

Grammatical cohesion in argumentative essays

by Norwegian and Russian learners

by

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I. Introduction

This thesis has several purposes. The main goal is to reveal what types of grammatical cohesive relations are displayed in argumentative essays of academic written English. For this purpose the International Corpus of Learner English (ICLE) has been chosen to study how Norwegian and Russian learners of English construct their compositions.

An attempt is made to show how various grammatical elements function as cohesive links for sentences and independent clauses. In order to achieve this goal, four major types of grammatical cohesion have been studied: reference, substitution, ellipsis and conjunction.

Chapter II provides an overview of the theoretical background. My research is related mainly to the seminal work of Halliday and Hasan (1976) and to work done within a SFG framework (Brown and Yule 1983, Eggins 1994, Gutwinski 1976, Halliday and Matthiessen 2004, Hoey 1983, 1991, Thompson 2004). Cohesion is mainly described with regard to grammatical cohesive relations that organize sentences and clauses into one whole. A short account of lexical cohesion is provided to show that connectedness in texts is also reflected by vocabulary words.

Chapter III presents information about corpus linguistics. The discussions are based on the works of Granger (1998), Meyer (2002), Biber (1993), Aarts (2000), Chafe (1992). Chapter III focuses on corpora typology and the implications that a learner corpus has for language teaching. ICLE as a learner corpus is valuable in terms of providing researchers with information about English learnt by students of different mother tongues. Vast amounts of data provided by ICLE allow for exploration of real language and the study of grammatical cohesion in argumentative essays of Norwegian and Russian learners.

Chapters IV, V and VI form the core of the study. Chapter IV presents the framework of my investigation and an example of discourse analysis. The examination of cohesion is presented in two complete texts in order to show what role grammatical elements play in the structure of written discourse.

Chapters V-VI deal with a discussion of grammatical cohesion. Various types of cohesive ties are exemplified in the selected pairs and groups of independent clauses or sentences. The purpose is to demonstrate what kinds of relationship grammatical elements establish between clauses and sentences, and to explain how they contribute to cohesion.

Chapter VII presents comparison and summary of the examination of grammatical cohesion in the texts by Norwegian and Russian learners.

II. Theory and previous research

2.1 Cohesion and Coherence

A study of theoretical sources has revealed that cohesion has been one of the most productive areas in the investigation of texts (Halliday and Hasan 1976, Brown and Yule 1983, Gutwinski 1976, Hoey 1983, 1991, Thompson 2004). It is obvious that important insights can contribute to further analyses and help researchers figure out and understand how various cohesive devices can be employed to fulfil semantic relations of a text.

The exploration of interrelated systems of textual signalling has been of considerable importance (Scott and Thompson 2001: 56). A great number of studies of written texts have tended to focus on the identification of cohesive signals that help readers to perceive a text. Despite the fact that there are only few studies of cohesion in spoken discourse that deserves obviously more attention, I intend to achieve more useful insights by the analysis of cohesive devices used in written texts. An important area of this study is opened up by a focus on grammatical devices that contribute to cohesion.

The term cohesion has been defined by Halliday and Hasan (1976). Theoretical sources give no evidence of different sets of terminology. However authors give various interpretations that help clarify how texts work as texts¹. Cohesion is a complex phenomenon to describe. Thus, the aim of this work is to figure out to what extent cohesion contributes to the creation of a text.

Halliday and Hasan devote a lot of attention to cohesive devices in their works, and what I intend to say in my work about cohesion will inevitably be coloured by their views. They define the general meaning of cohesion as “the continuity that exists between one part of the text and another” (Halliday and Hasan 1976: 299). In other words, cohesion is regarded as a semantic concept that “refers to relations of meaning that exist within the text” (Halliday and Hasan 1976: 4). In this respect cohesion has an impact on the comprehensibility of a written work. Flowerdew and Mahlberg introduce the notion of the property of connectedness to refer to Cohesion (2009: 103). Connectedness is the flow of information and is reflected by the choice of vocabulary words or grammatical linking words that contribute to textual relations (Flowerdew and Mahlberg 2009: 106).

¹ For details, see Brown and Yule(1983), Georgakopoulou and Goutsos (2004), Gutwinski (1976), Hoey (1991).

A concept of relations of meaning is revealed in various interpretations. As Scott and Thompson state, “cohesion depends on repetition within the text” (2001: 14). Hoey describes cohesive ties that “require the reader to look to the surrounding sentences for their interpretation” (1991: 4). “Cohesion occurs where the interpretation of some element in the discourse is dependent on that of another” (Halliday and Hasan 1976: 4). By the related elements in a written discourse scholars understand linguistic devices that refer to cohesion. These devices, or simply certain words or grammatical features of a sentence used to organize a text, are called cohesive or text-forming. Introducing various definitions of cohesion, scholars make an attempt to clarify what role it plays in the construction of a text. Different sets of cohesive resources establish different kinds of boundaries and may signal different kinds of links in a text (Scott and Thompson 2001: 57). According to Nunan, text-forming devices “enable the writer and speaker to establish relationships across sentence or utterance boundaries” (1993: 21).

Stoddard defines cohesion as a mental construct (1991: 20). This definition implies that cohesion must be interpreted and it requires mental effort on the part of the reader. In other words, cohesion requires to search for certain words or grammatical items that help to impart meaning and purpose to clauses and sentences, so that information is distributed in a logical way.

Cohesion is usually interpreted in contrast to coherence. Scholars pay attention to the fact that both terms can be easily confused. This work has its focus on cohesion. Thus, it is necessary to differentiate between the two terms. It does not seem to be a simple task to define the unique characteristics of cohesion and coherence. Both refer to text-forming mechanisms, but it does not presuppose that they are synonymous.

Some discourse analysts determine these concepts from contextual or linguistic points of view. Thus, cohesion is defined either as an evaluative measure of texts or as linguistic devices used for putting sentences together (Stoddard 1991: 13). Halliday and Hasan (1976) present cohesion as linguistically determined. Descriptions of referential links or sentence connectors given by other scholars refer to cohesion as evidenced linguistically. There seems no point in denying that the basic concept of cohesion concentrates on connections made by grammatical or lexical items, whereas coherence is a mental phenomenon that refers to the mind of the writer and reader (Thompson 2004: 179). Hoey (1991), referring to other scholars, describes cohesion in contrast to coherence. The first concept is defined as components of the surface text that are mutually connected and the latter one is described as components of the textual world that are mutually accessible and relevant (Hoey 1991: 11).

The idea of connectedness is interpreted in other works by the use of cohesive signals supplied by the writer or speaker. These signals or ties, various conjuncts or repeated words, bind a text together and signal to the reader that there is some degree of continuity present. In other words, the concept of cohesion comprises the interfaces between lexis and grammar, as well as between grammar and text analysis (Scott and Thompson 2001: 14). The role of cohesive ties in a text is to prompt the perception of coherence. The concept of coherence can therefore be described from the reader/hearer's point of view "as the unfolding perception of purpose within a delimited area of meaning" (Scott and Thompson 2001: 6).

It is worth mentioning that coherence is not defined in the work of Halliday and Hasan (1976) who have been influential in the discussion of cohesion. They describe the concept of coherence under the term of texture.

The concept of texture is used to express the property of being a text (Halliday and Hasan 1976: 2). Cohesion is one part of what is said to be textual. Various language resources used to express relationship to the environment fulfil the function of the textual component which characterizes a text (Halliday and Hasan 1976: 299).

Texts are formed by means of grammatical units – words, sentences, clauses. These units link the parts of a sentence or a clause and are called to be structural. "Structure is one means of expressing texture" (Halliday and Hasan 1976: 7). It shows whether a text is well-formed or not. In contrast, cohesion is not seen as structural relations in the usual sense.

Halliday and Hasan (1976) use the term cohesion to refer to non-structural text-forming relations. They play a special role in creating a text, but they do not constitute structure. Text-forming relations are properties of a text. They serve to link information within a text. This is achieved through relations in meaning. "The significant property of the cohesive relation is the fact that one item provides the source for the interpretation of another" (Halliday and Hasan 1976: 19).

From the point of view of readers' perception, cohesion can seem to be complicated. It obviously varies since different readers interpret written texts variously. Cohesive ties can be found and interpreted across sentence boundaries, but readers who have different processing abilities may or may not bring adequate experiences to understanding of a text. However, cohesion is significant in the description of a text since it provides texture that "functions as a unity with respect to its environment" (Halliday and Hasan 1976: 2). Moreover texture or coherence "includes the connection between the text and the cognitive and experiential environment of the processor" (Stoddard 1991: 19). Flowerdew and Mahlberg (2009: 103)

say that cohesion “focuses on features on the textual surface”, whereas coherence “describes underlying meaning relationships reflected by features on the surface text”.

2.2 Cohesion and sentence structure

The concept of cohesion is a semantic one (Halliday & Hasan 1976: 4). A semantic relation is expressed between one element in a text and some other element that is found in the same text. Halliday and Hasan (1976) claim that the relation between two cohesive elements found in a text is not determined by the grammatical structure. However, grammatical structure “determines the way in which cohesion is expressed” (Halliday and Hasan 1976: 8). In this respect the sentence, as the highest structural unit in the grammar, serves to be a significant unit for cohesion.

A text functions as a single meaningful unit when linguistic items correlate in sentences. Moreover a text has meaning as a text when each individual sentence has its cohesive relations with other sentences within a text (Halliday and Hasan 1976: 28).

Cohesive relations are found both within a sentence and between sentences. In terms of grammatical structure of sentences, there are certain rules that determine how cohesion is realized. The use of pronouns to refer to other nouns in order to avoid direct repetition is one of the examples of cohesive reference. This type of cohesion is always expressed when one entity is referred to one or more items in a sentence. The entity may be named again at the second mention, or it may be referred to by a pronoun. There are certain instances of cohesion, as conjunctions, that could be treated structurally, but only when they occur within the same sentence. Halliday and Hasan (1976) point out that conjunctions are used in sentences to express various conjunctive relations that are associated with grammatical structure.

Cohesion is realized more obviously across sentence boundaries since it produces a more striking effect. As Hoey (1991) mentions, on the one hand, two sentences may be understood as being in contrast with each other. On the other hand, a whole group of sentences or clauses may be interpreted as exemplifying what has been said earlier.

Halliday and Hasan (1976) state that “cohesive relations are the same whether their elements are within the same sentence or not” (Halliday and Hasan 1976: 9). Cohesion contributes to the establishment of relationships between sentences. Its contribution to the property of text is revealed in the idea of a text functioning as a text when sentences have a

meaning together. Markels (1984: 20) quoting G. Leech writes that “Cohesion is the way in which independent choices in different points of a text correspond with or presuppose one another, forming a network of sequential relations”.

Scholars assume that a sentence is structured grammatically. This grammatical condition presupposes that all the individual parts of a sentence are linked together and thus, they contribute to the construction of a text. Cohesive relations established by various ties across sentences of a text help readers to perceive the meaning of individual sentences presented as a single entity – textual meaning. What makes it possible for readers to understand textual meaning is the continuity of semantic relationships that is described as a necessary element in the interpretation of text (Halliday and Hasan 1976: 300).

2.3 Cohesion in written discourse

Cohesion is one of the central concepts in discourse analysis that has been developed to discover substitutable items in any stretch of written (or spoken) language that is felt as complete in itself (Hoey 1983: 15, 189). Discourse analysis refers to studies of the sentence in its linguistic context (Simensen 2007: 59). What is to be important for discourse analysts is that “readers interpret particular meanings and contexts in the light of their own existing knowledge and social associations” (Hillier 2004: 16).

Halliday introduces the main idea of cohesion saying that we need to establish relationships between sentences and clauses in order to construct discourse (1994: 309). The number of grammatical items in a sentence determines its length. However, these grammatical items or the number of sentences in a paragraph or the whole text are only a characteristic feature of discourse structure, but they do not determine whether a text is coherent or not. What helps to interpret cohesion in written discourse is the study of semantic resources used for linking across sentences in order to see how the different parts of a text are connected. What can be observed within sentences are structures which define the relations among the parts (Halliday and Hasan 1976: 10). In terms of cohesion, what can be observed across sentences in written discourse are not structures but links that have particular features that are to be interpreted on the part of a reader.

2.4 Types of Cohesion

There are two broad divisions of cohesion identified by Halliday and Hasan (1976) – grammatical and lexical. Reference, substitution, ellipsis and conjunction are the various types of grammatical cohesion. Lexical cohesion is realized through repetition of lexical items, synonyms, superordinates and general words. Table 1 (based on Halliday and Hasan 1976) presents the division of the types of cohesion that will be described further in this chapter:

Cohesion				
Grammatical			Lexical	
Reference	Exophoric [situational]		Reiteration	Repetition
	Endophoric [textual]			Synonyms
	Anaphoric [to preceding text]	Cataphoric [to following text]		Superordinate
Substitution			General word	
Ellipsis			Collocation	
Conjunction				

Table 1. Types of Cohesion

2.4.1 Lexical Cohesion

“Lexical cohesion is ‘phoric’ cohesion that is established through the structure of the vocabulary” (Halliday and Hasan 1976: 318). Lexical cohesion occurs when two words in a text are related in terms of their meaning. Halliday and Hasan (1976) distinguish between the two major categories of lexical cohesion: reiteration and collocation.

Under the notion of reiteration we understand repetition, synonym, superordinate and general word. Reiteration “involves the repetition of a lexical item, at one end of the scale; the use of a general word to refer back to a lexical item, at the other end of the scale; and a number of things in between” (Halliday and Hasan 1976: 278). An important feature of reiteration is that the reiterated lexical item shares a common referent with the original. The following examples show how cohesion is achieved by the selection of vocabulary².

² Examples 1-4 are taken from Nunan (1993: 29).

Repetition is realized in instances that embrace the same lexical item used across the sentences:

- (1) *What we lack in a newspaper is what we should get. In a word, a 'popular' newspaper may be the winning ticket.*

Hoey (1983, 1991) distinguishes between simple and complex lexical repetition. The former one occurs when a lexical item is repeated with no alteration. The latter one occurs when “two lexical items share a lexical morpheme, but are not formally identical, or when they are formally identical, but have different grammatical functions” (Hoey 1991: 55). For example, *drug – drugging* or *humans – human* would refer to complex lexical repetition.

A reiterated item may be not a pure repetition of a lexical item. It may be a synonym or near-synonym, a superordinate or a general word. Moreover, lexical cohesion can be also achieved by the use of complementaries, or different kinds of pairs of opposites (*boy - girl*), antonyms (*like - hate*) and converses (*order - obey*) (Halliday and Hasan 1976: 285).

A synonym is a word that has the same or similar meaning as another word (2). Synonyms are used to avoid repetition of the exact same word. A superordinate is a lexical item whose meaning is included within that of another word (3). It is “any item that dominates the earlier one in the lexical taxonomy” (Halliday and Hasan 1976: 280). General words can be characterized by familiarity (4). Many general words carry a connotation of attitude on the part of the speaker (Halliday and Hasan 1976: 280). These can be general nouns, like *thing, stuff, person, woman, man*, or general verbs, like *do* and *happen*. General nouns and verbs do not carry much information. They depend mostly on the co-text for their meaning, so that hearers or readers can identify what a particular word is referred to. General words are also described as superordinates of a higher level.

- (2) *You could try reversing the car up the slope. The incline isn't all that steep.*
- (3) *Pneumonia has arrived with the cold and wet conditions. The illness is striking everyone from infants to the elderly.*
- (4) *A: Did you try the steamed buns?
B: Yes, I didn't like the things much.*

Another type of lexical cohesion is collocation. What Halliday and Hasan (1976: 286) understand by the term collocation are pairs or chains of lexical items that tend to share the same lexical environment (5). They can occur freely both within the same sentence or across sentence boundaries. In some cases collocation makes it difficult to decide whether the words

are semantically related and form a cohesive relationship, or whether this relationship does not exist. That is why collocation³ can cause some problems for discourse analysis.

(5) *hair – comb – curl – wave; literature – reader – writer – style*

Brown and Yule (1983: 194) introduce some other notions for lexical relationships. They speak about hyponymy, part-whole, collocability, comparison (6):

(6) *daffodil – flower* (hyponyms)

arm – a man (part-whole)

Monday – Tuesday (collocability)

My thumb is stronger than that hammer. (comparison)

“The way lexical items are woven together through a text” is called lexical cohesion (Carter et al. 2001: 187). Each individual lexical item carries certain information in a text and creates a lexical environment. This environment includes all the words that form relational patterns in a text in a way that links sentences. The way the content of sentences is linked contributes to a specific interpretation of a text. Cohesion may be derived from various lexical relationships, but it is “the occurrence of the item in the context of related lexical items that provides cohesion and gives to the passage the quality of text” (Halliday and Hasan 1976: 289). Several ways of creating lexical ties can be used by writers to vary vocabulary and keep referents constant.

2.4.2 Grammatical Cohesion

Grammatical cohesion refers to the linguistic structure. The highest structural unit in the grammar is the sentence (Halliday and Hasan 1976: 28). The structure determines the order in which grammatical elements occur and the way they are related within a sentence. Cohesive relationships with other sentences create a certain linguistic environment, and the meaning of each sentence depends on it. Various linguistic means help to identify whether a text can function as a single meaningful unit or not.

Table 2 (based on Halliday and Hasan 1976) illustrates the types of grammatical cohesion that will be discussed further:

³ Example 5 is taken from Halliday and Hasan (1976: 286).

Grammatical Cohesion				
Reference		Substitution	Ellipsis	Conjunction
Personals		Nominal	Nominal	Additive
Existential I, you, we, he, she, it, they, one	Possessive my/mine, your/yours, our/ours, his, her/hers, its, their/theirs, one's	one/ones, the same, so		and, and also, nor, or, or else, furthermore, by the way, in other words, likewise, on the other hand, thus
Demonstratives		Verbal	Verbal	Adversative
this/that, these/those, here/there		do, be, have, do the same, likewise, do so, be so, do it/that, be it/that		yet, though, only, but, however, at least, in fact, rather, on the contrary, I mean, in any case
Definite article		Clausal	Clausal	Causal
the		so, not		so, then, therefore, because, otherwise,
Comperatives				Temporal
same, identical, similar(ly), such, different, other, else				then, next, before that, first ... then, at first, formerly ... final, at once, soon, to sum up, in conclusion

Table 2. Types of Grammatical Cohesion⁴

2.4.2.1 Reference

The principle of reference is based on the exploration of the lexico-grammatical environment of a text to look elsewhere to get a fuller picture and to make complete sense of a word or structure (Halliday and Hasan 1976: 31). Referential cohesion plays a special role in creating cohesive ties between the elements that can be difficult or even impossible to interpret if a single sentence is taken out of context (Nunan 1993: 21). The study of grammatical cohesion in students' essays requires the retrieval of the information necessary for interpretation from the given context. This refers to endophoric reference. An exophoric relationship plays no part in textual cohesion (Halliday and Hasan 1976: 18). This type of reference directs hearers or readers to look outside the text and to interpret the information from the context of situation.

⁴ The classification is taken from Halliday and Hasan (1976). It is not fully exemplified. For details see Halliday and Hasan (1976: 333-338).

Halliday and Hasan (1976) distinguish between the two kinds of endophoric relations: anaphoric and cataphoric. Anaphoric reference points listeners or readers backwards to what is previously mentioned (1)⁵. On the contrary, cataphoric reference looks forward in the text in order to identify the elements the reference items refer to (2).

(1) *Look at the sun. It's going down quickly. (It refers back to *the sun*.)*

(2) *It's going down quickly, the sun. (It refers forwards to *the sun*.)*

Halliday and Hasan (1976: 37) identify three sub-types of referential cohesion – personal, demonstrative and comparative. The definite article is included into the sub-type of demonstratives. Various types of referential cohesion enable speakers and writers to make multiple references to things and people within a text.

Personal reference items are expressed through the three classes of personal pronouns, possessive determiners and possessive pronouns, through the category of person (3)⁶. Personal reference is used to identify individuals and things or objects that are named at some other point in the text.

(3) *Alice wondered a little at this, but she was too much in awe of the Queen to disbelieve it. (The third person singular pronoun *She* refers back to *Alice*.)*

“Demonstrative reference is essentially a form of verbal pointing” (Halliday and Hasan 1976: 57). It is expressed through determiners and adverbs (4). This type of reference is achieved by means of location, on a scale of proximity. What is understood by proximity is nearness in place, time, occurrence or relation. Demonstrative reference items can represent a single word or phrase, and they can range across several paragraphs.

(4) *We went to the opera last night. That was our first outing for months. (That refers anaphorically to *last night*.)*

The definite article *the* is classified together with demonstratives and possessives. Historically, it is a reduced form of *that* (Halliday and Hasan 1976: 58). Demonstratives often refer exophorically to something within the context of situation. The use of demonstrative reference in speech is regularly accompanied by gestures indicating the objects referred to (5). The same applies to the definite article. It can be used exophorically, and then it is the situation that specifies the referent (6).

(5) *Leave that there and come here! (That and *there* imply distance, whereas *here* refers to something that is near the speaker.)*

(6) *Look at the flowers! (The situation makes it clear what referent is intended.)*

⁵ Examples of reference (1, 2) are taken from Brown and Yule (1983: 193).

⁶ Examples of reference (3-6) are taken from Halliday and Hasan (1976).

The definite article has no content and thus, it cannot specify anything on its own. “It serves to identify a particular individual or subclass within the class designated by the noun; but it does this only through dependence on something else” (Halliday and Hasan 1976: 71). *The* is used as a signal to show that the information necessary for identifying the element is recoverable. The definite article creates a cohesive link between the sentence in which it occurs and the referential information. It does not contain that information in itself, and it does not say where the information is located; its only function is to signal definiteness (Halliday and Hasan 1976: 74).

The third type of referential cohesion is comparative. “Comparative reference is expressed through adjectives and adverbs and serves to compare items within a text in terms of identity or similarity” (Nunan 1993: 24). Halliday and Hasan (1976: 76) distinguish between the two sub-types of comparative reference: general and particular. General comparative reference expresses likeness between things, in the form of identity, similarity and unlikeness or difference. Particular reference expresses comparability between things. This is comparison in respect of quantity or quality. Particular comparison in terms of quantity is expressed by a comparative quantifier or an adverb of comparison submodifying a quantifier. Particular comparison in terms of quality is expressed by comparative adjectives or adverbs submodifying an adjective. Table 3 provides examples for comparative reference⁷:

Comparative reference			
General		Particular	
identity	<i>We have received exactly the <u>same</u> report as was submitted two months ago.</i>	quantity/ numeration	<i>There were twice <u>as many</u> people there <u>as</u> last time.</i>
similarity	<i>The candidates gave three <u>similar</u> answers.</i>	quality/ epithet	<i>We are demanding <u>higher</u> living standards.</i>
difference	<i>A: Would you like <u>these</u> seats? B: No, I'd like <u>the other</u> seats.</i>		

Table 3. Comparative Reference

Comparative reference represents cohesive resources that can make it difficult for an analyst to differentiate between grammatical reference and lexical repetition. However, reference is always described grammatically since it includes the categories of person, number, proximity

⁷ Comparative reference is fully described in Halliday and Hasan (1976: 76-84).

and degree of comparison. Halliday and Hasan (1976: 314) use the term co-interpretation for the meaning of reference. The role of reference is to link semantically an item of language to its environment. Personals, demonstratives and comparatives are text-forming devices that enable readers to define the identity between language instances.

2.4.2.2 Substitution

The other two types of grammatical cohesion, substitution and ellipsis, are presented separately in the early work of Halliday and Hasan (1976). The authors however point out that these two types are essentially the same. Substitution and ellipsis can be treated as the same process providing cohesion to a discourse, where “ellipsis can be interpreted as that form of substitution in which the item is replaced by nothing” (Halliday and Hasan 1976: 88). I shall describe these two types of cohesive relation as two different means available for providing cohesion.

Different mechanisms that create cohesive relations within the text can be characterised semantically or grammatically. In this respect, substitution is distinguished from reference⁸. Halliday and Hasan (1976) describe substitution on the lexicogrammatical level. It is a type of cohesive relation between words and phrases within the text. Reference is on the other hand interpreted on the semantic level as a relation between meanings. Both types of cohesion constitute links between parts of a text, but substitution is mostly used anaphorically in comparison with reference items that may point in any direction. As with endophoric reference, substitution holds the text together and avoids repetition. In contrast to reference, substitution is used where there is no identity of referent (Halliday & Hasan 1976: 314). Thus, it implies non-identity of meaning and serves to define a new referent.

The term ‘repudiation’ is used by Halliday and Hasan (1976) to provide a key to the understanding of substitution and to distinguish it from reference. The notion of repudiation can be explained in terms of the presupposition relation. In reference, the reference item and the one that it presupposes have a referential identity of definition. In substitution, some new specification, or redefinition, can be added in the presupposition relation when a part of the element in the preceding text is not carried over.

⁸ Various instances of cohesive forms can lie on the borderline between two types, and their interpretation can be based on both semantic and grammatical criteria (Halliday and Hasan 1976: 88).

Halliday and Hasan (1976) use the term ‘substitutes’ to describe substitution links⁹. “A substitute (1) is a sort of counter which is used in place of the repetition of a particular item” (Halliday and Hasan 1976: 89).

(1) *You think Joan already knows? – I think everybody does.*
(does substitutes for knows)

Different views on the classification of substitution are presented in the works of Halliday, Hasan and Hoey. Hoey (1983) is concerned to classify substitution as a subclass of repetition. His presentation of substitution includes personal and demonstrative pronouns, demonstrative adverbs, and the proverb do. This kind of representation tends to combine various cohesive features with the same organisational and relational functions.

In his later work, Hoey (1991: 74) gives an account of substitution links and draws a special attention to a group of items that can be treated both lexically and grammatically: *(an)other, the other, (the) same, different, similar*. These items can be found in a repetition link where they accompany a lexical item. Thus, they can function as modifiers and indicate anaphorically whether the referent is the same or not. If these words are used with a lexical item that is not in a repetition link with an earlier item, then they can be treated as creating a substitution link¹⁰.

I shall follow Halliday and Hasan’s presentation of substitution and substitute items. They describe a variety of means that serve to provide cohesion to a discourse, and they assume that substitution is simply revealed by the replacement of one expression by another in the text (Brown and Yule 1983: 201).

Halliday and Hasan (1976) define different types of substitution as a grammatical relation in the wording. They introduce three types of substitution: nominal, verbal and clausal. Table 4 provides examples for the three types of substitution¹¹:

Nominal substitution	Verbal substitution	Clausal substitution
<i>There are some new <u>tennis</u> balls in the bag. These <u>ones</u> have lost their bounce.</i>	<i>A: Annie says you <u>drink too</u> much.</i> <i>B: So <u>do</u> you!</i>	<i>A: Is it <u>going to rain</u>?</i> <i>B: I think <u>so</u>.</i>

Table 4 Types of Substitution

⁹ Examples of substitution links are taken from Halliday and Hasan (1976).

¹⁰ Hoey (1991: 74) notes that this kind of link is not strictly to be labelled substitution: when *the other* and *another* do not accompany a lexical item in a repetition link, they can mark the presence of ellipsis; *the same* can have a similar function to *this*.

¹¹ Examples of substitution in Table 4 are taken from Nunan (1993).

According to the three types of substitution, the substitutes may function as a noun, as a verb, or as a clause¹². The substitutes *ones*, *do* and *so* in Table 4 replace expressions of the preceding text and can be interpreted in relation to what has been said before (anaphorically).

The first type of substitution is represented by the following nominal substitutes: *one*, *ones*, *same*, *so* (2, 3, 4):

(2) *I've read several books by this author. But this one is the best, I think.*

(3) *A: I'll have a glass of apple juice, please.*

B: I'll have the same.

(4) *I am a social smoker, and so is my husband.*

The nominal substitutes *one* and *ones* function as head in the nominal group. They can substitute only for an item that is itself head of a nominal group. A substitute nominal item does not have to have the same syntactic function as the substituted item (5) or to preserve the grammatical features of the substituted item (6):

(5) *I only brought the red wine. The white wine must be in the fridge.*

(6) *Cherry ripe, cherry ripe, ripe I cry.*

Full and fair ones – come and buy.

In (6), the noun that is presupposed is a count noun. The nominal substitute *ones* is plural and thus differs from the singular substituted item in number. It is worth noting that mass nouns cannot be substituted by *one* or *ones*. Halliday and Hasan (1976: 92) define this form of substitution as substitution by zero (ellipsis) (7b):

(7) a. *These biscuits are stale. – Get some fresh ones. (*ones* stands for a count noun)*

b. *This bread is stale. – Get some fresh. (no substitute form for a mass noun)*

“The nominal substitute *one/ones* is always accompanied by some modifying element (8) which functions as defining in the particular context” (Halliday and Hasan 1976: 93):

(8) *Can you give me the big table cloth? – You mean the one with the red flowers.*

It is important to distinguish the nominal substitute *one* from other non-cohesive forms of the word *one* and its functions. *One* can function as a personal pronoun (9), a cardinal numeral (10), a determiner (11) and a pro-noun *one*¹³ (12):

(9) *One never knows what is going to happen. (personal pronoun)*

In (9), *one* stands for *you* and *we*. It is not modified and occurs alone in a nominal group. Thus, it cannot be the substitute.

(10) *He made one very good point. (cardinal numeral)*

¹² Examples of substitution are taken from Halliday and Hasan (1976).

¹³ *One* in the meaning of a ‘pro-noun’ is restricted to human referents; it is intermediate between the substitute *one* and the class of general noun (Halliday and Hasan 1976: 103).

In (10), *one* functions as a numerative modifier. It is distinguishable from the substitute *one*, since it does not function as head.

(11) *I'd like a cup of coffee. – Then pour yourself one.* (indefinite article *one*)

In (11), *one* is an elliptical determiner. It cannot be the substitute, since it occurs without a modifier

(12) *The ones she really loves are her grandparents.* (pro-noun)

In (12), *ones* is not used anaphorically. It stands for *people* and cannot be the substitute.

The nominal substitute *same* is typically accompanied by *the*. *The same* can be used as a cohesive element when it “presupposes an entire nominal group including any modifying elements” (Halliday and Hasan 1976: 105). The nominal substitute *same* presupposes the item that is non-human.

Same can substitute for a fact (13); it can be combined with the verb *do* and substitute for the process (14); it can occur as attribute and substitute a noun or an adjective (15):

(13) *Winter is always so damp. – The same is often true of summer.*

(14) *They all started shouting. So I did the same.*

(15) *John sounded rather regretful. – Yes, Mary sounded the same.*

The difference between the substitutes *the same* and *one(s)* is that the same functions as a lexical item to carry the information focus. Halliday and Hasan (1976) note that there is sometimes no clear line between nominal and clausal substitution. An intermediate relation can be obtained between the substitutes *the same* and *so (too)* (16):

(16) *John felt it was disappointing. – Mary felt so (too)./ Mary felt the same.*

The second type of substitution is verbal and it is represented by the substitute *do*. It is always found in final position and it substitutes the lexical verb or the predicator (17):

(17) *I don't know the meaning of half those long words, and, what's more, I don't believe you do either!*

In (17), the verbal substitute *do* and the presupposed item are found in the same sentence but different T-units. However, verbal substitution often occurs in different sentences and serves to link the two sentences anaphorically. In this respect the verbal substitute has the same function as the nominal substitute *one(s)*. Both substitutes function as heads. The difference is that the substitute *do* operates as head of a verbal group.

Halliday and Hasan (1976) discuss the use of the verbal substitute *do* in terms of differences between British and American English. They note that this substitute is used more often in British English, and it occurs more in speech than in writing. One considerable difference between the two varieties concerns such lexical verbs as *be*, *have* in the sense of

possess, and also verbs of the *seem* class. The verbal substitute *do* does not substitute for *be* and *have* in British English. American speakers can substitute *had* by *did*, and they would choose the elliptical form in case of verbs of the *seem* class. The choice of this form, when there is no substitution but omission, depends on the structure of the verbal group in the presupposing clause. Both national varieties would use the regular substitution if there is one word in that verbal group (18), and American speakers would not substitute the lexical verb if the verbal group in the presupposing clause has more than one word (19):

(18) *Does John sing? – No, but Mary does.*

(19) *John is smoking more now than he used to. (do is omitted in used to do)*

The main role of the verbal substitute *do* is to replace the verb and thus to provide continuity in the environment of contrast, “that the relevant item is to be recovered from elsewhere” (Halliday and Hasan 1976: 122).

Like the nominal substitute one, the verbal counter *do* should be distinguished from other non-cohesive forms: full verb (20), auxiliary (21), verbal operator *do* or ellipsis (22):

(20) *He has done the job.*

(21) *I don't like this cake.*

(22) *Does she sing? Yes, she does. (does is the elliptical substitute for does sing)*

The third type of substitution is clausal. It may extend over more than the head of the substituted item, and it involves the presupposing of a whole clause. The substitutes *so* (23) and *not* (24) are used in clausal substitution:

(23) *Are you feeling better? I think so.*

(24) *Did he stand up to be counted in the old days? I think not.*

In the example (23), *so* stands for *I am feeling better*; in (24) *not* substitutes for *he didn't stand up to be counted in the old days*.

Halliday and Hasan (1976: 131) describe three environments in which clausal substitution takes place. These are reported clauses (25), condition (26) and modality (27):

(25) ‘...if you’ve seen them so often, of course you know what they’re like.’ ‘I believe so’, said Alice.

(26) *Everyone seems to think he’s guilty. If so, no doubt he’ll offer to resign.*

(27) ‘May I give you a slice?’ she said, taking up the knife and fork, and looking from one Queen to the other. ‘Certainly not,’ the Red Queen said,...

In (25), *so* substitutes for *I know what they are like*. What is essential for substitution of reported clauses is that they are always declarative. In (26), *so* follows *if* and substitutes for the conditional clause *if he is guilty*. In (27), *not* occurs as a substitute for the clause

expressing modality. The clausal substitute follows a modal adverb *certainly* that is used to express the speaker's assessment of some right or duty.

What makes a difference between the three types of substitution is that unlike the first two types, nominal and verbal, clausal substitution cannot be used to substitute a clause that functions independently. Clausal substitution is used "to display the clause as a repetition in a contrastive context in which it is dependent on a report, a condition or an opinion" (Halliday and Hasan 1976: 136). What unites all the three types is that substitution is a textual relation where the primary meaning is anaphoric.

2.4.2.3 Ellipsis

Many scholars base their descriptions of ellipsis on the study of Halliday and Hasan (1976) who define it as substitution by zero. The basic difference between the two types of cohesion is that in ellipsis¹⁴ there is nothing to be inserted into the structural slot of the missing information (Halliday and Hasan 1976: 143):

(1) *Whose is this hat? – It's mine.*

In (1), a deictic element *mine* presupposes an item expressing a thing – *hat*.

Hillier (2004: 251) defines ellipsis as leaving out and distinguishes between textual and situational ellipsis. The former one is to be recoverable from elsewhere in the text (exophoric and not cohesive), whereas the latter one can be understood from the immediate situation. Hoey (1983: 110) treats ellipsis as deletion that occurs "when the structure of one sentence is incomplete and the missing element(s) can be recovered from a previous sentence unambiguously". Thompson (2004: 180) defines ellipsis as "the set of resources by which full repetition of a clause or clause element can be avoided". He distinguishes between substitution and ellipsis proper, where the latter one is a missed out element. This element occurs in an incomplete sentence, and the gap is to be filled by elements from a previous message. Fawcett (2000: 190) introduces the definition of ellipsis as "recoverability at the level of form". He also speaks about co-ordination that occurs when clauses form a single element of structure. Ellipsis often occurs in co-ordinated clauses (2) when there are semantic and syntactic similarities between two units (Fawcett 2000: 264):

(2) *The thieves have stolen our TV and drunk all my whisky.*

(The thieves have stolen our TV and they have drunk all my whisky.)

In (2), *they* (and not *the thieves*) and *have* are ellipted from the second clause.

¹⁴ Examples of ellipsis are taken from Halliday and Hasan (1976).

As Fawcett mentions (2000: 264), an adjunct or the negator *not* marks the presence of an ellipted clause (3):

(3) *Ivy is going out with Paul and not Fred.*

(Ivy is going out with Paul and she is not going out with Fred.)

In (3), there is an example of complex ellipsis in two co-ordinated clauses, where the negator *not* signals the omission of some elements that can be recovered from the previous clause.

Hasselgård et al. (1998: 395) note that ellipsis occurs normally in sentence fragments, such as in question-answer exchanges, “where missing words and phrases can be precisely inferred from the linguistic context” (4):

(4) *Where did you study? – At Oxford.*

In (4), the omitted elements are *I* and *studied* that can be derived from the question form and the change of role in the interaction.

Such sentence fragments are common in conversation situations, and as the scholars point out ellipsis is typically more fully exploited in speech than in writing. Eggins (2004) speaks about minor clauses and explores the connection between clause structure and contextual dimensions. She notes that in a dialogue “there is a correlation between the different structure of an initiating move and the structure of a responding move” (Eggins 2004: 147). Minor clauses or ellipsis are typically involved in responding moves and therefore responses are short (5):

(5) *Have you ever read “The Bostonians”? – Yes, I have.*

(instead of Yes, I have read it.)

“Texture in spoken interaction comes from the patterns of conversational structure” (Eggins 2004: 51), and as Thompson (2004: 184) notes, ellipsis “reflects the negotiation and co-operation that is an explicit feature of face-to-face interaction”.

According to Halliday and Hasan (1976: 146) the study of cohesion is important between sentences where there are no structural relations¹⁵. These scholars define ellipsis “as a form of relation between sentences, where it is an aspect of the essential texture” (Halliday and Hasan 1976: 146). Therefore they see the relevance of ellipsis in its role in grammatical cohesion.

As with substitution, there are three types of ellipsis – nominal, verbal and clausal. Table 5 provides examples for the three types of ellipsis¹⁶ where the omitted elements are marked by (x):

¹⁵ Halliday and Hasan (1976: 146) concentrate on grammatical cohesion between sentences. To some extent they ignore relations within the sentence where they are adequately expressed in structural terms.

¹⁶ Examples of ellipsis in Table 5 are taken from Nunan (1993).

Nominal ellipsis	Verbal ellipsis	Clausal ellipsis
<i>My kids play an awful lot of sport. Both (x) are incredibly energetic.</i>	<i>A: Have you been working? B: Yes, I have (x).</i>	<i>A: Why'd you only set three places? Paul's staying for dinner, isn't he? B: Is he? He didn't tell me (x).</i>

Table 5 Types of Ellipsis

Nominal ellipsis occurs within the nominal group where the function of the omitted head is taken by some modifying element. Such elements are deictic (determiners), numerative (numerals or other qualifiers), epithets (adjectives) and classifiers (nouns). As Halliday and Hasan (1976: 148) note, deictic and numerative elements function more often as head than the other elements. For example, in (6) the numerative *four* does not function as modifier, but is upgraded to function as head:

(6) *Four other Oysters followed them, and yet another four.*

Thus, the second clause is cohesive because it presupposes the previous one that is not elliptical. The presupposed items in elliptical clauses can be restored anaphorically and always replaced by a full nominal group. The role of nominal ellipsis is to upgrade “a word functioning as deictic, numerative, epithet or classifier from the status of modifier to the status of head” (Halliday and Hasan 1976: 148).

What is always presupposed in ellipsis is the thing. There may be several other elements in the presupposed group that do not occur in the elliptical one. “The range of possible presuppositions is dependent on the structure of the nominal group” (Halliday and Hasan 1976: 151), and therefore only those items can be presupposed that can follow the element acting as head in the elliptical group (7):

(7) *Here are my two white silk scarves.*

(a) *Where are yours? (your (deictic) two/ white/ silk/ scarves)*

(b) *I used to have three. (three (numerative) white/ silk/ scarves)*

(c) *Can you see any black? (black (epithet) silk/ scarves)*

(d) *Or would you prefer the cotton? (the cotton (classifier) scarves)*

In (7), it is shown that the thing *scarves* is presupposed by all the modifying elements that function as head in the elliptical nominal group. It is only a deictic modifier in nominal ellipsis that can presuppose a full nominal group in a non-elliptical clause.

Halliday and Hasan (1976) classify nominal ellipsis according to the modifying elements that can function as head in the elliptical nominal group. Deictic and numerative elements are the most characteristic instances of nominal ellipsis. Table 6 presents deictic words that often function elliptically¹⁷:

Deictic elements in nominal ellipsis		
Deictic proper		Post-deictics
<i>Specific deictics</i>	<i>Non-specific deictics</i>	<i>Adjectives:</i> Same, other(s), different, identical, usual, regular, certain, odd, famous, well-known, typical, obvious
<i>Possessives:</i> - <i>nominals:</i> Smith's, my father's, etc.; - <i>pro-nominals:</i> my, your, etc.; mine, yours, hers, etc.	All, both, each, any, either, neither, some	
<i>Demonstratives:</i> this, that, these, those, which		

Table 6 Deictic elements in nominal ellipsis

All of the deictic words presented in table 6 occur as head of an elliptical nominal group. In case of pro-nominal possessives, such items as *hers*, *yours* and others presuppose both a possessor (by means of reference) and a thing possessed (by means of ellipsis). Non-specific deictics *either*, *neither*, *both* presuppose two sets, and *each* can presuppose two or more. Post-deictic elements differ from adjectives in their functions as epithet in a way that they combine with determiners and may be followed by a numerative (8):

- (8) *the identical three questions* (deictic) – *three identical questions* (epithet)
the obvious first place to stop (deictic) – *the first obvious place to stop* (epithet)
a different three people (deictic) – *three different people* (epithet)

Halliday and Hasan (1976: 159) point out that the elliptical use of deictic elements presents a major source of cohesion in English texts. These elements are used to link the presupposed item to its verbal and situational context.

Numerative elements in the nominal group are classified by Halliday and Hasan (1976: 161) according to the three subcategories: ordinal, cardinal numerals and quantifying words (table 7):

¹⁷ For more details, see Halliday and Hasan (1976: 155-161).

Numerative elements in nominal ellipsis		
<i>Ordinals</i>	<i>Cardinals</i>	<i>Indefinite quantifiers</i>
First, next, last, second, third, fourth, etc.	The three, these three, any three, all three; the usual three, the same three, etc.	Much, many, more, most, few, several, a little, lots, a bit, hundreds, etc.
<i>Have some more <u>tea</u>. – No, thanks; that was my <u>third</u>. (third (cup of) tea)</i>	<i>Smith was the first <u>person</u> to leave. I was <u>the second</u>. (the second person)</i>	<i>Can all <u>cats</u> climb trees? – They all can; and <u>most</u> do. (most cats)</i>

Table 7 Numerative elements in nominal ellipsis

In (table 7), the examples illustrate the use of numerative elements in the nominal group. Ordinal numerals are generally preceded by *the* or a deictic pro-nominal possessive. Cardinal numerals may be preceded by any deictic elements that are appropriate in number, and by post-deictic adjectives. The noun that is presupposed by ordinals and cardinals may be singular or plural, but it cannot be a mass noun. For example, in (table 7), *tea* is interpreted as *a cup of tea*.

It is worth noting that both deictic and numerative elements as heads in nominal ellipsis may be used exophorically (9). Used thus, they are interpreted according to the generalized sense or the context of situation.

(9) a. *All go into the other room.*

b. *My three are absolute terrors.*

In (9a), a non-specific deictic *all* is used to mean *people*. In (9b), a possessive deictic *my* precedes the cardinal numeral *three* to mean *children*.

As for the use of epithets and classifiers in the presupposing nominal group, substitution would be preferred to ellipsis (Halliday and Hasan 1976: 166).

Verbal ellipsis occurs within the verbal group “whose structure does not fully express its systemic features” (Halliday and Hasan 1976: 167). The verbal group is generally presented by one lexical element – the lexical verb, and other systemic features: finiteness, polarity, voice and tense. To understand whether a verbal group is elliptical or not, it is necessary to find any omitted features that can be recovered by presupposition (10):

(10) *What have you been doing? – Swimming.*

In (10), what is omitted is *I have been swimming*. It is only the lexical verb *swim* that is found in the elliptical verbal group. The elliptical form *swimming* has various systemic features that

are not found in the verbal structure. Among these features are finite, indicative, non-modal; positive; active; present perfect progressive.

Halliday and Hasan (1976) distinguish two types of verbal ellipsis: lexical and operator ellipsis¹⁸. They are illustrated in table 8:

Verbal ellipsis	
<i>Lexical ellipsis</i>	<i>Operator ellipsis</i> <i>(modal and temporal operators)</i>
<i>Is he <u>complaining</u>? – He may be; I don't care.</i> <i>Mary <u>didn't know</u>, did she?</i>	<i>Has she <u>been crying</u>? – No, laughing.</i> <i>What <u>must I do</u> next? – Play your highest card.</i>

Table 8 Verbal ellipsis

The difference between the two types of verbal ellipsis is that in lexical ellipsis the lexical verb is omitted from the verbal group, whereas operator ellipsis involves the omission of operators. Moreover, operator ellipsis does not include the subject. It must be presupposed. “Operator ellipsis is characteristic of responses which are closely tied to a preceding question or statement, and which have the specific function of supplying, confirming or repudiating a lexical verb” (Halliday and Hasan 1976: 178). Lexical ellipsis can be clearly exemplified by question tags. The initial operator is always presented, and other elements preceding the lexical verb may be omitted.

The two types of verbal ellipsis can also differ in terms of the systemic features of the verbal group: polarity, finiteness, voice and tense. The initial element of the verbal structure carries the expression of polarity. In lexical ellipsis, this element cannot be omitted, and therefore polarity is always expressed. Negative polarity can be expressed by the negator *not* or by negative adverbs (*never, hardly, hardly ever*). In operator ellipsis, there can be a change of polarity. It is resulted in the restriction of operator ellipsis to be often used in responses in which polarity cannot be presupposed.

As with polarity, finiteness is always expressed in the first word in the verbal group. In lexical ellipsis, a verbal group is always finite or non-finite, whereas in operator ellipsis, the choice between finite and non-finite forms cannot be expressed. Finiteness and modality

¹⁸ Halliday and Hasan (1976: 174) note that operator ellipsis within the sentence, in the context of coordination, does not contribute to cohesion: *Some were laughing and others crying.*

in a verbal group with operator ellipsis is always carried over from the presupposed group (Halliday and Hasan 1976: 182).

A verbal group can be active or passive. In the former, there is absence of some form of *be* or *get* before a lexical verb in the passive participle form. A passive verbal group displays both these features. In both types of verbal ellipsis, the voice selection must be presupposed. If the verbal group is elliptical in the presupposing clause, the voice selection cannot be repudiated.

Halliday and Hasan (1976) describe the tense system of the English verb as being complex. They note that several elements are needed to make the tense selection clear. In lexical ellipsis, a tense can be fully explicit. In case of compound tense, an unchanged form of the lexical verb can be carried over from the presupposed group. In operator ellipsis, the lexical verb is presented in the same form as it is in the presupposed verbal group. The rest of the elements belonging to the tense selection can be totally presupposed.

Verbal ellipsis can also involve external ellipsis. This is the omission of other elements in the structure of the clause. Halliday and Hasan (1976) introduce four sub-types of clausal ellipsis (table 9) according to the structure of the clause in English and various speech functions it can express. These sub-types are propositional, modal, general and zero ellipsis:

Clausal ellipsis			
<i>Propositional</i>	<i>Modal</i>	<i>General</i>	<i>Zero</i>
<i>Who was going to plant a row of poplars in the park? - The Duke was.</i>	<i>What was the Duke going to do? - Plant a row of poplars in the park.</i>	<i>Are you coming? - Yes./ No.</i>	<i>England won the cup. - Who told you?</i>
omission of the complement and the adjunct + lexical ellipsis	omission of the subject and the finite operator + operator ellipsis	all elements but one omitted	entire clause omitted

Table 9 Clausal ellipsis

In (table 9), the first two sub-types of clausal ellipsis are defined according to a two-part structure of the English clause. It consists of modal element (subject and the finite element in the verbal group) and propositional element (the rest of the verbal group, complements and adjuncts). Modal ellipsis typically occurs in response to WH-questions where the choice of mood is not expressed in the clause. On the contrary, propositional ellipsis occurs in the clause where both mood and polarity are expressed. What also follows from (table 9) is that lexical ellipsis implies propositional ellipsis, whereas operator ellipsis implies the modal one.

The example of zero ellipsis in (table 9) shows the entire omission of the clause. It is possible to use the substitute *so* as the cohesive form of the reported clause: *Who told you so?* In general ellipsis of the clause, all elements but one required can be omitted (11):

(11) *When is John coming? – Next weekend.*

General ellipsis can be illustrated by the presence of WH-element or some other single clause element (12). These items are used to require further specification:

(12) a. *Someone's coming to dinner. – Who?*

b. *John's coming to dinner. – John Smith?*

In (12), clausal ellipsis is expressed in the form of *Who?* and *John Smith?* as question rejoinders¹⁹. “A rejoinder is any utterance which immediately follows an utterance by a different speaker and is cohesively related to it” (Halliday and Hasan 1976: 206).

It is worth mentioning that “there is no type of clausal ellipsis which takes the form of the omission of single elements of clause structure” (Halliday and Hasan 1976: 203). So it is not possible to say *She has taken* in response to (13):

(13) *Has she taken her medicine? – a. She has.*

b. *She has done.*

In (13), clausal ellipsis is used with verbal lexical ellipsis in (13a) and with verbal substitution in (13b). It is also possible to reply with a full non-elliptical clause where the complement *her medicine* can be presupposed by referential *it*.

To summarize, ellipsis refers to the structure of sentences and clauses in which some information is missed. Elliptical clauses are the presupposing ones, and the missing information can be carried over from the presupposed clause.

2.4.2.4 Conjunction

This section presents the discussion of the fourth type of grammatical cohesion – conjunction. The account of the types of conjunctive relations will be based on Halliday and Hasan's (1976) classification.

Conjunction differs from reference, substitution and ellipsis in that it is not an anaphoric relation. However, Halliday and Hasan (1976), Martin and Rose (2007), Nunan (1993) treat conjunction and conjunctive elements as cohesive devices. The scholars note that conjunction expresses cohesive relations indirectly, through certain meanings. These meanings presuppose the presence of other components in the discourse (Halliday and Hasan

¹⁹ For more details about types of rejoinder, see Halliday and Hasan (1976: 207).

1976: 226). Therefore, the relationships signalled by conjunction can be fully understood through reference to other parts of the text (Nunan 1993: 26).

Scott and Thompson (2001) give an account of patterns of cohesion, taking the lexicogrammatical level into consideration and basing their approach on a division of the patterns into two categories: conjunction and repetition. Conjunction is defined as a text-making resource. It refers to links between clauses or “the ways in which the different parts of a text fit together” (Scott and Thompson 2001: 4). In other words, conjunction serves to bind parts of a text and to mark the difference between these stages.

Halliday and Matthiessen (2004) characterize grammatical relations that hold between clause complexes. These authors also focus attention on conjunctions as the clause constituents that serve as textual linkers within the clause. According to Halliday and Matthiessen’s (2004) approach, Thompson (2004) introduces three levels at which conjunction can be investigated: within the clause (prepositions), between clauses (conjunctions) and between clause complexes or sentences (conjunctive adjuncts). Halliday and Hasan (1976) define three kinds of conjunctive adjuncts as linkers between sentences: simple and compound adverbs, and prepositional expressions with a reference item²⁰. The authors note that a conjunctive adjunct usually takes the initial position in the sentence, and its meaning extends over the entire sentence. However, they add that written English has its own conventions, and so a conjunctive expression can be also found in the middle of a sentence.

Halliday and Hasan (1976), as well as Martin and Rose (2007), define conjunctive relations as internal and external (1)²¹. External conjunctions are used to relate activities, whereas internal conjunctions are used to organize texts (Martin and Rose 2007: 122, 133).

(1) a. *They gave him food and clothing. And they looked after him til he was better.*

(external)

b. *They gave me fish to eat. And I don’t like fish.* (internal)

Both internal and external conjunction are classified according to four main types. Martin and Rose (2007) define these types according to four logical conjunctive relations: adding, comparing, time and consequence (table 10):

²⁰ See types of conjunctive expression (Halliday and Hasan 1976: 230-233).

²¹ Examples 1a-1b are taken from Halliday and Hasan (1976: 321).

External conjunction			Internal conjunction		
addition	addition	and, besides	addition	additive	further
	alternation	or, if not-then		alternative	alternatively
comparison	similarity	like, as if	comparison	similar	for instance
	contrast	but, whereas		different	in contrast
time	successive	then, after	time	successive	firstly, finally
	simultaneous	while		simultaneous	at the same time
consequence	cause	so, because	consequence	concluding	therefore, in conclusion, thus
	means	by, thus			countering
	purpose	in order to			
	condition	if, unless			

Table 10 Martin and Rose's classification of conjunction²²

Halliday and Hasan (1976) distinguish additive, adversative, causal and temporal types of conjunctive relations in terms of ideational meaning (external) and interpersonal meaning (internal). The simplest form of conjunctive relations can be expressed by the words *and*, *yet*, *so* and *then* (2)²³:

(2) *For the whole day he climbed up the steep mountainside, almost without stopping.*

- a. *And in all this time he met no one.* (additive)
- b. *Yet he was hardly aware of being tired.* (adversative)
- c. *So by night time the valley was far below him.* (causal)
- d. *Then, as dusk fell, he sat down to rest.* (temporal)

The additive conjunction *and* in (2a) signals the presentation of additional information. As Nunan (1993: 27) notes the adversative relationship (2b) is established when the second sentence moderates or qualifies the information in the first. The causal conjunction (2c) expresses the relation between cause and consequence. When the events are related in terms of the timing of their occurrences, the temporal conjunction relationship (2d) is established.

Halliday and Hasan (1976: 242-243) introduce several subclasses of each type of conjunction to make a clear distinction between these four cohesive relations. Table 11 contains the examples of some typical conjunctive words and expressions that enter into cohesion:

²² For more details about the types of conjunction see Martin and Rose (2007: 122-141).

²³ Examples 2a-2d are taken from Halliday and Hasan (1976: 239).

Types of conjunction			
additive	adversative	causal	temporal
<i>simple:</i> and, nor, or	<i>proper:</i> yet, but, however	<i>general:</i> so, because of, thus	<i>simple:</i> then, next, afterwards
<i>complex:</i> moreover, in addition, besides that, additionally	<i>contrastive:</i> but, on the other hand, actually, in fact, at the same time	<i>specific:</i> for this reason, as a result, for this purpose	<i>complex:</i> at once, this time, the last time, meanwhile, at this moment, until then
<i>comparative:</i> likewise, similarly, on the other hand	<i>corrective:</i> instead, on the contrary, at least	<i>conditional:</i> then, under the circumstances	<i>sequential/ conclusive:</i> at first, in the end; finally, at last
<i>appositive:</i> I mean, in other words, for example, thus	<i>dismissive:</i> in any case, anyhow, at any rate	<i>respective:</i> in this respect, with regard to this, otherwise	<i>'here and now'/ summarizing:</i> up to now, up to this point; to sum up, briefly
<i>From a marketing viewpoint, the popular tabloid encourages the reader to read the whole page instead of choosing stories. <u>And</u> isn't that what any publisher wants?</i>	<i>The eldest son works on the farm, the second son worked in the blacksmith's shop, <u>but</u> the youngest son left home to seek his fortune.</i>	<i>Chinese tea is becoming increasingly popular in restaurants, and even in coffee shops. This is <u>because of</u> the growing belief that it has several health-giving properties.</i>	<i>The weather cleared just as the party approached the summit. <u>Until then</u> they had seen nothing of the panorama around them.</i>

Table 11 Halliday and Hasan's classification of conjunction

To define the first type of conjunction, Halliday and Hasan (1976) make a distinction between additive and coordinate relations. The coordinate relation may be established between nouns, verbs, adverbs, nominal, verbal, adverbial or prepositional groups, as well as between clauses. The words *and*, *or*, *nor* can occur in coordinate pairs, such as *both ... and*, *either ... or*, *neither ... nor*. These pairs function as a single unit and therefore there is no cohesive relation. The main distinction between coordination and the additive type of conjunction is that the former relation is structural, whereas the latter one is cohesive (Halliday and Hasan 1976: 234). Cohesion is established in a text when the words *and*, *or*, *nor* link one sentence to another and thus operate conjunctively. They are used as additive conjunctions²⁴ to connect a succession of two sentences and add more information to what has been said (3):

- (3) *'I said you looked like an egg, sir,' Alice gently explained. And some eggs are very pretty, you know,' she added ...*

²⁴ The examples of additive conjunctions are taken from Halliday and Hasan (1976).

Like the word *and* in (3), other simple additive conjunctions *or* and *nor* can also be used in the initial position to cohere one sentence to another. In case of *nor*, it serves to function as the negative form of the additive relation. The additive conjunction *or* has the basic meaning of alternation, and it often occurs in questions, requests, permissions, predictions, opinions (Halliday and Hasan 1976: 246) (4):

(4) *Perhaps, she missed her train. Or else she's changed her mind and isn't coming.*

In (4), the alternative relation is established by the additive conjunction *or* that takes the initial position in the second sentence. Why *she isn't coming* is interpreted alternatively by means of *or* that introduces another possible opinion and connects this information to the one expressed in the previous sentence.

Additive conjunction can be characterized as complex, comparative and appositive (table 11). Complex additive conjunctive expressions are classified into emphatic and de-emphatic. Emphatic forms are used to emphasize some additional point that is to be connected to the previous one (*further, moreover, additionally*), or to stress some alternative interpretation (*alternatively*) (5). De-emphatic forms (*incidentally, by the way*) introduce information as afterthought.

(5) *My client says he does not know this witness. Further, he denies ever seeing her or spoken to her.*

In (5), *further* is the example of the emphatic form of the complex additive conjunction. It is used initially and serves to emphasize *he denies ever seeing her or spoken to her* in conjunction with *he does not know this witness*.

A conjunctive cohesive relation can be established when what is being said is compared to what has been said. In this case, the additive conjunction can express similarity (*similarly, in the same way*) or dissimilarity (*by contrast, as opposed to this*). In the former sense, the presupposing sentence is added to the same effect that is expressed in the presupposed sentence. In the sense of dissimilarity, two sentences are connected to each other in terms of contradistinction (Halliday and Hasan 1976: 247) (6):

(6) *Our garden didn't do very well this year. By contrast, the orchard is looking very healthy.*

In (6), the meaning of dissimilarity is expressed by the comparative additive conjunctive form *by contrast*. It serves to introduce a different point, *the orchard is looking very healthy*, that contradicts the information expressed in the presupposed sentence.

One more subclass of the additive conjunction is that of apposition. It can establish expository (*that is, I mean*) and exemplificatory (*for instance*) relations between sentences.

The former relation serves to add some explanation to what has been already said (7), whereas the latter one links sentences by giving examples.

(7) *I wonder whether that statement can be backed up by adequate evidence. – In other words, you don't believe me.*

The second type of conjunction is defined by Halliday and Hasan (1976) as adversative. The basic meaning of the adversative conjunction is to introduce a contrary point to what has been said. The adversative relation can be characterized as proper, contrastive, corrective and dismissive (table 11).

The proper adversative conjunction is expressed in its simple form by the words *yet*, *though*, *only* or various emphatic conjunctions, such as *however*, *nevertheless*, *despite this*. All these adversative words can occur initially for the cohesive purpose of creating contrast in a text (8). *Though* has its normal position at the end of the clause, but when it occurs initially, it is treated as fully cohesive subordinating conjunction. In case of *however*, it can occupy both initial and final positions.

(8) *All the figures were correct; they'd been checked. Yet the total came out wrong.*

In (8), the adversative sense is expressed by the simple form of the proper adversative conjunction *yet*. It occurs after the full stop and serves to link the two sentences indicating that the sense of the presupposing sentence is in contrast to the sense expressed in the first sentence.

Unlike *yet*, the proper adversative conjunction *but* has an extra component in its meaning. In addition to the adversative meaning, it contains the meaning of *and*. Therefore *but* cannot combine with *and*, whereas *yet* can frequently occur with it. The basic meaning of the adversative *but* is to project the *and*-relation backwards (Halliday and Hasan 1976: 237) (9):

(9) *The eldest son worked on the farm, the second son worked in the blacksmith's shop, but the youngest son left home to seek his fortune.*

And and *but* are also used to establish contrastive adversative relations. They have the meaning of something that is against to what has been said (10):

(10) *He's not exactly good-looking. But he's got brains.*

There are various emphatic expressions that can establish contrastive adversative relations in a text. These are *however*, *on the other hand*, *at the same time*. Halliday and Hasan (1976: 253) introduce a group of avowal contrastive items that are used in the meaning of "as against what the current state of the communication process would lead us to expect, the fact of the matter is ...". Among these items are *in fact*, *actually*, *to tell the truth*, *as a matter of fact*.

The two more subclasses of the adversative conjunction express corrective and dismissive relations (table 11). The former one can be expressed by *instead, on the contrary, rather, at least*. These forms serve to establish the link between sentences by rejecting what has been said in favour of another formulation (11):

(11) *I don't think she minds the cold. It's the damp she objects to, rather.*

The dismissive adversative relation can be expressed by *in any/either case/event, anyhow, at any rate*. These forms introduce a new point that refers to what has been said with the only difference that some previous information has been dismissed as irrelevant (12):

(12) *We may be back tonight; I'm not sure. Either way, just make yourself at home.*

Halliday and Hasan (1976) define the third type of conjunction as causal (table 11). This type of conjunctive relation establishes a link between sentences that can be labelled as the cause-consequence relation (13):

(13) *She was never really happy here. So she's leaving.*

In (13), the causal conjunction *so* creates a causal relation between the state *was never happy* and the event *is leaving*. The meaning of *so* is to introduce the consequence of the cause stated in the first sentence – because she was not happy.

Among the simple forms of causal relation are *so, thus, therefore*. They belong to the subclass of general causal relations. Various emphatic forms, such as *consequently, accordingly, because of that*, are used as general conjunctive expressions to emphasize the cause-consequence relation.

The causal conjunction can establish specific relations of result (*as a result*), reason (*on account of this, for this reason*) and purpose (*for this purpose, with this intention*). For example in (13), *so* can be treated as the specific clausal conjunction of result. What it means is that *she's leaving* as a result of that *she was never really happy here*. When *so* establishes specific relations of reason and purpose, it can be interpreted as *for this reason* and *for this purpose*.

Another subclass of causal conjunction is conditional. The conditional relation can be expressed by the simple form *then* or other emphatic items (*in that case, under these circumstances, otherwise*) (14):

(14) *I was not informed. Otherwise I should have taken some action.*

In (14), the conditional meaning can be interpreted as *If I had been informed, then I should have taken some action*. Halliday and Hasan (1976: 259) label *otherwise* as a causal conjunction of reversed polarity. For example in (14), *otherwise* switches the polarity from negative to positive.

Otherwise can be also used as an equivalent to such conjunctive expressions as *in this respect*, *apart from this*, *with regard to this*. These forms establish a conjunctive link that is called respective.

The fourth type of conjunction (table 11) expresses a temporal relation between sentences (15):

(15) *He stayed there for three years. Then he went on to New Zealand.*

In (15), the temporal conjunctive link is established by means of the simplest form of the temporal conjunction *then*. It serves to create a sequence in time showing that one event happens after another. Other forms used in the same sequential sense can mean that two events happen simultaneously (*at the same time*, *simultaneously*) or that one of the events precedes another (*earlier*, *before that*, *previously*) (16):

(16) *The weather cleared just as the party approached the summit. Until then they had seen nothing of the panorama around them.*

Temporal expressions may have some additional components in their meanings to specify the relation of succession in time. For example, they may be used in the repetitive (*next time*, *on this occasion*) or durative (*meanwhile*, *all this time*) sense. Such forms belong to the complex temporal conjunction.²⁵

It is not only the sequence in time that can be established between two sentences to mark a temporal cohesive link. A number of conclusive expressions are used to mark the end of a process (*finally*, *at last*, *as a final point*, *in conclusion*) (17):

(17) *All this time the Guard was looking at her, first through a telescope, then through a microscope, and then through an opera-glass. At last he said 'You're travelling the wrong way', and shut up the window and went away.*

In (17), it is well illustrated that conclusive temporal relations occur with the sequential ones (*first ... then*, *first ... second*). These are labelled as correlative forms with *first* having a cataphoric time expression and the other forms (*next*, *then*, *second*, *finally*) referring anaphorically to the presupposed sentence.

Halliday and Hasan (1976) define two more subclasses of temporal conjunction, here and now (*up to now*, *at this point*, *here*) and summary (*to sum up*, *to resume*, *briefly*) relations. The former kind of temporal relation refers to the present time in the content of communication, and thus it creates a cohesive effect. The latter one serves to indicate the end or culmination of what has been said.

²⁵ For details, see Halliday and Hasan (1976: 266).

To sum up, the term cohesion is used in this investigation for the relations obtaining among the sentences and clauses of a text. Lexical and grammatical items form various links within a text and contribute to the establishment of various relations between clauses and sentences. Termed by Halliday and Hasan (1976) as cohesive ties, these relations keep the text together in its original order. Cohesive ties may operate within the boundaries of the sentence. They may also be anaphoric or cataphoric. Cohesive relations do not constitute cohesion by themselves. They mark which clauses and sentences are related and in what manner. In this respect, the contribution of the four types of grammatical cohesion to the organization of text is obvious. Reference, as a semantic relation, serves to retrieve the identity of what is being talked about from the immediate context. Conjunction contributes to the semantic organization of text. Substitution and ellipsis serve to establish grammatical relations, when another item (substitution) or a zero element (ellipsis) appears to link to a previous part of the text.

III. Using a Learner Corpus

3.1 Special features of corpus linguistics

English has been analysed from a corpus linguistic perspective since the late 1970s. Corpus linguistics gives priority to descriptive adequacy.²⁶ A diversity of text types in corpora makes it possible to test out linguistic hypotheses and describe the use of language as a communicative tool. The use of corpora provides language researchers with controlled access to large amounts of usage data. Corpora reveal the range and frequencies of patterns of a language that learners assimilate.²⁷ Various sophisticated tools have been designed for doing both quantitative and qualitative research these days. However, Aarts (2000: 7-8) points out that modern linguists should focus more on meaningful questions about the language being studied and go beyond the bare statistics. “A corpus linguist is a linguist who tries to understand language by carefully observing extensive natural samples of it and then constructing plausible understandings that encompass and explain those observations” (Chafe 1992: 96).

Corpora are valuable resources for descriptive, theoretical and applied discussions of language (Meyer 2002: 28). Corpora have been introduced into different linguistic disciplines and are used to study language change and variation, to understand the process of language acquisition, to improve foreign- and second-language instruction. Moreover, corpora are used for creating dictionaries. Corpora open up new areas of research and bring new insights to traditional research questions.

3.2 Corpora typology

Granger (1998, 2002) and Meyer (2002) give a full account of learner corpus design and analysis. They speak about a collection of texts or parts of texts that are used to carry out some linguistic research. According to whether English is learnt in an English-speaking country or not, “the learning context distinguishes between English as a Second Language (ESL) and English as a Foreign Language (EFL)” (Granger 1998: 9).

²⁶ Chomsky’s theory of principles (for details see Meyer: 2002: 2-3).

²⁷ Barlow (1996: 2) notes that researchers should not become complacent about language in the computer since corpora present particular samples of language use, but not ‘language’ in the computer.

Corpora have numerous uses, ranging from the theoretical to the practical ones. “What one discovers in a corpus can be used as the basis for whatever theoretical issue one is exploring” (Meyer 2002: 4). For the current research the use of corpora is relevant in terms of studying of learner grammar and discourse.

Corpora vary in terms of the overall length of the corpus, the types of genres included, the number and age of texts, the length of individual text samples (see Meyer 2002: 30-45).

Historical corpora, such as the Helsinki and ARCHER²⁸ provide resources for studies of the linguistic development of English. They contain samples of writing that represent earlier dialects and periods of English and allow for the study of changes in the language from the past to the present. These corpora are also useful for studying grammar and vocabulary.

Corpora of Modern English are often used for the study of language variation. For example, FLOB and FROWN consist of texts published in 1991. As synchronic corpora, on the one hand, they permit the study of varieties in British and American English. On the other hand, FLOB and FROWN replicate the LOB and Brown corpora (with texts published in 1961), and allow for studies of linguistic change in BE and AmE over a period of thirty years (Meyer 2002: 21).

Meyer (2002) notes that for the study of language varieties or for conducting a contrastive analysis, as well as for synchronic or diachronic comparison, it is better to use corpora of the same size. In this respect, the corpora of Brown family are suitable. They are divided into 2,000-word samples in varying genres (Meyer 2002: 145). The only limitation is that they exclude spoken material. Chafe (1992: 88) suggests that spoken corpora have a more favored place since “speaking is natural to the human organism in ways that writing can never be”.

Multi-purpose corpora, such as BNC and the ICE Corpus²⁹ consist of both written and spoken texts of different types (see Meyer 2002: 31, 35). These corpora represent similar genres and are used for studies of vocabulary, grammatical features, differences between various national varieties and genres of English.

There have been created other corpora for special purposes. Those that facilitate contrastive analyses of English and other languages are known as parallel corpora. For example, the English-Norwegian Parallel Corpus contains English and Norwegian fiction and non-fiction of similar types. This material can be used to study genre variation between the

²⁸ For details see Meyer (2002: 142, 145).

²⁹ For details see Meyer (2002: 30-38).

two languages and to conduct a contrastive translation analysis. Parallel corpora are also valuable in terms of enhancing foreign language teaching.

3.3 Contribution of Learner Corpora to SLA³⁰ research

The so called learner corpora have been developed to facilitate the study of second-language acquisition. Current learner corpora are big in size and are used for particular SLA and FLT³¹ purposes. Learner corpora give access to learners' total interlanguage and make it possible to conduct a contrastive interlanguage analysis (see Granger 1998: 12). In this respect learner corpora are used to study and compare the structure of various interlanguages that individuals from different first-language backgrounds develop. Moreover, researches can use learner corpora to test what non-native and native speakers of a language do in comparable situations. A learner corpus has important implications for language teaching since it allows for a quantitative investigation of distinctive features of interlanguage: the frequency of use of certain words, phrases and structures, whether they are overused or underused. Descriptions of learner language can help to develop new pedagogical methods and approaches which target more accurately learners' needs.

Granger (1998: 4) describes SLA as a mental process and notes that learner performance data is necessary to uncover the principles that govern the process of learning a foreign or a second language. Three main data types are distinguished³²: language use, metalingual judgements and self-report data.

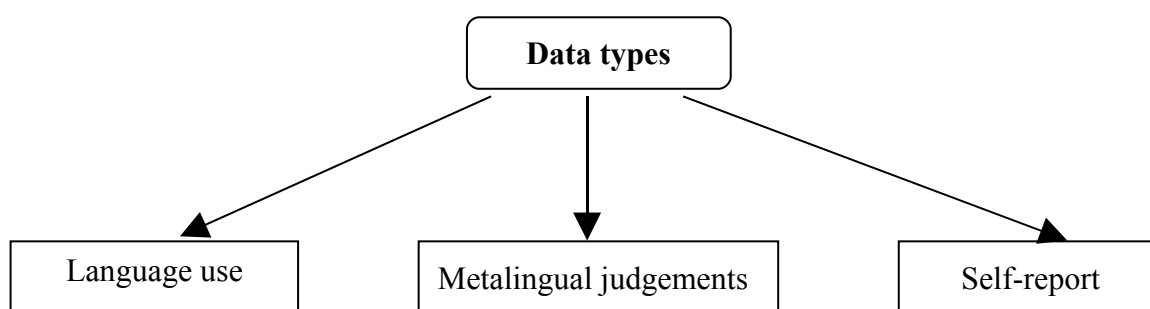


Figure 1. Learner performance data types

³⁰ SLA – Second Language Acquisition.

³¹ FLT – Foreign Language Teaching.

³² This classification is taken from Granger (1998: 4, 2002: 5), but the data types are distinguished by Ellis (1994: 670).

The first data type reflects how learners use a second language in either comprehension or production. If no control is exerted on the language performance, the data will be natural. Language use data is elicited if it is based on the results of a controlled experiment. Metalingual judgements type concerns learners' intuition when they judge some instances of a language. The third data type is based on questionnaires or think-aloud tasks used to explore the ways learners acquire a second language.

The development of learner corpora contributes to the development of teaching strategies for individuals learning English as a second or foreign language (Meyer 2002: 27). The use of corpora helps to depict how learners are actually using the language. Various kinds of grammatical distinctions in English can be investigated by students themselves. Students of English as a foreign language can examine and figure out to what extent the speech or writing of native speakers of English is different from their English. Real examples of language usage taken from corpora differ obviously from those found in a majority of text- and grammar-books. Vast amounts of data provided by learner corpora allow for exploration of real language. The only challenge concerns interpretation of data discovered. Coming back to Aarts (2000), corpus linguistics should focus more on qualitative research.

3.4 The International Corpus of Learner English

One of the larger learner corpora is called the International Corpus of Learner English (ICLE)³³. The current size of this corpus is more than two million words. It is comprised of written English that represents one type of genre – essay writing. ICLE is divided into 500-word essays written by students from fourteen different linguistic backgrounds learning English as a foreign language (Granger 1998: 10)³⁴.

What distinguishes a learner corpus from other corpora are design criteria for a specific purpose. ICLE shares some features with its subcorpora and has some variable ones³⁵. Figure 12 illustrates ICLE design criteria³⁶:

³³ http://www.hf.uio.no/ilos-dyn/studier/fleksibel/contrastive_analysis/CALL/corpora/ICLEtexts.txt

³⁴ It should be noted that more linguistic backgrounds have been added in the most recent version of the corpus.

³⁵ All the national subcorpora share a common design and for the most part a common set of essay questions.

³⁶ For details, see Granger (1998: 9).

Shared features	Variable features
Age	Sex
Learning context	Mother tongue
Level	Region
Medium	Other foreign languages
Genre	Practical experience
Technicality	Topic
	Task setting

Table 12. ICLE design criteria

ICLE includes mostly argumentative essay writing and a small proportion of literature exam papers. ICLE's medium distinguishes this corpus from spoken corpora, and within this medium the argumentative genre is distinguished from narrative writing. This corpus contains writing by young male and female learners at an advanced level (university undergraduates) who study English as a foreign language in a non-English-speaking environment. This kind of environment refers to language context and is a crucial distinction between ESL and EFL. Learners' mother tongue background and their knowledge of other foreign languages are recorded in the corpus. It is an important factor that makes it necessary and useful to be aware of how learners' English may be influenced by other foreign languages.

The content of the essays included in ICLE is similar, but these written productions cover a variety of topics. It is a relevant factor since topics can affect the choice of lexical items and such a language feature as technicality. The degree of technicality can affect both the lexis and the complexity, as well as the frequency of grammatical items.

Each corpus has its limitations, and ICLE is not an exception. On the one hand, it is a lengthy corpus and allows for the study of lexis and grammar within the context of a complete text. On the other hand, only one genre and non-professional writing make up the corpus. As Biber (1993: 252) notes, diversity across text types contributes more to the achievement of broader linguistic representation. It is important to be aware of limitations when one chooses a corpus for a particular type of investigation to be carried out.

ICLE as a learner corpus is valuable in terms of providing researchers with information about English learnt by students of different mother tongues. Accurate descriptions of learner language can help to develop new classroom practices, especially those that concern developing writing skills. A qualitative account of research findings can help teachers of English to figure out what targets more accurately the needs of their learners.

For the current paper it is of a particular interest to use written productions to carry out research on grammatical cohesion in advanced learner writing. The choice for ICLE can be explained by pedagogical implications – to study how Norwegian and Russian students of English construct their compositions. In other words, the intention is to give an account of various grammatical cohesive ties found in texts that are produced by non-native speakers of English.

IV. Cohesion in the text

4.1 Method and material

The current investigation involves two methods. First of all, it is based on the study of theory (see 2.1-2.4). Secondly, the aim to answer the formulated research questions turns a research work into a process of finding out.

The analysis is based on the following research questions: (a) what types of grammatical cohesive relations hold between sentences and T-units of an argumentative essay? (b) can cohesion be discerned between sentences that are not adjacent? (c) to what extent does the overall picture of grammatical cohesion differ in argumentative essays of Norwegian and Russian students?

The texts used for the analysis of the problem of grammatical cohesion are taken from the International Corpus of Learner English (ICLE)³⁷. The data for this study have been restricted to argumentative essays of academic written English. An argumentative essay does not only give information but also presents an argument with ideas supporting or opposing an argumentative issue. The chosen essays have been written by students from two different linguistic backgrounds learning English as a foreign language – Norway and Russia. The number of essays has been restricted to 20 for each linguistic background.

It is worth noting that English has been made a priority in Norway and Russia's foreign-language teaching. Together with many other countries, Norway and Russia belong to the "expanding circle" (Crystal 2003) since they acknowledge the importance of English as an international language for cultural, commercial, educational and other purposes. What distinguishes the two linguistic backgrounds is that English is approaching the status of a second language in Norway, and furthermore that Norwegian is typologically closer to English than Russian is.

Written language has been chosen to focus attention on grammatical cohesive relations. One of the main functions of written language is to make a shift from the oral to the visual domain, so that words and sentences can be examined (Brown and Yule 1983: 13). In spite of the restricted range of the linguistic data studied, it is hoped that the conclusions about the nature of grammatical cohesion in the analysed texts will be relevant to these texts in particular and also to academic spoken language. "In particular situations, if an academic is

³⁷ http://www.hf.uio.no/ilos-dyn/studier/fleksibel/contrastive_analysis/CALL/corpora/ICLEtexts.txt

saying something he has said or thought about before, the speech may have a great deal in common with written language forms” (Brown and Yule 1983: 14). What I assume is that students’ written language may have some features common to language forms used in speech.

Because of the theoretical orientation of this work, I have chosen structure analysis as an analytic tool. In other words, the framework of the current investigation is based on the analyses of sentences and T-units in order to figure out how grammatical cohesion contributes to the creation of a text. What is considered as a T-unit is “an independent clause together with all the clauses that are dependent on it” (Thompson 2004: 156). Additionally, an example of discourse analysis will be provided to display a picture of grammatical cohesion in a complete text.

There are several common characteristic features of the texts chosen for the current analysis. First of all, argumentative essays are by definition produced by individual students in the form of a short composition on a particular theme. A vast majority of the essays are on the topic of education or prison punishment. It should be taken into consideration that the thematic orientation of texts may determine the choice of words or linguistic devices used to develop the topic. Secondly, there can be observed comparability of length of texts. The number of arguments for or against a particular question varies in the essays. Some texts are therefore short. In addition, argumentative essays are information-oriented. Declarative sentences compose the structure of texts and provide crucial information towards understanding in what manner pieces of text are related.

Analysis of grammatical cohesion in each text has been carried out systematically, taking each feature separately. Analyses have been displayed separately for the two linguistic backgrounds. Attention has been focused on providing illustrations of the four types of grammatical cohesion and on giving explanations of how these cohesive relations contribute to the creation of text. Findings are presented where possible via tables, since these can provide the reader with the information introduced in a clear and concise visual form to support the discussion.

4.2 Discourse analysis

This section presents an example of discourse analysis that shows how all the texts have been analysed (Chapters V-VI). Discourse analysis is fundamentally concerned with the general

principles of interpretation by which people normally make sense of what they hear and read (Brown and Yule 1983). Discourse analysis refers to studies of the sentence or utterance in its linguistic context. For this purpose cohesion or a group of linguistic devices can be used to obtain texture both within and between sentences (Simensen 2007: 60).

Two texts, one for each linguistic background, have been chosen to give an account of the types of grammatical cohesive relations (see Appendix I). Both texts under analysis are an example of written discourse that was created as a short argumentative composition or rather as an expression of opinion to the question whether prison punishment should exist or not. Further, I intend to use Text A and Text B to refer to the texts written by a Norwegian and a Russian student respectively.

The intention of this analysis is to describe how grammatical features establish relationships across sentence boundaries to organize a text. Additional relations form the basis for the distribution of information in a text, and thus they construct discourse. These are the different ways by which cohesion is created: reference, substitution, ellipsis and conjunction (Halliday 1994: 309).

Both texts under analysis are structured by means of declarative clauses. The division of the texts into paragraphs signals to the reader that the material is organized according to the arguments discussed. Each paragraph presents a new reason or set of reasons to show the importance of the prison system for each country. The paragraph division is marked by means of the adversative contrastive conjunctions *but*, *on the other hand*, or other conjunctive items, such as *of course* and *sure(ly)*, that contribute to the purpose of the text. This is a discussion of the issue by giving arguments for and against punishment for crime, with some comments on the extent to which society can benefit from prison punishment.

The topic and the key points of the discussion are introduced in the first paragraphs of both texts. A chain of semantically related words (*the prison system, an organ of punishment, to be punished, to be isolated, criminal, committed a crime*) establishes continuity and reveals the flow of the writers' thought from one paragraph or sentence to the next. The grammatical categories of personal and possessive pronouns are used in the texts to the distinction between speech roles and other roles (Coffin and Mayor 2004: 242). A speech role is realised linguistically through the first-person pronoun *I*. Other roles are realised through personal pronouns *he*, *they* and *it* which are used to make multiple references to people within the texts. The first person singular pronoun *I* and the possessive determiner *my* fulfil the functions

of language resources that serve to introduce writer-reference in order to provide personal opinion and express agreement or disagreement (1)³⁸:

- (1) a. *In my opinion, a criminal should be punished, as well as being rehabilitated.*
(ICLE-NO-AC-0008.1)
- b. *I believe it is impossible to imagine a state without prisons or any other organs of punishment.* (ICLE-RU-MOS-0001.1)
- c. *At the top of all, I'd like to say ...* (ICLE-RU-MOS-0001.1)

In (1a-c), existential and possessive personal pronouns are used to substitute for nouns. The interpretation of *I* and *my* can be obtained by their reference function – they refer to a person and belong to the types of writer-reference. As cohesive elements, these pronouns can be identified exophorically from the situational context since the nodes of the pronouns are not recoverable from the texts. The pronouns make it clear that the texts have a writer. Moreover, the repetition of the pronouns contributes to cohesion as well.

The two texts do not differ greatly in terms of the use of the types of reference, substitution and ellipsis. These grammatical devices are used to subordinate information and to force the reader back to preceding sentences for their substitutions (Markels 1984: 17). Some degree of cohesion is established by these relations since they maintain the chains of recurrences (2):

- (2) a. *Knowing that the criminal will go to prison, secluded from the rest of the world, his freedom and personal life being robbed from him, satisfies society. They get even with him. But does it benefit society in the long run?* (ICLE-NO-AC-0008.1)
- b. *Those committed a crime should by all means be punished. It goes without saying.* (ICLE-RU-MOS-0001.1)
- c. *By all means everyone has his own look at it ...* (ICLE-RU-MOS-0001.1)

In (2a), *they* and *it* are both cohesive ties and operate within the boundaries of the sentence and relate anaphorically to something that has gone before. The personal third person pronoun *they* is used as personal reference and serves to indicate the semantic identity of an item with another. For instance, *they* points back to *society* forming an anaphoric link. It should be

³⁸ All examples are taken from ICLE. These are original samples from students' essays; syntax and other errors are not corrected.

noted that *society* is used in the text of a Norwegian learner as a collective noun that stands for people. It explains the choice of the pronoun *they* as a semantic identifier in the following sentence.

The third person singular pronoun *it* functions anaphorically and is used to retrieve the identity from the immediate context. In (2a, 2c), *it* does not establish an anaphoric cohesive tie between the two sentences following each other. The reader is forced back to one of the preceding sentences in order to interpret what may possibly benefit society (2a). In (2c), *it* refers to the *problem* being discussed and mentioned at an earlier point in the text (3):

(3) *By all means everyone has his own look at it ... [the problem – What missions should the prison system fulfil?]*

In both examples (2a-b), *it* performs the role of a clausal substitute, since the third person pronoun does not refer to any particular object or thing. One of the preceding sentences is completely or partially substituted by *it*. Example (4) illustrates how readers can make an interpretation of *it* by connecting the parts of the text:

(4) a. *But does it [knowing that the criminal will go to prison, secluded from the rest of the world, his freedom and personal life being robbed from him] benefit society in the long run?*
b. *It goes without saying [that those committed a crime should by all means be punished].*

In (2c), an exophoric reference to every person is expressed by a compound pronoun *everyone* and the possessive pronoun *his*. A characteristic feature of *everyone* is that it may have both collective and individual reference. If *everyone* correlates with the possessive pronoun *their*, it is interpreted as collective reference to all people. In (2c), the type of reference is individual since it is marked by correlation with the possessive pronoun *his*. This reference is used by the writer in order not to express a highly subjective opinion on the issue. Additionally, both *everyone* and *his* signal writer-reader reference. It is introduced to share different opinions and to emphasize that another point of view is also important.

Personal references are used in both texts as cohesive choices in identification and tracking of participants (Martin and Rose 2007: 157). The number of the participant identification resources vary in the texts. Text A possesses a greater number of resources that

track people, whereas Text B has more examples of entities that track a thing, an institution or an abstraction.

Personal and possessive pronouns are constantly used to track the identity of a person who commits a crime, prisoners or an organ of punishment. Pronouns like *he*, *she*, *it*, *they*, *his*, *him* are used for presuming reference that is recoverable (Martin and Rose 2007: 161) (5):

(5) a. *Ideally, the criminal would come out of prison as a new and improved person.*

He will have had time to do some serious thinking about his life and his wrongdoings ... (ICLE-NO-AC-0008.1)

b. *What missions should the prison system fulfil? ... it consumes a man ... (ICLE-RU-MOS-0001.1)*

In both (5a, 5b), the third person pronouns function anaphorically. The reader expects to have to link these pronouns with something that has been already mentioned. The node of *it* (5b) can be easily identified in the same text. Writer B discusses some positive and negative sides of the prison punishment. In his further comments, the pronoun *it* is used to replace the noun in one of the preceding sentences. *The prison system* as an organ of punishment is introduced in the beginning of the text, and then tracked with the pronoun *it*.

In (5a), the third person singular *he* and its inflectional form, the personal possessive *his*, refer back to *the criminal* and fulfil the role of anaphoric items. The word *criminal* appears in the initial paragraph of Text A and the main strategy for tracking its identity is with pronouns. The reader is likely to interpret the node of *he* differently, as a male or both males and females. According to generic point of view, *he* can be used to mean all persons, but recent studies suggest that *he* applies to males only (Stoddard 1991). Writer A uses two third person singular pronouns *he* and *she* in the first sentence referring to a person who commits a crime. However no more instances of *she* occur later in the text. It can be assumed that the writer uses *he* as applicable to both males and females.

Text A and Text B do not differ in the use of the third person singular pronouns. Preference is given to the masculine pronoun *he* and its inflectional forms *his* and *him*. As a rule, the third person singular pronouns are used to distinguish between male and female reference, whereas the plural *they* does not (2a).

Another language resource used in both texts for identifying participants and things is demonstrative reference. This is achieved by means of the demonstrative determiners and pronouns *this*, *those* and the definite article (6):

- (6) a. *It seems morally right that the criminal should pay for his action.* (ICLE-NO-AC-0008.1)
- b. *This only punishes society.* (ICLE-NO-AC-0008.1)
- c. *The prison system should by all means be flexible.* (ICLE-RU-MOS-0001.1)
- d. *Those committed a crime should ... be punished.* (ICLE-RU-MOS-0001.1)

The examples of pronouns and *the* in (6) are all used for presuming reference. Demonstrative pronouns and the definite article are often associated with each other. They all refer to something that is definite. In other words, their nodes are retrievable from the text. However, there can be also a potential for the ellipsis of the node, when a determiner indicates a relationship of what is given in the text with some idea or some object in the real world. A characteristic feature of determiners is a semantic relationship between these cohesive elements and their nodes.

The definite article serves as a noun determiner. It usually presents a referent as something already known. “The definite article cohesive element provides information to the reader about how the noun phrase to which it is attached can be integrated into the text being processed” (Stoddard 1991: 40). The presentation of objects or persons as definite by using the article *the* establishes mutual understanding between the writer and the reader. In (6a, 6c), the writers present a person and an institution by means of the definite article in its specifying function. It serves to single out a person (6a) and an institution (6c) from all the other persons or institutions. In (6a), the specification is carried out by means of reference to the preceding context (*a person who commits a crime – the criminal*). *The criminal* can be also treated as all who commit a crime. The use of the definite article qualifies as anaphoric in (6a). Backward reference is not established in (6c). The noun phrase *the prison system* is introduced in the initial sentence of Text B and is repeated later in the text. Though the institution is mentioned for the first time, no context is necessary for the writer to point it out and for the reader to understand what institution is meant. An attribute, *as an organ of punishment*, is introduced in the first sentence to mark specification. In other words, the writer speaks about the prison and its system in their general senses.

The demonstrative pronouns *this* and *those* are used in (6b, 6d) as grammatical ties binding sentences and providing cohesion between them. It should be noted that the general demonstrative meaning of *this* (*these*) is of relatively near reference in time or space, while *that* (*those*) implies more distant reference in time or space. Both of them are commonly used

anaphorically, pointing to things, persons or situations denoted in the preceding context, as in (6b, 6d). In (6b), *this* functions as a pronoun and refers to the preceding clause. It can be also treated as an anaphoric substitute for the whole clause or one of its elements – *prison*. In Text A, *this* is used in the final paragraph to relate two sentences and to introduce a different point as the argument unfolds. The writer introduces this demonstrative pronoun to expand on the consequences of the prison punishment for society. The prison system does not only help criminals to start a new life, but it also teaches them to be better criminals.

Both texts under analysis are abstract discourses or arguments. The role of demonstratives is to track what is said previously. In (6b), the meaning of the reference is to evaluate the writer's point expressed in the preceding sentence. The role of the demonstrative pronoun is different in (6d). *Those* is used to introduce plural participants. Interestingly, despite a common use of demonstrative pronouns as anaphoric items, *those* in (6d) does not point back to any participants mentioned before. Nor is a cataphoric link established between the demonstrative pronoun and another element. That is why there is relatively little signalling of personal pronouns tracking people in Text B. However, the meaning of *those* is not ambiguous. The demonstrative pronoun is used for presenting reference and the meaning is easily understood from the contextual environment. It can be assumed that the role of *those* is to substitute for a noun that is deliberately avoided by the writer. Instead, there is an obvious repetition of the same lexical items referring to people who commit a crime. Since lexical cohesion is not in the focus of this analysis, lexical items are not discussed.

In comparison with the definite article, the use of the demonstrative pronouns is not always an example of tracking participants through a discourse. It can be explained by the fact that some of the demonstrative pronouns are used to refer to previous sentences (3), rather than to participants (Text A), or they may not establish an anaphoric link at all (Text B).

Text A introduces one more example of the demonstrative pronoun used anaphorically to relate two sentences (7):

(7) *When a person commits a crime, he or she should be punished for it. That is at least how most people feel. (ICLE-NO-AC-0008.1)*

In (7), *that* is another example, similar to *this* in (6b), of how a demonstrative pronoun is used to refer to and evaluate the point expressed in the previous sentence by the writer. The intention here is to develop an argument expressing an opinion that is common to most people.

Text A and Text B differ in terms of the third type of referential cohesion that is used to compare items within a text in terms of identity. There is lack of examples of comparative reference in Text B, whereas instances can be found of the two sub-types of comparative reference in the T-units of Text A (8):

- (8) a. ... *once the person is free, he will most likely return to living the same lifestyle.*
 b. ... *the criminal is going to be able to live a more productive life once he is free.*
 (ICLE-NO-AC-0008.1)

In (8a), *the same* is used as general reference to express likeness in the form of identity. What is identified here is the way of life a criminal has before being sentenced to prison and after he or she has been released. The role of comparative reference is to link an item of language semantically to its environment. Particular reference is expressed in (8b) by means of an adjective in its comparative form - *more productive*. The time spent in prison and a prisoner's life when he is free are identified by comparing the qualities of these two periods of life.

A possible explanation for why Text A and Text B differ in terms of comparative reference is the way the writers unfold their arguments. Text B focuses mainly on a discussion of what type of punishment should be set for a particular crime, whereas Text A introduces more contrary opinions about the consequences of the prison punishment for the society and criminals.

Contrary arguments are clearly introduced by means of conjunctions in both texts. Conjunctive relations provide the context in which two sentences or T-units can be interpreted coherently. Several kinds of relations established by conjunctive items can be identified in Text A and Text B:

Text A (ICLE-NO-AC-0008.1)	
adversative: proper (<i>but</i>) and internal: time/ contrastive (<i>at the same time</i>)	a. <i><u>But</u> does it benefit society in the long run?</i> b. <i><u>But at the same time</u> many prisons today teach the prisoners some type of skill ...</i>
additive: simple (<i>and</i>) additive: complex (<i>in addition</i>)	c. <i>The prison often hardens the criminal, // <u>and</u> once the person is free, he will most likely return to living the same lifestyle.³⁹</i> d. <i><u>In addition</u> serving as a punishment for the criminal, prison also keeps them away from society, out of harm ways.</i>
concessive	e. <i><u>Although</u> the prison has served as a punishment for the criminal, // it has also wasted much of the taxpayer's money.</i>

³⁹ Slashes are used to separate T-units.

external: condition (<i>if</i>) adversative: contrastive (<i>on the other hand</i>)	f. <i>If on the one hand, the criminal goes through some sort of rehabilitation, it would profit both the criminal and the society, // ...</i> g. <i>Obviously, if the criminal is suffering from a poor mental state, // psychiatric help should be given.</i>
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Table 13 Conjunctive relations in Text A (ICLE-NO-AC-0008.1)

Text B (ICLE-RU-MOS-0001.1)	
adversative: proper (<i>but</i>) and corrective/ contrastive (<i>on the contrary</i>)	h. <i>But the main question is still being discussed.</i> i. <i>But I dare say that no one prison system recreates men in full. On the contrary, it consumes a man, remakes him and breaks his soul.</i> j. <i>By all means everyone has his own his own look at it, // but all opinions are amateur ...</i> k. <i>But those committing crimes twice or more must be isolated into prison for the long period.</i>
additive: simple	l. <i>And those killed their victims cruelly should be sentenced to death.</i>
temporal: conclusive	m. <i>At the top of all, I'd like to say: Give the devil his due.</i>

Table 14 Conjunctive relations in Text B (ICLE-RU-MOS-0001.1)

As can be observed in tables 13-14, conjunction involves those linguistic forms that connect sentences or T-units and establish various relations, such as adversative, additive or temporal. Conjunctions are used in both texts as signals of textual relations as well as indicators of the writers' orientation and attitudes towards what is being said.

One of the conjunctive forms, *and*, is used initially in Text B and between the T-units in Text A. *And* is used as a simple additive cohesive item since it unites two independent sentences or T-units introducing an idea that there is something more to be said. In Text A additional information is added to an independent clause to clarify the most likely consequence of the prison punishment. The role of *and* in text B is not restricted to addition. It signals a relation ranging from contrast to expansion. Therefore the role of *and* extends to orientation of the writer's attitudes about the types of punishment for different crimes that are committed. In both texts, the additive conjunction *and* primarily indicates that there is a supplementary comment to be made by the writers.

An emphatic form of additive conjunction, *in addition* (Text A), is used to emphasize some additional point that is to be connected to the previous sentences. *In addition* is used at the beginning of the sentence that draws the reader's attention to the writer's opinion expressed earlier in the text. The writer looks at prison from two different angles: it is a place

where people should be kept as a punishment for a crime, and it is a place for rehabilitating criminals.

The adversative sense is expressed in both texts by a number of conjunctions. The most frequently used is *but*. The adversative words occur either initially or between the T-units for the cohesive purpose of creating contrast between the two grammatical units and generally in the text. In (a and h, tables 13-14), *but* is introduced to mark the sentences that play a key role in organizing the two pieces of discourse. It can be assumed that the first occurrence of *but* in both argumentative essays returns to the topic that has been interrupted by the writers' remarks regarding imprisonment. While Text B focuses on the punishment, the writer of Text A develops the argument about helpful and possible negative effects of the prison system. At the same time both sentences are related to what is stated in the previous ones. In Text B, *but* (h) marks the beginning of a new paragraph and thus it establishes a link between the two parts of the text.

An example of *but* in (b, table 13) does not seem to establish an adversative relation between two successive sentences. On the contrary, the conjunction is used to emphasise that the time spent in prison may also be helpful, since prisoners may be offered a number of activities to develop various skills. In this respect *but* is used in its retrospective meaning⁴⁰. It projects backwards the meaning of *and*. *But* thus establishes a link between two paragraphs and makes it available to continue the writer's remarks regarding rehabilitation of prisoners.

A contrastive meaning is rather expressed here by another conjunction, *at the same time*, that is positioned after *but*. In its usual sense, *at the same time* is used to signal a temporal relation between clauses or sentences indicating that two events are simultaneous. The role of *at the same time* in (b, table 13) is to highlight contrast relations between the information expressed in two successive paragraphs, that prison is not only a place for rehabilitation but also a kind of school for acquiring different job skills.

Contrast is also expressed in Text A by means of the conjunction *on the other hand* (f, table 13). This conjunction is not used together with its correlative form *on the one hand*. It means that the relation between two sentences cannot be characterized as comparative. The function of *on the other hand* is to contrast two remarks. An opinion about a disadvantage of the prison system is contrasted with another remark regarding how the society can profit from the prison punishment. *On the other hand* links two successive paragraphs and thus contributes to cohesion in the text.

⁴⁰ For details, see section 2.5.2.4. and Halliday and Hasan (1976: 237).

On the other hand is positioned after *if* in (f, table 13). This item can be characterized as a conjunction for condition. Used together with *on the other hand*, *if* does not only emphasise contrast but it also establishes a condition-consequence link. In other words, the writer uses *if* to relate a possible outcome to a certain condition under which it may occur. Rehabilitation of prisoners during imprisonment may lead to the improvement of their lives. The condition-consequence link is established between the T-units where *if* realizes condition in the sense of probability or expectancy. The outcome will be more likely if prisoners get help. Another example of *if* used in Text A does not seem to establish a condition-consequence relation. The writer remarks later in the text what kind of treatment should be required if a prisoner suffers from mental illness (g, table 13). The use of *if* realizes condition in the first clause but it is not related to a particular result in the following clause. What the writer remarks here is what kind of action is to be performed under the specified condition.

An opposite opinion about the process of rehabilitation in prison is expressed by the writer in Text B. A corrective⁴¹ subtype of adversative conjunction, *on the contrary* (i, table 14), is used to establish the link between sentences by rejecting what has been said in favour of another opinion. The writer's remark is that the time spent in prison for a long time does not help a prisoner to start a better life. The corrective adversative relation is established in the sense of *not ... but*: prisons do not help to rehabilitate, but make the life of prisoners even worse.

A concessive conjunction *although* is used in (e, table 13) to signal a relation holding between two clauses of a different status, a main and a dependent one. *Although* indicates that the information given in the main clause is in fact true, despite the idea expressed in the dependent clause.

Interestingly, both texts lack the use of correlative forms of temporal conjunction used in the sequential sense. Conjunctions such as *firstly*, *secondly*, *finally* could be used to indicate a new stage of the writers' arguments and at the same time to sequence these arguments. There is one example of conjunction used as the sub-type of temporal conjunction (m, table 14). It is used in the meaning of conclusion and could be substituted by *finally* or *in conclusion*. This conclusive conjunction serves to indicate the end of what has been said.

Text A and Text B do not differ considerably in the use of the sub-types of adversative conjunction. As it is observed in the texts, conjunctive relations obtain either between sentences or between T-units, but they are more typical of sentences. But the fact remains that conjunctive relations are not just restricted to clauses in a sentence. They can be established

⁴¹ For details, see section 2.5.2.4. and Halliday and Hasan (1976: 254).

between groups of sentences. Most conjunctions are used in the texts to establish a contrastive link between sentences or paragraphs. A few examples of additive and temporal relations contribute to the development of the arguments or state the culmination. A number of additive conjunction occur within the same sentence. These instances are not taken into account since they are not considered to be cohesive.

The genre of the texts may give a possible explanation of the fact that substitution and ellipsis are not presented widely. The writers do not develop their arguments in the form of question-answer exchanges. So, substitution and ellipsis do not create any links between the sentences. It could be relevant to analyse these cohesive resources by comparing differences in writing versus spoken English⁴², or by examining the use of these grammatical features in different genres. One example of substitution in Text B refers to nominal substitution within the same clause, and that is not in the focus of the current analysis. It is observed that ellipsis often occurs in co-ordinated clauses in both texts. These examples have not been taken into consideration. A few examples can be picked out to give a short account of ellipsis in Text A (9a) and Text B (9b):

- (9) a. *What prison should not be though, // but (x) often is today, // is a school for the prisoners on how to be a better criminal.* (ICLE-NO-AC-0008.1)
- b. *What missions should the prison system fulfil? The answer is doubtless; (x) to recreate a person to return him to a normal life.* (ICLE-RU-MOS-0001.1)

In (9a), an adversative conjunction *but* introduces another clause and establishes a contrastive link in the middle of the sentence. The position of this extra clause emphasizes the reality of imprisonment. Nominal ellipsis is characterized here by the omission of the word *prison* that could be also substituted by the pronoun. It can be illustrated by the separation of the two clauses (10):

- (10) *What prison should not be though, is a school for the prisoners on how to be a better criminal. But it often is today.*

In (9b), a punctuation mark is used to indicate the writer's development of the argument. The colon plays a special role in connecting two independent clauses under one utterance. Ellipsis occurs here to avoid the repetition of the previous sentence. It can be assumed that ellipsis is

⁴² "Ellipsis is typically more fully exploited in speech than in writing: it reflects the negotiation and co-operation that is an explicit feature of face-to-face interaction" (Thompson 2004: 184). Substitution is defined by Thompson as a type of ellipsis.

used in the place of the whole clause omission (*The missions that the prison system should fulfil are ...*), or it can be characterized as nominal and verbal ellipsis (*The prison system (it) should ...*).

The other grammatical relations are established between T-units or sentences and reinforce cohesion in different parts of the texts. Both texts appear to be built around anaphoric reference that is realized by the occurrences of third person pronouns and personal possessives. They are used in the texts to mark the involvement of the participants. The most striking feature of both texts is that lexical repetition is used more explicitly than reference items such as pronouns. Pronominal reference is frequently used in Text A, whereas lexical repetition dominates in Text B. The use of personal and possessive pronouns reflects the constant focus on the same topic.

There is little cohesive use of demonstrative pronouns. They occur mainly to refer anaphorically to what has been mentioned in an earlier sentence. They play the role of substitutes for clauses or refer to the participants.

The texts studied display grammatical cohesive relations that occur between two adjacent sentences or in a sequence of sentences. In such a sequence each sentence is joined with the next one by one or more cohesive ties. At the same time there can be identified cohesive relations in sentences that are not adjacent but are separated by one or more intervening sentences. It should be noted that all cohesive elements, lexical and grammatical, have to be considered to make a full statement about cohesion in the texts.

Table 15 presents a summary account of the various kinds of grammatical cohesive elements identified in Text A and Text B. It is assumed that the significance of the figures will be appreciated better when the number of cohesive items is compared in both texts. The number of cohesive ties for each type is related to the number of sentences in the essays (23 in Text A versus 26 in Text B) by giving a normalised frequency per 100 sentences.

Cohesive resources		Text A	per 100 sentences	Text B	per 100 sentences
reference	personal	20	86.9	7	26.9
	demonstrative	2	8.6	3	11.5
	comparative	2	8.6	0	0
the definite article		13	56.5	6	23
conjunction	adversative	4	17.3	6	23
	additive	2	8.6	2	7.6
	temporal	0	0	1	3.8
	concessive	1	4.3	0	0
	condition	2	8.6	0	0
substitution		0	0	0	0
ellipsis		1	4.3	1	3.8

Table 15 Grammatical cohesion in Text A and Text B

V. Cohesion in argumentative essays of Norwegian learners

5.1 Introduction

A study of grammatical cohesive features in a representative set of essays of Norwegian learners constitutes the main body of this chapter⁴³. The examination of grammatical cohesion in the texts studied is limited to independent clauses and pairs of adjacent sentences. An attempt is made to show how various elements of grammatical cohesion function as links for several independent clauses and sentences, organizing them into one whole and establishing connectedness. Cohesive ties and their function as linking elements are described separately for each type of grammatical cohesion discussed in Chapter II, except for lexical cohesion and those sub-types of grammatical cohesion that are not observed in the texts.

It should be taken into consideration that the selected argumentative essays are not written by native speakers or professional writers. The art of argumentation is not an easy skill to acquire. The function of an argumentative essay is not only to express an opinion about some phenomenon. It is also the act of forming reasons, making inductions and drawing conclusions. Obviously, a number of mistakes can be observed in the structure of discourse. There are lexico-grammatical mistakes as well. Some mistakes can be explained by the fact that students use a direct translation from their native language into English. The examples are rendered here without any corrections in order to present a real picture of students' essays.

Chapter IV presented an examination of cohesion was presented in two complete texts in order to show what role grammatical elements play in the structure of written discourse. A different method of examining cohesion is used in the present chapter. The intention here is to discuss grammatical cohesion and to exemplify various types of cohesive ties in the selected pairs and groups of independent clauses or sentences. Any grammatical item that functions as a cohesive element for two or more independent clauses or adjacent sentences is considered a tie. The purpose is to demonstrate what kinds of relationship grammatical elements establish between clauses and sentences, and to explain how they contribute to cohesion.

⁴³ References for all the texts used for analysis in Chapter V can be found in Appendix II. Complete texts can be found in the International Corpus of Learner English (ICLE).

5.2 Reference

5.2.1 Personal reference

‘The world according to the speaker in the context of a speech exchange’ (Halliday 1994: 189) is represented by the grammatical categories of personal pronouns, possessive pronouns and determiners that are used to refer to speech roles (writer and/or reader) and other roles. “Different stages of an argument may require a different level of explicit personal engagement” (Coffin and Mayor 2004: 239). Pronominal reference is widely used by Norwegian learners in the essays chosen for analysis. Examples presented in this section give a short account of different types of reference functioning cohesively for independent clauses and adjacent sentences.

Examples (1-2) illustrate the use of personal and possessive pronouns *I* and *my* that Norwegian learners use as self-reference.

- (1) a. *I say that the world is still open for changes, ...* . (ICLE-NO-AC-0011.1)
b. *I don't think the politicians in the European countries dispute the fact that the whole east-west situation has changed.* (ICLE-NO-AC-0018.1)
c. *I believe that the threat of a nuclear disaster is the scariest thought.*
(ICLE-NO-AC-0012.1)

In (1), the first person singular personal *I* refers exophorically to the writer. Together with lexical items this pronoun performs several roles. In (1a, 1c), *I say...*, *I believe...* are introduced to pay attention to individual opinions. In (1b), *I don't think...* introduces a new paragraph to express disagreement of the writer over the need of military system in Europe. Writer reference is primarily used in Theme positions and it is tracked in different parts of the texts. Since the texts are non-narrative, there is no confusion about an exophoric *I*. It belongs to a writer and not to a node-participant. Its cohesive role is either to introduce a writer's point of view and to link it with further discussions or to establish relations between arguments at different stages in a text.

Writer reference is also presented by the inflected forms (*my*, *me*) of the existential personal pronoun *I* (2). The objective form *me* (2e) is used mainly as the complement of a

preposition. The possessive pronoun *my* indicates possession by a writer and combines with different nouns to introduce opinion or a statement of disagreement.

- (2) a. *It is my opinion that in Norwegian schools the focus is too much on grades and reading.* (ICLE-NO-AC-0010.1)
- b. *In my opinion, the place for dreams and imagination is hidden inside our hearts.* (ICLE-NO-AC-0014.1)
- c. *Why is this a question that often comes to my mind?* (ICLE-NO-AC-0015.1)
- d. *My disagreement with the topic is that there is always something new and exciting to discover and figure out.* (ICLE-NO-AC-0009.1)
- e. *For me that seems insane.* (ICLE-NO-AC-0016.1)

In (2c, 2d), *my* is used in the sentences that introduce some attention-shift points between adjacent sentences or chunks of a text. In (2c), writer reference occurs in a question and serves to link the initial sentence with the writer's further comments on the issue. In (2d), an attention-shift point is established between the parts of the texts to introduce an argument against.

In (2a, 2 b), *my* occurs in front of the same lexical item but at different stages, initially in the text (2a) and in the final paragraph (2b). Both examples introduce a possessive personal *my* that is identified exophorically from the situational context. It is not used for presuming reference since it does not function with reference to other persons in the texts. The writers use self-reference to emphasize their point of view but at the same time to attract the reader's attention to the prior and the upcoming discourse chunks.

Examples (3-4) illustrate the use of plural personal pronouns *you* and *we*. They function as interactional reference and may carry a degree of ambiguity in written texts (Coffin and Mayor 2004: 243).

- (3) a. *Do you think this is still true to today?* (ICLE-NO-AC-0012.1)
 - b. *If you ask yourself what the most important thing in life is, you will probably say: family.* (ICLE-NO-AC-0001.1)
 - c. *If you are able to relax and listen closely, you can feel how the music changes with the seasons.* (ICLE-NO-AC-0014.1)

In (3 a-c), the instances of *you* are used to mean an individual reader (3b, 3c) or to refer to readers as a set (3a). In most cases, there are some clues in the texts that help to interpret the meaning of the second person pronoun. In (3b), the reflexive pronoun *yourself* indicates identity between the person it denotes and the subject of the sentence. The category of number is illustrated by *-self* that refers to an individual person. In (3c), reader reference occurs in two independent clauses that are linked to adjacent sentences with anaphoric and anticipatory force. A link to the first occurrence of the possessive pronoun *your* in the imperative *Sit back in your chair...*, where *your* premodifies a noun in the singular form, gives a clue to the identity of *you* as an individual reader. In other cases it is less clear whether *you* indicates an individual identity or not. It is assumed that pronominal reference in (3a) is used to introduce reader reference in its collective meaning (*you all*).

Both *you* and *we* introduce writer-reader reference to affect a reader's perception of cohesion and to share a writer's point of view. Not every instance of *we* refers to the same persons. What is not observed in the essays is the use of *we* referring to a single writer. The use of *we* refers mainly to other roles exemplified in (4):

- (4) a. *I believe that we have become too dependent on the modern technology.*
(ICLE-NO-AC-0013.1)
- b. *We live in a world full of distracting noise,* (ICLE-NO-AC-0014.1)
- c. *We need more time to try different things to discover what we are good at*
(ICLE-NO-AC-0010.1)
- d. *When we as children are being told that crime does not pay, we are presented with an illusion.* (ICLE-NO-AC-0005.1)
- e. *Do we really need a world with no restrictions to feel good about ourselves?*
(ICLE-NO-AC-0006.1)

In (4), the first person plural pronoun *we* functions as collective reference. The meaning of *we* is interpreted from the situational context (4a-b, 4d-e) or in connection with anaphoric referent (4c). In (4a-b, 4d-e), it is clear that *we* refers to *we all (people)*. In (4c), *we* refers anaphorically to *we (pupils) in the ninth grade*. It is not an example of reader reference. *We* is used here (4c) to introduce other roles or participants into discourse in order to support the writer's point of view with an example from life experience. In (4e), *we* is introduced in an interrogative sentence. It is used together with its reflexive form *ourselves* as a prepositional

object. Their possible function is to affect the readers' perception of the topic under discussion.

More interesting findings concern the use of the third person personal pronouns and their inflected forms. These pronouns are usually used for presuming reference to track participants in written discourse. Example (5) illustrates the use of the singular form *it*. The role of this pronoun is sometimes ambiguous because of its multipurpose nature.

- (5) a. *I believe many also regret it when they get caught.* (ICLE-NO-AC-0004.1)
b. *It is limited to the countries with the right economy to be able to experiment and try out new paths ...* (ICLE-NO-AC-0011.1)
c. *... and even though people in Norway aren't satisfied with the prison system or the public health services, it is quite good compared to other countries.*
(ICLE-NO-AC-0016.1)

In (5a), *it* is used in a clausal substitution and refers to one of the preceding sentences. It stands for *committing crimes just for the fun of it*. In most cases *it* is used with anaphoric force to refer to non-persons and to establish links between a pair or a group of adjacent sentences. In (5b), *it* points back and refers to *the expansion of technology* in the preceding sentence. In (5c), a cohesive link is established between two independent clauses, where *it* refers anaphorically to *the prison system*.

The third person plural pronoun *they* and its inflected forms refer to more than one participant in written discourse. In terms of the specific number of persons or things, the meaning of *they* is sometimes ambiguous. However, example (6) illustrates some instances of *they* which are easily identified with their nodes. *They* serves to refer not only to persons but also to things and abstract notions.

- (6) a. *Take for example the third world. How much knowledge do they have about technical equipments?* (ICLE-NO-AC-0011.1)
b. *They learn how to adapt to other people and surroundings, and how to work in a team.* (ICLE-NO-AC-0018.1)
c. *This is because they know that the students are ready for the real world, because they have had some practice.* (ICLE-NO-AC-0007.1)
d. *They get all the information that they need from TV and Internet.* (ICLE-NO-AC-0009.1)

e. *Some of them didn't go to school at all ...* (ICLE-NO-AC-0015.1)

f. *They lived in caves to shelter themselves and made weapons which provided them with food.* (ICLE-NO-AC-0013.1)

In (6a, 6c), the nodes of *they* are easily recoverable from the preceding sentences. The pronoun's role is simply to avoid repetition of the lexical items *the Third World* (6a) and *the companies* (6c). The meaning of *they* refers not only to countries and places but also to people living in these countries and working for these companies. In the same anaphoric role *they* functions in (6a-b, 6d-f) but refers to various persons: *young male adults* (6b), *kids and adults* (6d), *grandparents and ancestors* (6e), *the most primitive human race* (6f). In (6f), the pronoun *they* is reinforced by *them* and *themselves*. It points backwards to the lexical item in the singular form. The choice of the plural form *they* is determined by the meaning of *the human race* as all people considered together as a group.

A peculiar feature of argumentative essays is that they do not introduce characters who interact with each other in terms of goals and actions. It may explain the fact that there is a lack of instances of the third person singular pronouns *he* and *she* (7):

(7) a. *Ideally, the criminal would come out of prison as a new and improved person. He will have had time to do some serious thinking about his life and his wrongdoings ...* (ICLE-NO-AC-0008.1)

b. *I have a friend who works as a prison guard. She told me that they had a psychiatrist working with them, ...* (ICLE-NO-AC-0016.1)

c. *To punish a child after he/she has done wrong is something many parents do ...* (ICLE-NO-AC-0016.1)

d. *A person, who has not got a job, cannot pay for his or her necessary needs.* (ICLE-NO-AC-0001.1)

In (7a-b), *he* and *she* appear anaphorically to substitute for the nouns *criminal* (7a) and *friend* (7b). The nodes are to be found in the preceding sentences, so *he* and *she* provide one cohesive tie between a pair of adjacent sentences. The pronoun *she* (7b) does not exhibit ambiguity. The third personal *he* (7a) may be interpreted in its generic sense, applying to both males and females, or as applying to male persons only. In (7c-d), the writers avoid ambiguity by using both *he* and *she* (7c) and their possessive forms *his* and *her* (7d) to refer to *a child*

(7c) and *a person* (7d). These pairs of third person singular pronouns indicate that the referential items are of both masculine and feminine genders.

5.2.2 Demonstrative reference

It is observed that Norwegian learners make extensive use of demonstrative reference that includes demonstratives *this, that, these, those* acting as pronouns or as determiners within the noun phrase, and place reference such as *here, there*. An overall impression is that a number of determiners dominate over a number of pronouns that stand in for a whole noun phrase or refer to the preceding clause. Examples (1-4) illustrate the use of some demonstrative reference items that occur at sentence boundaries, between independent clauses or range across several sentences and even paragraphs.

This and *that* (1), *these* and *those* (2) function in argumentative essays as an important organisational technique. They occur extensively with anaphoric function referring to something that has been said before. A form of reference, singular (1) or plural (2), is determined by a set of various lexical items that the demonstratives are often combined with.

In (1a-d), a singular form *this* acts as a determiner (*this group, this category, this jungle*). It appears with a noun and the whole noun phrase encapsulates the content of what has been said. For example, *this line of communication* (1c) points back to *the Internet*. The noun phrase which is headed by the noun *line* contains the determiner *this*. This determiner is a factor of grammatical cohesion and functions anaphorically between pairs of adjacent sentences. It at the same time reinforces lexical cohesion and is used to avoid repetition.

- (1) a. *International, this group gets high respect, because of their ability to work fast and effectively behind enemy lines.* (ICLE-NO-AC-0003.1)
- b. *Forgery of money and credit cards, embezzlement and transactions are some examples of crime, which go under this category.* (ICLE-NO-AC-0004.1)
- c. *The problem with this line of communication is the lack of human contact.* (ICLE-NO-BE-0022.1)
- d. *A very good example is the Amazon jungle. This jungle is the last rainforest, ...* (ICLE-NO-AC-0012.1)
- e. *By saying this people can look at you strangely.* (ICLE-NO-AC-0015.1)

f. *If you choose to study at Gløshaugen for 5 years you have to work for a company, for at least 12 weeks, to get some practical experience. This is a good thing!* (ICLE-NO-AC-0007.1)

g. *It is being said that with this development, with all the science technology and industrialisation, there is no longer a place for dreaming and imagination. I cannot agree to that.* (ICLE-NO-AC-0014.1)

In (1e-f), *this* acts as a demonstrative pronoun that appears in the middle of the sentence (1e) and at the sentence boundaries (1f). Both instances function in the same way. *This* refers clearly to the content of the preceding sentence and provides one cohesive tie that binds two adjacent sentences. *This* in (1f) also performs the grammatical function of the subject.

In (1g), the demonstrative pronoun *that* links the expression of disagreement to the whole preceding sentence. *That* refers to something said by another person. This example illustrates a common tendency to use *that* in stead of *this* to refer anaphorically to a preceding chunk of discourse when something is not said by a writer himself (Halliday and Hasan 1976: 60).

In comparison with the singular demonstrative, *these* and *those* refer to count plural nouns. No ambiguity arises while interpreting the plural demonstrative in (2). *These* and *those* function mainly as determiners (2b-c, 2e). They combine with plural lexical items and supply one cohesive tie that forces the reader to look back for an antecedent. For example, *these* determines *people* in (2c) and is easily assigned to its antecedent *criminals*.

(2) a. *These are all main headlines we often hear of in the news.*

(ICLE-NO-AC-0004.1)

b. *Crime such as stealing cars, breaking into other houses and murder are some of the crimes the police has to deal with almost daily. These criminal acts are, in many cases, easier to discover and solve, ...* (ICLE-NO-AC-0004.1)

c. *After having conversations with criminals while I was working in the mental institution, I saw very clearly that these people had a lot of resources.*

(ICLE-NO-AC-0016.1)

d. *In today's Norway we have long lines of people waiting for their trials. Many of those don't even get tried.* (ICLE-NO-AC-0005.1)

e. *Sometimes when I think about it I miss those times.* (ICLE-NO-AC-0009.1)

In (2a), *these* functions as the subject of the initial sentence of the text. It is used in the neighbourhood of a lexical item *headlines* that refers to the same antecedents. These referents are mentioned neither anaphorically nor cataphorically within the text. The original headlines are provided as a title of the text. It thus makes it possible to interpret *these* as an anaphoric item. In (2d), anaphoric reference is traced from the second sentence to the first. *Those* appears alone and thus functions as a demonstrative pronoun pointing back to *people*.

The demonstrative pronouns *this* and *these* have a general meaning of near reference in time or space, whereas the demonstrative meaning of *that* and *those* implies (more) distant reference. The latter is illustrated by *those times* in (2e). *Those* serves as a determiner for *times* within the noun phrase. It is related anaphorically to the third person singular pronoun *it* whose referent *childhood* is recoverable from the preceding chunk of discourse. The pronoun *those* does not refer to *childhood* as the period of time. *Those* is interpreted as *childhood moments* that the writer exemplifies in the text. This example shows that a clear antecedent of *those* is not found in the text but its meaning is recoverable from the lexical environment. *Those* points back to the writer's childhood years and therefore it implies distant reference.

Example (3) illustrates a few instances of place reference that is realized by the adverbs *here* and *there*. As reference items, *here* and *there* are closely parallel to *this* and *that* respectively (Halliday and Hasan 1976: 74).

- (3) a. *What if people had the same attitude when the computer was made. Internet would not have been here today.* (ICLE-NO-AC-0011.1)
b. *All of the examples I mentioned here are, in my opinion, positive changes.* (ICLE-NO-AC-0013.1)
c. *This rehabilitation should be just for criminals, and there should be plenty of psychiatrists working there.* (ICLE-NO-AC-0016.1)

In (3a-b), *here* is a demonstrative adverb. The meaning of *here* is not recoverable linguistically but exophorically. It refers to *the world of today* (3a) and *in the text* (3b). The meaning of *there* in (3c) is anaphoric and locative. The antecedent of *there* is retrievable from the preceding sentence. So, a clear endophoric place reference is established between two adjacent sentences where *there* refers to *in prison*.

Norwegian learners do not confuse the use of the definite article. The word *the* is always a grammatical item and is used for presuming definite meaning. Example (4)

illustrates some instances of the definite article. It expresses definiteness (and thereby identifiability) since the reader is assumed to know the specific entity being referred to.

- (4) a. *The most important issue to help prisoners with, ... is to help them understand that they cannot keep on disobeying the law.* (ICLE-NO-AC-0017.1)
- b. *... you put a CD into the CD-player; Vivaldi's "The four seasons". The music comes floating out of the loudspeakers. The music is all around you.* (ICLE-NO-AC-0014.1)
- c. *To quickly answer the questions stated, the only persons we can blame are ourselves.* (ICLE-NO-AC-0001.1)
- d. *The critique was invalid and based on the financial interests of the country mentioned.* (ICLE-NO-AC-0012.1)

In (4a), *the* establishes a cataphoric link between a pair of independent clauses. It is used within the nominal phrase and points forward to the whole clause that follows. This instance is not a resource of a central cohesive importance since *the* determines the noun *issue* that is used with a superlative form of an adjective. In contrast, the meaning of *the* is anaphoric in (4b-d). The definite article is used in its specifying function and implies that the writers present a thing or an abstract notion as known to the reader from the context. The presence of *the* is cohesive since it signals that the meaning is being repeated from earlier in the texts. In (4b-d), the specification is carried out by means of the preceding context. The noun with the definite article in (4d) refers to the word *USA* and *the questions* in (4c) points back to the statements just mentioned. In (4b), the anaphoric use of *the* relates *the music* to "*The four seasons*". The repeated use of *the* is reinforced by lexical repetition later in the text.

5.2.3 Comparative reference

The third type of cohesive reference is not a typical feature of the essays studied. Examples (1-3) illustrate some instances of comparative reference that implies the existence of two or more entities or ideas that are compared. Not only comparative forms of adjectives but also items like *the same*, *the other* contribute to cohesion.

- (1) a. *They'll think it's cool and even some kids try to do the same things that their heroes on TV.* (ICLE-NO-AC-0009.1)

b. *I guess most people have experienced somewhat the same thing.*
(ICLE-NO-AC-0005.1)

In (1a-b), *the same* functions anaphorically by bringing back into the texts the meaning of what has been said before. For example, *the same things* in (1a) refers back to *shooting, killing, using violence*. As a general sub-type of comparative reference, *the same* serves to compare items within the texts in terms of identity.

General comparative reference expresses comparison in terms of difference by means of *the other* (2):

(2) *This part of the university is called Gløshaugen, while the other part is called Dragvoll.* (ICLE-NO-AC-0007.1)

In (2), the writer introduces the names of two different parts of a university. A cohesive effect is established within the same sentence but between its independent clauses. The anaphoric character of *other* is determined by the fact that the head of the noun phrase of which *other* is part refers to the university mentioned in the preceding clause and earlier in the text.

Particular reference in (3) expresses comparability between two things in terms of quality (3a-b) and quantity (3c). It is achieved by means of comparative adjectives or adverbs.

(3) a. *I think Gløshaugen is a lot different than Dragvoll.* (ICLE-NO-AC-0007.1)

b. *This technology is again a result of the industrialisation that has been present for as long as our population has existed.* (ICLE-NO-AC-0013.1)

c. *All the materials we need are taken from nature without questioning the consequences of our actions. At least not as much as we should.*

(ICLE-NO-AC-0012.1)

In (3a), quality is expressed by an adjective *different* used in its comparative form. An adverb of comparison *as...as* submodifying an adverb *long* in (3b) is used to emphasize that developments in industry have existed for a very long time since the beginning of civilization. In (3c), comparability is expressed by an adverb of comparison *as...as* that submodifies a quantifier *much*.

5.3 Substitution and ellipsis

A short account of substitution and ellipsis is given in this section. These two types of grammatical cohesion are not widely displayed in the essays under analysis. It is assumed that substitution and ellipsis are a typical example of speech and narrative texts (Thompson 2004: 184). They often occur in a question-answer sequence when participants are involved in interaction. The use of substitution and ellipsis in co-ordinated clauses is not taken into account. These two cohesive types are analyzed as ties between sentences and independent clauses.

Several instances picked out for illustration show that substitution and ellipsis are example of phoric relations. The presence of both cohesive types signals a kind of anaphoric relation that holds pieces of a text together and avoids repetition.

(1) *Crime does not pay. It never does, ...* (ICLE-NO-BE-0020.1)

In (1), *does* illustrates verbal substitution. A grammatical relation in the wording is expressed by the verbal substitute *does*. It is used in place of the repetition of the lexical verb *pay*. The verbal substitute and the presupposed lexical item are found in two adjacent sentences that are linked anaphorically.

Positive confirmation is expressed by a verbal substitute in (2):

(2) *My disagreement with the topic is that there is always something new and exciting to discover and figure out. It has always been like that.*
(ICLE-NO-AC-0009.1)

In (2), *be like that* serves as a verbal substitute. It occurs in an incomplete sentence and provides verbal reference to the preceding clause. The primary meaning of the elliptical clause is anaphoric.

The use of nominal ellipsis is illustrated in examples (3-4):

(3) a. *Some learned to read and write at church, while others learned from friends and family.* (ICLE-NO-AC-0015.1)

b. *...and some have also attained jobs in top positions.* (ICLE-NO-BE-0021.1)

(4) *I believe many also regret it when they get caught.* (ICLE-NO-AC-0004.1)

In (3a-b), nominal ellipsis is expressed by a deictic proper element *some*, whereas in (4), it is expressed by a numerative element *many* that serves as an indefinite quantifier. *Some* and *many* are modifying elements that occur within a nominal group as heads. The presupposed items are restored anaphorically and they can be replaced by a full nominal group *some people* in (3a, 4) and *some women* in (3b).

Example (5) illustrates pairs of adjacent sentences that are linked anaphorically by means of verbal ellipsis that occurs within a verbal group.

(5) a. *But how could these small troops help Norway when we would face a much larger enemy? It wouldn't...* (ICLE-NO-AC-0003.1)

b. *We also got a great offer to buy a laptop for a real good price. They did not.* (ICLE-NO-AC-007.1)

In (5a-b), the omitted features of both verbal groups are recovered by presupposition. The elliptical forms *wouldn't* and *did not* are the only elements that are found in the verbal structure. They are characterized by finiteness, polarity (5a-b) and tense (5b). The type of ellipsis is lexical since the presupposed items are lexical verbs, *wouldn't help* in (5a) and *did not get* in (5b).

An external sub-type of ellipsis occurs when several elements are omitted in the structure of the clause. General ellipsis is illustrated by the presence of a WH-element *why* in (6a-b):

(6) a. *Without dreams and hopes how will the world move forward? ... So why stop?* (ICLE-NO-AC-0011.1)

b. *When the prisoners get out of jail they often commit new violations of the law. ... Why?* (ICLE-NO-AC-0016.1)

In (6a-b), *why* introduces elliptical clauses in which some information is missed. This information is carried over anaphorically from the presupposed clauses. *Why* serves as a question rejoinder that relates the questions (6a-b) to one of the preceding sentences in discourse. In (6a), the writer speaks about the importance of dreaming and formulates his opinion in the form of a rhetorical question. The answer is presupposed in the question itself

that *the world cannot move forward without dreams*. As response to this question the writer uses a question rejoinder that serves to introduce a supplementary attitude – *So why stop dreaming?* In (6b), a WH-element appears alone in the elliptical clause. This rejoinder is used as an indirect response to the question in order to evade a possible answer. The presence of this elliptical clause may be interpreted in terms of inviting the reader to express his or her point of view and answer the question.

Another type of rejoinder is used by a Norwegian learner in (7):

(7) *People get away with murder, robbery and shoplifting every day. Or do they?*
(ICLE-NO-BE-0020.1)

In (7), a question rejoinder *do they* and a cohesive element *or* occur in an elliptical question that follows a statement. This statement is the writer's remark about doing something wrong and not being not punished. The question that follows is elliptical and points back to the preceding sentence. It serves to express some degree of contradiction.

Example (8) illustrates the use of clausal ellipsis that occurs within the same sentence and establishes a cohesive link between two independent clauses.

(8) *I have worked at a mental institution for one year. While I was working there, we had several patients who were criminals, and many of them also had drugproblems. I know that this was not the right place for them, but neither was the prison.* (ICLE-NO-AC-0016.1)

In (8), clausal ellipsis is identified as propositional since both mood and polarity are expressed. The modal element of the clause is presented by the subject *the prison* and the finite element of the verbal group *was*. Polarity is expressed by the element *neither*. The omitted elements are recovered from the preceding clause – *Neither was the prison the right place for them*.

5.4 Conjunction

Conjunction involves various linguistic forms used by writers to contribute to the semantic organization of text (Hoey 1991: 5). Examples in this section serve as an illustrative list of the

set of devices referred to conjunctive cohesive relations which obtain between independent units and sentences of a text.

5.4.1 Additive conjunction

Examples (1-2) illustrate the means by which conjunction marks different stages in a text. Conjunctive elements *and*, *for example* operate in a succession of two sentences or independent units and establish additive relations.

- (1) a. *And by inventing this new stuff, to ease our own lives, we also create a need for something better.* (ICLE-NO-AC-0001.1)
- b. *And I believe that we will continue to encourage the use of creative thinking and that it will last through time,... And further on we will continue to use our imagination and dreams to reach for the future.* (ICLE-NO-AC-0013.1)
- c. *The human population grows too rapidly, and there are too many people that suffer.* (ICLE-NO-AC-0001.1)
- d. *We are also paying a lot of money to get our degree at the university today and this is certainly not a good thing...* (ICLE-NO-AC-0007.1)

In (1a-b), a simple additive conjunction *and* is used in the initial position, whereas in (1c-d) it links two units of the same sentence. *And* highlights addition of information and thus coheres one sentence to another. The function of *and* is cohesive since it does not occur sentence-internally in a co-ordinated clause to mark a structural relation. In (1b), *and* occurs in a sequence of sentences and establishes continuity of additive relations in a chunk of discourse.

Exemplificatory function is expressed by *for example* in (2):

- (2) a. *We all commit smaller crimes at some stage in our lives. For example when one is out driving, one is tempted to bend the speed limits a little.*
(ICLE-NO-AC-0005.1)
- b. *It is limited to the countries with the right economy to be able to experiment and try out new paths on the way to becoming an even more advanced society. Take for example the third world.* (ICLE-NO-AC-0011.1)

In (2), two adjacent sentences are connected to each other in terms of apposition. The conjunction serves to introduce an additional remark to give some examples of what has been said. The writer of (2a) uses *for example* to specify what type of crime all people can perform in their every day life. In (2b), *for example* serves to rework a general statement of the preceding sentence with a specific instance *the third world*.

5.4.2 Adversative conjunction

Examples (1-3) illustrate the use of conjunctive elements that establish adversative relations. The proper adversative conjunction *but* is frequently used by Norwegian learners.

- (1) a. *Young people today can sit for hours and hours doing their homework. ... But when they finally get to go out in the real world to do their job, they can't manage it...* (ICLE-NO-AC-0007.1)
- b. *But now, in this century we just couldn't have managed to live without it.* (ICLE-NO-AC-0009.1)
- c. *Yes we do have better communication, but that is through mechanical objects.* (ICLE-NO-AC-0013.1)

In (1a-c), *but* is a simple form of adversative conjunction. It occurs at sentence boundaries (1a-b) as well as between main clauses in a compound sentence (1c). In (1a), *but* serves to link two sentences that are not adjacent and stand apart. Its cohesive feature is realized in its function. *But* serves to contrast pieces of information. For example, the writer of (1b) uses *but* to contrast two periods of time, past and present days, saying that nowadays people cannot imagine their lives without technological inventions such as telephone or television.

An emphatic form of the adversative conjunction is expressed by means of the conjunctive adverb *however* (2):

- (2) a. *However, the trend in recent years is clear: the public wants more, and they want it more brutal.* (ICLE-NO-AC-0006.1)
- b. *However one week in ninth grade can hardly qualify.* (ICLE-NO-AC-0010.1)

In (2a-b), *however* occurs initially for the cohesive purpose of highlighting contrast in a text. The sense of both presupposing sentences is in contrast to what has been said. In (2a), it is

emphasized that despite too much violence on television, new films and programmes attract a lot of interest of the public. The writer of (2b) puts emphasis on the fact that one week of practical work does not give ninth graders much experience.

Another contrastive form of adversative conjunction is illustrated in (3):

(3) *Then on the other hand universities today are very expensive...*

(ICLE-NO-AC-0015.1)

In (3), *on the other hand* is an emphatic expression that serves to link a group of sentences by means of a contrastive adversative relation. This conjunction does not establish a clear link between a pair of sentences but it occurs to link parts of a text. It is used to formulate a different remark about studying at universities.

5.4.3 Causal conjunction

Examples (1-3) illustrate the use of some simple forms of a causal relation between sentence units, adjacent sentences and in a sequence of sentences.

(1) a. *She told me that they had a psychiatrist working with them, ... And many of them didn't even want to see him. So there were just a few of them who got treatment.*

(ICLE-NO-AC-0016.1)

b. *The reason for that is that the psychiatrists are experts on way of resolving a problem, and the criminal is an expert on him or her self. So here we need a perfect teamwork, otherwise the treatment will never give results.* (ICLE-NO-AC-0016.1)

In (1a-b), *so* is a simple form of a general causal conjunction. It is used initially to establish a specific relation of cause-consequence. In both (1a-b), the consequence clause introduced by *so* is linked to the cause clause expressed in the preceding sentence. In (1b), *so* occurs together with a respective type of causal conjunction expressed by *otherwise*. *Otherwise* is equivalent here to *under other circumstances*. This conjunction switches the polarity to negative and introduces another consequence that is related to the cause-consequence relation established earlier in the discourse.

Examples (2-3) have instances of conjunction used to establish conditional relations.

(2) *Unless we get some brilliant inventions or discoveries in the near future, the world as we, or they, know it will crumble...* (ICLE-NO-AC-0012.1)

In (2), a conditional relation between clauses is established by means of *unless*. It is used initially to introduce the condition under which a possible outcome will occur. A simple form *if* can be used to interpret the conditional meaning: *If we do not get some brilliant inventions or discoveries in the near future, the world as we, or they, know it will crumble...*

(3) *The criminals should feel bad about themselves, they should feel naked and vulnerable. Then the psychiatrists should help them to get back their selfesteem.* (ICLE-NO-AC-0016.1)

The writer of (3) introduces a remark about rehabilitation of criminals. *Then* functions to link to adjacent sentences. It is equivalent to *under these conditions or circumstances* and is a conditional type of causal conjunction. It can be interpreted as *If criminals feel bad about themselves, then the psychiatrists should help them to get back their selfesteem.*

5.4.4 Temporal conjunction

A few temporal expressions are used by Norwegian learners to highlight temporal conjunctive links. The correlative forms of temporal conjunction do not vary greatly (1):

- (1) a. *First of all, things change and the life they knew isn't the same any more after all those years.* (ICLE-NO-AC-0017.1)
b. *First of all it has to be stated that a number of visible alterations have taken place during the last 300 years.* (ICLE-NO-BE-0021.1)

In (1a-b), *first of all* is used to indicate the initial stage of a writers' arguments and at the same time to sequence it to the arguments that follow. The element *first* is cataphoric and thus refers to the information that follows.

Cohesive simultaneous conjunctions are illustrated by *while* and *at the same time* (2):

- (2) *It is strange that so many of the criminals blame parents, teachers and bad friends for their misery, while at the same time their siblings and fellow*

students have had no problems at all with the same parents, teachers and friends. (ICLE-NO-BE-0020.1)

In (2), *at the same time* is used to establish a link between the two units within one sentence. This conjunction does not seem to join two events happening at the same time. What is emphasized by a writer is that many people grow up in similar conditions but these conditions do not always determine people's lifestyle.

Interestingly, conclusive or summarizing temporal relations are not widely presented.

(3) a. *In the end I do not think it is worth taking risks.* (ICLE-NO-AC-0004.1)

b. *To summarize this paper it can be stated that feminists actually have done harm to the cause of women.* (ICLE-NO-BE-0021.1)

c. *As a conclusion I would say that crime does not pay...* (ICLE-NO-AC-0005.1)

In (3a-b), three instances of temporal conjunction exemplify conclusive (3a, 3c) and summarizing (3b) expressions that serve to mark the end of an argument or culmination of what has been said. All the expressions occur initially and relate the final remarks to the preceding chunks of discourse.

VI. Cohesion in argumentative essays of Russian learners

6.1 Introduction

For a better understanding of what types of grammatical cohesive relations hold between sentences and T-units of an argumentative essay observations made in the preceding chapter are compared with those linguistic forms that are used by Russian learners⁴⁴.

The second group of learners has been chosen because of the following reason. Both English and Norwegian are members of the Germanic family of languages. That is why it is assumed that the essays of Norwegian learners display cohesive features similar to those used by the native speakers. Russian is a member of the Slavic family of languages. Therefore the essays of Russian learners under analysis can be expected to display a different picture of cohesive linguistic forms. One of the hypotheses is that Russian learners may confuse the use of the definite article and some additive and adversative conjunctions (*and, but*). The former element does not exist as a noun determiner in Russian and the latter ones are not considered to be correctly used at sentence boundaries. To some extent, it is a challenging task for Russian learners to make appropriate choices of cohesive ties in a non-narrative text.

Chapter VI deals with the cohesiveness of pairs of adjacent sentences and independent clauses. A description of cohesive features may involve some repetition since such a description is given for the essays of Norwegian learners in chapter V.

6.2 Reference

Isolated sentences presented in this section exemplify the use of the three types of reference. Grammatical elements are interpreted when sentences are placed in their context. In discourse terms cohesive relations are identified when pieces of language are placed together (Hoey 1983: 18). The essays under analysis contain various clues that help the reader to perceive accurately what type of relation links sentences or independent clauses.

⁴⁴ References for all the texts used for analysis in Chapter VI can be found in Appendix III. Complete texts can be found in the International Corpus of Learner English (ICLE).

6.2.1 Personal reference

Personal reference is realized by the category of person and its function in the speech situation. Personal pronouns occur in different forms. It depends on the role of a pronoun in a particular sentence. The fact that these pronouns belong to the category of personal pronouns indicates their reference to people. Some instances are also used to refer to inanimate objects or abstract ideas.

Examples (1-4) illustrate the use of personals that are chosen by Russian learners to mark reader-writer reference and reference to the writer plus others. On the one hand writer-reader reference is not fully cohesive since the first person pronouns refer to persons exophorically. On the other hand these pronouns are used in sentences or across sentence boundaries to express an opinion or a thought, and the reader can make complete sense of a pronoun or the whole sentence when this sentence is related to other parts of discourse. Besides, repeated use may contribute to patterns of cohesion.

It is clear from the findings that writer reference plays an important role in developing an argument. Personal voice dominates over collective voice (1-2):

- (1) a. *I know some people who were in the jail.* (ICLE-RU-MOS-0007.1)
- b. *Also I guess that no prison system can save a society from crimes since a prison system does not eliminate causes of crime.* (ICLE-RU-MOS-0011.1)
- c. *I'm sure that prisons should be different...* (ICLE-RU-MOS-0014.1)
- d. *I quite agree with that all armies should consist entirely of professional soldiers...* (ICLE-RU-MOS-0016.1)
- e. *...and I think it's illustration of that people can dream and imagine.* (ICLE-RU-MOS-0018.1)

In (1a-e), the first person existential *I* is primarily used in Theme positions at sentence boundaries (1a-d) and between the clauses (1e). It precedes various verb forms and together they express a particular idea or opinion (*I guess...*, *I think...*), a fact (*I know...*), an agreement (*I quite agree...*) or the state of being certain (*I'm sure...*). The pronoun *I* is used as a writer identification resource. By this means the reader can keep track of a writer's arguments used to support a statement that is discussed or to express disagreement.

Individual opinions are also expressed by means of the first person possessive pronoun *my* that combines mainly with the noun *opinion* (2):

- (2) a. *So in my opinion university degrees are rather necessary for everyone who wants to achieve a certain success in this world.* (ICLE-RU-MOS-0008.1)
- b. *In my opinion, compulsory military service has exhausted itself...*
(ICLE-RU-MOS-0010.1)

In (2a-b), *my* is used for presuming writer reference. When this pronoun occurs in texts it signals that there is a switch in discussion from stating facts and exemplifying to giving opinions about a particular issue. It is clear from the context of the essays that Russian learners do not introduce any intratextual narrators. It is also determined by the essays' non-narrative structure. The meaning of the identifiers of *my* and *I* is made clear exophorically.

Surprisingly, Russian learners choose various words expressing agreement or disagreement (*I agree...*, *I disagree...*), a particular opinion (*In my opinion...*, *in my point of view...*, *I guess...*) or general statements (*In general...*) to mark the end of an argument. Some instances are exemplified in (2-3):

- (2) *So in my opinion university degrees are rather necessary for everyone who wants to achieve a certain success in this world.* (ICLE-RU-MOS-0008.1)
- (3) *And I want to end the little essay by the word of Napoleon "Imagination rules the world"...* (ICLE-RU-MOS-0018.1)

Example (3) illustrates the use of the first person plural pronoun *we*. It is used as exophoric reference to add emphasis (3a-c) and for presuming reference to force the reader to look backwards (3d).

- (3) a. *In the first place we should protect honest citizens,...* (ICLE-RU-MOS-0014.1)
- b. *We know a lot about such cases.* (ICLE-RU-MOS-0014.1)
- c. *Technology dominates our lives and minds. Some of us start thinking like machines.* (ICLE-RU-MOS-0023.1)
- d. *Not knowing where we would serve and what we would do we had to study various subjects. That's why our range of knowledge was wide.*
(ICLE-RU-MOS-0020.1)

The writer of (3a-b) does not give any prior specification of those persons who are to be included in the pronoun *we*. *We* does not seem to signal the speech role of writer plus reader.

In (3a), *we* is interpreted as reference to people in general. The writer draws attention to the fact that imprisonment does not often change criminals and people know about that. *We* can be also interpreted as an attempt to invite the reader to accept the writer's disagreement about the importance of the prison system. In (3b), the meaning of *we* is more ambiguous. Its interpretation depends on the reader's perception of the topic under discussion. *We* may refer to people as well as to those who are involved in the prison service. In (3c), the inflected forms of *we* (*our, us*) are introduced to refer to people as *we all*. This type of reference is used to emphasize that the writer's voice does not occur as an authority. The forms of *we* serve to signal the collective view. In (3d), the referents of *we* and its possessive form *our* are recoverable from the text. They are used for presuming reference to other roles and let the writer to include self and others (*students*), but notably not the reader.

Interestingly, Russian learners avoid generally the use of the second person pronoun and its inflected forms to refer to individual readers or readers as a set. This is in contrast to the Norwegian learners (cf. section V. 5.2.1) A possible explanation is that *you* is a typical feature of casual conversations, whereas in written texts it can be understood in more than one way.

(4) *It's awful to spend your best years in prison.* (ICLE-RU-MOS-0021.1)

The writer of (4) expresses a remark about young criminals who receive a prison punishment. According to the nature of its meaning the second person possessive pronoun *your* functions with reference to persons and as a linguistic resource it establishes reader reference. In (4), *your* does not seem to refer to any individual reader. It is used in its generic meaning to express reference to people in general, or rather to some unspecified set of individuals.

Examples (5-7) illustrate the use of the third person personal pronouns and their inflected forms. These instances do not occur frequently to track participants. A general impression is that Russian learners use the pronoun *he* in its generic sense to refer to all persons. In some texts the pronoun *she* points back with anaphorical force.

(5) a. *As a rule, a professional soldier is older than a recruiter and he has a certain preparation.* (ICLE-RU-MOS-0010.1)

b. *If a man knows that penalty is inevitable, he never commits a crime.*
(ICLE-RU-MOS-0001.2)

c. *She was already seriously in debt.* (ICLE-RU-MOS-0001.2)

- d. *I am sure any enterprise will take him willingly.* (ICLE-RU-MOS-0002.1)
- e. *Thus if a capable boy or girl wants to become an authority in the chosen subject he or she should try to enter a certain university.* (ICLE-RU-MOS-0020.1)
- f. *Every prisoner has his or her own cell, which looks like a usual comfortable room.* (ICLE-RU-MOS-0002.2)

In (5a-b), *he* forces the reader to look back for its interpretation. The pronoun is used between the parts of one sentence to refer to male persons, *a soldier* (5a) and *a man* (5b). In (5d), the objective case form *him* establishes an anaphoric link between two adjacent sentences referring to *a Master of Law*. This pronoun can be interpreted as applying to males and females. So its generic sense can be questioned. The writers of (5e-f) use the third person singular pronoun to refer to both male and female. In (5e), there is a clear anaphoric link between *he* - *she* and the lexical items *boy* and *girl*, whereas in (5f), the possessive forms *his* and *her* refer to the same noun *prisoner*. These two gender forms indicate that the presupposed item does not apply only to men. In (5c), the writer exemplifies a situation about a woman put on probation. A new participant is introduced by means of the lexical item *woman*. This participant is tracked by the third person singular *she* that is used for presuming reference.

The third person singular pronoun *it* functions mainly as reference to non-persons (6):

- (6) a. *It is a very expensive type of Armed forces,...* (ICLE-RU-MOS-0004.1)
- b. *It leads to dying out a lot of species of animals, fishes, plants.*
(ICLE-RU-MOS-0017.1)
- c. *And it threatens our children's lives.* (ICLE-RU-MOS-0022.1)
- d. *Some people think it is just an awful waste of time.* (ICLE-RU-MOS-0019.1)

In (6a-c), *it* establishes an anaphoric link between adjacent sentences, whereas the node of *it* in (6d) is not found earlier in the text. It is identified by a cataphoric link to the following sentence. All the instances track non-persons: *professional army* (6a), *environment pollution* (6b), *ecological situation* (6c), *studying theoretical subjects* (6d) (cf. section V. 5.2.1(5)).

A more preferable form to track persons and things is the third person plural *they* (7):

- (7) a. *It is possible only when they have armies which not only consist of professional soldiers, but when they also have drafted personnel.* (ICLE-RU-MOS-0004.1)

- b. *They need a special individual approach.* (ICLE-RU-MOS-0014.1)
- c. *So they have to spend years of suffering in prison.* (ICLE-RU-MOS-0021.1)
- d. *Their stories about prisoner system are terrible.* (ICLE-RU-MOS-0007.1)
- e. *Without them it would be impossible to work.* (ICLE-RU-MOS-0008.1)
- f. *They try to make progress to be promoted to higher ranks or positions. ... Their social and living conditions are perfect. They don't have to worry about earning their living as they have everything necessary.* (ICLE-RU-MOS-0024.1)

In (7a), *they* occurs twice in one sentence but two independent clauses. These instances do not have the same node. The first *they* is interpreted in relation to the preceding sentence and refers to *most countries*. The second *they* points back to *armies* in the preceding clause. Both instances are chosen to avoid repetition of lexical items. In contrast to the use of the inflected forms in (7d-e), *they* in (7b-c) is not recoverable from the preceding sentences but its antecedents are easily identified from the texts. In (7b-c), *they* refers to people, *teenagers* (7b) and *criminals* (7c). A different picture is observed in (7d-e). The inflected forms of *they* are used to refer to persons and things as well. The possessive form *their* (7d) combines with the plural noun *stories* and refers to *people*. It indicates possession by persons. The objective form *them* (7e) points back to *university degrees*. In (7f), *they* and its possessive form occur in a sequence of sentences that illustrate a pattern of anaphoric relations. The antecedent of *they* and *their* is *professional soldiers*. This lexical item occurs earlier in the text and thus makes it possible to presume personal reference.

6.2.2 Demonstrative reference

Examples (1-3) illustrate the use of demonstrative determiners and the definite article. An overall impression is that demonstratives *this*, *that*, *these*, *those* are more often used by Russian learners as determiners within the noun phrase. The singular forms *this* and *that*, as well as their plural equivalents (*these/those*) function primarily with their anaphoric force.

- (1) a. *In this case the term of service should be as long as it is necessary for good-training of this personnel.* (ICLE-RU-MOS-0004.1)
- b. *I've got some friends of mine who served in this system.* (ICLE-RU-MOS-0007.1)
- c. *This space is getting smaller and smaller.* (ICLE-RU-MOS-0023.1)
- d. *This difference seems to deny the very idea of equality.* (ICLE-RU-MOS-0003.2)

e. Only on that condition a student or a post-graduate student can become an authority on a particular subject. (ICLE-RU-MOS-0019.1)

In (1a-e), both *this* and *that* are used in a clear pattern of grammatical cohesive relations between two adjacent sentences. They combine with different lexical items and force the reader to look back. Demonstrative reference in (1a-d) shows that grammatical items are dependent on lexical cohesion between sentences. The lexical items determined by *this* make it clear what the exact referents of the demonstrative determiner are. For example, *this prison* (1b) refers to *the prison system*. In (1c-e), the antecedents of *this* and *that* are not single words but pieces of information. In (1e), *that condition* refers back to the immediately preceding sentence and is used to emphasize under which circumstances a student can become an authority on a particular subject.

Examples (2-3) illustrate the use of the plural forms *these* and *those*. They serve to determine lexical items; namely the plural nouns in the plural form *armies* (2a) and *disciplines* (2b). In a close relation with the lexical elements *these* functions anaphorically and can be replaced by the adjectives *professional* (2a) and *theoretical* (2b).

- (2) a. These armies have not well-trained reserves. (ICLE-RU-MOS-0004.1)
b. These disciplines are seemed to be never used in practical life.
(ICLE-RU-MOS-0019.1)

In (3), the meaning of *those* is interpreted by relating the pronoun to the previous sentence. *Those* determines *days of studying* and refers to the years when the writer studied at *High Air Force Engineering College*.

- (3) Trying to recall those days of studying now I am inclined to think that the system of higher education was great. (ICLE-RU-MOS-0020.1)

In (4a-f), it is not the definite article itself but the noun to which the article is attached that shows a cohesive relation between the sentence in which the determiner occurs and the referential information. The uses of *the* illustrate three types of relationships (4):

- (4) a. At the present time as far as I know most of prisons are overcrowded, ...
(ICLE-RU-MOS-0007.1)

- b. *The problem is money.* (ICLE-RU-MOS-0010.1)
- c. *The system is urgent for society so evil must be punished.*
(ICLE-RU-MOS-0014.1)
- d. *Many countries faced the problem.* (ICLE-RU-MOS-0014.1)
- e. *The factors pose a grave threat to nature and humanity.* (ICLE-RU-MOS-0017.1)
- f. *The topic of the composition is very difficult to cover in a short essay.*
(ICLE-RU-MOS-0020.1)

In (4a), *the* is used exophorically. Definiteness is not indicated by the definite article alone. It is attached to the noun phrase *present time* that refers to nowadays and can be interpreted in contrast with the past. The writer evaluates what is happening in prisons these days. It is not necessary for the reader to find an appropriate node. The noun phrase refers exophorically to nowadays and it is clearly identified as definite.

In (4b-e), the use of *the* is anaphoric. The antecedents are easily recoverable from the preceding context. For example, criminality of young people is the problem that many countries have faced. In (4f), *the* occurs initially in the phrase *the topic of the composition* and is identified cataphorically within the text. The writer speaks about the present system of high education.

6.2.3 Comparative reference

A few examples illustrate the use of comparative reference. It implies comparison of two things. In the essays of Russian learners this type of reference is primarily expressed through the elements of general comparison (1-3). The words such as *same*, *different*, *such* “have a cohesive function when the basis for the comparison occurs in the preceding text” (Hasselgård et al. 2007: 406).

- (1) *In the same way they study military specialities.* (ICLE-RU-MOS-0003.1)

In (1), comparative reference is used anaphorically. The presence of *same* together with the definite article signals that a similar meaning is recoverable from earlier in the text. The writer expresses unwillingness of young men to join the army and to study military disciplines.

- (2) *There's no doubt such criminals ought to be isolated from the society.*

(ICLE-RU-MOS-0021.1)

In (2), the pronoun *such* points to a certain quality in persons. According to its nature *such* refers to something already mentioned. It is used in its anaphoric function and points back to *people who commit crimes more than once*. Both *same* and *such* serve to compare two items in terms of identity and are used to avoid repetition. *The same* (1) combines with the noun *way* and expresses identity of young men's attitude to two different processes, whereas *such* combines with the lexical item *criminals* to point to identity of the same group of people.

Difference is expressed by the item *other* in (3a-b). The writer of (3a) speaks about an importance of theory and practice at universities. The element *other* combines with an inanimate noun *thing*. The word *thing* "is in a sense intermediate between the substitute one and the class of general noun" (Halliday and Hasan 1976: 103). It can be confusing for the reader to interpret *other thing* since there is no clear presupposition of an earlier occurrence of a similar noun. *Other thing* can be interpreted as *something else* or *in a different way*. It can force the reader to look both back and forward since the writer's attempt is to contrast two remarks. The first one is about students' attitude to theoretical disciplines at universities and the second one is about the true situation and problems that students face in working practices. This idea is further emphasized in a chain of comparative reference. Particular comparison is expressed by a comparative adjective *easier*. A cohesive nature of this item is realized in its contribution to the development of an idea that theory is inextricably linked with the practice.

(3) a. *Naturally real life is other thing. Theory is always checked by practice. But if a student worked hard at his institutes it will be easier to overcome difficulties at an enterprise or a factory.* (ICLE-RU-MOS-0008.1)

b. *There have been a lot of other factors, which influence ecology very badly.*
(ICLE-RU-MOS-0017.1)

The writer of (3b) discusses environmental problems. A cohesive effect is not established between adjacent sentences but in a sequence of sentences. Moreover, *other* performs a double role. It is used as part of the noun phrase *other factors*. The head of this noun phrase refers cataphorically to different ecological problems that are discussed later in the text. At the same time the phrase *other factors* points back to what has been mentioned earlier – *urbanization* and a large number of *plants and factories*.

6.3 Substitution and ellipsis

It is assumed that various lexical links dominate the cohesive organization in argumentative essays under analysis. Russian learners do not seem to favour cohesive patterns of substitution and ellipsis. These types of grammatical cohesion are used to provide links to what has been replaced (substitution) or omitted (ellipsis). A possible reason for the failure to see cohesive ties established by substitution and ellipsis is that cohesive relations are analysed between sentences or independent clauses. Example (1) illustrates the use of substitution within the same clause. Such instances were not taken into account in the present analysis.

(1) a. *A deliberate crime should be punished tougher than an unintentional one.*
(ICLE-RU-MOS-0001.1)

b. *In comparison with compulsory military service professional one is much better.*
(ICLE-RU-MOS-0003.1)

In both (1a) and (1b) the substitute *one* is recoverable from the sentence it occurs in. *One* establishes a relation in the wording that is determined by the structure of the clause. An anaphoric reference to *crime* (1a) and *military service* (1b) is not cohesive in terms of discourse.

Example (2) illustrates the use of the substitute *one* within a complex structure in a repetition chain. A colon is used to separate the writer's remark about the types of prisons and a set of examples introduced by the additive conjunction *for example*. Punctuation is not considered here as an important factor in terms of cohesion. The presupposed lexical item *prisons* occurs in the same sentence, so there is no relation to preceding discourse⁴⁵.

(2) *I'm sure that prisons should be different: for example, prisons for hardened criminals..., ones for criminals having committed grave crimes, ones for criminals having committed light crimes, ones for teenagers, women and so on.*
(ICLE-RU-MOS-0014.1)

In (3), *one* occurs in an additional clause in a complex structure. Double slashes are introduced to separate several clauses. The final clause adds some information to what has been said and it can also be characterized by the presence of ellipsis of subject and finite (x,

⁴⁵ This use of *one* is not entirely correct – *ones* is more appropriately used with a preceding adjective, as in (1).

this happens twice in the same example) in coordination (...and they have to improve it...). The substitute one is easily recoverable. It points backwards to *the present system of education* (3):

(3) *Therefore if the policy-makers and MPs want their country to be or become prosperous and survive in this severe world // they have to scrutinize thoroughly the present system of education // and (x) to improve it // or (x) to develop a new one.* (ICLE-RU-MOS-0020.1)

A clear example of substitution is presented in (4). The nominal substitute *one* replaces an expression of the preceding text. It is interpreted in relation to what has been said before. *One* relates two independent clauses and refers to *the question of death penalty* (4):

(4) *In my composition I don't touch upon the question of death penalty, because it is a complicated one.* (ICLE-RU-MOS-0001.2)

Russian learners use nominal ellipsis in a close relation with personal reference (5). A deictic proper element *some* (5a-d) combines with inflected forms of personal pronouns to refer to different groups of people. Post-deictic elements *others* and *same* (5d-e) occur alone either initially in the sentence (5d) or in its final position (5e). In (5d), the plural form of *others* is interpreted in relation to one of the preceding sentences. The presupposed elliptical expression is *other people who are reluctant to serve in the army*. *Same* (5e) establishes a cohesive relation in the wording between two adjacent sentences and avoids repetition. The presupposed item is *methods of punishment*.

(5) a. *Some of them leave the Army at once...* (ICLE-RU-MOS-0010.1)

b. *They develop criminal tendencies, some of them commit crimes more than once.* (ICLE-RU-MOS-0021.1)

c. *Some of us start thinking like machines.* (ICLE-RU-MOS-0023.1)

d. *Some of them try to avoid draft. Others do nothing serving in the army.* (ICLE-RU-MOS-0024.1)

e. *And in principle they remain the same.* (ICLE-RU-MOS-0002.2)

Example (6) illustrates the use of numerative elements that belong to the subcategory of indefinite quantifiers in nominal ellipsis. Like a deictic proper *some* (5), *many* (6a) and *most* (6b) combine with the inflected elements of personal reference. Together they point anaphorically to *many animals, birds and fish* in (6a) and to *most of people* in (6b).

(6) a. *Unfortunately it's too late to restore many of them.* (ICLE-RU-MOS-0022.1)

b. *Most of us are reasonable and predictable.* (ICLE-RU-MOS-0023.1)

Another subcategory of numerative elements is illustrated in (7). Cardinal numerals occur elliptically in a chain and presuppose a plural noun *students* that is recoverable from preceding discourse.

(7) *It had a high quality of teaching faculty and research facilities and it accepted only two or three out of every ten who applied.* (ICLE-RU-MOS-0020.1)

6.4 Conjunction

6.4.1 Additive conjunction

The main cohesive function of conjunctions is to establish links between sentences. “Conjunction refers broadly to the combining of any two textual elements into a potentially coherent complex semantic unit” (Thompson 2004:189).

Russian learners use extensively two sub-types of additive conjunction (*and*, *besides*) to add more information to what has been said (1-2):

(1) a. *And, by the way, every army consisting entirely of professional soldiers required a lot of money.* (ICLE-RU-MOS-0004.1)

b. *And it threatens our children's lives.* (ICLE-RU-MOS-0022.1)

c. *I quite agree with that all armies should consist entirely of professional soldiers and there is no value in compulsory military service.* (ICLE-RU-MOS-0016.1)

In (1a-c), a simple form of additive conjunction *and* is used to connect a succession of two (1b) or more (1a) sentences, as well as to link two independent clauses (1c). The basic meaning of *and* is that of addition. In (1a), additional information is also introduced by means

of the complex item *by the way*, which combines the sense of additive with that of afterthought (Halliday and Hasan 1976: 249). *By the way* follows sentence-initial *and* that occurs initially in the first sentence of the final paragraph. Both items refer to preceding discourse and thus function cohesively.

In (1b), *and* is used in initial position to connect one sentence to another. It precedes a referential personal pronoun *it* that points backwards to *the ecological situation*. *And* serves to add information that specifies why the present ecological situation is dangerous. In (1c), there is no relation to preceding discourse, since this is the first sentence in the text. Instead, *and* creates a clear logical connection within the same (compound) sentence. It links two independent clauses that introduce the writer's point of view about compulsory military service.

Example (2) illustrates the use of the more emphatic form *besides*. This conjunction occurs in an internal sense to emphasize that some additional point is connected to the previous one (cf. Martin and Rose 2007: 133). For example, the writer of (2a) adds an idea of special conditions in prisons for those who have committed crimes several times.

(2) a. *Besides they should be kept in special conditions.* (ICLE-RU-MOS-0014.1)

b. *Besides they haven't any profession and when they release they can't find a job.*
(ICLE-RU-MOS-0014.1)

c. *Besides the industry of entertainments is so developed now that instead of dreaming and imagination one spends his or her spare time sometimes only watching TV set.* (ICLE-RU-MOS-0018.1)

In (2a-c), *besides* occurs clause-initially at sentence boundaries. In (2a-b), it precedes the personal pronoun *they* that reinforces an anaphoric relation to the previous sentence. In (2b), *and* and *besides* occur within the same sentence and establish a chain of additive relations. *Besides* introduces a clause that adds information to preceding discourse, whereas *and* links two independent clauses.

In (3-4), the additive conjunctions *for example* and *for instance* are used in their exemplificatory function to rework a general statement with a specific instance (Martin and Rose 2007: 135).

(3) *For example, a Master of Law is smart in laws.* (ICLE-RU-MOS-0002.1)

6.4.2 Adversative conjunction

A simple form of adversative conjunction *but* is predominantly used initially in (1a-e) and it sometimes links two independent clauses (1f). *But* provides one cohesive tie between the sentences and clauses. Not all the instances of *but* seem to establish clear contrastive relations. In (1a-c), *but* occurs to emphasize what has been said and makes it possible to continue a writer's remark. For example in (1c), *but* serves to mark an additional thought. In (1e), there is a shift of emphasis from different types of punishment to how well they protect from criminality.

- (1) a. *But 18 months are hardly enough for it.* (ICLE-RU-MOS-0003.1)
- b. *People should join the army willingly. But to provide it, social and financial support of service must be sufficient.* (ICLE-RU-MOS-0003.1)
- c. *But I consider that the prison system has to be changed.* (ICLE-RU-MOS-0011.1)
- d. *But humanity begins to recognize the danger and undertake a number of measures to improve the situation.* (ICLE-RU-MOS-0017.1)
- e. *But these methods failed to create a protection from criminality.*
(ICLE-RU-MOS-0001.2)
- f. *May be it is cruel to deprive somebody of freedom but unfortunately it's necessary nowadays because of very high criminality level in many countries.*
(ICLE-RU-MOS-0014.1)

In (1d), *but* is introduced initially in the second paragraph to make a shift from a discussion of environmental problems to how people try to protect the planet. A contrastive link is established between the parts of the text to contrast problems and actions. The same type of relationship is clearly identified in (1f). The writer of (1f) expresses an opinion about imprisonment. *But* serves to signal the contrast between the independent clauses. A contrastive link is established in a pattern *it is cruel but it's necessary*.

Examples (2-3) illustrate the use of other contrastive conjunctions. *At the same time* (2) and *on the other hand* (3) are used in their emphatic sense to mean something as against to what has been said (Halliday and Hasan 1976: 252). These conjunctive elements can be substituted for *however* (2-3):

(2) a. *At the same time* military service is good life school for future.

(ICLE-RU-MOS-0003.1)

b. *At the same time* many countries have armies which consist only of drafted personnel. (ICLE-RU-MOS-0004.1)

In (2a), *at the same time* establishes a cohesive link between the sentences that are not adjacent. This conjunction introduces a general statement about military service and relates a remark about advantages to some disadvantages mentioned earlier in the text. In (2b), the conjunction is used in the same sense. Its meaning presupposes the presence of another component in the text. *At the same time* serves to bind two adjacent sentences and to mark the difference between them.

Both *on the other hand* and *however* (3-4) occur initially and are used to establish a contrastive link. In (3), a cohesive tie is immediate since *on the other hand* joins two contiguous sentences. The sense of both presupposing sentences is in contrast to what has been said.

(3) a. *On the other hand*, they have a well-trained personell which very well knows its weapons and equipment. (ICLE-RU-MOS-0004.1)

b. *On the other hand*, it's horrible that prisoners are deprived of freedom.

(ICLE-RU-MOS-0021.1)

(4) *However*, people are different in terms of their talents, dedication, goals in life, etc. (ICLE-RU-MOS-0003.2)

In (4), *however* does not establish a clear link between two sentences that follow each other. It is used at the boundaries of two paragraphs and marks a shift to another argument that is in contrast to what has been mentioned earlier.

Example 5 illustrates a chain of additive and adversative conjunctions that occur in a close relationship established within and across sentence boundaries. The difference between these two types of conjunction is realized by the nature of their meanings and by their relation to the previous pieces of information.

(5) *But* there are some areas which cannot be practical, history *for example*. ... *And* a Bachelor of History can be either a scholar or a teacher of history. *However*, every area of knowledge, such as chemistry or math *for instance*, could be converted into

practice, earlier or later. Even if a young man didn't go into a related field of work, his knowledge would be useful. (ICLE-RU-MOS-0002.1)

In (5), *and* signals the presentation of additional information. *For example* and *for instance* exemplify what has been said. The relationships signalled by the conjunctions *but* and *however* are adversative. They serve to signal explicitly to the reader that the sentences they are used in are in a contrastive relation to preceding discourse. *Even if* is used in the meaning of concession. It occurs initially as a subordinate conjunction and adds information to the main part of the sentence.

6.4.3 Causal conjunction

Example (1) illustrates the use of a simple form of causal conjunction *so*. It often serves to signal the relation of cause and effect by indicating that the clause it introduces specifies a result or a situation presented earlier. In (1), *so* occurs at sentence boundaries between two adjacent sentences (1a-b) or independent clauses (1c). In (1a), a clear causal relation is identified as cause-consequence (*armies do not have well-trained reserves – such troops cannot be despatched to the war zone*).

The interpretation of *so* in (1b-c) depends on the reader's perception and can thus be ambiguous or confusing. In (1b), the relation between the sentences can be identified as that of cause-effect, but a conditional relation is also conceivable in which for example the form *in that case* can be used instead of *so*. In (1c), the causal relation is misleading. *So* does not signal the appropriate relation of cause and effect between the two parts of the sentence. The intended meaning is probably that *the prison system is important because criminals must be punished*.

(1) a. So it means that those armies cannot conduct large-scale operations in large theatres of war for a long period of time. (ICLE-RU-MOS-0004.1)

b. The higher education, the more skillful a serviceman is. So he may get higher position. (ICLE-RU-MOS-0024.1)

c. The system is urgent for society so evil must be punished.
(ICLE-RU-MOS-0014.1)

A reversed⁴⁶ causal conjunction *for* is used in (2a-b) to introduce the reason for what has been just said within the same sentence. In both (2a-b), *for* introduces the presupposing clause that expresses the cause.

(2) a. *None the less, only rich, well-developed industrialized countries may afford to establish the professional army for it takes a great deal of money to maintain it.*

(ICLE-RU-MOS-0003.1)

b. *Otherwise it would be impossible to establish the powerful and combat-ready army for nobody would go into service being homeless and poor sponsored.*

(ICLE-RU-MOS-0003.1)

In (2b), another causal relation is established between the sentences that follow each other. They are related in the form of condition. It is interpreted by the use of *otherwise* that functions as an equivalent to *under other circumstances*.

Two more sub-types of causal relations are illustrated in (3-4). In (3), a simple form *then* indicates a conditional relation. It functions in the meaning of *under these conditions* and it is linked linguistically to the circumstances mentioned earlier in the text. In (4), *thus* can be substituted for *therefore*. This conjunction occurs initially and establishes a causal relation between two adjacent sentences.

(3) a. *Then it will meet demands of the time and serve our society perfectly.*

(ICLE-RU-MOS-0014.1)

(4) a. *Thus it may be cheaper to operate the materials by one man than to change an operator every year.* (ICLE-RU-MOS-0016.1)

6.4.4 Temporal conjunction

Interestingly, temporal expressions are not used by Russian learners to highlight temporal or conclusive conjunctive links in argumentative essays. Example (1) illustrates one instance of a conclusive conjunction *finally* that is used in the sense of *to round off (the point)*. However, it is assumed that the writer of (1) makes the wrong choice of conjunction. It is clear from the context that the writer does not mark the culmination of the argument but comes back to the point discussed earlier in the text. This presupposes a resumptive relation. Such words as *to*

⁴⁶ The reversed form of the causal relation is discussed in Halliday and Hasan (1976: 243, 257-258).

resume or *to return to the point* can be used instead to indicate that the writer is resuming the main point.

(1) *Finally I must confess I can see no reason to oppose that most university degrees are theoretical but I would find it difficult to accept that they don't prepare students for real world.* (ICLE-RU-MOS-0020.1)

VII. Summary and Conclusion

On the basis of the framework described in Chapter IV, argumentative essays of Norwegian and Russian learners have been analysed in Chapters V-VI in order to find out which grammatical items the learner groups choose to establish cohesive relations in written discourse.

First of all, each text was simply scanned to recognize any particular instance of reference, substitution, ellipsis and conjunction. At the next stage it was explored how these grammatical elements operate in individual texts⁴⁷. The main focus of analysis was on cohesive relations that hold between adjacent sentences and T-units.

The examination of grammatical cohesion in the texts of Norwegian and Russian learners shows that argumentative essays do not differ greatly in the number of cohesive items. A difference is, however, observed in the way these items signal different types of cohesion.

Both groups of argumentative essays display a range of cohesive ties that link sentences and independent clauses. However the ties are not evenly distributed. The evidence of the examination suggests that reference and conjunction are the most common types of grammatical cohesion, whereas substitution and ellipsis are not represented widely.

The findings show that numerous functions can be realised by grammatical elements. Reference operates between adjacent sentences and independent clauses, as well as in a sequence of sentences. An overall impression is that the referential function of grammatical items is primarily realised in their anaphoric relation to preceding discourse⁴⁸. It is explained by the fact that readers are not initially familiar with participants, things or abstract notions that learners introduce into discourse. But when the referents are repeated, this is often done by means of anaphoric patterning, whose role is to presume what has been mentioned.

The functions of various anaphoric devices deserve attention since reference often occurs across sentence boundaries to avoid repetition. Both learner groups use extensively three exponents of anaphoric reference, namely personal, possessive and demonstrative.

Personal reference is mainly used to track a participant or a thing through a piece of discourse. At the same time some instances of the third person pronoun *it* and demonstrative pronouns *this/that* occur to refer to the whole previous sentence or to some piece of information in preceding discourse, rather than to a participant. An effect produced by such

⁴⁷ The discourse analysis in section 4.2 is an example of how all the texts have been analysed.

⁴⁸ For further studies see *Discourse structure and anaphora* (Fox 1987).

anaphoric relations may sometimes confuse the reader's perception of a written text, especially when a cohesive link is not sufficiently established between two adjacent sentences. A possible explanation for misleading information is that learners make a quick shift in their discussions. They introduce a new remark or an example and then they come back to what has been said. As a result, some presupposing items do not have antecedents in preceding sentences. They force the reader to look back to recover an item earlier in the text.

There is little use of demonstrative pronouns as cohesive ties in the essays of Russian learners. A distinctive feature is that Russian learners make a choice of the determiners *this/that* and their plural forms *these/those* in combination with a (head) noun.

Some Russian learners do not distinguish between the general demonstrative meaning of *these* and *those* as of relatively near and distant reference in time or space. Example (1) is provided to illustrate such an instance⁴⁹.

- (1) *These armies have not well-trained reserves. So it means that those armies cannot conduct large-scale operations in large theatres of war for a long period of time. These troops are good only for unexpected local operations.*
(ICLE-RU-MOS-0004.1)

The determiners *these/those* in (1) are used in a sequence of adjacent sentences. The interpretation of *those* can be confusing. The first impression is that the writer of (1) speaks about two different armies. It is the role of lexical items that force the reader to look back. The lexical items determined by *these/those* make it clear what the exact referent is of the demonstrative determiners (*armies that consist of professional soldiers*).

The examination of demonstrative reference shows that determiners work together with lexical cohesion. An overall impression is that lexical cohesion dominates in the essays of Russian learners. So a full statement about cohesion in these essays can be made only if both grammatical and lexical cohesive elements are considered.

Anaphoric patterning of demonstrative reference varies in the essays of Norwegian learners. Demonstratives act both as determiners and as demonstrative pronouns. They may have their nodes in the previous sentence or they may point back to a chunk of discourse.

In the essays of both learner groups demonstrative reference is predominantly expressed by *this* and its plural equivalent. The role of *this/these* seems to be more specific

⁴⁹ According to the principles of presentation and analyses in Chapters V-VI, mistakes have not been corrected; see also Chapter IV.

than the role of *that/those*. Learners choose *this* and *these* not only to avoid repetition but also to refer to something located near in the text.

The findings support our hypothesis⁵⁰ about the use of *the*. Both learner groups use the article *the* for presuming definite meaning. Norwegian learners do not confuse the use of the definite article. The essays of Russian learners display a different picture. The definite article is used to establish cohesive relations between sentences. However, this type of grammatical cohesion is not fully represented. Some learners make the wrong choice of English articles and such instances are not taken into account. Example (4) illustrates the omission of *the* marked by (x) in (4a) and the wrong use of the indefinite article in (4b) :

- (4) a. *It's not easy to talk about (x) prison system. It goes without saying that (x) prison system, in my opinion, has never changed a man in better way of leading life. (ICLE-RU-MOS-0007.1)*
- b. *... no prison system can save a society from crimes since a prison system does not eliminate causes of crime. (ICLE-RU-MOS-0011.1)*

Example (4) illustrates the most common problem. Such cases can be classified as unfulfilled cohesion. This means that the noun phrase *prison system* is not specified as definite. A possible explanation for the omission of the article in (4a) is that from the learner's point of view the noun phrase is abstract and is used in a general sense. Russian learners have difficulties acquiring articles since these grammatical elements do not exist in their mother tongue. Therefore these learners are prone to making errors.

Both learner groups use personal pronouns and determiners that establish endophoric relations between sentences. A difference is observed in the use of the third person pronouns. In the texts by Russian learners, the pronoun *it* occurs primarily between adjacent sentences and points back to non-persons in preceding discourse. Some instances of *it* establish a cataphoric link to the following sentence. In the essays by Norwegian learners, *it* is used extensively. This pronoun establishes anaphoric links between independent clauses, pairs and groups of adjacent sentences. Despite its multipurpose nature, *it* is easily interpreted in its relation to preceding sentences. It refers either to non-persons or stands for the whole clause (cf. section V. 5.2.1 (5)).

It is not a typical feature of an argumentative essay to introduce participants that interact with each other. This explains the fact that there is lack of the third person singular

⁵⁰ See section 6.1, Chapter VI.

pronouns in the essays. However, both learner groups have some instances of the third person *she* that functions to track a participant (*a friend* or *a woman*). The role of this type of reference is to provide an example in order to support an argument. To track a participant Norwegian learners often use the inflected forms for both *he* and *she* to indicate that an antecedent is of both masculine and feminine genders. Russian learners use preferably the masculine form.

It is interesting to observe that the first person personal and possessive pronouns are used as an important language resource that helps to develop an argument. Norwegian and Russian learners provide explicitly their personal opinions about a particular issue. They introduce the first person *I* and its possessive form *my* to express a thought, an idea, agreement or disagreement. These pronouns are used to perform several roles. On the one hand, they function to introduce writer reference. This type of reference can be interpreted exophorically and thus it is of little cohesive value. On the other hand, the first person pronouns link a writer's opinion with further discussions and establish relations between arguments at different stages in a text. In this respect the pronouns are interpreted as cohesive elements.

An interesting finding is that plural first person pronoun *we* is not used to refer to a single writer. Instead *we* tends to refer to people in general. A difference is observed in the use of *we* and *you* to introduce writer-reader reference. The role of this type of reference is to affect a reader's perception of cohesion and to share the writer's point of view. Norwegian learners generally use more reader reference, whereas Russian learners are more reluctant to invite the reader to share their opinions. It can be explained by some cultural reasons. "Cultural influences motivate the use of collective reference" (Coffin and Mayor 2004: 260).

You and *we*, as well as their oblique forms, are also used in the essays to introduce other roles. These pronouns function as reference to people in general or to some unspecified set of individuals. They are also used for presuming reference to other roles. The meaning of *we* is ambiguous in some essays of Russian learners. It can leave the reader unclear who is being referred to. The interpretation of *we* depends on the reader's perception of the topic under discussion. In the texts by Norwegian learners, there are some clues that help to interpret the meaning of *we* and *you*.

Both learner groups choose the third person plural pronoun *they* (*their*, *them*) as the most preferable form to track persons, things and abstract notions. The pronoun is used mainly to avoid repetition of lexical items. Its antecedents are easily identified in relation to

preceding discourse. *They* and its oblique forms often occur in a sequence of sentences that illustrate a pattern of anaphoric relations.

The essays do not differ much in terms of comparative reference. It is difficult to give a full account of this type of reference since the essays do not display a lot of examples. Such elements as *same*, *other* are primarily introduced to refer to either identity or difference between things. Norwegian learners use more comparative adjectives and adverbs to express comparability between two things in terms of quality and quantity.

One of the most interesting findings is that substitution and ellipsis are not a representative feature of grammatical cohesion in the texts by both Norwegian and Russian learners. One possible reason for the failure to see cohesive ties established by substitution and ellipsis is that the analyses presented in Chapters IV-VI are based on the study of cohesion across sentences and T-units; both ellipsis and substitution were mainly found within sentences. Another reason for the failure is that only written material has been analysed. As Thompson notes (2004: 184), “ellipsis is typically more fully exploited in speech than in writing”⁵¹. Moreover, the number of essays has been restricted⁵².

An interesting observation is that Norwegian learners introduce rhetorical questions as an attempt to invite the reader to express his or her opinion. The learners themselves do not provide any answers. The role of rejoinders in elliptical clauses is to express an indirect response. The effect produced by such elements is that Norwegian learners try to evade a possible answer.

A difference is observed in the use of deictic and numerative elements in nominal ellipsis. The essays of Norwegian learners display a few clear examples of nominal ellipsis expressed by the elements *some* and *many* (see section 5.3). They are easily interpreted and cause no confusion. Russian learners provide examples that show how nominal ellipsis works together with other cohesive devices. The elements *others* and *same* interact with comparative reference. The deictic proper element *some* does not appear alone but in combination with the preposition *of*. They both serve to denote a kind of part-whole reference.

Conjunction serves in the essays to establish various patterns for the organization of information. This applies to patterns such as cause-consequence or cause-effect, comparison and contrast, and condition. Both learner groups use two types of conjunction extensively, additive and adversative. The findings support the hypothesis⁵³ about the use of *and*. Norwegian learners favour the use of *and*. It occurs initially to link two adjacent sentences or

⁵¹ It should be noted that according to Thompson substitution is a type of ellipsis. See Thompson (2004: 180).

⁵² See section 4.1, Chapter IV.

⁵³ See section 6.1, Chapter VI.

independent clauses. The same conjunction does not often appear initially in the essays by Russian learners. This position is taken by *besides*. It is possibly because of cultural influence (or language teaching), since *and* is not considered to be correctly used at sentence boundaries.

Adversative conjunction is a characteristic feature of the essays. Such words as *but*, *however*, *on the other hand*, *at the same time* serve to organize information in terms of comparison and contrast. These elements help the reader to understand what is different or unlike. However occurs to establish a contrastive link, whereas *but* is sometimes used to project the *and*-relation.

Both learner groups use a conditional type of causal conjunction. A cause-consequence relationship is often established by means of the conjunction *so*. In this respect, the essays do not differ much. The conjunction *for* is observed only in the essays by Russian learners. It functions to introduce a presupposing clause that expresses a cause. A possible reason for the lack of the same conjunction in the essays by Norwegian learners could be that *for* “is hardly ever heard in spoken English” (Halliday and Hasan 1976: 258). Norwegian learners hear a lot of English on radio and television. So, spoken forms may determine their choice of particular grammatical elements in written discourse.

The most surprising finding is that neither of the learner groups organize information in terms of temporal relations. Norwegian learners introduce a few conjunctions that signal the initial stage of a writer’s arguments or a concluding remark. Russian learners are reluctant to organize their essays in a sequence of arguments. They neither summarize nor give a resume what has been said. Instead they highlight the end of an argument by an expression of personal opinion.

To answer the research questions⁵⁴ it should be stated that reference and conjunction are used extensively to establish cohesive relations that hold between sentences and T-units of argumentative essays by Norwegian and Russian learners. Grammatical cohesion is not discerned only between two adjacent sentences. Cohesive links are often established by grammatical elements that occur in a sequence of sentences that are not adjacent. The presence of intervening sentences often signals that a writer includes an additional remark or an example. The overall picture of grammatical cohesion shows that reference and conjunction is more frequent than the use of substitution and ellipsis in argumentative essays. It is assumed that lexical cohesion is more widespread than the use of grammatical reference in the essays by Russian learners.

⁵⁴ See section 4.1, Chapter IV.

The limited framework of this study does not allow for examination of all the cohesive features. It seems significant that grammatical cohesion should be studied in comparison with lexical cohesive items in a future study of cohesion in learner texts. Furthermore, contrastive studies and analyses of argumentative essays written by the native speakers of English would expand the framework and they would reveal more about the nature of grammatical cohesion as well as of the degree of success of the advanced learners of English.

Appendix I

Text A (ICLE-NO-AC-0008.1)

When a person commits a crime, he or she should be punished for it. That is at least how most people feel. It seems morally right that the criminal should pay for his actions. Knowing that the criminal will go to prison, secluded from the rest of the world, his freedom and personal life being robbed from him, satisfies society. They get even with him. But does it benefit society in the long run?

Ideally, the criminal would come out of prison as a new and improved person. He will have had time to do some serious thinking about his life and his wrongdoings, and will have been determined to live a better life.

Of course, his is rarely the case. The prison often hardens the criminal, and once the person is free, he will most likely return to living the same lifestyle.

Although the prison has served as a punishment for the criminal, it has also wasted much of the taxpayer's money.

If on the other hand, the criminal goes through some sort of rehabilitation, it would profit both the criminal and the society, given that the criminal is going to be able to live a more productive life once he is free.

Obviously, if the criminal is suffering from a poor mental state, psychiatric help should be given. But at the same time many prisons today teaches the prisoners some type of skill, for instance activities like pottery making, but also different job skills. While it keeps the prisoners occupied when they are locked up, it is also a great help for them when they are released. It should be easier for them to function normally in society, and thus stay away from crime.

In my opinion, a criminal should be punished, as well as being rehabilitated. It is important to set an example to show that society does not tolerate criminal offences. In addition serving as a punishment for the criminal, prison also keeps them away from society, out of harms way. While rehabilitation of all criminals would benefit society, it is not realistic. Not every one wants to be helped, and not every one can be helped.

What prison should not be though, but often is today, is a school for the prisoners on how to be a better criminal. This only punishes society.

Text B (ICLE-RU-MOS-0001.1)

Among many institutions of every state the prison system as an organ of punishment takes not the last place. I believe it is impossible to imagine a state without prisons or any other organs of punishment. Those committed a crime should by all means be punished. It goes without saying.

But the main question is still being discussed. What missions should the prison system fulfill? The answer is doubtless: to recreate a person to return him to a normal life. But I dare say that no one prison system recreates men in full. On the contrary, it consumes a man, remakes him and breaks his soul. (God, bless me if I am wrong!)

Sure, to discuss a certain problem is rather difficult for a person not concerned with it. The problem should be thoroughly observed in advance. By all means everyone has his own look at it but all opinions are amateur which can not pretend to be taken into consideration by specialists.

But I dare say some word on the problem. All the crimes committed should be punished. A deliberate crime should be punished tougher than an unintentional one. But those committing crimes twice or more must be isolated into prison for the long period. And those killed their victims cruelly should be sentenced to death. An eye for an eye, despite Christ's words. Can the leopard change his spots?

The prison system should by all mean be flexible. Error is human. That taken a false step should be given a chance.

Sure, a short essay can not grasp the whole issue. And I do not try to.

At the top of all, I'd like to say: Give the devil his due.

Appendix II

Texts by Norwegian learners

(ICLE-NO-AC-0001.1)

(ICLE-NO-AC-0003.1)

(ICLE-NO-AC-0004.1)

(ICLE-NO-AC-0005.1)

(ICLE-NO-AC-0006.1)

(ICLE-NO-AC-0007.1)

(ICLE-NO-AC-0008.1)

(ICLE-NO-AC-0009.1)

(ICLE-NO-AC-0010.1)

(ICLE-NO-AC-0011.1)

(ICLE-NO-AC-0012.1)

(ICLE-NO-AC-0013.1)

(ICLE-NO-AC-0014.1)

(ICLE-NO-AC-0015.1)

(ICLE-NO-AC-0016.1)

(ICLE-NO-AC-0017.1)

(ICLE-NO-AC-0018.1)

(ICLE-NO-BE-0020.1)

(ICLE-NO-BE-0021.1)

(ICLE-NO-BE-0022.1)

Appendix III

Texts by Russian learners

(ICLE-RU-MOS-0002.1)

(ICLE-RU-MOS-0003.1)

(ICLE-RU-MOS-0004.1)

(ICLE-RU-MOS-0007.1)

(ICLE-RU-MOS-0008.1)

(ICLE-RU-MOS-0010.1)

(ICLE-RU-MOS-0011.1)

(ICLE-RU-MOS-0014.1)

(ICLE-RU-MOS-0016.1)

(ICLE-RU-MOS-0017.1)

(ICLE-RU-MOS-0018.1)

(ICLE-RU-MOS-0019.1)

(ICLE-RU-MOS-0020.1)

(ICLE-RU-MOS-0021.1)

(ICLE-RU-MOS-0022.1)

(ICLE-RU-MOS-0023.1)

(ICLE-RU-MOS-0024.1)

(ICLE-RU-MOS-0001.2)

(ICLE-RU-MOS-0002.2)

(ICLE-RU-MOS-0003.2)

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