalization of marijuana -Homelessness |

| | |
|---|---|
| <ul style="list-style-type: none"> which they live -Feminists have done more harm to the cause of women than good | <ul style="list-style-type: none"> -The welfare system -Divorce |
| <ul style="list-style-type: none"> -The Confederate Flag -Rules and regulations -Death penalty -Legalization of marijuana -Teachers deserve recognition and reward - Gender roles in our society | <ul style="list-style-type: none"> -Salary caps -Sex in the Media -Euthanasia -Gender roles, feminism, etc. -US government |
| <ul style="list-style-type: none"> -Premarital sex -Football -Drinking age -Talk shows -Professors that don't speak English shouldn't teach English speaking students -Welfare | <ul style="list-style-type: none"> -Violence on television -Gun control -Portrayal of women in fashion magazines -Recycling -The wild card and its effect on Baseball -Journalists should not reveal their sources |
| <ul style="list-style-type: none"> -Women in combat -Rules -Sink or Swim -Early are drinking -Should the Browns stay in Cleveland? -Curfew -Government support for the Arts -Abortion | <ul style="list-style-type: none"> -Stereotyping the colours pink and blue -Capital punishment -The media's right to know -Emerging women -Legalization of marijuana -Bookbanning in America -Frivolous lawsuits |
| <ul style="list-style-type: none"> -Great inventions and discoveries of 20th century and their impact on people's lives (one per interview - computer, television, etc.) | |

3.4 Method

The method uses terminology provided by Halliday and Mathiessen (2014), with helpful explanations by Thompson (2004), and is based on statistics, and what information these statistics can provide. An exploration of transitivity will take place, between English language learner texts from Norwegian universities/colleges and texts written by native British A-level students and native American university/college students. For the exploration of the differences and for the providing of information related to SFL, a program called UAM CorpusTool is used (O'Donnell, 2016). This program can parse, and in addition, has an interface made for exploring the texts. Further, the program recently gained support for the transitivity system in SFL.

To parse a text means to give each word a specific tag for a specific purpose. This process can either be done manually or automatically, both using the program. As there are large amounts of text dealt with in this thesis, an automatic parser is well suited for the purpose of transitivity analysis. The advantage of using such an automatic parser is that one can parse large amounts of text in a short amount of time. The disadvantage is that one does not have control over the parsing, and thus must trust the algorithms the program uses. As with any

linguistic analysis, there are always specific cases of ambiguity and uncertainty of what goes into which category. With a qualitative analysis, it would have been possible to explain choices for 78,155 processes (the total number of processes analyzed in this thesis). However, that is virtually impossible to do, so there is in fact no choice but to trust the algorithms in the program.

More explicitly, has a built-in SFL parser. The SFL parser is new to the program, and there have been a few problems on the way, related to both exploring the results and to the parsing. The first problem concerned how to make the parser work. It was installed on two computers, and the parser only worked on one of them. The program files were then copied from the computer where it worked into the computer where it did not work. This solved the problem, there have not been any problems with the parser since. It seems that, in the computer where it worked from start, there were language files that were downloaded automatically when the program had a problem parsing, while in the second computer, there was no automatic download of the needed files. The second problem encountered was related to exploring texts with the tools in the program. There is only a very brief tutorial/help file following the program, and it does not cover all the newest additions (for example the SFL parser, and how to explore the SFL analysis). A search for external tutorials on the net was tried, but in vain. Therefore, quite some time had to be spent on getting to know the program and its many functions.

Using UAM CorpusTool and Microsoft Excel, different process types are counted and calculated into percentages based on how many processes in the different texts were analyzed (For example, 1000 material processes in a total of 10,000 processes results in 10%). These percentages are placed into comparative bar charts to provide readily accessible data for the reader. After the analysis follows a comparative discussion about the findings.

4. Results

In this section, results from the analysis will be presented. As there are large amounts of data to present, the presentation will consist mostly of tables and graphs, with a brief explanation following each table or graph. One important factor to keep in mind when reading these results is that there are quite a few discrepancies in my findings due to the parsing method used. An automatic parsing method has issues when the texts are not written with perfect grammar. For example, in the Norwegian texts, there are quite many it/there errors, a very

common interlanguage error. The automatic parser will in these cases not see the process as an existential one, because an existential clause needs ‘there’ to be true. Furthermore, it appears that the parser has issues with all forms of the verbs ‘be’, ‘do’ and ‘have’. It clearly cannot distinguish between these verbs as processes and as auxiliaries.

Table 4.a: Pretext and posttext for material processes in the Norwegian texts

| | | |
|------------------------|-----------|----------------------------|
| a chance to | do | it practically in their |
| . One need | exercise | to become a skilful |
| need exercise to | become | a skilful teacher. |
| Some students may | get | the best marks in |
| know how to | do | a day's work |
| studies that are | found | in the university. |
| that those who | get | a degree with excellent |
| excellent marks should | get | the jobs that the |
| latter could have | done | better? I guess |
| better? I | guess | there are a good |
| I guess there | are | a good many employers |
| employers that would | choose | those who know how |
| choose those who | know | how to work in |
| know how to | work | in the real world |
| do not only | have | the knowledge of different |
| the teachers have | graduated | from a university. |
| know how to | teach | it to their pupils |
| students do not | manage | to relate their studies |
| not manage to | relate | their studies to the |
| many of them | do | . A number of |
| job. Theory | forms | the basis of good |
| , but why | do | they not include practical |
| do they not | include | practical work in the |
| degrees like they | do | in for example training |

In the table above, the program was asked to show pretext and posttext in a search for material processes in the Norwegian texts. Here, one can see that the program is unable to differ between auxiliaries and processes. In the eyes of the parser, there is no difference between the ‘do’ in ‘but why do they not include...’ and the ‘do’ in ‘do a day’s work’. The parser counts both these as material processes. There are similar examples of many ‘be’, ‘do’ and ‘have’ verbs. In addition, the program has the same kind of issues with emphatic tenses. Therefore, I will disregard these verbs in my analysis. On the positive side, the parser distinguishes between the material process ‘get’ and get-passives.

4.1 American texts in LOCNESS (USARG in the LOCNESS corpus)

The figure below displays data extracted from the analysis of *USARG* (Université catholique de Louvain, 2015). In total, there are 14142 material processes, 4805 mental processes, 8433 relational processes, 1942 verbal processes and 822 existential processes.

Figure 1: Process types in *USARG* (Université catholique de Louvain, 2015)

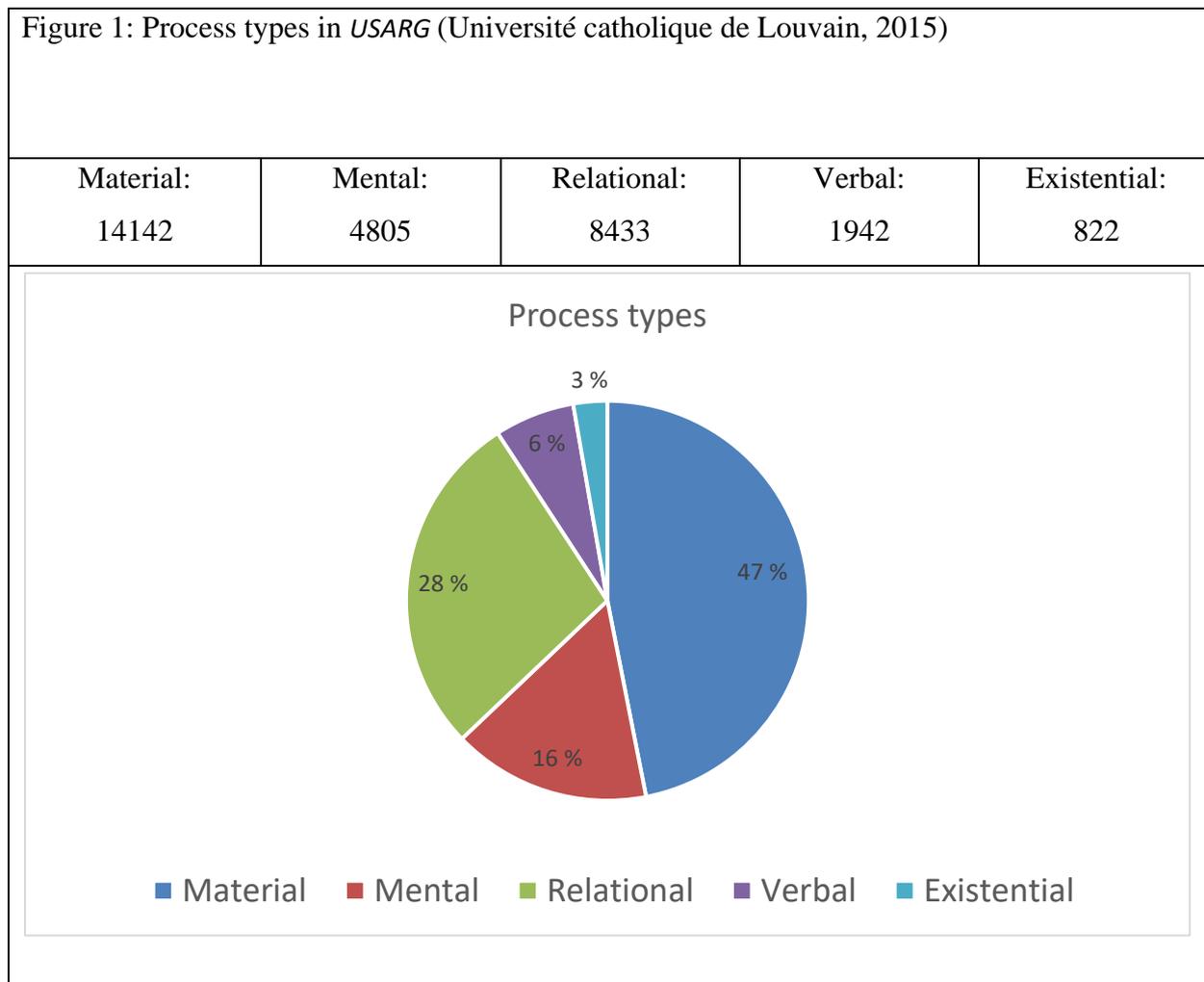


Figure 1 displays that between these five process types, 47% of them were material, 16% of them were mental, 28% of them were relational, 6% of them were verbal and 3% of them were existential.

4.2 Texts from LOCNESS (British a-levels 1-9)

The figure below displays data extracted from the analysis of *alevels1-9* (Université catholique de Louvain, 2015). In total, there are 5231 material processes, 1557 mental processes, 3565 relational processes, 521 verbal processes and 530 existential processes.

Figure 2: Process types in *alevels1-9* (Université catholique de Louvain, 2015)

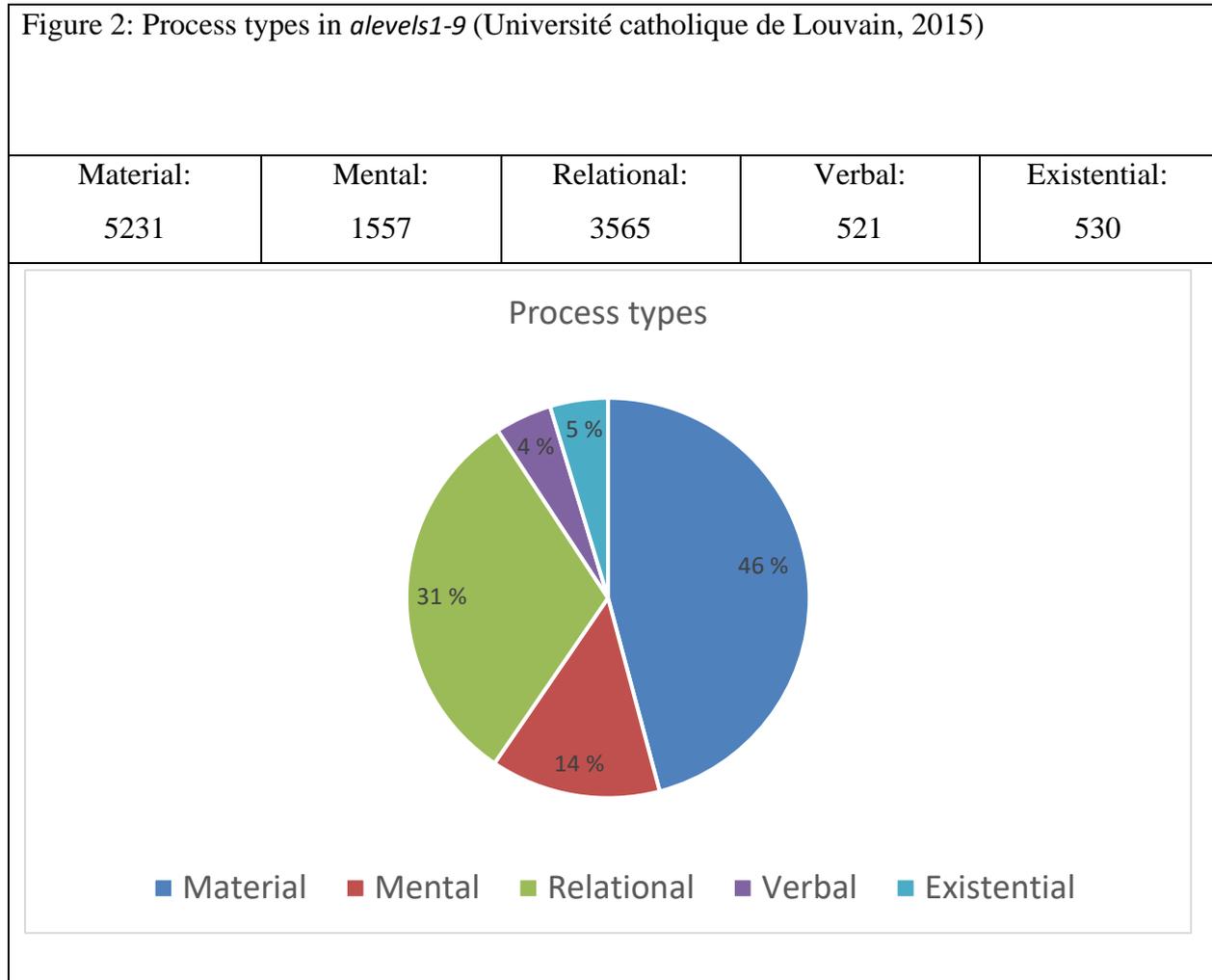


Figure 2 displays that between these five process types, 46% of them were material, 14% of them were mental, 31% of them were relational, 4% of them were verbal and 5% of them were existential.

4.3 Texts from Norwegian universities/colleges combined

The figure below displays data extracted from figure 11,12,13 and 14 in the appendix. In total, there are 14765 material processes, 6714 mental processes, 11640 relational processes, 2244 verbal processes and 1244 existential processes.

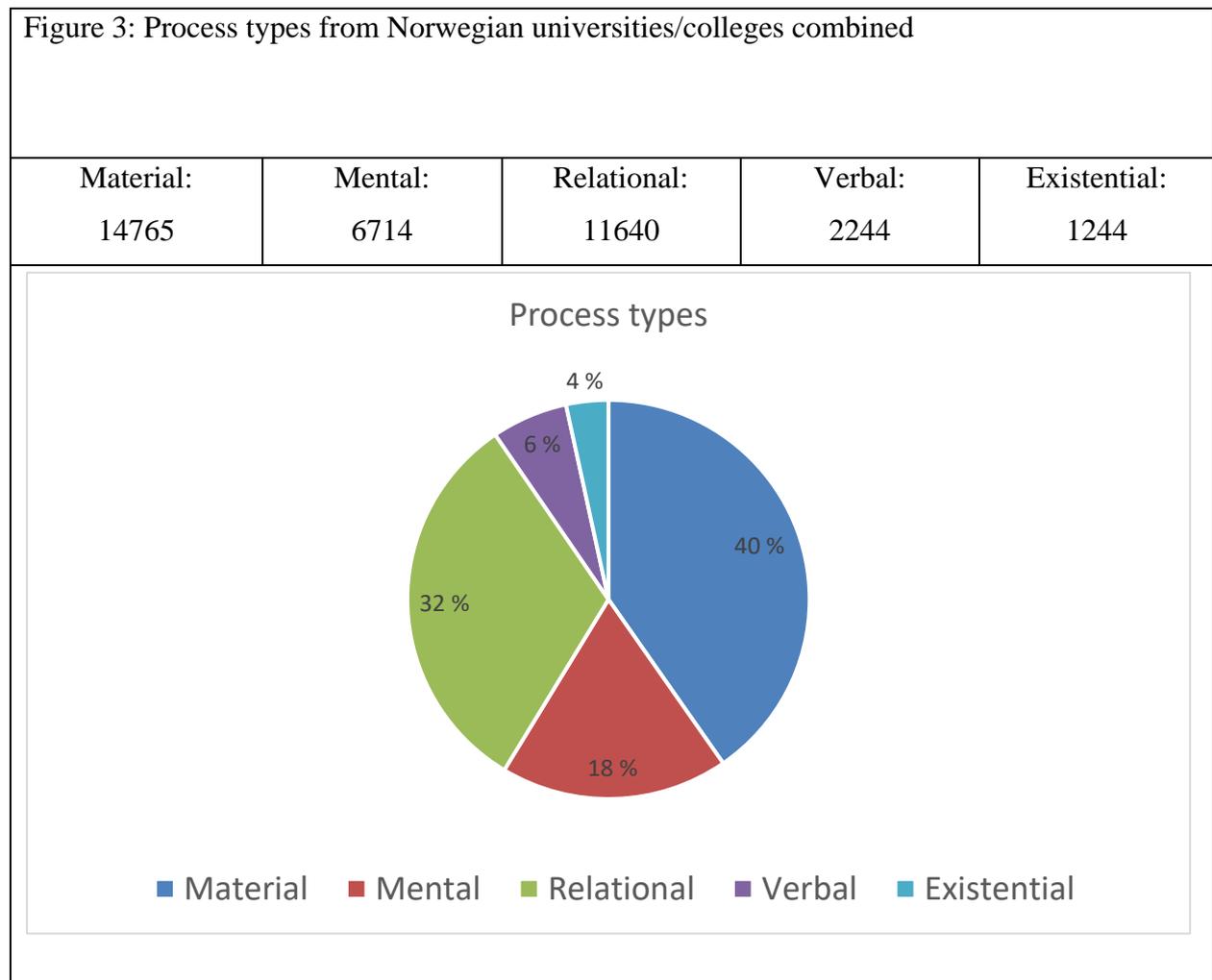


Figure 3 displays that between these five process types, 40% of them were material, 18% of them were mental, 32% of them were relational, 6% of them were verbal and 4% of them were existential.

4.4 Comparison figure

The figure below displays data extracted from figure 1-3.

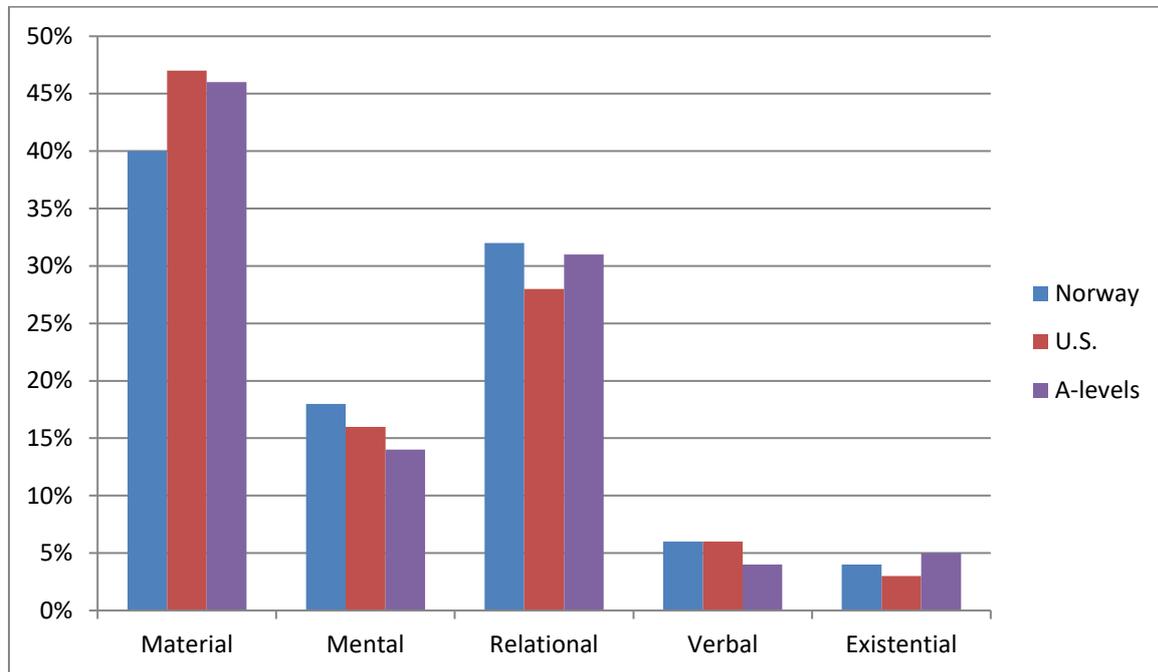


Fig. 4: This figure illustrates an overview of the different process types in all the texts. (Data from figure 1-3)

As shown above, the distribution of the different process types between the learner language texts varies more in some processes than others. Firstly, the Norwegian students used fewer (40% vs. 46-48%) material processes than the American and British students. Secondly, the Norwegian students used more (18% vs. 14-16%) mental processes than the American and British students. Thirdly, the Norwegian students used more (32% vs. 28-31%) relational processes than the American and British students. Fourthly, the Norwegian students used approximately the same number of verbal processes as the American students, but more (6% vs. 4%) than the British students. Finally, the Norwegian students used more (4% vs. 3%) existential processes than the American students, but fewer than the British students (4% vs 5%). These differences are of course interesting to look at in more depth, and further investigation follows in the next sub-chapters.

5.0 Exploring the differences/similarities

As the results in the above charts did not differ greatly from each other, not enough to support the hypothesis, looking underneath the surface of these numbers is needed. In the following sub-chapters, the differences are explored further, and the hypothesis is that frequency lists of the top processes, i.e., doing or happening, saying or sensing, being or having, within these categories; a) material, b) mental, c) relational, d) verbal and e) existential, will show larger differences than what was evident with the categorized analysis.

To achieve comparable numbers, each process was counted by frequency and divided by the total number of that type of process, for each corpus. As an example, the material process ‘do’ was counted 395 times in the Norwegian texts. In total, there are 14765 material processes in the Norwegian texts. I then calculated it into percentages: $395/14765 = 2,67524\%$. This method has been used for every single process, every process type and every country. In this way, comparable percentages for each corpus were obtainable, even though the amount of text was not identical for each group. Another aspect of this kind of comparison that must be considered is that of differences due to topic choices. As there are no corpora which have equal parameters set for (Norwegian) learner language texts, native British texts and native American texts, the results must be considered less generalizable than if the amount of available, comparable material was higher. However, as is shown in the following figures, most of the top 20 processes within each process type relate to the style of argumentative writing, rather than to certain topics. There was one process that oddly stood out in the Norwegian frequency lists, and that is the process of ‘dreaming’ (and its other forms). Looking at the topic choices these students had (Granger, Dagneaux, Meunier, & Paquot, 2009, p. 213), it is clear why the process ‘dream’ is used frequently enough to make it into the top 20 lists. Furthermore, this process was not even found in any of the top 100 frequency lists of the American and British texts. For comparison purposes, ‘dreaming’, and its other forms, was thus removed from the results. Nevertheless, one must keep in mind that there may be other reasons for this discrepancy, that are not evident in the corpus or the corpus guide.

5.1 Exploring the material processes

In the clustered bar chart below (fig. 5), the top 20 material processes in the Norwegian texts are compared to the same processes in the British A-level texts and the American texts.

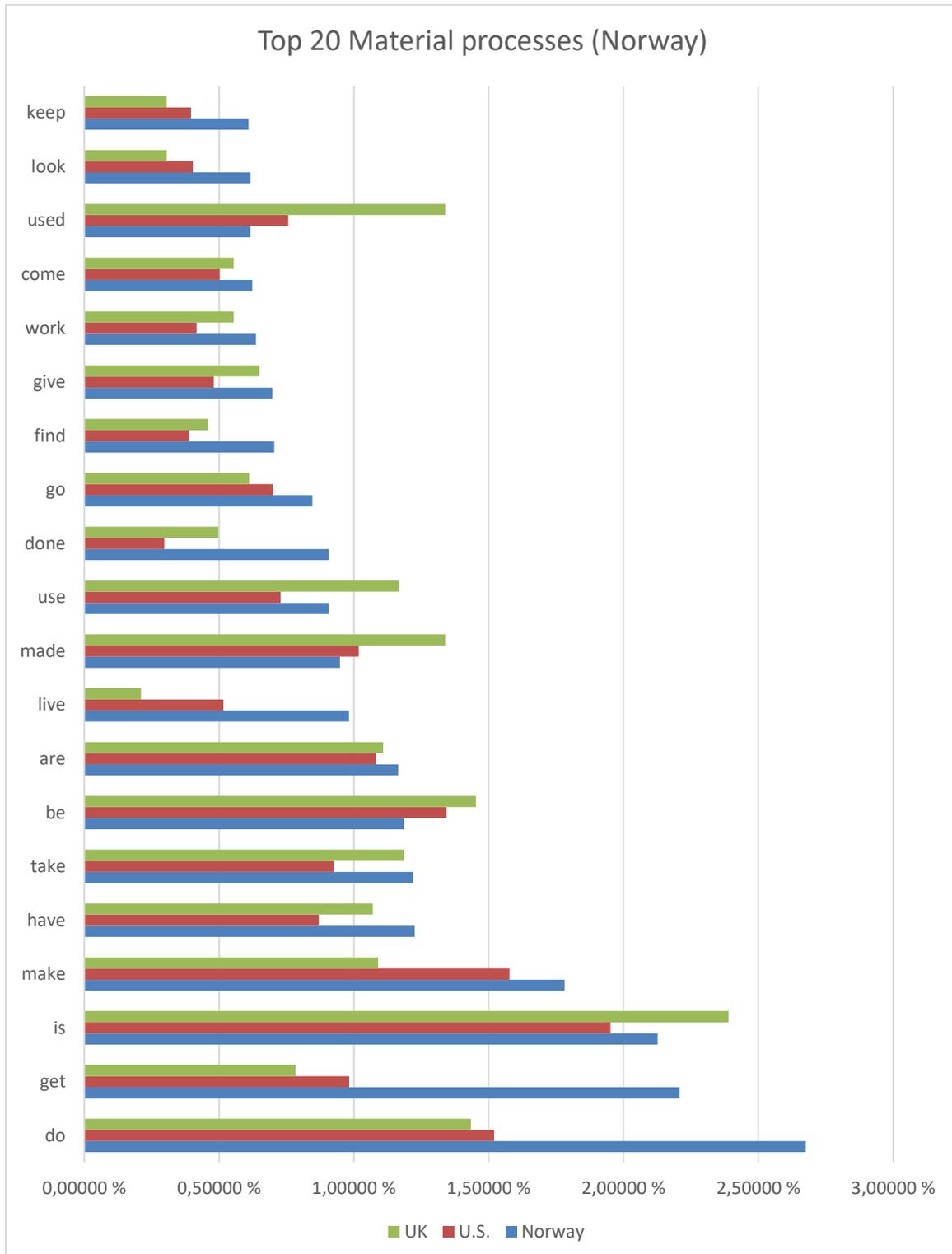


Fig. 5: This figure illustrates an overview of the top 20 material processes in all the texts. (Data from frequency lists in the appendix)

Looking at the clustered bar chart above (fig. 5), it is evident that Norwegians use the verb 'do' quite much more than the American and the British students. However, as stated earlier, the parser is unable to differ between auxiliaries and processes, therefore these findings are of little use to this analysis. Looking away from this verb and its other tenses, the largest difference lies in the use of 'get', 'find' and 'live'. Norwegians used the material process 'get' more than twice as many times as the American and British students, 'find' close to twice as many times, and 'live' almost twice as many times as the American students and four times as many times as the British students.

In general, there is an overuse of these top 20 material processes in comparison to the American and British texts.

On the other hand, the list above shows a clear underuse of the process 'used' in comparison with the American and the British texts, but this is the only process in the top 20 material processes where such a distinct difference is evident.

A closer look at Norwegians's overuse of certain material processes is needed.

Table 5.1.a: Pretext and posttext for the material process ‘get’

| | | |
|-----------------------|-----|------------------------------|
| don't | get | too rich by working |
| don't | get | me wrong here. |
| don't | get | a job or get |
| children can easily | get | into problems, and |
| , more easily | get | away from awkward situations |
| opportunity we even | get | from the radio. |
| do not even | get | more than three months |
| Norway you even | get | extra point for taking |
| the leg first | get | to be operated on |
| something they go | get | it and they very |
| , and hopefully | get | on the right track |
| , and I | get | the experience that I |
| and therefore I | get | the feeling that I |
| , but I | get | the feeling that after |
| reasons why I | get | up in the morning |
| the closest I | get | to the church is |
| soon as I | get | home I'm going |
| , and I | get | peace inside myself when |
| rehabilitated, i.e. | get | them off the streets |
| we can just | get | in the car. |
| shout out loud | get | more attention. For |
| the common man | get | through his day of |
| . Not many | get | to the top, |
| Some students may | get | the best marks in |
| and sometimes men | get | better wages than women |
| degrees that mostly | get | the criticism of being |
| and colleges must | get | a grip, and |
| Some criminals nearly | get | anyone to talk to |
| people can never | get | enough of material goods |
| that will never | get | out of date. |
| they do not | get | the money they are |
| you do not | get | all the adequate training |
| they do not | get | this help, their |

The table above shows how the Norwegian students use the material process ‘get’. As seen in many of these examples, the overuse of ‘get’ can be explained by the limited size of the students’ vocabularies. For example, the phrase ‘that will never get out of date’ would not be used by a native American or native British student. Most likely, the material process ‘expire’ would have been used in this particular phrase. Another example from above that stems from interlanguage issues is the phrase ‘and I get peace inside myself’. In this example, a British or American student would most likely have used the material process ‘find’ instead of ‘get’. There are many pages of such examples, and this explains the Norwegian’s overuse of ‘get’.

Furthermore, in the phrase ‘they do not get the money’, ‘receive’ would be a better suited process. There are many more examples displaying such colloquialism; ‘trying to get rid of that tradition’, ‘get away from awkward situations’ and ‘they don’t get anything done’ to name a few. In some of the examples, it becomes very clear that these students are indeed second language learners; ‘for youngsters to get relapse’ to name one. On another note, some of the examples above are clearly topic specific, such as the ones including marriage and pregnancy. However, the overuse of the process ‘get’ can not be explained solely by topic choice.

Moving on, the overuse of ‘find’ can not be explained by interlanguage errors, as shown in the table below:

Table 5.1.b: Pretext and posttext for the material process ‘find’

| | | |
|-----------------------------|------|------------------------------|
| but did not | find | so before. E.g. |
| and will not | find | time to have lunch |
| wonder some people | find | it difficult to " |
| criminals can perhaps | find | out why the crime |
| using trained professionals | find | no value in a |
| think we should | find | other ways of punishing |
| existence you sometimes | find | yourself trapped, do |
| but people still | find | place and time for |
| years of studying | find | out that one do |
| needs we the | find | the need of self-realization |
| , if they | find | out that this affair |
| be that they | find | no interest in the |
| preserve what they | find | genuinely "British" |
| "they" | find | the South European women |
| the opportunity to | find | out if they fit |
| less eager to | find | solutions by oneself by |
| towards religion to | find | answers to their everyday |
| is easy to | find | similarities to religion in |
| watch television to | find | solutions to their worries |
| the methods to | find | more information. IT |
| is difficult to | find | the balance between a |
| life, to | find | comfort, etc. |
| people seek to | find | the answers to the |
| We need to | find | the child in ourselves |
| today struggle to | find | time and reason to |
| , is to | find | different reasons in order |
| is possible to | find | out if a 3-4 |
| is accepted to | find | a new partner or |
| They have to | find | out a way to |
| better than to | find | himself at the head |
| our imagination to | find | solutions to problems. |
| one day to | find | bad genes and select |
| be problematic to | find | people to these armies |

Judging by the table above, the only tendency that may possibly explain part of the overuse is that the Norwegian students seem to pair ‘find’ and ‘out’ quite often. An American or British student might possibly have varied more in these sentences. For example, the material processes ‘discover’ and ‘learn’ can replace many of these instances of ‘find out’.

Looking at the process ‘live’, it appears that this difference is most likely heavily linked to topic of the thesis:

Table 5.1.c: Pretext and posttext for the material process ‘live’

| | | |
|----------------------|------|--------------------------------|
| and famous people | live | for real" - |
| to make people | live | in harmony together, |
| and many people | live | a very hectic life |
| a foetus should | live | or not? We |
| that we still | live | in the stone age |
| to let them | live | in peace (which |
| that we therefor | live | within too restricted limits |
| had. They | live | under other influences than |
| happy that they | live | today. Some of |
| moral standards they | live | by in for instance |
| emerge when they | live | together. The disadvantage |
| state if they | live | together without being married |
| , where they | live | together, preferably without |
| is that they | live | close to the object |
| the society they | live | in, if they |
| let your thoughts | live | their own life for |
| the same time | live | a life as perfect |
| you have to | live | the life to know |
| secure place to | live | . Young women and |
| not free to | live | rich and fulfilling lives |
| a place to | live | or a job. |
| more satisfactory to | live | now than it was |
| many chose to | live | without television. They |
| same opportunity to | live | happily, free and |
| chose not to | live | by the rules set |
| quite lucky to | live | in this "androgyny |
| for man to | live | together with other human |

It is clear that a large amount of the instances of ‘live’ follow a topic related to history and/or intercultural communication in some way or another.

On another note, keeping in mind that this list is sorted by the top 20 material processes found in the texts written by Norwegian students, and that the top 20 material processes sorted by the American or British texts would show other results. Nevertheless, this thesis aims to present findings that could be useful information for the Norwegian school system, and thus the discussion will be focussed on the texts from the ICLE corpus (Norwegian texts).

5.2 Exploring the mental processes

In the clustered bar chart below (fig. 6), the top 20 mental processes in the Norwegian texts are compared to the same processes in the British A-level texts and the American texts. The method used to obtain these numbers is the same as with the material processes.

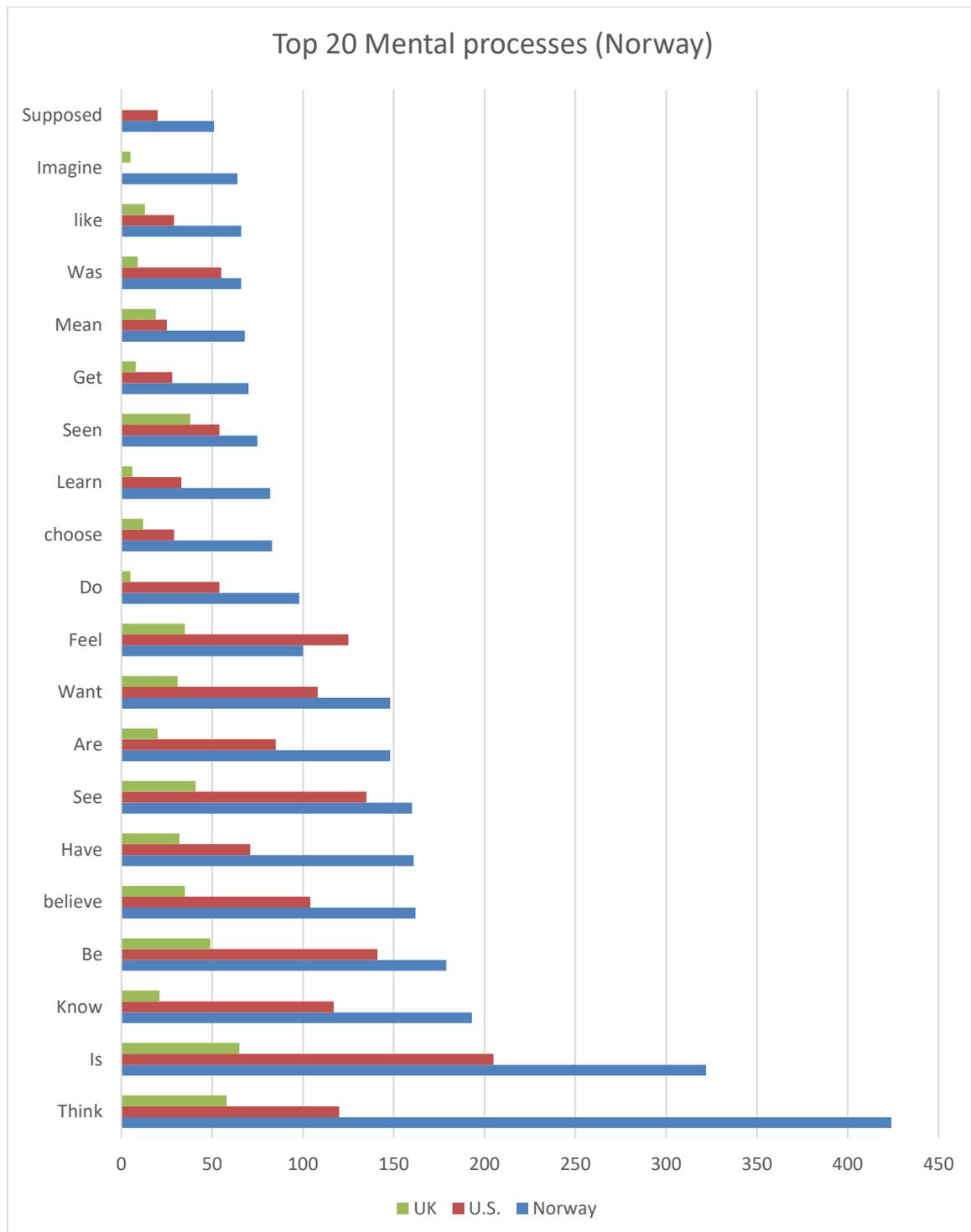


Fig. 6: This figure illustrates an overview of the top 20 mental processes in all the texts.

Looking away from ‘be’, ‘do’ and ‘have’ and their finite counterparts, the largest difference lies in the use of ‘think’, ‘choose’, ‘get’, ‘mean’, ‘like’, ‘imagine’, ‘supposed’ and ‘learn’. In general, there is an overuse of these top 20 material processes in comparison to the American and British texts, especially the latter.

Another interesting find here, that differs quite much from the findings in the material processes, is that the choice of processes in the Norwegian texts are much more similar to the American students’ choices than the British students’ choices. This may have something to do with the fact that most of the popular TV-shows and movies available in Norway are American, not British. Then the question arises as to why these similarities only first appeared in mental processes, and not in material processes. This may have something to do with the fact that in films and tv-shows, the physical/material processes are most often not verbalized.

Further investigation of the Norwegian students’ overuse of certain mental processes is required.

Table 5.2.a: Pretext and posttext for the mental process ‘think’

| | | |
|-----------------------|-------|-----------------------------------|
| some people I | think | you can even say |
| helped, I | think | it's difficult for he |
| life, I | think | they need to attend |
| I do not | think | any countries should be |
| I don't | think | so. In fact |
| . Therefore I | think | that there is no |
| . I would | think | that we all would |
| us that some | think | not. The legitimacy |
| personally, I | think | I can discuss this |
| , I just | think | of myself and the |
| hand, I | think | it would be healthy |
| living, I | think | that in a war |
| situation they will | think | more about fighting the |
| service will probably | think | more about the consequences |
| . Sometimes I | think | about it and worry |
| it realistic to | think | so? I can |
| way, I | think | I would feel safer |
| ? Many critics | think | little is done in |
| because, I | think | , in most of |
| exist, I | think | a feeling of emptiness |
| convicts? I | think | that the society will |
| repetitive crime I | think | it is worthwhile to |
| is easy to | think | that this money will |
| ' ability to | think | independently and act responsibly |
| my opinion I | think | it is very sad |
| n't have to | think | at all. The |
| am starting to | think | it is more like |

The table above shows how the Norwegian students use the mental process ‘think’. As seen in many of these examples, the overuse of ‘think’ can be explained by the need for including the student’s voice, as in the majority of these instances, ‘think’ is preceded by ‘I’ (I think). This can be categorized as an interlingual problem, and this study has made it clear that Norwegian students need more guidance about voice in argumentative writing.

The same can be said about ‘believe’:

Table 5.2.b: Pretext and posttext for the mental process ‘believe’

| | | | |
|--|---------------------|---------|-----------------------------|
| Norwegians combined texts/NOHO1030.txt | be honest I | believe | it is too late |
| Norwegians combined texts/NOHO1031.txt | itself. I | believe | there is today a |
| Norwegians combined texts/NOHO1031.txt | many cases I | believe | they have not. |
| Norwegians combined texts/NOHO1031.txt | kindergarten. I | believe | it is unnatural that |
| Norwegians combined texts/NOHO1031.txt | beings. I | believe | we have to consider |
| Norwegians combined texts/NOHO1035.txt | people think, | believe | and behave. Some |
| Norwegians combined texts/NOHO1036.txt | ". I | believe | this to be true |
| Norwegians combined texts/NOHO1037.txt | TV-entertainment. I | believe | that we look at |
| Norwegians combined texts/NOHO1039.txt | not! I | believe | that through the rules |
| Norwegians combined texts/NOHO1039.txt | and youth should | believe | is ok, and |
| Norwegians combined texts/NOHO1039.txt | not. I | believe | that a lot of |
| Norwegians combined texts/NOHO1039.txt | they are to | believe | have already been decided |
| Norwegians combined texts/NOHO1039.txt | journalists. I | believe | that this is completely |
| Norwegians combined texts/NOHO1039.txt | on what you | believe | is right. I |
| Norwegians combined texts/NOHO1039.txt | we should just | believe | in the good of |
| Norwegians combined texts/NOHO1040.txt | I don't | believe | in a compulsory military |
| Norwegians combined texts/NOHO1043.txt | that he must | believe | that he is more |
| Norwegians combined texts/NOHO1044.txt | We like to | believe | that women in the |
| Norwegians combined texts/NOHO1044.txt | . I do | believe | that feminists have changed |
| Norwegians combined texts/NOHO1044.txt | them. I | believe | the whole question of |
| Norwegians combined texts/NOHO1044.txt | . Personally I | believe | that it is no |
| Norwegians combined texts/NOHO1045.txt | all need to | believe | in our dreams. |
| Norwegians combined texts/NOHO1046.txt | that. I | believe | that there is nothing |
| Norwegians combined texts/NOOS1001.txt | imagination. I | believe | it is more a |
| Norwegians combined texts/NOOS1001.txt | , and I | believe | that the need and |
| Norwegians combined texts/NOOS1005.txt | ? People who | believe | that fosters are human |
| Norwegians combined texts/NOOS1008.txt | but I would | believe | that one can agree |
| Norwegians combined texts/NOOS1009.txt | don't | believe | that marriage is an |
| Norwegians combined texts/NOOS1011.txt | . Some people | believe | that skipping breakfast may |
| Norwegians combined texts/NOOS1015.txt | I don't | believe | him when he says |
| Norwegians combined texts/NOOS1016.txt | Personally, I | believe | that without dreams and |
| Norwegians combined texts/NOOS1016.txt | it easier to | believe | it has been a |
| Norwegians combined texts/NOOS1019.txt | done! I | believe | that the prison system |

5.3 Exploring the relational processes

In the clustered bar chart below (fig. 7), the top 20 relational processes in the Norwegian texts are compared to the same processes in the British A-level texts and the American texts. The method used to obtain these numbers is the same as with the material/mental processes.

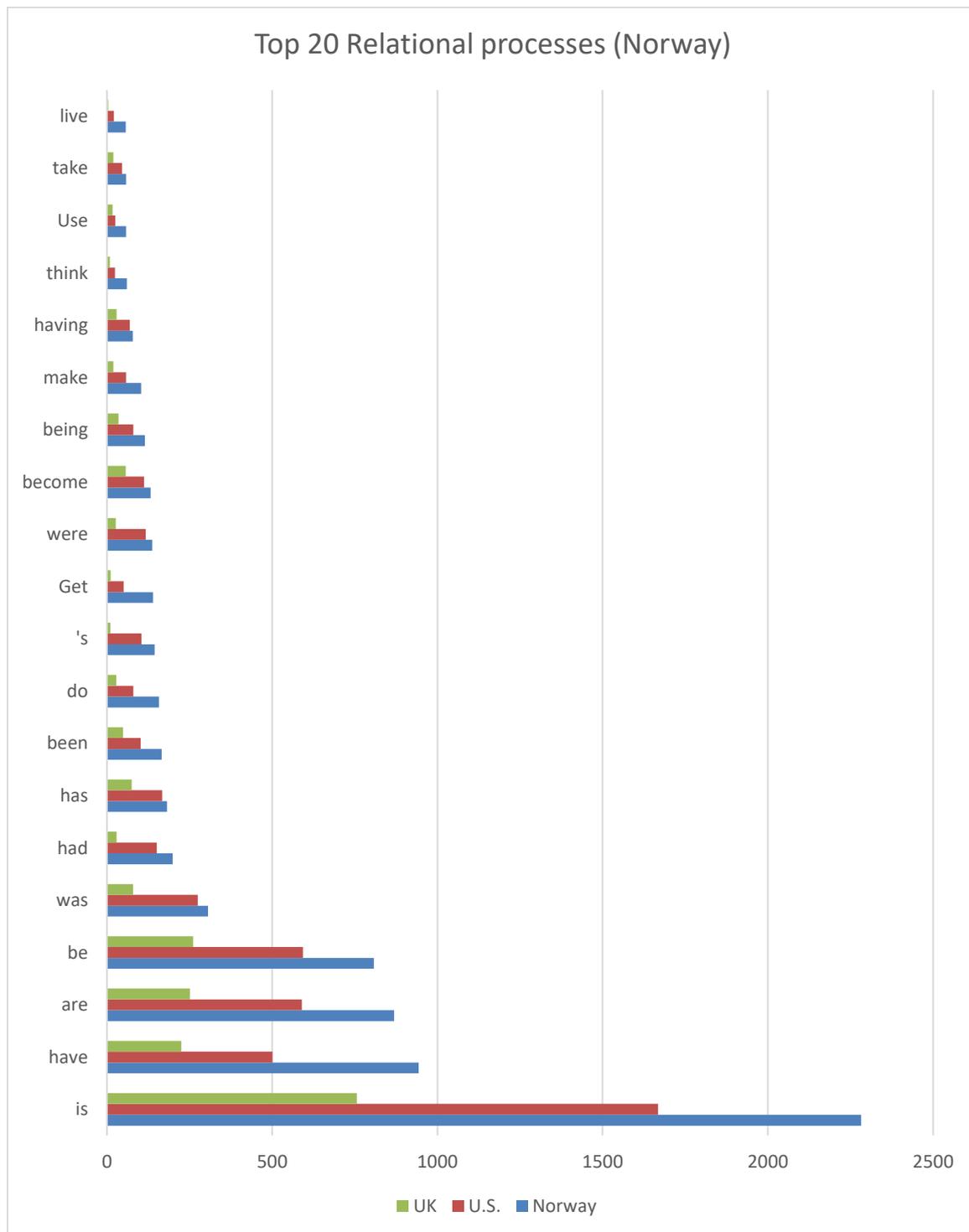


Fig. 7: This figure illustrates an overview of the top 20 relational processes in all the Norwegian texts .

(Data from frequency lists in the appendix).

In the bar chart above, it is clear that the automatic parser has issues regarding relational processes. Below there are examples of the relational process 'do' (according to the program):

Table 5.3.a: Pretext and posttext for the relational process 'do'

| | | |
|----------------------|----|---------------------------|
| natural thing to | do | . Things as basic |
| that if you | do | something wrong, you |
| are you to | do | ? You go and |
| at what they | do | . They would certainly |
| he has to | do | certain things. And |
| what he'll | do | . As simple as |
| prison as they | do | today? How would |
| them have to | do | crimes to get enough |
| be able to | do | this, it was |
| the initiative and | do | a little work, |
| able to serve | do | not. Myself, |
| are likely to | do | a better job than |
| forced' to | do | it. Armies should |
| they had to | do | it they would then |
| things that machines | do | for us now, |
| they had to | do | with their hands and |
| the right to | do | it anyhow. Are |
| you have to | do | it. Maybe I |
| to what we | do | now, as they |
| his office we | do | our dreaming. Furthermore |
| 's choice to | do | whatever is right for |
| right thing to | do | for that particular woman |
| best thing to | do | . Every story is |
| decide what to | do | with her body. |
| themselves what to | do | . If the |
| right thing to | do | , or it may |
| you need to | do | is watch television" |
| of what they | do | . Today, the |

The most used relational processes that are most likely correctly counted by the parser are 'is', 'have', 'are' and 'be'. In the table below, there are many examples where the program has correctly identified the relational process 'is':

Table 5.3.b: Pretext and posttext for the relational process ‘is’

| | | |
|------------------------------|----|-----------------------------------|
| claim that television | is | the opium of the |
| most popular pastime | is | mass-produced sit-coms which airs |
| kind of supervision | is | terrible. But it |
| . But it | is | a fact that some |
| homework. This | is | not a healthy development |
| generation. It | is | not unusual for a |
| activity, which | is | unfortunate. In Marx |
| woman. Opium | is | a drug that is |
| a drug that | is | tranquillises the central nerve |
| Orwell's 1984 | is | frightening, and shows |
| hands. It | is | important to remember that |
| Peoples own medium | is | a possibility for debate |
| <CLE-NO-BE-0006.1> The world | is | today far from a |
| . The USA | is | in addition nowadays also |
| Army) it | is | possible to have only |
| , but that | is | , to note, |
| argue that this | is | true. The United |
| in these rights | is | the fact that all |
| in practice not | is | the case, as |
| resources. It | is | also possible to argue |
| that someone famous | is | more likely to get |
| , but it | is | not good enough. |
| A rehabilitation programme | is | perhaps more necessary in |
| crimes because that | is | the only way of |
| This notorious criminal | is | also aware of the |
| fact that it | is | impossible for him to |
| such cases also | is | a rehabilitation programme a |
| offender that crime | is | not the only way |

Some of the relational processes in the table above are identifying (i.e. ‘it is a fact that...’) and some are attributive (i.e. ‘the notorious criminal is also aware...’), and the program seems to have no issues regarding these instances.

An interesting part of these results is that the Norwegian students’ use of relational processes is much closer in frequency to the American students’. The same was evident in the mental processes, strengthening my claim that the Norwegian students are very much affected by American TV-shows, movies music, gaming and American media in general, when making their choices.

5.4 Exploring the verbal processes

In the clustered bar chart below, the top 20 verbal processes in the Norwegian texts are compared to the same processes in the British A-level texts and the American texts. The method used to obtain these numbers is the same as with the material, mental and relational processes.

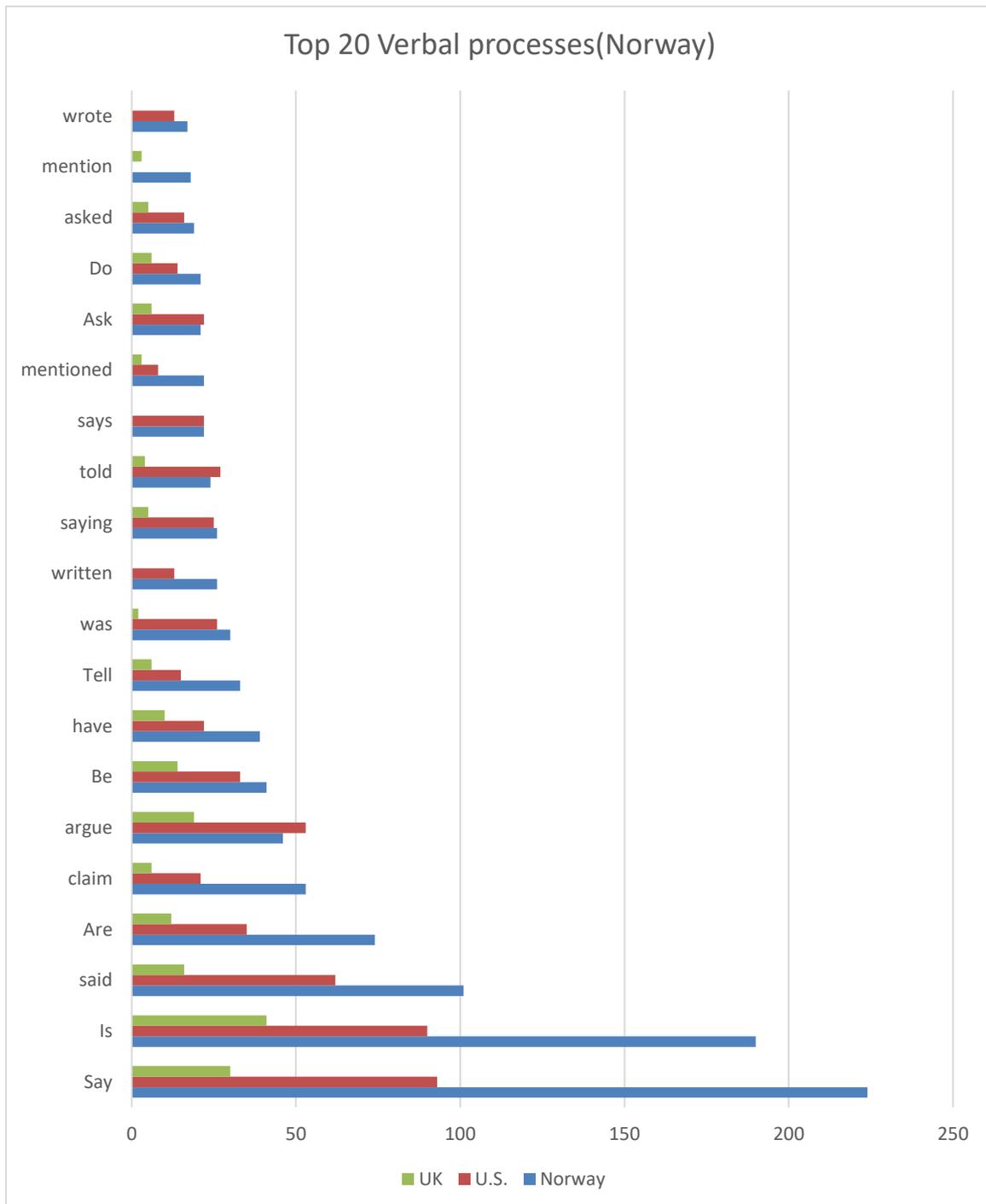


Fig. 9: This figure illustrates an overview of the top 20 verbal processes in all the texts. (Data from frequency lists in the appendix)

Disregarding all forms of ‘be’, ‘do’ and ‘have’, the Norwegian students’ most used verbal processes are ‘say’, ‘claim’, ‘tell’, ‘written’, ‘mentioned’, and ‘mention’. It is evident that the Norwegian students’ use of verbal processes is very much in line with or closer to how frequent the American students use them, as was the case for both mental and relational processes. In the table below we can see some examples of the Norwegians’ most overused

verbal processes:

Table 5.4.a: Pretext and posttext for the verbal process ‘say’

| | | |
|---------------------------------|-----|------------------------------|
| be wrong to | say | that the university degrees |
| wish I could | say | that it is needless |
| . One can | say | it is part of |
| . Some people | say | that in our modern |
| ? Some would | say | that the number of |
| "Some people | say | that in our modern |
| far as to | say | that there is no |
| . I would | say | that there is still |
| <ICLE-NO-UO-0022.1> Some people | say | that in the modern |
| is not to | say | that they cannot |
| which one could | say | started to develop after |
| . I would also | say | that the modern world |
| or one could | say | the wealthiest part of |
| . One may | say | that much of modern |
| "Some people | say | that in our modern |
| " I would | say | that it is a |
| , I would | say | that instructions in theatre |
| . Some people | say | that television weakens the |
| But let's | say | that a system where |
| is safe to | say | that crime is a |
| prisons. Some | say | life is even tougher |
| is difficult to | say | for sure, but |
| some humanity and | say | "walk away and |
| people would probably | say | he deserved this sentence |
| think I can | say | that the only place |
| ones? Some | say | yes, professionals are |
| one could even | say | that conscripts have all |
| or should I | say | inmates. The classical |

The table above shows how the Norwegian students use the process ‘say’. As was evident with some of the mental processes as well, this overuse can be explained by a strong will to include one’s own voice. It should be mentioned that ‘overuse’ in this case refers to the frequency difference only, not that one way is better than the other. Some teachers prefer their students to include their own voice as much as possible, and some teachers prefer their students to write in a more objective manner. Thus, these results may give information regarding the formal writing culture in these three countries. Who is to say what is right and what is wrong? There is not one international standard regarding these choices, there are many. Though, based on these results, one could say that a Norwegian student might have an easier time at school in the U.S. than in the U.K.

Table 5.4.b: Pretext and posttext for the verbal processes ‘mention’ and ‘mentioned’

| | | |
|----------------------|-----------|------------------------------|
| . First to | mention | is the fiction and |
| it necessary to | mention | that not all the |
| . I can | mention | for example the buffaloes |
| 'd like to | mention | another important reason why |
| . Not to | mention | all the calories that |
| I want to | mention | : a condom would |
| , not to | mention | their careers. And |
| . They only | mention | the cases that has |
| , not to | mention | building cities within a |
| cleaners just to | mention | a few of the |
| art, to | mention | a few. This |
| . Not to | mention | that all over the |
| . I can | mention | e.g. the African American |
| also want to | mention | another argument for why |
| designers, to | mention | a few. Most |
| last i will | mention | that it feels a |
| people not to | mention | the society. And |
| Israel just to | mention | a few. But |
| examples of such | mentioned | above. The situation |
| has to be | mentioned | that the moral in |
| of the rejection | mentioned | above is only to |
| I have already | mentioned | that there are differences |
| college has ever | mentioned | the word conflict during |
| through the examples | mentioned | above. I truly |
| I think I | mentioned | the most important reason |
| which I have | mentioned | in my essay, |

The table above shows examples of how the Norwegian students have used the processes ‘mention’ and ‘mentioned’. The reason the Norwegian students use these processes in such frequency is the same as with ‘say’; the need to include one’s own voice.

5.5 Exploring the existential processes

In the clustered bar chart below, the top 8 existential processes in the Norwegian texts are compared to the same processes in the British A-level texts and the American texts. The method used to obtain these numbers is the same as with the other process types.

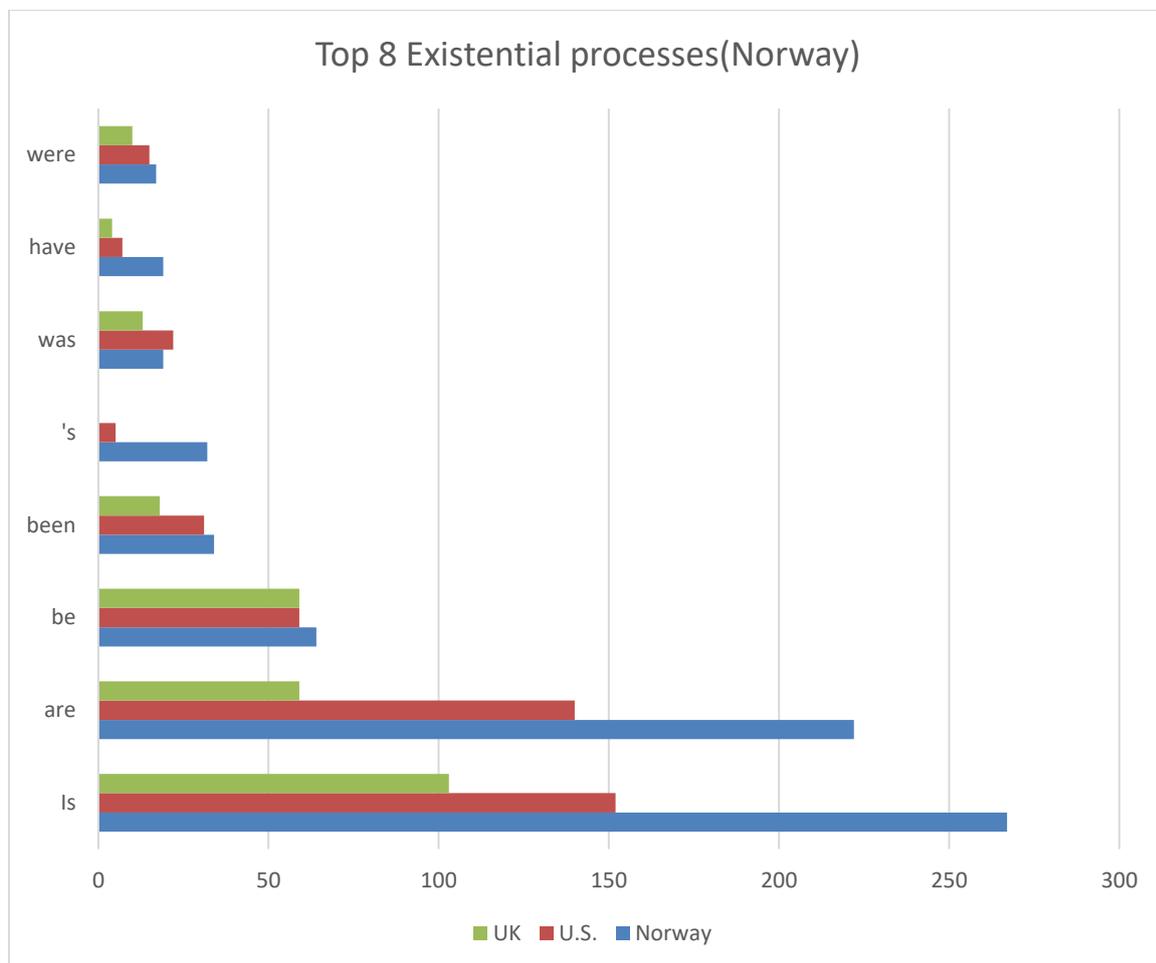


Fig. 10: This figure illustrates an overview of the top 8 existential processes in all the texts. (Data from frequency lists in the appendix)

Disregarding 'have' due to the parser having issues separating between an existential process and other verbs in an existential clause, the Norwegian students' most overused existential processes are 'is' ('s) and 'are':

Table 5.5.a: Pretext and posttext for the existential process 'is'

| | | |
|--|----|---|
| argumentation one could say that there | is | no time for either dreaming or imagination |
| But it does show that there | is | a place for dreaming in the modern |
| write an argumentation about. There | is | no right or wrong, saying that |
| or wrong, saying that there | is | time for dreaming in the modern world |
| for dreaming in the modern world | is | just as valid as saying that there |
| as valid as saying that there | is | not. |
| in the nineteenth century. There | is | no doubt that a woman's life |
| doubt that a woman's life | is | far freer and more satisfactory to live |
| On the other hand, there | is | a tendency with many young people today |
| world. Then again, there | is | of course a debate about how real |
| how real the teaching practice situation | is | . When you give a lecture you |
| for a teacher anyway. There | is | a fact though, that most of |
| and even other college graduates, | is | theoretical. This is done to build |
| "real world". There | is | a lot that could be said about |
| for, are theoretical. There | is | always a purpose of a college degree |
| extent, because I think there | is | a lack of appropriate practise in many |
| these professions. And yet there | is | no sign of an increased emphasis on |
| increased emphasis on mathematics, which | is | necessary for software development, nor has |
| "irrelevant" studies, there | is | the problem of the actual content of |
| . During the third year there | is | also one week when the students take |
| in the school system. There | is | no teaching about this at the college |
| at the college, and why | is | n't it? Teachers always meet some |
| of weeks a year. There | is | simply not enough time to learn everything |
| time to learn everything, which | is | important to know before you start working |
| Science and so on. There | is | also a part were the students can |
| is of aesthetic value. There | is | also 17 weeks with supervised teaching. |
| to 16 year olds. There | is | no room for specialisation in the Norwegian |
| If this really had happened there | is | a chance that the trouble with not |

Table 5.5.b: Pretext and posttext for the existential processes 'is' and 'are'

| | | |
|--|-----|---|
| . There is a reason that they | 're | on the inside. They've done |
| To put it another way, there | 's | authority only, with no human face |
| to the age of sixteen! There | 's | almost no room for specialising for a |
| teacher, you're lucky if there | 's | sometimes one other teacher in the room |
| so fast these days; everywhere there | 's | a high pace. This causes stress |
| affordable clothes. And every year there | 's | the same discussion whether this is fine |
| can't be too careful. There | 's | always someone out there watching, tracing |
| world filled with opportunities like ours there | 's | no end to the possibilities. I |
| and pass all their exams... There | 's | also another aspect with all this technological |
| . As far as I know there | 's | usually 52 weeks in one year, |
| myself either, but I guess there | 's | something special about women and mornings. |
| you're still in your teens there | 's | a lot of things to try out |
| killing them, they mean. There | 's | no reason to argue that, because |
| to be answered before deciding if it | 's | right or wrong. It could even |
| Inside every one of us, there | 's | a bit of my friend. The |
| two seconds later he says "There | 's | one thing about Biff - he's |
| 's one thing about Biff - he | 's | not lazy." And he is |
| socializing. When watching TV, there | 's | little left for the imagination. Most |
| newspapers and the gossip magazines. There | 's | no doubt that television has a strong |
| hold on people. Nowadays, there | 's | a real worry about the decreasing physical |
| at all, do they? There | 's | no time for dreaming and imagination, |
| down and do some dreaming, there | 's | just industry, roads, and cars |
| kind of people doesn't think there | 's | time for dreaming and imagination in our |
| world. I would suggest that there | 's | even more time for that today, |
| they are. I find that there | 's | a place in today's society for |
| . Always on the run. There | 's | always something you have to do or |
| by science technology and industrialization, there | 's | no longer a place for dreaming and |
| I think they're wrong. There | 's | always such a place. And that |

Table 5.5.c: Pretext and posttext for the existential process ‘are’

| | | |
|---|-----|--|
| As has been noted, there | are | several reasons to introduce more practical training |
| highway that connects the world there | are | few, if any international laws. |
| or just an opinion? There | are | two ways of dreaming. You can |
| upon conscience. Hence, there | are | a large amount of activities a computer/machine |
| However, in this matter there | are | other aspects to be considered than just |
| or made use of. There | are | plenty of examples seen everyday in our |
| The words are common. There | are | no metaphors or fancy imagery, no |
| their taxes... Yes, there | are | also innocent victims to tax evasions. |
| be on the increase, there | are | only a limited number of students who |
| I have already mentioned that there | are | differences between the different subjects at our |
| to point out is that there | are | a great number of college degrees to |
| . At Oslo College, there | are | several different degrees, and other colleges |
| small units of subjects as there | are | in College; it would feel more |
| for previous English teachers but there | are | lots of other skills which are as |
| are lots of other skills which | are | as necessary, and useful to gain |
| and useful to gain while you | are | a student. |
| to define the meaning. There | are | a lot of different college degrees, |
| teacher education college in Oslo there | are | 16 weeks altogether when the students go |
| get very much responsibility. There | are | four students together in a group, |
| aspects in our teachers training that | are | missing, but to mention them all |
| system. In my opinion there | are | too many students that pass. I |
| . However, I think there | are | more sides to be considered. Most |
| the practise. However, there | are | still many university degrees that do prepare |
| ! In today's society there | are | maybe often larger differences than before. |
| for those involuntarily involved there probably | are | not any excuses good enough. Not |
| example is the fact that there | are | dozen people who uses their imagination and |
| is their biggest dream. There | are | of course several other things that have |
| than they did before. There | are | even many who are addicted. They |

In the three tables above, the parser correctly (in most cases) identifies existential processes, and it is safe to say that the Norwegian students use these existential processes much more than their American and British counterparts. As to why Norwegian students use existential processes more often, is difficult to say. It could simply be an interlingual error, as the phrase ‘det er’ (~ ‘there is/are’) is very common in the Norwegian language.

6. Summary and discussion

Through a corpora-based transitivity study, a selection of Norwegian, British, and American student texts have been analyzed in a quantitative manner. It was hypothesized that the results would show differences in terms of transitivity between the texts from Norwegian students and the texts from the British and American students. More explicitly, the student texts were hypothesized to show differences in the distribution of process types and word frequency lists. In addition, it was hypothesized that the Norwegian students would use less variation in the distribution of process types.

The purpose of this thesis was to show that Norwegian students may reach a higher proficiency in writing formal English, through a focus on transitivity in the English subject curriculum (ENG01-04). Competence aims to be reached after the completion of the Vg1 programme for general studies in Norway are very general, and thus such a specific focus as

the one suggested here might not fit directly, however there are several aims where transitivity could be included; The pupil is expected to be able to:

- use appropriate strategies for language learning, text creation and communication
- listen to, understand and use academic language in working on own oral and written texts
- express himself or herself in a nuanced and precise manner with fluency and coherence, using idiomatic expressions and varied sentence structures adapted to the purpose, receiver and situation
- use knowledge of similarities between English and other languages with which the pupil is familiar in language learning
- use knowledge of grammar and text structure in working on own oral and written texts
- write different types of formal and informal texts, including multimedia texts with structure and coherence that describe, discuss, reason and reflect adapted to the purpose, receiver and situation

(Utdanningsdirektoratet, 2020)

Moving on, the results of the study were achieved using Halliday and Mathiessen's terminology within systemic functional linguistics and the computer program UAM Corpustool to parse a plethora of student texts from Norway, the U.K. and the U.S. Before discussing the results, it is important to keep in mind the limitations of this study. Firstly, the quantity of base material in the study is not sufficient to make firm, general assumptions. Secondly, an automatic parser has its limitations, especially due to issues when parsing texts with many errors/mistakes. This is notably seen in parsing existential processes, because an existential clause needs 'there' to be true, and there are quite many it/there errors in the Norwegian students' texts, as it is a common interlanguage error.

In the American students' texts, there was a total of 30.144 processes. Between these, 47% of them were material, 16% of them were mental, 28% of them were relational, 6% of them were verbal and 3% of them were existential. In the British students' texts, there was a total of 11.404 processes. Between these, 46% of them were material, 14% of them were mental, 31% of them were relational, 4% of them were verbal and 5% of them were existential. In the Norwegian students' texts, these was a total of 36.607 processes. Between these, 40% of them were material, 18% of them were mental, 32% of them were relational, 6% of them were

verbal and 4% of them were existential. On the surface, the differences between the texts appeared not to be very significant. However, when exploring frequency lists of the most used processes, it was clear that the Norwegian texts were very different from the American and British texts.

In the section for material processes, among the most frequently used processes in the Norwegians' texts were 'get' and 'find', and these are very typical examples showing Norwegian students' lack of process vocabulary. The Norwegian students used these two processes twice as much as the American and British students.

When exploring the mental processes, it was found that Norwegian students tend to heavily overuse, compared to their American and British counterparts, processes such as 'think', 'choose', 'get', 'mean', 'like', 'imagine', 'supposed' and 'learn', among others. An interesting find here was that, when it comes to mental processes, the Norwegian students' choices differed far more from the British than from the American students. In an extensive number of cases, the Norwegian students' overuse of these mental processes may be explained by a need to include one's own voice. "I mean", "I think" and "I imagine" are typical examples of this.

Moving on to relational processes, 'is', 'have', 'are' and 'be' are the most frequently used by the Norwegian students. As in mental processes, the Norwegian students made choices more similar to their American than their British counterparts. The reason might be connected to American culture dominating the Norwegian entertainment scene.

When it comes to verbal processes, the results were very similar to the mental processes. 'say', 'claim' and 'mention' are typical examples of the Norwegian students' need to include their own voice in their writing, which seems atypical for the American and the British students.

The Norwegian students' most overused existential processes are 'is' ('s) and 'are'. As with several other process types, the Norwegian students' choices are much closer to their American than their British counterparts. However, there might be a different reason too, and that is of interlingual nature, as the phrase 'det er' (~ 'there is/are') is very common in the Norwegian language.

Some of the above paragraphs display interlanguage issues in relation to usage of different process types. There are two different types of interlanguage errors/mistakes, where some are interlingual and some are intralingual. Intralingual issues occur “due to the language being learned, independent of the [native language]” (Gass & Selinker, 2008, p. 103), while interlingual errors are related to the language learner’s native language (p. 103). These errors are systematic, which differ from mistakes, and are going to happen frequently until the language learner has made progress on that specific aspect of the target language (p. 102). Therefore, if the goal is for Norwegian students to become adapt at formal English writing, teachers in Norway should teach their students to use a larger variety of processes, in the manner they are used in British and/or American texts.

Whether the goal is to learn to write more like the British or the American students, or International English, or a different style altogether, it is clear that the Norwegian students need to learn more about process types and increase their process vocabulary. Perhaps a closer integration to a focus on meaning, in addition to a focus on form, in the English subject curriculum, can be the solution. English and American students construe meaning to sentences in a different way compared to Norwegians, because they are not second language learners. As second language learners, students must think outside the box often, because their box is relatively small. When writing in one’s primary language, the flow of meaning in a sentence comes naturally. Thus, with solely a focus on form, disregarding meaning, most Norwegian students will not reach the level of English writing proficiency that is needed for studies at university level and further development. If a focus on meaning was included in the competence aims after Vg1, the students would be more prepared for further English studies.

This study only shows a selection of student texts, with a primary focus on Norwegian students’ choices in relation to processes in the system of transitivity within SFG. There is a wide variety of other systems within SFG one could use as a theoretical baseline for a corpora-based study, and this thesis is just an example of one way to analyze meaning in student texts. There were several interesting findings, and further research is clearly needed, and highly recommended, as the Norwegian school system, at least on paper, primarily focuses on form rather than meaning, rather than including both in relation to each other.

7. Conclusion and outlook

Through extensive research, mainly using Halliday and Mathiessen's SFG terminology and ideas as theoretical framework, the research questions have been answered. Both in terms of process type distribution, and in frequency lists of the most used singular processes, the Norwegian students' texts differ greatly from their American and British counterparts, especially the latter. This research project has provided information about how Norwegian students construe meaning when writing formal, argumentative English. Although this study is limited in format, it shows differences in transitivity between the analyzed texts. With further research on the topic, it can merit an addition to the English subject curriculum in Norway; a focus on meaning alongside a focus on form, preparing students for university and/or other arenas where a higher proficiency in formal English writing is required. The material used in this study is available for further research and is included in the appendix below.

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8. Appendix

8.1 Texts from UiB (NOBE1001-1027 in the ICLE corpus)

The figure below displays data extracted from the analysis of *NOBE1001-1027* (Granger, Dagneaux, Meunier, & Paquot, 2009).

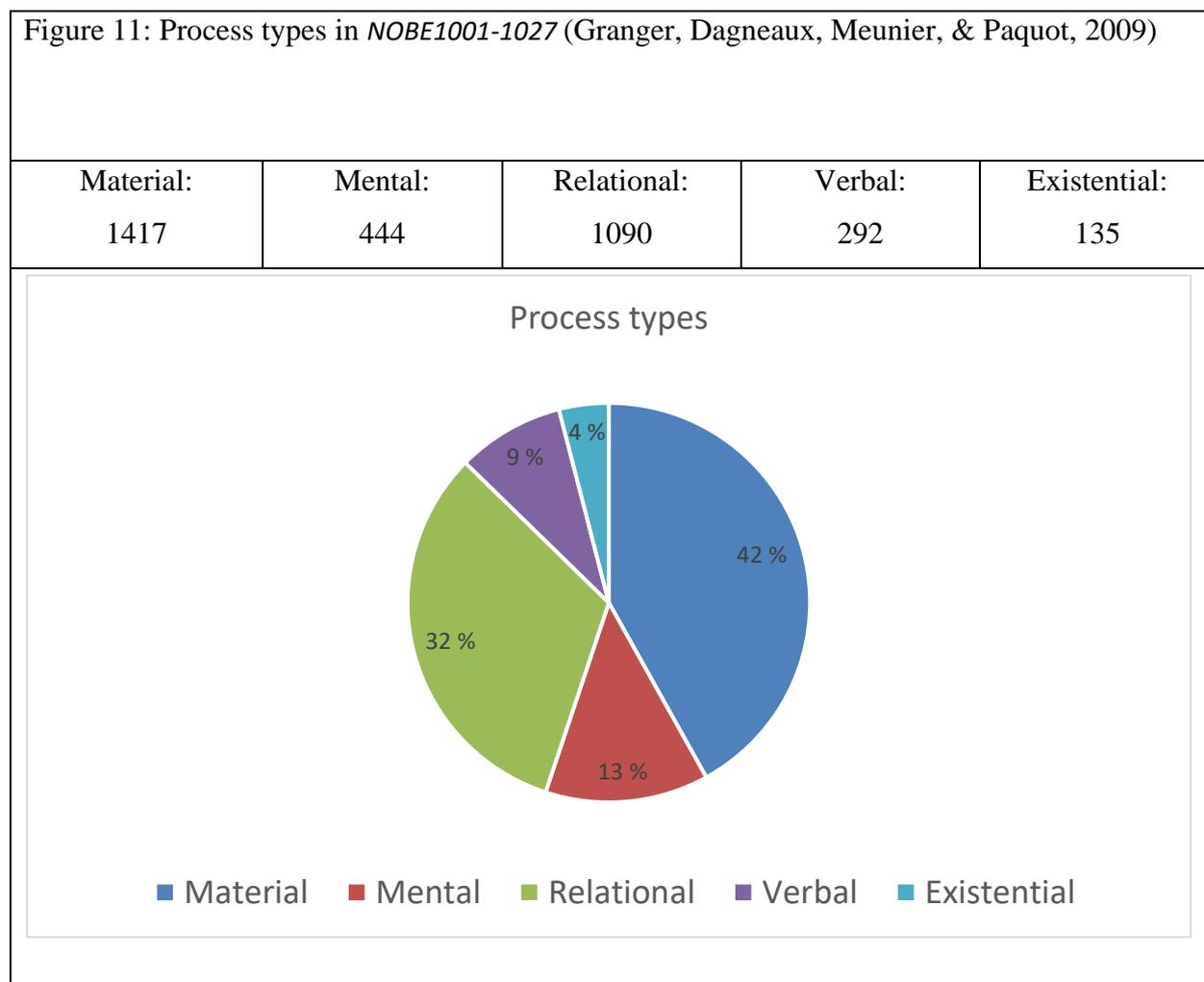


Figure 11 displays that between these five process types, 42% of them were material, 13% of them were mental, 32% of them were relational, 9% of them were verbal and 4% of them were existential.

8.2 Texts from HiØ (NOOS1001-1047 in the ICLE corpus)

The figure below displays data extracted from the analysis of *NOOS1001-1047* (Granger, Dagneaux, Meunier, & Paquot, 2009).

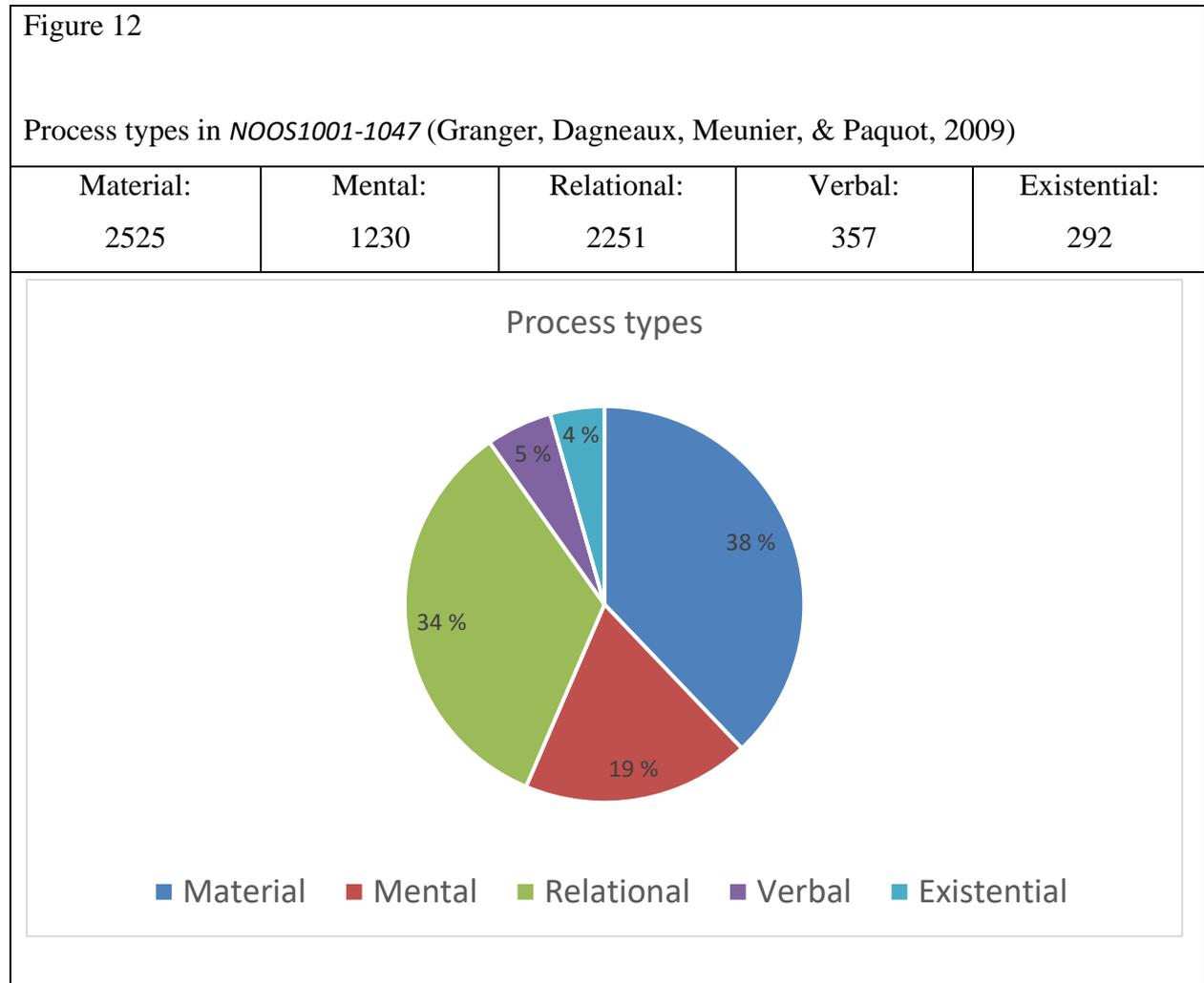


Figure 12 displays that between these five process types, 38% of them were material, 19% of them were mental, 34% of them were relational, 5% of them were verbal and 4% of them were existential.

8.3 Texts from HiOA (NOHO1001-1046 in the ICLE corpus)

The figure below displays data extracted from the analysis of *NOHO1001-1046* (Granger, Dagneaux, Meunier, & Paquot, 2009).

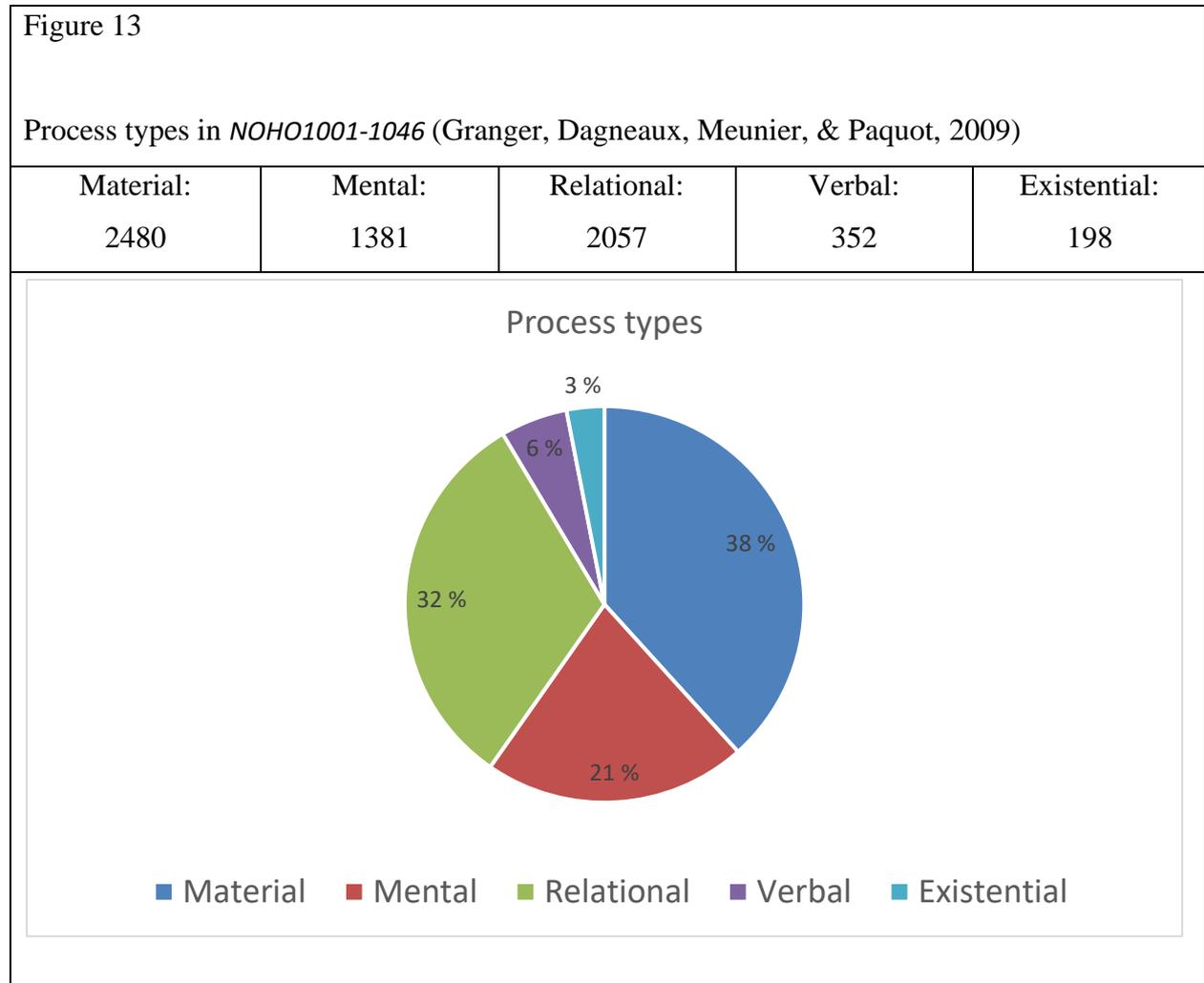


Figure 13 displays that between these five process types, 38% of them were material, 21% of them were mental, 32% of them were relational, 6% of them were verbal and 3% of them were existential.

8.4 Texts from UiO (NOUO1001-2048 in the ICLE corpus)

The figure below displays data extracted from the analysis of *NOUO1001-2048* (Granger, Dagneaux, Meunier, & Paquot, 2009).

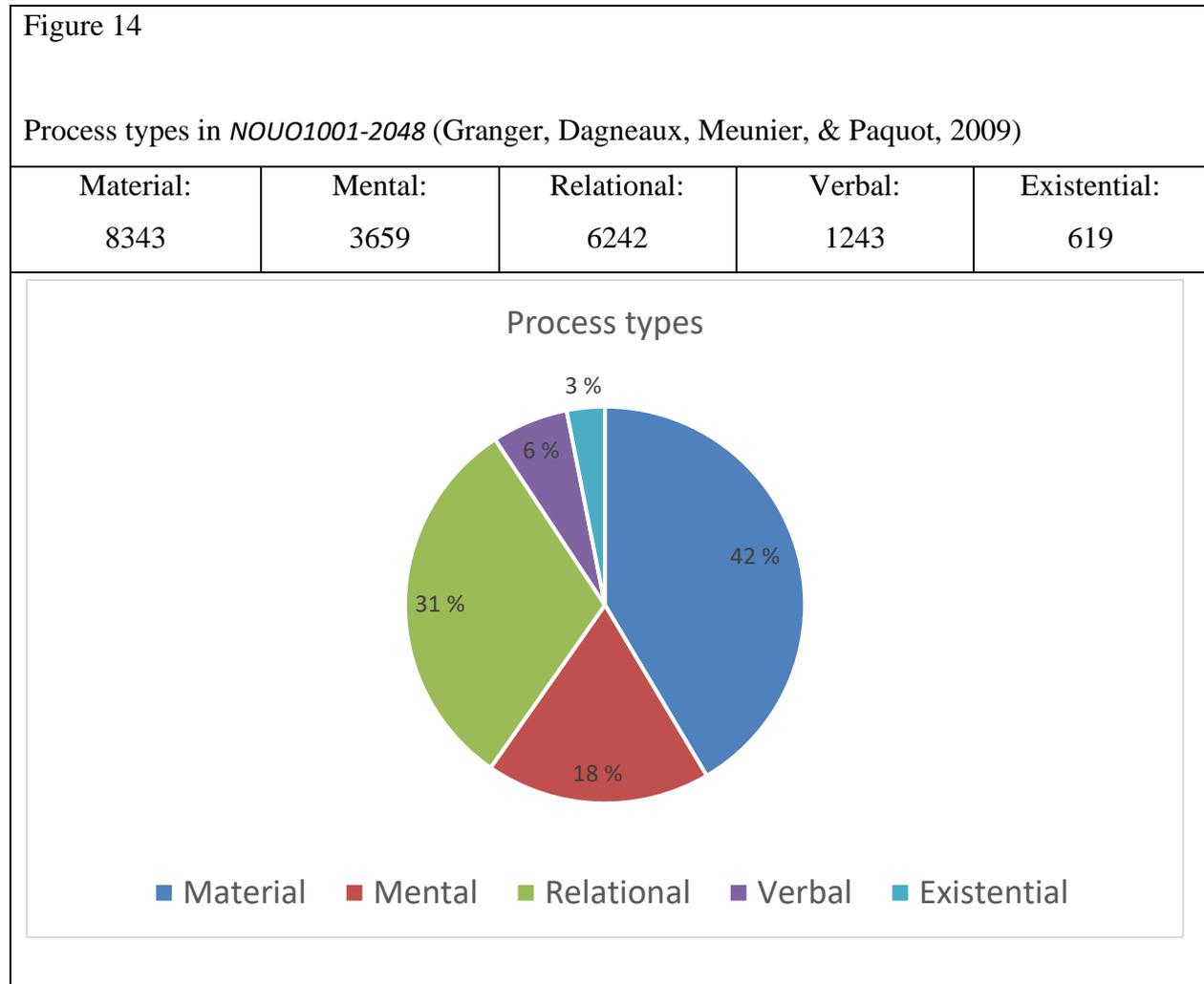


Figure 14 displays that between these five process types, 42% of them were material, 18% of them were mental, 31% of them were relational, 6% of them were verbal and 3% of them were existential.

8.5 Norwegian students: Top 100 Material processes

| SEARCH RESULTS: SUMMARY | |
|--|-----|
| Query: <Transitivity feature="process"/> within <Transitivity feature="material"/> | |
| Date: Tue Jul 12 16:17:25 2016 | |
| do | 395 |
| get | 326 |
| is | 314 |
| make | 263 |
| have | 181 |
| take | 180 |
| be | 175 |
| are | 172 |
| live | 145 |
| made | 140 |
| use | 134 |
| done | 134 |
| go | 125 |
| find | 104 |
| give | 103 |
| work | 94 |
| come | 92 |
| used | 91 |
| look | 91 |
| keep | 90 |
| doing | 86 |
| pay | 80 |
| put | 79 |
| changed | 74 |
| makes | 72 |
| being | 70 |
| help | 70 |
| was | 68 |
| going | 68 |
| got | 68 |
| using | 64 |
| spend | 62 |
| let | 62 |
| think | 58 |
| working | 58 |
| did | 57 |
| read | 57 |
| change | 55 |
| watch | 54 |
| taking | 54 |
| know | 50 |

| | |
|--------------|----|
| based | 50 |
| getting | 50 |
| see | 49 |
| taken | 48 |
| had | 46 |
| given | 46 |
| does | 45 |
| comes | 45 |
| teach | 45 |
| called | 44 |
| create | 44 |
| making | 44 |
| serve | 44 |
| eat | 44 |
| want | 44 |
| having | 42 |
| living | 42 |
| left | 42 |
| show | 42 |
| start | 41 |
| found | 41 |
| 's | 41 |
| gives | 41 |
| become | 40 |
| prevent | 40 |
| caught | 39 |
| need | 38 |
| created | 38 |
| meet | 37 |
| lead | 37 |
| were | 36 |
| dream | 34 |
| paid | 34 |
| fight | 34 |
| defend | 34 |
| prepare | 34 |
| came | 32 |
| stay | 32 |
| dreaming | 32 |
| committing | 32 |
| watching | 32 |
| continue | 32 |
| act | 31 |
| turn | 31 |
| happen | 30 |
| discuss | 30 |
| rehabilitate | 30 |
| forced | 29 |
| tend | 29 |
| try | 28 |

| | |
|-----------|----|
| dominated | 28 |
| end | 27 |
| achieve | 27 |
| kill | 27 |
| escape | 27 |
| believe | 27 |
| bring | 26 |
| sit | 26 |
| call | 26 |

8.6 Norwegian students: Top 100 Mental processes

| SEARCH RESULTS: SUMMARY | |
|--|-----|
| Query: <Transitivity feature="process"/> within <Transitivity feature="mental"/> | |
| Date: Tue Jul 12 16:20:31 2016 | |
| Think | 424 |
| Is | 322 |
| Know | 193 |
| Be | 179 |
| believe | 162 |
| Have | 161 |
| See | 160 |
| Are | 148 |
| Want | 148 |
| Dream (must be subject specific, disregard it) | 101 |
| Feel | 100 |
| Do | 98 |
| choose | 83 |
| Learn | 82 |
| Seen | 75 |
| Dreaming (must be subject specific, disregard it) | 74 |
| Get | 70 |
| Mean | 68 |
| Was | 66 |
| like | 66 |
| imagine | 64 |
| supposed | 51 |
| agree | 46 |
| make | 46 |
| means | 45 |
| decide | 42 |
| understand | 41 |
| find | 41 |
| being | 38 |
| wanted | 37 |
| consider | 36 |
| thought | 34 |
| done | 34 |
| were | 33 |
| meant | 32 |
| live | 32 |
| remember | 32 |
| considered | 31 |
| say | 31 |
| use | 31 |

| | |
|-------------|----|
| thinking | 29 |
| take | 28 |
| 's | 28 |
| go | 28 |
| forget | 28 |
| wants | 27 |
| been | 26 |
| look | 26 |
| accept | 25 |
| had | 25 |
| become | 24 |
| need | 23 |
| give | 22 |
| going | 21 |
| wish | 21 |
| care | 20 |
| doing | 20 |
| felt | 19 |
| knows | 19 |
| hope | 17 |
| enjoy | 17 |
| expect | 17 |
| known | 17 |
| work | 16 |
| come | 16 |
| learning | 16 |
| concerning | 16 |
| put | 16 |
| did | 15 |
| teach | 15 |
| living | 15 |
| hear | 15 |
| used | 15 |
| considering | 15 |
| spend | 14 |
| getting | 14 |
| chose | 14 |
| imagining | 14 |
| using | 14 |
| knowing | 14 |
| has | 14 |
| justify | 13 |
| made | 13 |
| suffer | 13 |
| having | 13 |
| chosen | 13 |
| decided | 13 |
| read | 13 |
| working | 13 |
| making | 12 |

| | |
|-----------|----|
| does | 12 |
| serve | 12 |
| heard | 12 |
| watch | 12 |
| agreed | 12 |
| help | 11 |
| concerned | 11 |
| seeing | 11 |
| decides | 10 |
| knew | 10 |

8.7 Norwegian students: Top 100 Relational processes

| SEARCH RESULTS: SUMMARY | |
|--|------|
| Query: <Transitivity feature="process"/> within <Transitivity feature="relational"/> | |
| Date: Tue Jul 12 16:21:32 2016 | |
| is | 2282 |
| have | 943 |
| are | 869 |
| be | 808 |
| was | 306 |
| had | 199 |
| has | 182 |
| been | 165 |
| do | 157 |
| 's | 144 |
| Get | 139 |
| were | 137 |
| become | 132 |
| being | 115 |
| make | 103 |
| having | 78 |
| think | 60 |
| Use | 58 |
| take | 58 |
| live | 57 |
| say | 51 |
| want | 48 |
| seems | 47 |
| go | 46 |
| am | 46 |
| done | 46 |
| see | 46 |
| feel | 45 |
| dream | 42 |
| know | 40 |
| doing | 40 |
| pay | 35 |
| look | 35 |
| work | 32 |
| choose | 31 |
| need | 31 |
| seem | 30 |
| find | 30 |
| learn | 29 |
| let | 29 |
| keep | 29 |

| | |
|------------|----|
| put | 28 |
| give | 28 |
| getting | 28 |
| made | 25 |
| decide | 25 |
| used | 25 |
| believe | 25 |
| became | 25 |
| comes | 24 |
| help | 23 |
| 're | 23 |
| imagine | 23 |
| prevent | 22 |
| spend | 22 |
| using | 21 |
| defend | 21 |
| making | 21 |
| seen | 21 |
| come | 21 |
| change | 21 |
| taking | 21 |
| becomes | 20 |
| based | 19 |
| got | 19 |
| dreaming | 19 |
| teach | 19 |
| serve | 18 |
| working | 18 |
| read | 18 |
| understand | 17 |
| did | 17 |
| fight | 17 |
| 'm | 16 |
| living | 16 |
| watch | 16 |
| deal | 16 |
| like | 15 |
| stay | 15 |
| s | 15 |
| show | 15 |
| makes | 14 |
| create | 14 |
| achieve | 14 |
| left | 14 |
| said | 13 |
| watching | 13 |
| becoming | 13 |
| thinking | 13 |
| caught | 13 |
| going | 12 |

| | |
|----------|----|
| agree | 12 |
| sit | 12 |
| happen | 12 |
| taken | 12 |
| kill | 12 |
| accept | 12 |
| eat | 12 |
| consider | 11 |
| meet | 11 |

8.8 Norwegian students: Top 100 Verbal processes

| SEARCH RESULTS: SUMMARY | |
|---|-----|
| Query: <Transitivity feature="process"/> within <Transitivity feature="verbal"/> | |
| Date: Tue Jul 12 16:22:36 2016 | |
| | |
| Say | 224 |
| Is | 190 |
| said | 101 |
| Are | 74 |
| claim | 53 |
| argue | 46 |
| Be | 41 |
| have | 39 |
| Tell | 33 |
| was | 30 |
| written | 26 |
| saying | 26 |
| told | 24 |
| says | 22 |
| mentioned | 22 |
| Ask | 21 |
| Do | 21 |
| asked | 19 |
| mention | 18 |
| wrote | 17 |
| write | 15 |
| 's | 15 |
| dominated | 15 |
| stated | 15 |
| telling | 14 |
| get | 14 |
| were | 13 |
| argued | 13 |
| make | 12 |
| admit | 12 |
| writing | 12 |
| claimed | 12 |
| done | 12 |
| offers | 11 |
| has | 11 |
| explain | 10 |
| pay | 10 |
| offered | 10 |
| think | 9 |
| made | 9 |
| been | 9 |

| | |
|-----------|---|
| live | 8 |
| tells | 8 |
| know | 8 |
| offer | 8 |
| state | 8 |
| asking | 8 |
| comes | 8 |
| being | 7 |
| explained | 7 |
| take | 7 |
| become | 7 |
| emphasize | 7 |
| need | 7 |
| see | 7 |
| had | 7 |
| getting | 6 |
| dreaming | 6 |
| states | 6 |
| demand | 6 |
| like | 6 |
| create | 6 |
| used | 6 |
| put | 6 |
| deny | 6 |
| did | 6 |
| doing | 6 |
| working | 6 |
| denied | 6 |
| act | 5 |
| am | 5 |
| choose | 5 |
| demanded | 5 |
| taken | 5 |
| agree | 5 |
| go | 5 |
| claims | 5 |
| demanding | 5 |
| use | 5 |
| lost | 5 |
| change | 5 |
| dream | 4 |
| created | 4 |
| develop | 4 |
| feel | 4 |
| watching | 4 |
| mean | 4 |
| watch | 4 |
| spend | 4 |
| end | 4 |
| claiming | 4 |

| | |
|------------|---|
| works | 4 |
| implied | 4 |
| screaming | 4 |
| indicate | 4 |
| killing | 4 |
| believe | 4 |
| serve | 4 |
| guaranteed | 4 |
| promise | 4 |

8.9 Norwegian students: Top 100 Existential processes

| SEARCH RESULTS: SUMMARY | |
|---|-----|
| Query: <Transitivity feature="process"/> within <Transitivity feature="existential"/> | |
| Date: Tue Jul 12 16:23:15 2016 | |
| is | 267 |
| are | 222 |
| be | 64 |
| been | 34 |
| 's | 32 |
| was | 19 |
| have | 19 |
| Dreaming (subject specific, disregarding) | 18 |
| were | 17 |
| dominated | 16 |
| do | 14 |
| take | 10 |
| want | 8 |
| make | 8 |
| left | 7 |
| see | 7 |
| go | 7 |
| imagination | 7 |
| think | 6 |
| know | 6 |
| getting | 5 |
| get | 5 |
| become | 5 |
| choose | 5 |
| going | 5 |
| saying | 5 |
| live | 5 |
| work | 4 |
| working | 4 |
| taking | 4 |
| mentioned | 4 |
| believe | 4 |
| doing | 4 |
| watching | 4 |
| made | 4 |
| watch | 4 |
| eat | 4 |
| seen | 4 |
| learn | 3 |
| living | 3 |
| has | 3 |

| | |
|----------------|---|
| wants | 3 |
| find | 3 |
| fight | 3 |
| say | 3 |
| done | 3 |
| need | 3 |
| decide | 3 |
| use | 3 |
| comes | 3 |
| allowed | 3 |
| gain | 3 |
| skip | 3 |
| taken | 3 |
| having | 3 |
| had | 3 |
| involved | 2 |
| rehabilitating | 2 |
| explore | 2 |
| call | 2 |
| wanted | 2 |
| suggesting | 2 |
| influenced | 2 |
| prepare | 2 |
| improve | 2 |
| spending | 2 |
| experience | 2 |
| discriminated | 2 |
| discovered | 2 |
| preparing | 2 |
| carry | 2 |
| turn | 2 |
| break | 2 |
| happen | 2 |
| fulfil | 2 |
| educated | 2 |
| found | 2 |
| shows | 2 |
| considered | 2 |
| wish | 2 |
| regarding | 2 |
| follow | 2 |
| improved | 2 |
| used | 2 |
| mention | 2 |
| answer | 2 |
| pass | 2 |
| concerning | 2 |
| qualified | 2 |
| growing | 2 |
| studying | 2 |

| | |
|---------|---|
| put | 2 |
| stop | 2 |
| look | 2 |
| leaving | 2 |
| treated | 2 |
| give | 2 |
| change | 2 |
| search | 2 |
| keeping | 2 |

8.10 American students: Top 100 Material processes

| SEARCH RESULTS: SUMMARY | |
|--|-----|
| Query: <Transitivity feature="process"/> within <Transitivity feature="material"/> | |
| Date: Tue Jul 12 16:15:26 2016 | |
| is | 276 |
| make | 223 |
| do | 215 |
| be | 190 |
| are | 153 |
| made | 144 |
| get | 139 |
| take | 131 |
| have | 123 |
| used | 107 |
| use | 103 |
| go | 99 |
| was | 76 |
| live | 73 |
| put | 72 |
| come | 71 |
| give | 68 |
| support | 61 |
| changed | 61 |
| work | 59 |
| help | 57 |
| look | 57 |
| makes | 57 |
| pay | 57 |
| keep | 56 |
| show | 55 |
| find | 55 |
| according | 54 |
| taken | 53 |
| see | 52 |
| were | 51 |
| making | 51 |
| does | 50 |
| continue | 50 |
| doing | 49 |
| given | 49 |
| involved | 47 |
| being | 45 |
| found | 45 |
| has | 45 |
| had | 45 |

| | |
|-----------|----|
| going | 43 |
| provide | 42 |
| done | 42 |
| taking | 42 |
| want | 39 |
| watch | 39 |
| play | 38 |
| using | 38 |
| goes | 38 |
| did | 37 |
| stay | 36 |
| bring | 35 |
| change | 35 |
| left | 34 |
| getting | 34 |
| comes | 34 |
| having | 33 |
| lead | 33 |
| teach | 32 |
| came | 32 |
| called | 32 |
| giving | 32 |
| let | 32 |
| brought | 32 |
| buy | 31 |
| receive | 31 |
| presented | 31 |
| realize | 31 |
| cause | 30 |
| lost | 30 |
| know | 30 |
| happen | 30 |
| living | 30 |
| took | 30 |
| shows | 29 |
| become | 29 |
| based | 29 |
| end | 29 |
| believe | 28 |
| began | 28 |
| caused | 27 |
| 's | 27 |
| set | 27 |
| played | 27 |
| die | 27 |
| begin | 26 |
| drink | 26 |
| stop | 26 |
| created | 25 |
| growing | 25 |

| | |
|---------|----|
| looked | 25 |
| view | 25 |
| taught | 24 |
| include | 24 |
| working | 24 |
| turn | 24 |
| speak | 23 |
| lose | 23 |
| spend | 23 |

8.11 American students: Top 100 Mental processes

| SEARCH RESULTS: SUMMARY | |
|--|-----|
| Query: <Transitivity feature="process"/> within <Transitivity feature="mental"/> | |
| Date: Tue Jul 12 16:26:03 2016 | |
| is | 205 |
| be | 141 |
| see | 135 |
| feel | 125 |
| think | 120 |
| know | 117 |
| want | 108 |
| believe | 104 |
| are | 85 |
| have | 71 |
| was | 55 |
| do | 54 |
| seen | 54 |
| considered | 51 |
| understand | 47 |
| wanted | 44 |
| thought | 40 |
| were | 35 |
| make | 35 |
| learn | 33 |
| realize | 32 |
| prove | 31 |
| agree | 30 |
| heard | 30 |
| choose | 29 |
| like | 29 |
| get | 28 |
| decide | 28 |
| known | 28 |
| consider | 26 |
| mean | 25 |
| felt | 23 |
| decided | 23 |
| has | 22 |
| remember | 22 |
| means | 21 |
| supposed | 20 |
| wants | 20 |
| concerning | 20 |
| had | 20 |
| go | 19 |

| | |
|-------------|----|
| accepted | 19 |
| made | 19 |
| hear | 18 |
| use | 18 |
| take | 17 |
| having | 17 |
| find | 17 |
| recognize | 17 |
| found | 17 |
| become | 16 |
| feels | 15 |
| doing | 15 |
| give | 15 |
| being | 14 |
| expect | 14 |
| thinking | 14 |
| determine | 14 |
| wonder | 14 |
| live | 14 |
| knows | 14 |
| pay | 14 |
| enjoy | 14 |
| knew | 13 |
| taking | 13 |
| keep | 13 |
| believes | 13 |
| watching | 13 |
| used | 13 |
| going | 12 |
| 's | 12 |
| > | 12 |
| come | 12 |
| assume | 12 |
| accept | 12 |
| expected | 12 |
| suffer | 12 |
| say | 12 |
| proven | 12 |
| involved | 12 |
| work | 11 |
| justify | 11 |
| look | 11 |
| believed | 11 |
| given | 11 |
| considering | 11 |
| stay | 10 |
| allowed | 10 |
| discovered | 10 |
| chooses | 9 |
| learning | 9 |

| | |
|-----------|---|
| care | 9 |
| sees | 9 |
| concerned | 9 |
| reflect | 9 |
| read | 9 |
| meant | 9 |
| stop | 9 |
| getting | 8 |
| follow | 8 |

8.12 American students: Top 100 Relational processes

| SEARCH RESULTS: SUMMARY | |
|--|------|
| Query: <Transitivity feature="process"/> within <Transitivity feature="relational"/> | |
| Date: Tue Jul 12 16:28:00 2016 | |
| is | 1668 |
| be | 593 |
| are | 590 |
| have | 501 |
| was | 275 |
| has | 167 |
| had | 151 |
| were | 117 |
| become | 112 |
| 's | 104 |
| been | 102 |
| being | 80 |
| do | 80 |
| having | 69 |
| make | 58 |
| get | 50 |
| take | 45 |
| go | 38 |
| feel | 36 |
| seem | 34 |
| want | 33 |
| see | 33 |
| know | 30 |
| seems | 26 |
| use | 25 |
| think | 24 |
| made | 23 |
| say | 23 |
| becoming | 23 |
| live | 21 |
| support | 20 |
| used | 19 |
| became | 19 |
| look | 17 |
| am | 17 |
| come | 16 |
| decide | 16 |
| keep | 16 |
| changed | 16 |
| 'm | 15 |
| help | 15 |

| | |
|------------|----|
| getting | 15 |
| according | 15 |
| believe | 15 |
| > | 15 |
| understand | 14 |
| choose | 14 |
| stay | 14 |
| work | 14 |
| put | 14 |
| makes | 13 |
| comes | 13 |
| taken | 13 |
| known | 13 |
| pay | 13 |
| making | 13 |
| give | 13 |
| bring | 12 |
| using | 12 |
| learn | 12 |
| play | 12 |
| presented | 12 |
| prove | 12 |
| becomes | 12 |
| commit | 11 |
| going | 11 |
| does | 11 |
| did | 11 |
| teach | 11 |
| given | 11 |
| needed | 11 |
| deal | 10 |
| receive | 10 |
| provide | 10 |
| came | 10 |
| living | 10 |
| change | 10 |
| die | 10 |
| leave | 10 |
| follow | 10 |
| find | 10 |
| involved | 10 |
| running | 10 |
| wanted | 10 |
| protect | 9 |
| goes | 9 |
| received | 9 |
| considered | 9 |
| seen | 9 |
| allowed | 9 |
| dying | 8 |

| | |
|----------|---|
| < | 8 |
| compared | 8 |
| needs | 8 |
| taking | 8 |
| watch | 8 |
| stated | 8 |
| creating | 8 |
| need | 8 |
| working | 8 |

8.13 American students: Top 100 Verbal processes

| SEARCH RESULTS: SUMMARY | |
|--|----|
| Query: <Transitivity feature="process"/> within <Transitivity feature="verbal"/> | |
| Date: Tue Jul 12 16:28:58 2016 | |
| say | 93 |
| is | 90 |
| said | 62 |
| argue | 53 |
| states | 52 |
| are | 35 |
| be | 33 |
| > | 30 |
| told | 27 |
| was | 26 |
| stated | 26 |
| saying | 25 |
| ask | 22 |
| says | 22 |
| have | 22 |
| claim | 21 |
| asked | 16 |
| offer | 16 |
| state | 16 |
| were | 15 |
| < | 15 |
| tell | 15 |
| reported | 14 |
| do | 14 |
| stating | 14 |
| wrote | 13 |
| written | 13 |
| write | 12 |
| explain | 12 |
| want | 12 |
| writes | 11 |
| informed | 10 |
| denied | 10 |
| get | 10 |
| argued | 10 |
| offered | 10 |
| make | 10 |
| had | 9 |
| take | 8 |
| wanted | 8 |
| mentioned | 8 |

| | |
|------------|---|
| doing | 8 |
| has | 7 |
| 's | 7 |
| having | 7 |
| offers | 7 |
| claims | 7 |
| writing | 7 |
| asking | 7 |
| made | 7 |
| argues | 7 |
| came | 6 |
| report | 6 |
| going | 6 |
| know | 6 |
| did | 6 |
| admit | 6 |
| arguing | 6 |
| inform | 6 |
| propose | 5 |
| emphasize | 5 |
| explains | 5 |
| noted | 5 |
| reveal | 5 |
| claiming | 5 |
| deny | 5 |
| need | 5 |
| teach | 5 |
| pay | 5 |
| look | 5 |
| note | 5 |
| prohibited | 5 |
| responds | 4 |
| become | 4 |
| feel | 4 |
| used | 4 |
| given | 4 |
| using | 4 |
| caused | 4 |
| discuss | 4 |
| guarantees | 4 |
| proposed | 4 |
| thought | 4 |
| lead | 4 |
| needed | 4 |
| killing | 4 |
| responded | 4 |
| lost | 4 |
| prohibit | 4 |
| insisted | 4 |
| work | 3 |

| | |
|----------|---|
| being | 3 |
| drink | 3 |
| notified | 3 |
| wants | 3 |
| hear | 3 |
| live | 3 |
| assert | 3 |
| got | 3 |
| tells | 3 |

8.14 American students: Top 100 Existential processes

| SEARCH RESULTS: SUMMARY | |
|---|-----|
| Query: <Transitivity feature="process"/> within <Transitivity feature="existential"/> | |
| Date: Tue Jul 12 16:29:48 2016 | |
| is | 152 |
| are | 140 |
| be | 59 |
| been | 31 |
| was | 22 |
| were | 15 |
| have | 7 |
| do | 7 |
| used | 6 |
| 's | 5 |
| involved | 4 |
| believe | 4 |
| make | 4 |
| go | 4 |
| came | 3 |
| has | 3 |
| played | 3 |
| being | 3 |
| doing | 3 |
| help | 3 |
| exist | 3 |
| done | 3 |
| made | 3 |
| use | 3 |
| see | 3 |
| allowed | 3 |
| create | 3 |
| know | 3 |
| drink | 2 |
| provide | 2 |
| recite | 2 |
| taking | 2 |
| come | 2 |
| place | 2 |
| says | 2 |
| utilize | 2 |
| consider | 2 |
| making | 2 |
| support | 2 |
| called | 2 |
| die | 2 |

| | |
|--------------|---|
| take | 2 |
| looking | 2 |
| play | 2 |
| become | 2 |
| argue | 2 |
| considered | 2 |
| regarding | 2 |
| attempting | 2 |
| feel | 2 |
| need | 2 |
| forced | 2 |
| decide | 2 |
| makes | 2 |
| remain | 2 |
| face | 2 |
| follow | 2 |
| comes | 2 |
| dissatisfied | 2 |
| wins | 2 |
| given | 2 |
| serving | 2 |
| watch | 2 |
| taken | 2 |
| concerning | 2 |
| continuing | 2 |
| arguing | 2 |
| sit | 2 |
| change | 2 |
| viewed | 2 |
| get | 2 |
| committed | 2 |
| having | 2 |
| want | 2 |
| pick | 2 |
| learn | 1 |
| allow | 1 |
| s | 1 |
| drafted | 1 |
| certify | 1 |
| supposed | 1 |
| provided | 1 |
| achieved | 1 |
| suspect | 1 |
| persists | 1 |
| ruined | 1 |
| sees | 1 |
| riding | 1 |
| seek | 1 |
| running | 1 |
| reflect | 1 |

| | |
|-----------|---|
| answering | 1 |
| cause | 1 |
| fixed | 1 |
| worry | 1 |
| writes | 1 |
| institute | 1 |
| accused | 1 |
| ties | 1 |
| decides | 1 |

8.15 British students A-levels: Top 100 Material processes

| SEARCH RESULTS: SUMMARY | |
|--|-----|
| Query: <Transitivity feature="process"/> within <Transitivity feature="material"/> | |
| Date: Tue Jul 12 16:02:37 2016 | |
| Is | 125 |
| Be | 76 |
| Do | 75 |
| made | 70 |
| used | 70 |
| Take | 62 |
| Use | 61 |
| Are | 58 |
| make | 57 |
| have | 56 |
| banned | 50 |
| Get | 41 |
| Lead | 36 |
| Give | 34 |
| Eat | 34 |
| taken | 33 |
| Go | 32 |
| Stop | 30 |
| Put | 29 |
| work | 29 |
| come | 29 |
| increasing | 27 |
| given | 27 |
| taking | 27 |
| using | 26 |
| done | 26 |
| increase | 24 |
| Find | 24 |
| Run | 24 |
| going | 23 |
| being | 22 |
| increased | 22 |
| produce | 22 |
| travel | 21 |
| eating | 21 |
| afford | 21 |
| cause | 20 |
| making | 20 |
| reduce | 20 |
| raised | 19 |
| Buy | 19 |

| | |
|------------|----|
| become | 19 |
| Was | 18 |
| create | 18 |
| growing | 18 |
| Left | 18 |
| change | 18 |
| caused | 17 |
| continue | 17 |
| killed | 16 |
| Pay | 16 |
| Look | 16 |
| involved | 16 |
| keep | 16 |
| spend | 15 |
| developed | 15 |
| having | 15 |
| Help | 15 |
| grow | 15 |
| shown | 15 |
| introduced | 15 |
| found | 15 |
| Sell | 15 |
| bring | 14 |
| banning | 14 |
| causing | 14 |
| brought | 14 |
| winning | 14 |
| spent | 13 |
| Kill | 13 |
| created | 13 |
| improve | 13 |
| running | 13 |
| called | 12 |
| gambling | 12 |
| goes | 12 |
| happen | 12 |
| Lose | 12 |
| occur | 12 |
| carried | 12 |
| Feel | 12 |
| allowed | 12 |
| were | 11 |
| Win | 11 |
| build | 11 |
| leads | 11 |
| Led | 11 |
| encourage | 11 |
| Hit | 11 |
| Live | 11 |
| Ban | 11 |

| | |
|----------|----|
| doing | 11 |
| catch | 11 |
| passed | 11 |
| Died | 10 |
| affected | 10 |
| start | 10 |
| cease | 10 |
| produced | 10 |
| cope | 10 |

8.16 British students A-levels: Top 100 Mental processes

| SEARCH RESULTS: SUMMARY | |
|--|----|
| Query: <Transitivity feature="process"/> within <Transitivity feature="mental"/> | |
| Date: Tue Jul 12 16:39:03 2016 | |
| is | 65 |
| think | 58 |
| be | 49 |
| see | 41 |
| seen | 38 |
| believe | 35 |
| feel | 35 |
| have | 32 |
| want | 31 |
| means | 24 |
| know | 21 |
| are | 20 |
| mean | 19 |
| known | 16 |
| like | 13 |
| make | 13 |
| wants | 13 |
| choose | 12 |
| banned | 12 |
| meant | 12 |
| consider | 11 |
| use | 11 |
| find | 10 |
| take | 9 |
| was | 9 |
| agree | 9 |
| made | 9 |
| eat | 9 |
| go | 8 |
| get | 8 |
| discovered | 8 |
| decide | 8 |
| enjoy | 8 |
| believed | 8 |
| understand | 7 |
| become | 7 |
| found | 7 |
| considered | 7 |
| used | 7 |
| going | 7 |
| taken | 7 |

| | |
|-------------|---|
| suffer | 7 |
| proved | 7 |
| wish | 6 |
| spent | 6 |
| done | 6 |
| were | 6 |
| having | 6 |
| learn | 6 |
| prefer | 6 |
| thinking | 6 |
| deemed | 6 |
| being | 5 |
| called | 5 |
| chosen | 5 |
| imagine | 5 |
| given | 5 |
| chose | 5 |
| do | 5 |
| considering | 5 |
| increase | 5 |
| sell | 5 |
| fear | 5 |
| playing | 5 |
| had | 5 |
| felt | 5 |
| knows | 5 |
| afford | 4 |
| knowing | 4 |
| concerned | 4 |
| stop | 4 |
| hear | 4 |
| dislike | 4 |
| heard | 4 |
| put | 4 |
| meaning | 4 |
| seeing | 4 |
| conclude | 4 |
| come | 4 |
| increased | 4 |
| learning | 4 |
| hope | 4 |
| proven | 4 |
| wanted | 4 |
| suffered | 4 |
| does | 4 |
| realise | 4 |
| concerning | 4 |
| allowed | 4 |
| accept | 4 |
| goes | 4 |

| | |
|---------|---|
| give | 4 |
| work | 3 |
| gives | 3 |
| banning | 3 |
| killed | 3 |
| drive | 3 |
| bring | 3 |
| knew | 3 |
| looking | 3 |

8.17 British students A-levels: Top 100 Relational processes

| SEARCH RESULTS: SUMMARY | |
|--|-----|
| Query: <Transitivity feature="process"/> within <Transitivity feature="relational"/> | |
| Date: Tue Jul 12 16:40:09 2016 | |
| is | 756 |
| be | 261 |
| are | 251 |
| have | 225 |
| was | 79 |
| has | 75 |
| become | 57 |
| been | 49 |
| being | 35 |
| having | 29 |
| had | 29 |
| do | 28 |
| were | 27 |
| take | 19 |
| make | 19 |
| seems | 18 |
| use | 17 |
| made | 16 |
| becoming | 15 |
| used | 15 |
| eat | 14 |
| seem | 14 |
| feel | 13 |
| am | 13 |
| stop | 13 |
| come | 12 |
| give | 12 |
| go | 11 |
| banned | 11 |
| get | 11 |
| eating | 11 |
| see | 11 |
| 's | 10 |
| seen | 10 |
| think | 9 |
| look | 9 |
| taking | 9 |
| going | 8 |
| find | 8 |
| using | 8 |
| choose | 8 |

| | |
|------------|---|
| wants | 8 |
| travel | 8 |
| say | 8 |
| winning | 8 |
| want | 8 |
| raised | 7 |
| goes | 7 |
| kill | 7 |
| play | 7 |
| work | 6 |
| cope | 6 |
| facing | 6 |
| caused | 6 |
| believe | 6 |
| causing | 6 |
| playing | 6 |
| increasing | 6 |
| created | 6 |
| run | 6 |
| lead | 6 |
| doing | 6 |
| known | 6 |
| making | 5 |
| buy | 5 |
| know | 5 |
| increased | 5 |
| thinking | 5 |
| produce | 5 |
| carried | 5 |
| allowed | 5 |
| happen | 5 |
| prevent | 5 |
| becomes | 5 |
| keep | 5 |
| taken | 5 |
| given | 5 |
| ban | 5 |
| sell | 5 |
| put | 5 |
| alter | 5 |
| became | 5 |
| cause | 4 |
| understand | 4 |
| bring | 4 |
| changing | 4 |
| makes | 4 |
| create | 4 |
| conceive | 4 |
| increase | 4 |
| blame | 4 |

| | |
|-----------|---|
| face | 4 |
| imagine | 4 |
| pay | 4 |
| decide | 4 |
| continues | 4 |
| gambling | 4 |
| hold | 4 |
| compared | 4 |
| live | 4 |

8.18 British students A-levels: Top 100 Verbal processes

| SEARCH RESULTS: SUMMARY | |
|--|----|
| Query: <Transitivity feature="process"/> within <Transitivity feature="verbal"/> | |
| Date: Tue Jul 12 16:40:56 2016 | |
| is | 41 |
| say | 30 |
| argue | 19 |
| said | 16 |
| be | 14 |
| are | 12 |
| argued | 12 |
| have | 10 |
| claimed | 7 |
| do | 6 |
| claim | 6 |
| ask | 6 |
| tell | 6 |
| made | 5 |
| saying | 5 |
| make | 5 |
| asked | 5 |
| offer | 4 |
| complain | 4 |
| stop | 4 |
| told | 4 |
| used | 4 |
| eat | 4 |
| winning | 4 |
| reported | 3 |
| taking | 3 |
| mentioned | 3 |
| played | 3 |
| take | 3 |
| writing | 3 |
| become | 3 |
| promised | 3 |
| insist | 3 |
| mention | 3 |
| threatened | 3 |
| think | 3 |
| proposed | 3 |
| using | 3 |
| give | 3 |
| working | 2 |
| running | 2 |

| | |
|-------------|---|
| has | 2 |
| objected | 2 |
| lead | 2 |
| lose | 2 |
| increasing | 2 |
| respond | 2 |
| find | 2 |
| help | 2 |
| asking | 2 |
| fight | 2 |
| was | 2 |
| repeated | 2 |
| keep | 2 |
| need | 2 |
| effect | 2 |
| tells | 2 |
| use | 2 |
| makes | 2 |
| going | 2 |
| playing | 2 |
| stated | 2 |
| growing | 2 |
| denied | 2 |
| spend | 2 |
| offered | 2 |
| gambling | 2 |
| buy | 2 |
| demand | 2 |
| go | 2 |
| becoming | 2 |
| banned | 2 |
| considering | 2 |
| stating | 2 |
| offers | 2 |
| travel | 2 |
| learn | 1 |
| work | 1 |
| crack | 1 |
| ridding | 1 |
| being | 1 |
| advise | 1 |
| explaining | 1 |
| guarantees | 1 |
| encouraging | 1 |
| runed | 1 |
| loosing | 1 |
| face | 1 |
| write | 1 |
| pushes | 1 |
| contracted | 1 |

| | |
|----------|---|
| summing | 1 |
| mount | 1 |
| get | 1 |
| needs | 1 |
| buying | 1 |
| save | 1 |
| looked | 1 |
| shoulder | 1 |
| ban | 1 |

8.19 British students A-levels: Top 100 Existential processes

| SEARCH RESULTS: SUMMARY | |
|---|-----|
| Query: <Transitivity feature="process"/> within <Transitivity feature="existential"/> | |
| Date: Tue Jul 12 16:41:35 2016 | |
| is | 103 |
| be | 59 |
| are | 59 |
| been | 18 |
| was | 13 |
| were | 10 |
| banned | 5 |
| take | 5 |
| put | 4 |
| have | 4 |
| believe | 3 |
| find | 3 |
| done | 3 |
| going | 3 |
| banning | 3 |
| involved | 3 |
| keeping | 3 |
| do | 3 |
| had | 3 |
| use | 3 |
| stopping | 2 |
| work | 2 |
| running | 2 |
| being | 2 |
| get | 2 |
| discovered | 2 |
| become | 2 |
| shown | 2 |
| need | 2 |
| killing | 2 |
| brought | 2 |
| retaining | 2 |
| needed | 2 |
| taken | 2 |
| given | 2 |
| raised | 2 |
| catch | 2 |
| stop | 2 |
| started | 2 |
| go | 2 |
| run | 2 |

| | |
|--------------|---|
| know | 2 |
| using | 2 |
| suggest | 2 |
| surviving | 1 |
| learn | 1 |
| constructed | 1 |
| harm | 1 |
| identified | 1 |
| manufacture | 1 |
| base | 1 |
| integrated | 1 |
| achieved | 1 |
| marred | 1 |
| ruined | 1 |
| faced | 1 |
| taking | 1 |
| said | 1 |
| contaminated | 1 |
| publicised | 1 |
| applied | 1 |
| bear | 1 |
| directed | 1 |
| reached | 1 |
| getting | 1 |
| drive | 1 |
| tampering | 1 |
| leads | 1 |
| compared | 1 |
| bring | 1 |
| looked | 1 |
| adopting | 1 |
| increasing | 1 |
| walking | 1 |
| compliment | 1 |
| went | 1 |
| accrue | 1 |
| influencing | 1 |
| developing | 1 |
| objecting | 1 |
| chosen | 1 |
| consume | 1 |
| produced | 1 |
| did | 1 |
| survive | 1 |
| breeding | 1 |
| worried | 1 |
| left | 1 |
| called | 1 |
| perform | 1 |
| sat | 1 |

| | |
|------------|---|
| doing | 1 |
| switch | 1 |
| am | 1 |
| decreasing | 1 |
| start | 1 |
| lying | 1 |
| reduce | 1 |
| injured | 1 |
| continue | 1 |

Reflection note

What I wanted to achieve with this thesis was to learn about the system of transitivity within systemic functional grammar, and to apply the theory to assess Norwegian learner language texts and compare these to texts written by British and American students, from a metaperspective. Choosing a corpora-based study proved to be a good decision overall, even though the UAM corpustool program gave me some difficulties. Assessing texts from this kind of perspective seems impossible to do in any other way than through the use of corpora and automatic parsing. UAM corpustool does not come with an English manual, only Spanish, and thus it was not easy to learn how to use it properly. Luckily, due to my background in IT, I'm very adapt at computers in general, so in the end it all worked out.

The reason I chose to write about the transitivity system is that I was very motivated from Daniel Fryer's classes in SFG. I also wanted to work with corpora, as I find it very interesting due to the vast amount of material available, and the prospect of automatic parsing motivated me to make the choice of doing a corpora-based study. Looking at just a few student texts would give far less generalizable results. Automatic parsing isn't always accurate, but with it I could assess a far greater number of texts than with manual parsing. If I did the parsing manually, the parses would be more accurate, but the limited data size would make the results very insignificant.

Regarding the topic for my thesis, considering how long it took me to finish it, was perhaps not the right choice in my situation. The theory of systemic functional linguistics can be hard to grasp. When I started out my master journey, I did not have children, and it was alot easier to focus on schoolwork. Having two children, with only one and a half year apart, made it

hard to focus on dense theory. My meetings with one of my supervisors, Daniel Fryer, all had a positive spirit to it, but busy family life got in the way every single time. As time went on, the student life seemed further and further away. At one point, I gave up on the whole thing. Eva Lambertsson Björk and Kåre Solfeld contacted me after I had given up and offered to become my supervisors if I could find the time for a final push. I am eternally grateful to both of them for the opportunity to finally finish my master's thesis.