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COHESION IN BUSINESS SPEECHES

KOHĒZIJA BIZNESA RUNĀS

BACHELOR THESIS

Valērijs Krasuckis
Matriculation Card No. vk14036

Adviser: lect. Vineta Apse

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ANOTĀCIJA

Šis bakalaura darbs pēta kohēzijas līmeni Maska un Mejas un Abes runās par komercdarbību. Darba mērķis ir izpētīt kohēzijas līdzekļu lietojumu runās par komercdarbību. Kā pētījuma metodes darbā izmantots literatūras apskats par dažādiem publicētajiem avotiem par leksisko un gramatisko kohēziju un biznesa diskursu, kā arī biežuma analīze. Leksiskās kohēzijas, atsauces, un saikļa klātbūtne tika analizēti trīs runās un trīs runās struktūras daļās. Analīzes rezultāti parādīja, ka iepriekš minēto kohēzijas līdzekļu izmantošanas biežums ir diezgan vienāds. Tomēr var secināt, ka saiklis ir visizplatītākais kohēzijas līdzeklis analizētajās runās par komercdarbību.

Atslēgas vārdi: kohēzija, kohēzijas līdzekļi, atsauce, saiklis, leksiskā kohēzija, biznesa diskurss, prezentācijas struktūra

ABSTRACT

This bachelor thesis researches the level of cohesion in business speeches of Musk and May and Abe. The goal of the paper is to research the use cohesive devices in business speeches. The research employed a literature review of different published sources on lexical and grammatical cohesion and business discourse as a research method, as well as frequency analysis. Three speeches were analysed on the presence of lexical cohesion, reference and conjunction in three organizational parts of the speech. The results of the analysis demonstrated that the above-mentioned cohesive devices are used with a rather equal frequency. Nevertheless, it can be concluded that conjunction is the most common cohesive device in the analysed business speeches.

Key words: cohesion, cohesive devices, reference, conjunction, lexical cohesion, business discourse, presentation organisation

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INTRODUCTION

Over the years of studies in the Faculty of Humanities, the author of this paper came up with, on the one hand, a slightly simple conclusion; on the other hand, a crucial conclusion that language is a powerful and versatile instrument which might be used far beyond generally accepted purposes, e.g. as the basic everyday communication or a simple way of sharing information. Furthermore, for the most common communicative events involving the use of language there exists certain systematicity, which presents the use of language as more conscious and profound entity. Concluding altogether, the studies concerning language transform the comprehension of words, phrases, clauses, sentences, and texts from the number of symbols or sounds into a conscious, emotional, and informative creation, which always attains a specific aim. For that reason, the research on cohesion and cohesive devices is especially important, because on the one hand, textual cohesion is an inherent part of any text and, on the other hand, the specific use of cohesive devices might be used to reach a definite emotional effect. Thereby, textual cohesion combines together the basic language systematicity and language use for specific purposes.

In the previous study concerning textual cohesion, the author of this paper examined the presence of cohesive devices in financial reports. As it was suggested for the future consideration, this paper researches the use of cohesion in business speeches; in order to complete the research on the use of cohesion and cohesive devices in the environment of financial and business discourse. Considering, that the following study involves the examination of the use of cohesive devices in spoken texts, it presents how commonly certain cohesive devices are used there.

Business speeches have some characteristics in common with financial reports. A business speech is a special communicative event of a company or a representative of the specific organisation, or state and the public. Thereby, textual cohesion of any business text is an obligatory factor, because, the image of the organisation, company, or state is dependent on the quality and comprehensibility of the spoken text. This study is directly connected to business discourse and the results of this study shows the tendency of the use of the specific cohesive devices in business speeches.

The **goal** of the present paper is to research the use of cohesive devices in business speeches. The given paper contains theoretical information about cohesion and cohesive devices, which are the inalienable units of cohesion. The theoretical research results are applied to an empirical study that presents the findings of the practical use of the following

cohesive devices: reference, conjunction, and lexical cohesion. The corpus for the analysis consists of the business speech of by E. Musk (2017) and two business speeches by T. May and S. Abe (2017), which are referred to as 1 in the analysis because they were delivered together.

In contemplation of achieving the above-mentioned goal, the following **research questions** were formulated:

1. What is the purpose of cohesion in business speeches?
2. How can cohesion be achieved in business speeches?
3. Which cohesive devices are the most common in business speeches?
4. Which cohesive devices are typical for each organisational part of a speech?

In order to achieve the goal of this research paper, the following **enabling objectives** have been put forward:

1. to provide the theoretical background of the research reviewing published sources on business discourse, cohesion and cohesive devices and their use in business speeches;
2. to determine the characteristics of a business speech;
3. to select business speeches for the analysis;
4. to analyse the use of cohesive devices in the selected business speeches;
5. to draw conclusions.

In order to achieve the specified enabling objectives, the following **research methods** are applied: the examination and study of relevant to the topic dictionaries written by Richards and Schmidt (2002), Bussmann, Trauth, and Kazzazi (1996), Matthews (2007), Wales (2001), Coghlan and Brydon-Miller (2014), Johnson and Johnson (1998), and theoretical literature of the following authors: Halliday and Hasan (1976 and 1985), Halliday (1985), Brown and Yule (1983), McCarthy (2006), Warren (2009) , and published research article written by Berdine (1973). The frequency analysis is applied as the principal research method for the empirical study. The empirical study relies on the theoretical background concerning frequency analysis presented by Baker (2010), Hossein (2012), and (Online 4) and business discourse presented by Gunnarsson (2009), Bargiela-Chiappini and Zhang (2013), Bargiela-Chiappini, Nickerson, and Planken (2007). The full list of the literature used is available in the references.

The bachelor thesis consists of three chapters. Chapter 1 discusses the theoretical information assembled during the literature review. This chapter explains the concept of text and texture and examines different published theoretical sources about textual cohesion and discourse. Also, Chapter 1 presents the gathered information about cohesive devices and more

deeply researches the following cohesive devices of grammatical cohesion group: reference and conjunction, as well as presents devices of lexical cohesion. Chapter 2 presents the second part of the establishment of the theoretical background. Specifically, it discusses the main characteristics of business discourse and the distinctive features of organisation of a business speech. The information presented in both the above-mentioned chapters creates an environment for Chapter 3, which demonstrates the empirical part of this bachelor thesis. In the beginning, Chapter 3 indicates the research methods, materials, and the procedure. Then, this chapter presents the results of the frequency analysis of the indicated research corpus.

1 ESSENCE AND CHARACTERISTICS OF COHESION

This chapter intends to introduce findings on cohesion obtained during the theoretical research. It presents the general information about cohesion. This chapter discusses the essence of text and explains what texture is. Moreover, this chapter considers the features of cohesive devices and explains how cohesion can be achieved through the use of cohesive devices. It reviews theoretical information on the following grammatical cohesion group of cohesive devices: reference, conjunction, and lexical cohesion group. The information obtained and outlined in this chapter is an essential component for the empirical study of this research.

1.1 Text and texture

At the beginning of this research, before the actual discussion of the features of cohesion, it is considered essential to describe a fundamental basis of text and to define the term “texture”. It is known that cohesion directly deals with the structure of a text. Therefore, cohesion is simply a sequent result of existence of a more primal phenomenon, namely, a text.

First, in order to find general notions and definitions it is considered relevant to examine specific dictionaries. Bussmann, Trauth, and Kazzazi (1996) in *Routledge Dictionary of Language and Linguistics* define text as a communicative act which is specified by two approaches. The first is pragmatic approach which is defined by ‘text-internal criteria of a communicative intention which is situation-specific and meets a corresponding listener expectation’ (1996: 1187). The second approach is defined by ‘internal textual features, such as boundary signals, grammatical cohesion, dominant text theme, and content coherence’ (ibid.: 1187). It should be noted that considering the case of this research a text is considered from the perspective of the second approach.

Richards and Schmidt (2002) in *Dictionary of language teaching & applied linguistics* outline four characteristics of spoken and written text:

- ‘1 it is normally made up of several sentences that together create a structure or unit, such as a letter, a report, or an essay (however one word texts also occur, such as DANGER on a warning sign)
- 2 it has distinctive structural and discourse characteristics
- 3 it has a particular communicative function or purpose.
- 4 it can often only be fully understood in relation to the context in which it occurs’ (2002: 549).

Brown and Yule (1983) in the book *Discourse Analysis* discuss the characteristics of spoken and written language. Under this topic Brown and Yule review the notion “text”. First of all, Brown and Yule highlight that text is ‘a technical term, to refer to the verbal record of a communicative act’ (1983: 6). Brown and Yule separate text into two divisions: spoken and written text. In order to answer the question: ‘what a text is?’, both divisions should be equally observed.

The first type for the review is written text. According to Brown and Yule, ‘the notion of ‘text’ reaches beyond the reproduction of printed material in some further printed form’ (ibid.: 7), because, a text can be produced by various sources, e.g. a text written on the sand. Brown and Yule explain the meaning of written text as follows:

‘A ‘text’ may be differently presented in different editions, with different type-face, on different sizes of paper, in one or two columns, and we still assume, from one edition to the next, that the different presentations all represent the same ‘text’ (ibid.: 6).

Considering the above-mentioned information, it might be concluded that a written text is primarily a source of information. Regardless of the format of a text it presents some specific information. Brown and Yule highlight that the pattern of the same text consists of different invariables such as word order, lexis, punctuation, etc. Brown and Yule comment that ‘an adequate representation of a text must assign speeches to the correct characters, sentences to the correct paragraphs, and paragraphs to the correct chapters’ (1983: 6). Moreover, the researchers indicate that one of the features of written text is the specific indicators: headings, headlines, chapter, subchapters, etc. They describe these indicators as examples of communication between the author and the reader, as a source of fragmentation and emphasis of the author’s idea.

The second type is spoken text. Brown and Yule start the overview of this type with the problems of decoding spoken texts. The scholars explain that spoken text should be recorded with a high level of accuracy, because spoken texts should not be less precise than written text. Moreover, occasionally, spoken texts may express more information than written text. However, the most crucial factor is how accurate is the record of the spoken communicative event, as it was explained before. Therefore, they state that ‘in general the discourse analyst works with a tape-recording of an event, from which he then makes a written transcription, annotated according to his interests on a particular occasion’ (ibid.: 9).

In addition, Brown and Yule emphasise that the credibility of the record of the spoken text is highly dependent on the specialist who is working with the text, because the pronunciation patterns are slightly dependant on the dialect of the speaker and the analyst

takes a responsibility to properly recreate and present a specific manner of the speaker in written form. In addition, Brown and Yule highlight that at the time of their research (1983)

‘we have no standard conventions for representing the paralinguistic features of the utterance which are summarised as ‘voice quality’, yet the effect of an utterance being said kindly and sympathetically is clearly very different from the effect if it is said brutally and harshly’ (1983: 10).

The same refers to sex, age, health, and other personal characteristics of a speaker. According to Brown and Yule ‘the response of most analysts to this complex problem is to present their transcriptions of the spoken text using the conventions of the written language’ (ibid.: 11).

It could be noticed that the essence of written and spoken texts is very similar. However, Brown and Yule highlight that ‘there are dialectal differences, accent differences, as well as ‘register’ differences depending on variables like the topic of discussion and the roles of the participants’ (ibid.: 14). Moreover, Brown and Yule suggest that spoken text should be produced ‘less richly organised than written language, containing less densely packed information, but containing more interactive markers and planning ‘fillers’’ (ibid.: 15).

Brown and Yule refer to Halliday and Hasan (1976), who overview this notion more profoundly. Brown and Yule cite them: ‘the primary determinant of whether a set of sentences do or do not-constitute a text depends on cohesive relationships within and between the sentences, which create texture’ (1983: 191). At this point it is opportune to answer the second significant question: ‘what is texture?’. Brown and Yule cite Halliday and Hasan that ‘a text has texture and this is what distinguishes it from something that is not a text [...] The texture is provided by the cohesive RELATION’ (ibid.). This is crucial information before overstepping to the main subject of this research – cohesion. According to Brown and Yule’s reference to Halliday and Hasan, cohesive relation is defined as

‘INTERPRETATION of some element in the discourse is dependent on that of another. The one PRESUPPOSES the other in the sense that it cannot be effectively decoded except by recourse to it’ (ibid.).

The scholars outline that two sentences can formulate a text; more specifically, internal cohesive relations formulate a text.

Moreover, Brown and Yule, referring to Halliday and Hasan mention the taxonomy of types of cohesive relations as a tool for establishing cohesive ties. Cohesive ties are named ‘ties’, because, they allow to ‘tie up’ a text together creating different cohesive relations.

Halliday and Hasan (1985) discuss more widely the concept of a ‘tie’ in the book *Language, context, and text: aspects of language in a social-semiotic perspective*. They speak about the concept of cohesive tie as the most important element of texture. The concept of tie

could be visually observed in Figure 1.1. Halliday and Hasan present two ends of the tie: the A and the B. The scholars highlight that both ends are separated and ‘A may be part of one message and B part of another’ (1985: 173). However, the arrow represents a link between two separate parts. According to the researchers, ‘the nature of this link is semantic: the two terms of any tie are tied together through some meaning relation’ (ibid.). Halliday and Hasan specify that ‘these semantic relations form the basis for cohesion between the messages of a text’ (ibid.).

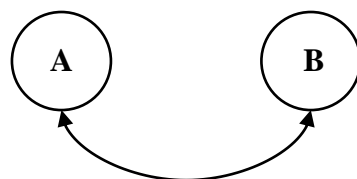


Figure 1.1 **Cohesive tie** (Halliday and Hasan, 1985: 73)

Halliday (1985) in the book *An Introduction to Functional Grammar* specifies the list of resources that create a texture of discourse, ‘without which it would not be discourse’ (1985: 334). Halliday divides these resources into two groups. The first group is called ‘structural’; however, this group is beyond the scope of this research, therefore it will not be considered here. The second group is called ‘cohesive’, which is the main subject of this research. Halliday explains that in order to create texture ‘these resources are deployed in certain ways; ways which vary considerably according to the register of the text, but about which it is possible to make some general observations as well’ (1985: 334).

Halliday and Hasan (1976) explain in the book *Cohesion in English* that the general meaning of the concept ‘texture’ is ‘being a text’ (1976: 2). They can express it more specifically, ‘if a passage of English containing more than one sentence is perceived as a text, there will be certain linguistic features present in that passage which can be identified as contribution to its total unity and giving it texture’ (ibid.).

In conclusion of the topic ‘text and texture’ it is considered appropriate to cite a part of Meyer’s (2009) summary. According to Meyer,

‘Although definitions of a text will vary, most linguists would agree that for a text to achieve coherence, it must exhibit unity of structure and unity of texture: it must have a clearly identifiable beginning, middle, and end, and the clauses within it must be linked together by various cohesive devices’ (2009: 108).

1.2 Explaining cohesion and cohesive devices

As the crucial background of the essence of text and texture is determined, now it is considered important and pertinent to establish the theoretical background for the subject of this research. Therefore, a sequential explanation of the essence and characteristics of cohesion is selected as the second subchapter of this paper.

Textual cohesion could be perceived as a rather broad and topical theme. Different researchers express their perception of textual cohesion or refer to more ‘standard’ concepts in their studies concerning various linguistic aspects. For example, in different studies and dictionaries various definitions can be found. According to Biber, Conrad, and Leech (2011), ‘cohesion refers to the integration which is achieved between different parts of a text by various types of semantic and referential linkages’ (2011: 42). However, as it was detected during literature review, usually when authors discuss the essence of cohesion they refer to Halliday and Hasan (1976). For instance, Camiciottoli (2007) refers to Halliday and Hasan who explain that the perspective of textual cohesion is ‘where the omitted item is pre-supposed or recovered from the text in order to fill in the missing information and thus achieve a coherent interpretation’ (2007: 66). Therefore, it was concluded that Halliday and Hasan’s research on cohesion is quantitatively approved as a relevant source of theoretical information. Nevertheless, this chapter tends to observe as many different thoughts and concepts of cohesion as possible.

Matthews (2007) in the *Concise Oxford Dictionary of Linguistics* defines cohesion as ‘the connection between successive sentences in texts, conversations, etc., in so far as it can be described in terms of specific syntactic units’ (2007: 62). Moreover, the scientist provides the second definition of cohesion – ‘the property of syntactic units which are not interrupted by elements that do not belong to them’ (ibid.: 63). The researcher explains the concept that ‘words are generally cohesive: i.e. they are not interrupted by other words or elements that belong to other words’ (ibid.).

In the book *An Introduction to Functional Grammar* Halliday (1985) explains the concept of cohesion as follows. Initially, the scholar defines the term “cohesion” as ‘non-structural resources for discourse’ (1985: 309). Halliday describes the notion “cohesion” as a process, explaining that discourse is also a process (ibid.: 311). Thereby, the researcher highlights the connection between cohesion and discourse. The scientist specifies that text is not only a written product. According to Halliday, ‘text happens in the form of talking or writing, listening or reading’ (ibid.). Additionally, the researcher presents a very important statement that

‘we analyze the product of this process (cohesion); and the term ‘text’ is usually taken as referring to the product – especially the product in its written form, since this is the most clearly perceptible as an object’ (1985: 311).

Finally, the scholar concludes that textual cohesion is an aspect of functional process of meaning.

Halliday highlights that cohesion is created by four ways: reference, ellipsis, conjunction, and lexical cohesion (ibid. 309). Halliday does not refer to these notions directly as cohesive devices; nevertheless, in the collective research on cohesion Halliday and Hassan (1976) describe and refer to reference, ellipsis, substitution, conjunction, and lexical cohesion as cohesive devices. Halliday managed to illustrate all four mentioned cohesive devices in one short text:

‘Little Boy Blue, come blow your horn!
The sheep’s in the meadow, the cow’s in the corn.
Where is the boy that looks after the sheep?
He’s under the haycock, fast asleep.
Will you go wake him? No, not I!
For if I do, he’ll be sure to cry.’ (ibid.).

The researcher more specifically introduces every occasion by the above-mentioned example.

The first cohesive device is reference. Halliday introduces it as ‘a participant or circumstantial element introduced at one place in the text can be taken as a reference point for something that follows’ (1985.: 309). According to the scholar, reference represents a relationship between ‘things, or facts (phenomena, or metaphenomena)’ (ibid.: 310). Halliday specifies that reference can make a relation to single element of the text, e.g. ‘processes, participants, circumstances’ (ibid.). He outlines that in the short text mentioned before, the reference could be tracked as follows: *Little Boy Blue* in the continuation of the text is referred as *he* and *him*.

The second cohesive device is ellipsis. Halliday shortly determines it as

‘a clause, or a part of a clause, or a part (usually including the lexical element) of a verbal or nominal group, may be presumed at a subsequent place in the text be the device of positive omission – that is, by saying nothing, where something is required to make up a sentence’ (ibid. 309).

He highlights that in the text the example of the use of ellipsis could be noticed as follows: [...] *Not I!* is an ellipsis for the clause ‘*I will not wake him*’ (ibid.: 310). In addition, Halliday shortly mentions substitution principle as ‘a placeholding element is inserted to signal the gap, like the *do* in *for if I do*’ (ibid.). However, the researcher does not specify substitution as an independent cohesive device in this book. In the research on cohesion Halliday and Hassan

(1976) more specifically describe cohesive devices and mention substitution as an individual cohesive device of the grammatical cohesion group.

The third cohesive device is conjunction. According to Halliday, conjunction is ‘a clause or clause complex, or some longer stretch of text, may be related to what follows it by one or other of a specific set of semantic relations’ (1985: 310). Halliday specifies, ‘the most general categories are those of apposition and clarification, addition and variation, and spatio-temporal, manner, causal-conditional and matter’ (ibid.). In addition, he mentions that ‘conjunction is a way of setting up the logical relations that characterize clause complex in the absence of the structural relationships by which such complexes are defined’ (ibid).

According to Halliday, the word *for* shows a ‘conjunctive relation between *I will not* and *if I do he will cry*’ (ibid.: 309).

The fourth cohesive device, or a cohesive group, is lexical cohesion. Halliday states that

‘continuity may be established in a text by the choice of words. This may take form of words repetition; or the choice of word that is related in some way to a previous one – either semantically, such that two are in the broadest sense synonymous, or collocationally, such that the two have a more than ordinary tendency to co-occur’ (ibid.: 310).

Moreover, Halliday specifies that lexical cohesion might be achieved by the presence of keywords (ibid.). He states that ‘lexical ties are independent of structure and may span long passages of intervening discourse’ (ibid.: 311). Considering the short text mentioned above, according to Halliday, ‘the word *sheep* in the line three reiterates *sheep* in line two; *cow* relates to *sheep*, *corn* to *meadow*, and *wake* to *asleep*’ (ibid.: 309).

Halliday states that all these resources (cohesive devices) ‘make it possible to link items of any size, whether below or above the clause; and to link items at any distance, whether structurally related or not’ (ibid.: 310). However, every cohesive device implements this action differently. Halliday specifies that usually different cohesive devices are indicated in one sentence or clause, as it was presented in the short text. For that reason, every cohesive device has more specific and context-oriented scope of application.

Brown and Yule (1983) referring to the theory presented by Halliday and Hasan discuss the general aspects of a text and essence of cohesion. First of all, Brown and Yule highlight cohesion provides the use of cohesive markers, which compose ‘textness’ (1983: 192).

The next topic which Brown and Yule overview is cohesive relations. Figure 1.2 presents all types of cohesive relations. As a matter of fact, only endophoric relations are the elements of cohesion within a text. According to the researchers, ‘where their interpretation lies within a text, they are called endophoric relations and do form cohesive ties within the text’ (ibid.). The form of cohesive ties is presented in Figure 1.1. As it is presented in Figure

1.2, endophoric relations could be divided into sub-types: anaphora and cataphora. Brown and Yule specify Halliday and Hasan's interpretation, 'those which look back in the text for their interpretation [...] are anaphoric relations, and those which look forward in the text for their interpretation, which are called cataphoric relations' (1983: 192). In the example presented in Figure 1.2 it is highlighted that *It* refers forward and back taking into accordance the structure of the sentence.

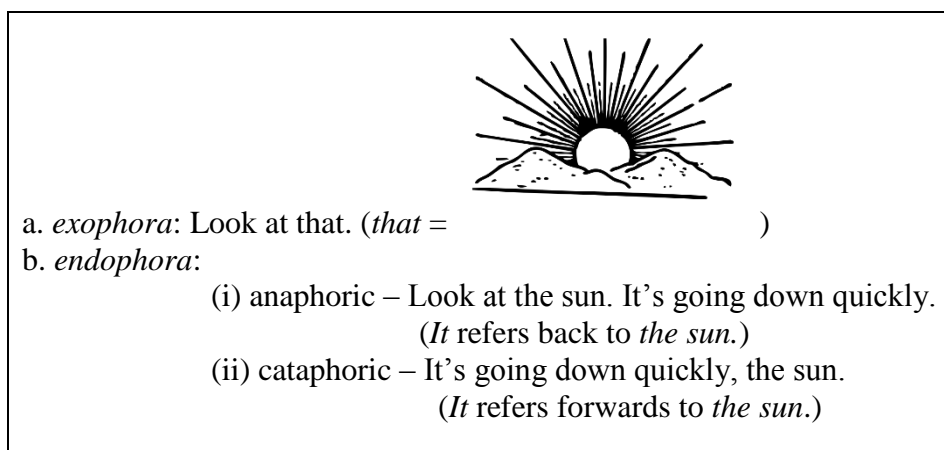


Figure 1.2 Types of co-reference relation (Brown and Yule, 1983: 193)

Brown and Yule explain that exophoric relations originate outside the text. However, if an exophoric relation occurs in the text, then it is incomprehensible for the reader without the additional knowledge of the context which stands beyond the reference or other cohesive devices applied to reproduce this relation. For that reason, the meaning of demonstrative reference *that* in the sentence 'Look at that' would not be understandable without the picture of the sunset (Figure 1.2). Considering that exophoric relations might be considered as a more common element of spoken texts or as a typical element for face-to-face communication because only in spoken discourse there is an opportunity to supplement speech with appropriate gestures. For example, as in the example 'Look at that' it is necessary to point to the sun in order to specify what is *that*.

Brown and Yule mention that co-reference is not the only possible way to produce cohesion within a text. Brown and Yule outline some lexical relations: hyponymy, part-whole '(*arm* is part of a *man*)' (ibid.), collocability, clausal substitution, comparison, syntactic repetition, consistency of tense, stylistic choice.

Also, Brown and Yule express some criticism towards Halliday and Hasan's concept of cohesion. Brown and Yule discuss cohesion in 'contiguous sentences'. Brown and Yule provide one of the examples:

'A: There's the doorbell

B: I'm in the bath' (1983: 196).

They highlight that a normal reader would consider these two sentences as a text, which it is. However, considering the theory of texture and cohesive ties explained in Chapter 1.1 it might be concluded that they are not relatable to that text. According to Brown and Yule, a reader 'will assume that there are 'semantic relations' between the sentences, in the absence of any explicit assertion that there is such a relationship' (ibid.). Tanskanen (2006) also mentions a similar case to the above-mentioned one and refers to Enkvist (1978, 1990) and Widdowson (1978) who 'concluded that overt markers of cohesion are only of secondary importance in the creation of unity in text, compared to the covert aboutness created by coherence' (2006: 17). Nevertheless, Brown and Yule agree with Halliday and Hasan that 'we shall assert that hearers and readers do not depend upon formal markers of cohesion in order to identify a text as a text' (ibid.: 198).

Halliday and Hasan (1976) in their book *Cohesion in English* mention that 'cohesion is part of the system of language' (1976: 5). They highlight that cohesion is realised through systemic resources. However, Halliday and Hasan more often call these systemic resources – cohesive devices. The researchers state,

'the actualization of cohesion in any given instance, however, depends not merely on the selection of some option from within these resources, but also on the presence of some other element which resolves the presupposition the tis sets up' (ibid.).

According to Halliday and Hasan, cohesion is realised through the 'stratal' language organisation pattern. The scholars describe this patter as follows: 'language can be explained as a multiple coding system comprising three levels of coding, or 'strata'' (ibid.). Figure 1.3 presents all three levels. Halliday and Hasan state that on lexicogrammatical level there is a clear distinction between grammar and vocabulary. Therefore, cohesion is expressed by grammatic structures and vocabulary. Grammatical and lexical cohesion is observed in detail in the following subchapters.

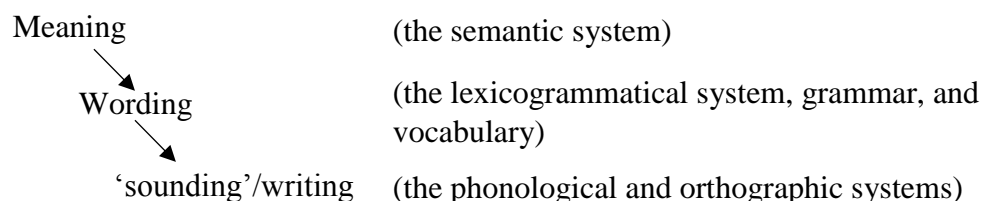


Figure 1.3 **Three levels of coding** (Halliday and Hasan, 1976: 5)

The last theory of cohesion for the observation is Beaugrande and Dressler's (1981) study. They describe cohesion as one of the main standards of textuality in the book *Introduction to Text Linguistics*. Other standards include such notions as coherence, informativity, intertextuality, acceptability, situationality, and intentionality. Beaugrande and Dressler describe that cohesion is the first standard of textuality. It 'concerns the ways in which the components of the surface text, i.e. the actual words we hear or see, are mutually connected within a sequence' (Online 1). They speak more specifically about components of the surface text as a dependent on a grammatical composition of a text. According to Beaugrande and Dressler, 'all of the functions which can be used to signal relations among surface elements are included under our notion of cohesion' (Online 1).

1.3 Grammatical cohesion

This subchapter describes what grammatical cohesion is. First, taking into account the information gathered in the previous subchapters it is important to mention that grammatical cohesion is achieved through the use of grammatical cohesive devices. The cohesive devices of this group are repetition, ellipsis, substitution, and conjunction. In order to narrow down the research topic, only two cohesive devices of grammatical group: reference and conjunction were selected. Therefore, in the following two subchapters the most important information about them is presented.

1.3.1 Essence of grammatical cohesion

Halliday and Hasan (1976) consider it important to highlight that 'we talk of cohesion as being grammatical or lexical', we do not imply that it is a purely formal relation, in which meaning is not involved' (1976: 6). The researchers emphasise that 'cohesion is a semantic relation' (ibid.) and as every semantic relation, cohesion also is accomplishing through lexicogrammatical system. Therefore, they do not consider grammatical and lexical cohesion to be so distinctive. According to Halliday and Hasan, 'some forms of cohesion are realized through the grammar and others through the vocabulary' (ibid.).

McCarthy (2006) presents grammatical cohesion as 'the surface marking of semantic links between clauses and sentences in written discourse, and between utterances and turns in speech' (2006: 34). McCarthy does not specify special features of grammatical cohesion either. The scholar mentions, 'spoken and written discourses display grammatical connexions between individual clauses and utterances' (ibid.: 35) and focuses on explanation of cohesive

devices of grammatical cohesion group. In addition, it should be said that Bakker and Wakker (2009) in the book *Discourse Cohesion in Ancient Greek* discuss the topic of grammatical cohesion only from the point of view that grammatical cohesion is simply a group of cohesive devices which are realised on grammatical level.

In addition to this topic, it is relevant to consider Halliday's (1985) statements about the grammatical structure. Halliday states that 'there is no structural relationship between, say, two occurrences of a lexical item, or between *John* and *he* – the members of such pairs are not linked in any constructional pattern' (1985: 338). Halliday names all non-structural relationships cohesion. Halliday believes that a text is not realised by a grammatic structure in a specific way. According to Halliday, a text has a semantic structure. Halliday explains that 'just as a syllable has a phonological structure, and a clause has a grammatical structure, a text has a semantic structure; but while the concept of structure is the same, the level at which it is 'coded' is different' (ibid.).

It is considered appropriate to finish this subchapter by Halliday and Hasan's (1985) words: 'to be effective, grammatical cohesion requires the support of lexical cohesion' (1985: 82). Further, they mention that lexical and grammatical cohesion also relate vice versa and support each other.

1.3.2 Reference

The first cohesive device from the grammatical cohesion group is reference. In the beginning it is important to mention that reference is a cohesive device which might operate on different levels of textual relations. These relations are exophora and endophora. Moreover, endophora includes anaphoric and cataphoric relations. Figure 1.2 (see Chapter 1.2) visually presents these relations.

Bussmann, Trauth, and Kazzazi (1996) define reference as an act of identifying 'objects of reality, about which he/she says something' (1996: 989). The scholars identify forms of reference:

'(a) situation-dependent reference expressed through pronouns, definite articles, deictic expressions (deixis), 'incomplete' designations, and also through gestures; (b) situation-independent reference expressed through personal names (proper noun) and 'complete' designations; (c) situation-defining reference expressed through illocutive expressions (illocution; also anaphora)' (ibid.)

It is interesting to observe that Bussmann, Trauth, and Kazzazi primarily speak about reference in the context of spoken discourse.

According to Wales (2001), reference redirects to something indicated previously or further in a text. Moreover, Wales indicates that reference can be not only textual but also situational. Wales describes that ‘in a text, the terms reference and refer are convenient to describe the function of words like pronouns and determiners to designate a noun phrase they identify with in the immediate co-text’ (2001: 336). Wales believes that reference in a text mean ‘any kind of designation’ (ibid.)

Halliday and Hasan (1976) believe that despite the fact that reference is a part of grammatical cohesion, it establishes strictly a semantic relation of a text. According to Halliday and Hasan, ‘since the relationship is on the semantic level, the reference item is in no way constrained to match the grammatical class of the item it refers to’ (1976: 32). However, they state that semantic relation is not necessarily in the text. The relation might be accessible only from the situation, which is called an exophoric relation.

Meyer (2009) believes that the primal purpose of reference is organising cohesive ties in a text. Meyer states that ‘reference is a process whereby a construction such as a third-person pronoun links parts of a text that have the same referent’ (2009: 103). Meyer provides an example:

‘*Maria* was last seen shouting for help inside a military jeep that evening. *Her* family heard *she* had been taken to the Regional Command Military camp in Legaspi City. *She* has not been seen since. Members of *her* family have received death threats’ (ibid.).

In the example above, *she* and *her* makes an anaphoric reference to *Maria* creating a cohesive tie construction, presented in Figure 1.1 (see Chapter 1.1), and establishing texture.

Halliday (1985) speak about exophora as a forefather of reference. Halliday provides an example: ‘the concept of ‘he’ probably originated as ‘that man over there’’ (1985). He expands this theory to all pronouns. In addition to that, Warren (2009) in the article in an edited collection: *Lexical Cohesion and Corpus Linguistics* states that ‘the use of ellipsis and reference are generally far more prevalent in spoken discourse than in written discourse’ (2009: 46). Therefore, taking into consideration Halliday’s theory of origins of reference, it becomes clear why reference is more common in spoken language. Nevertheless, relying on the results of the previous research of the author, it could be underlined that reference is the most prevalent cohesive device in financial articles.

McCarthy (2006) extensively speaks about cataphoric and anaphoric relations of reference. McCarthy agrees with other authors (Halliday and Hasan, 1976; Halliday, 1985) that reference expressed as cohesive device is primarily realised through the use of pronouns. Both cataphoric and anaphoric relations are realised by different types of pronouns. However,

Halliday and Hasan (1976) specify that the pronoun *that* constructs only cataphoric relations. Meanwhile, the pronoun *this* constructs both cataphoric and anaphoric relations. Nevertheless, it should be emphasised that '*this*' and '*that*' is rather an exception; other pronouns can be both cataphoric and anaphoric.

Halliday and Hasan (1976) split reference into three types. The first type of reference is called personal reference. They explain the name of this reference type as follows: 'there is no general name for this category in traditional grammar, because, the members of it belong to different classes with diverse structural roles; but in fact they represent a single system, that of person [...]' (1976: 43). Halliday and Hasan specify many variables on which the form and type of the pronoun depend. In the previous study of the author of this bachelor thesis the analysis of personal reference was accomplished by separating personal reference into these subtypes: subject pronouns, object pronouns, possessive determiners, possessive pronouns, and reflexive pronouns. The analysis of all subtypes of personal pronoun is considered to be the most precise method of identifying the level of commonness of personal reference in the discourse.

The next type of reference is demonstrative reference. According to Halliday and Hasan (1976), 'demonstrative reference is essentially a form of verbal pointing. The speaker identifies the referent by locating it on a scale of proximity' (1976: 57). Halliday and Hasan define an abstract and specific level of proximity as *near* and *far*. According to Halliday and Hasan, demonstrative reference is identified by two types of demonstratives: circumstantial and participant.

Circumstantial demonstratives are realised by pronouns: *here* and *there*, *now* and *then*, according to level of proximity (*near* and *far*). According to Halliday and Hasan, circumstantial demonstratives 'refer to the location of a process in space or time, and they normally do so directly, not via the location of some person or object that is participating in the process' (ibid.). Halliday and Hasan explain that participant demonstratives 'refer to the location of some thing, typically some entity - person or object - that is participating in the process' (ibid.: 58). Participant demonstratives are *this* and *these*, *that* and *those*, according to level of proximity (*near* and *far*).

The last type of reference is comparative reference. Halliday (1985) states 'whereas personals and demonstratives, when used anaphorically, set up a relation of co-reference, whereby the same entity is referred to over again, comparatives set up a relation of contrast' (1985: 316). In that context, Wales (2001) refers to Beaugrande and Dressler (1981) who define the notion "co-reference" as 'an inclusive term for all those cohesive devices such as

linkage, which permit ‘already used’ structures to be ‘re-used’ or modified economically in a text’ (2001: 86).

Halliday and Hasan describe that comparison can be general and particular. The scholars specify that general comparison ‘is expressed by a certain class of adjectives and adverbs’ (1976: 77). According to Halliday and Hasan general comparison shows likeness or unlikeness. Some typical examples of general comparison are adjectives *same, identical, similar, additional*, etc; and adverbials: *identically, similarly, likewise*, etc.

Halliday and Hasan believe that particular comparison compares quantity or quality. Particular comparison as well as general comparison is expressed by adjectives and adverbs. They put an emphasis on the fact that particular comparison is always comparative. Usually, particular comparison can be noticed by the following adjectives: *better, more*, etc.; and adverbials: *more, less, equally*, etc.

1.3.3 Conjunction

The next cohesive device from the group of grammatical cohesion is conjunction. First of all, it is considered necessary to observe some definitions provided by different published sources. Conjunction can be discussed from many points of observation; therefore, not all definitions observed in linguistic dictionaries include information about conjunction expressed as a cohesive device.

Wales (2001) refers to Beaugrande and Dressler (1981) who state that

‘it refers to links between units with the same status, i.e. which are ‘both true’ in the textual world, and contrast with disjunction (= ‘or’). Conjunction in this co-ordinate sense is most commonly signified by *and*; as well as (conjuncts like) *moreover, also, besides*’ (2001: 77)

Johnson and Johnson (1998) in *Encyclopedia of Applied Linguistics* define cohesion as ‘a cohesive relation marking logical-semantic relations between linguistic expressions and linking paragraphs’ (1998: 56). Moreover, Johnson and Johnson mention three conjunctive expressions: *elaboration, extension, and enhancement*, which are described in detail in Table 1.1.

Meyer (2009) speaks about conjunction as a slightly different cohesive device among others, because, according to Meyer, conjunction does not ‘depend on linguistic items occurring in the prior context’ (2009: 107). The researcher reviews that conjunction ‘instead, [...] involves the inclusion of various kinds of expressions that mark relationships between what occurred previously in a text and what follows’ (ibid.). The scholar indicates that words

as *also, therefore, meanwhile*, etc. are the pieces that establish this type of cohesion. In other words, Meyer explains that conjunction allows to consolidate different segments of a text into logical correlation.

Moreover, Meyer mentions three conjunctive relationships explained by Halliday and Hasan (1976). They describe conjunctive relationships as subcategories of conjunction. These relations are called additive, adversative, clausal, and temporal. Also, Halliday and Hasan presume that conjunctive relations can be external and internal. According to Meyer, ‘addition is signalled in texts by the coordinating conjunction *and* and transitional expressions such as *also* and *in addition*’ (ibid.). Meyer presents another kind of additive relationship called exemplification. Exemplification refers to something previously said complimenting the clause by an example. The researcher states that exemplification is realised by such expressions as *for instance* and *for example*. According to Meyer,

‘adversative relationships are marked by the coordinating conjunction *but* and other expressions such as *however, instead*, and *in contrast* that serve to mark some kind of difference or contrast between sections of a text’ (ibid.).

Meyer indicates that both clausal and temporal relations are ‘marked, respectively, by expressions such as *therefore, as a result*, and *so*, and *first, finally*, and *then*’ (2009: 108). However, Meyer does not define these two relations separately.

Halliday (1985) clarifies the distinction between external and internal conjunctive relations. According to Halliday, external conjunction ‘sets up a relationship between processes’ (1985: 338). Halliday presents this relationship as follows: ‘*first* [this happened], *next* [that happened], *finally* [the other happened]’ (ibid.). Speaking about internal relationships, Halliday explains ‘this sets up a relationship between propositions or proposals; for example *first* [I say this], *next* [I say that], *finally* [I say the other]’ (ibid.).

Mainly, Halliday and Hasan (1976) observe conjunction in terms of four conjunctive relations. Halliday and Hasan point out that four conjunctive relations are slightly simplified image of this cohesive device. It is necessary to add that Halliday and Hasan mention ‘other conjunctive items (continuatives)’ (1976: 267). According to Halliday and Hasan, continuatives are ‘a number of individual items which, although they do not express any particular one of the conjunctive relations identified above, are nevertheless used with a cohesive force in the text’ (ibid.). Halliday and Hasan provide the list of continuatives as follows: *now, of course, well, anyway, surely*, and *after all*.

Halliday (1985) expands the theoretical background of types and subtypes of conjunction. Halliday presents three new types of conjunction and two sub-types for each type of conjunction. Halliday supplements the theory by a detailed table. McCarthy (1991)

presents a more simplified version, which includes the core information. The table drawn by McCarthy is presented in Table 1.1.

Table 1.1 Classification of conjunctive relations (McCarthy, 1991: 47)

Type	Sub-types	Examples
elaboration	apposition clarification	<i>in other words</i> <i>or rather</i>
extension	addition variation	<i>and/but</i> <i>alternatively</i>
enhancement	spatio-temporal causal-conditional	<i>there/previously</i> <i>consequently/in that case</i>

Halliday indicates that the first type is elaboration. According to Halliday, there are two subcategories of elaboration: apposition and clarification. He defines that when ‘some element is re-presented, or restated, either by exposition, the ‘i.e.’ relation, or by example, the ‘e.g.’ relation’ (1985: 324) that indicates on apposition. The researcher determines that clarification relation is established when the ‘elaborated element is not simply restated but reinstated, summarized, made more precise or in some other way clarified for purposes of the discourse’ (ibid.)

The second type is extension, which includes addition and variation. According to Halliday, ‘addition is either positive *and*, negative *nor* or adversative *but*’ (ibid.). Additionally, Halliday identifies that ‘variation includes replacive instead, subtractive expert and alternative or types’ (1985: 324).

The third and the last type of conjunction is enhancement. As it could be seen in Table 1.1, there are two subtypes: spatio-temporal and causal-conditional. However, Halliday observes two more subtypes: matter and manner. Halliday believes that spatio-temporal relation ‘may be used conjunctively within a text, with *here* and *there*, spatial adverbs such as *behind* and *nearby*, and expressions containing a place noun or adverb plus reference item. e.g. *in the same place, anywhere else*’ (ibid.: 325). According to Halliday, causal-conditional relations relate to result, reason, or purpose.

1.4 Lexical cohesion

The next group of cohesion is lexical cohesion. It is decided to begin this subchapter with the words of Halliday and Hasan (1985), which were partly mentioned in the subchapter dedicated to grammatical cohesion. Halliday and Hasan consider that ‘in a typical text, grammatical and lexical cohesion move hand in hand, the one supporting the other. The many

differing kinds of semantic relation operate at one and the same time through sizeable portions of a text' (1985: 83).

To prove that point, Halliday and Hasan provide two examples which perfectly execute lexical and grammatical cohesion; however, the first example is without lexical cohesion: 'John gets up early. We bought him a tie. He loves peaches. My house is next to his.' (ibid.). The other example is without grammatical cohesion: 'A cat is sitting on a fence. A fence is often made of wood. Carpenters work with wood. Wood planks can be bought from a lumber store.' (1985: 83). As it could be noticed, in semantical relation these two texts do not make sense, despite the fact, that they might be called cohesive.

Therefore, it is essential to look at definitions and features of lexical cohesion. Johnson and Johnson (1998) believe that lexical cohesion 'depends on the choice by the speaker/writer of particular lexical items, which are related to the relevant preceding expressions through some recognizable semantic relation' (1998: 56). Bakker and Wakker (2009) state that their research is primarily focused on grammatical cohesion; however, they mention lexical cohesion and define it as follows: 'Lexical cohesion devices create cohesion by lexical means. Devices like lexical repetition, the use of synonymy and hyponymy' (2009: XV). Naciscione (2010) in the book *Stylistic Use of Phraseological Units in Discourse* discusses the use of lexical cohesion and phraseological cohesion. Considering lexical cohesion, Naciscione refers to Halliday and Hasan (1976) accounting that '[...] it is more subtle and difficult to estimate. Every lexical item may enter into a cohesive relationship, but by itself it carries no indication of whether it functions cohesively or not' (2010: 61). At the end, a rather simple definition is present by Meyer (2009) in the glossary 'a type of cohesion involving, for instance, the repetition of a word or the use of a synonym' (2009: 229).

Tanskanen (2006) in the book *Collaborating towards Coherence* broadly discusses the notion "lexical cohesion". He states that many researchers on lexical cohesion agree on the same basic aspects of this notion. The researcher refers to Halliday and Hasan, who identify two lexical cohesive relations: *reiteration* and *collocation*. He mentions that sometime the term reiteration is substituted by *repetition*. Nevertheless, Tanskanen agrees that reiteration includes 'the repetition of lexical item, either identically, or in a modified form (synonymic expression, generalisation, specification, co-specification; contrast is also a special case of reiteration)' (2006: 12). Moreover, the scholar considers that grammatical ties are slightly easier to find comparing to lexical ties.

Tanskanen describes the several different approaches, including Halliday and Hasan's (1976), as "previous approaches". He mentions that Halliday and Hasan receive a bit of criticism for different cases, some of those explained in Chapter 1.2. Another case for

criticism is that Halliday and Hasan discuss lexical cohesion narrowly, comparing to grammatical cohesion. The researcher refers to Halliday and Hasan who describe the two above-mentioned cohesive relations. According to Tanskanen,

‘Reiteration includes the repetition of the same word (*mushroom – mushroom*), the use of a synonym (*sword – brand*), the use of a superordinate (*Jaguar – car*), and the use of a general word (We all kept quiet. That seemed the best *move*.)’ (2006: 32).

The researcher simply describes that all above-mentioned devices have ‘have the function of reiterating the previous item, either in an identical or somewhat modified form, and this is the basis for the creation of a cohesive tie between the items’ (2006: 32).

Tanskanen decodes ‘a little vague’ (ibid.: 33) definition of the second lexical cohesive relation – collocation, presented by Halliday and Hasan. The scholar clarifies that ‘the association is achieved when the lexical items have a tendency to appear in similar lexical environments or when they are related lexicosemantically’ (ibid.). He provides the following examples of collocation, ‘*boy* and *girl* are cohesive because they have opposite meanings, but *laugh* and *joke*, and *boat* and *row* are also cohesive, although they are not systematically related’ (ibid.). The researcher highlights that Halliday and Hasan believe that such examples as *laugh* and *joke* are simply usually associated; therefore, a cohesive relation is built. Tanskanen mentions that ‘collocation is a very intricate relation indeed: the items are only linked by a subtle association, since they cannot be said to in any way repeat each other’ (ibid. 34).

Most of the authors to whose theories this paper refers to agree with the model of lexical cohesion presented by Halliday and Hasan (1976). For example, (McCarthy, 1991; Meyer, 2009) speak about lexical cohesion in the context of two cohesive relations: *collocation* and *reiteration*. Nevertheless, Tanskanen states that Hasan (1984) expanded the research on lexical cohesion and came up with the conclusion that ‘because of the intersubjective nature of collocation “it is best to avoid the category in research”’ (ibid.: 35). He mentions that Hasan developed absolutely new two categories of lexical cohesion: *general* and *instantial*. It should be mentioned that general and instantial categories are certainly influenced by previous two (reiteration and collocation) but they maintain more areas of convergence between a text and lexical cohesive relations and fulfil the gaps of the previous theory in Hasan’s view.

Halliday (1985), another scholar to whose theory this bachelor thesis is often referred, in later individual research on grammar also reconsidered the theory of two relations of lexical cohesion. The researcher presents three separate relations: *repetition*, *synonymy*, and *collocation*. It is considerably clear what repetition is. In addition, Halliday states that

‘for a lexical item to be recognized a repeated it need not be in the same morphological shape. For example dine, dining, diner, dinner are all the same item, and an occurrence of any one constitutes a repetition of any of the others.’ (1985: 330-331).

Speaking about synonymy and repetition, the researcher highlights the necessity to lexical cohesion to be supplemented by grammatical cohesion. In most of the examples he specifies the importance of reference, which strengthens a cohesive tie. Moreover, Halliday states that under the subtype synonymy other lexical devices as *antonymy*, *hyponymy*, and *meronymy* should also be observed.

Halliday presents collocation as an instance of cohesion ‘which do not depend on any general semantic relationship of the types just discussed, but rather on a particular association between the items in question – tendency to co-occur’ (ibid.: 333). However, he points out that the associations are dependent on the context of a text. Halliday mentions that collocation has ‘a noticeably cohesive effect [...] because collocation is one of the factors on which we build our expectations of what is to come next’ (ibid.).

In conclusion, after researching the essence of lexical cohesion it was decided not to follow the example of Tanskanen, a researcher who in one research has observed different theories and models including Halliday and Hasan (1976), Hasan (1984), Halliday (1985), Enkvist (1975), Källgren (1979), Daneš (1987), and more scholars. After detailed researching of published researches on lexical cohesion, Tanskanen combined all researched models into one, which includes all possible variables. Nevertheless, for the framework of this research it was decided to stick to the original theory presented by Halliday and Hasan (1976). Because, comparing with the model developed by Halliday (1985), it could be noticed that the general tendency of analysing: *synonymy*, *repetition*, and general associations is present in the both models. Moreover, considering that other scholars as McCarthy (1991), Meyer (2009) and Naciscione (2010) refer exclusively to a model by Halliday and Hasan (1976), it might be concluded that this model is still relevant.

At the end of the whole chapter it could be summarised that grammatical and lexical cohesion groups are interrelated. It is important to note that each cohesive device has a number of unique characteristics and different viewpoints on its essence. Therefore, only the features of the above-mentioned cohesive devices are taken as the basis for the empirical part of this research.

2 CHARACTERISTICS OF BUSINESS DISCOURSE AND BUSINESS SPEECHES

The present chapter is determined to present the main characteristics of business discourse and to explain the organisational pattern of business speeches. The first subchapter is entitled to define the notion “discourse” and to research the key features of business discourse. This chapter observes the theoretical background behind this term. The second subchapter presents the organisational pattern on business speeches and observes some particular qualities of business speeches. This chapter establishes another fundamental theoretical background, which is considered vital in order to answer the principal questions of this paper.

2.1 Defining discourse and explaining features of business discourse

This chapter is aimed to observe the notion “discourse” and “business discourse”. The information presented in this chapter is essential in order to understand the features of the language of the research corpus. Before overstepping to discussion about the features of business discourse it is considered essential to look at several definitions of the notion “discourse” in order to clarify the theoretical basis of the term.

According to Coghlan and Brydon-Miller (2014), ‘discourse is a set of language and rhetorical practices that individuals employ in order to navigate various communicatory environments.’ (2014: 1). They specify that one person possesses the knowledge of several discourses, e.g. several conversations with a friend, college supervisor, and a police officer at the same day presumes application of several different discourses. It could be considered that Matthews (2007) agrees with Coghlan and Brydon-Miller. Nevertheless, Matthews discusses different discourse practices in texts, e.g. an article in a magazine and an article in an academic journal will possess different discourses and requires the understanding of these discourses from the reader. Bussmann, Trauth, and Kazzazi (1996) refer to different authors who define this notion differently, e.g. as

‘connected speech (Harris 1952); the product of an interactive process in a sociocultural context (Pike 1954); performance (vs ‘text’ as a representation of the formal grammatical structure of discourse) (van Dijk 1974); talk (vs written prose, or ‘text’) (Cicourel 1975); conversational interaction (Coulthard 1977); ‘language in context across all forms and modes’ (Tannen 1981); and process (vs product, or ‘text’) (Brown and Yule 1983)’ (1996: 320).

It could be noted that Bussmann, Trauth, and Kazzazi personally define discourse as a ‘generic term for various types of text’ (ibid.).

Gunnarsson (2009) discusses the notion “professional discourse”. He specifies that this term is used ‘to cover text and talk – and the intertwining of these modalities – in professional contexts and for professional purposes’ (2009: 5). The researcher defines professional discourse as a language of professionals. Thus, business discourse might be considered as a part of larger group – professional discourse. The researcher presents 6 features of professional discourse:

‘(1) Expert discourse related to different domains, (2) Goal-oriented, situated discourse, (3) Conventionalized form of discourse, (4) Discourse in a socially ordered group, (5) Discourse dependent on various societal framework systems, and (6) Dynamically changing discourse’ (2009: 5).

First of all, Gunnarsson presents professional discourse as a feature of the community. According to the scholar, primary, professional discourse is a language of the certain community of the professionals. Therefore, the scholar highlights that any professional discourse is only what can be learned, e.g. ‘terminology, text genres, conversation patterns’ (ibid.: 6). Next, the researcher specifies that professional discourse requires especial level of certainty. Then, he mentions that professional discourse is what supplements a profession or is an inalienable part of it. For example, people are expecting a judge speak like a judge, not like a meteorologist from a news channel. In addition to that, the scholar mentions that ‘the conventionalized feature is also part of what distinguishes professional discourse from private discourse; we do not expect judges to talk in court in the same way as they do when they chat with their friends over a cup of coffee’ (ibid.: 7). Next, according to Gunnarsson, ‘much professional discourse is the result of collaboration between professionals within the working group, between professionals from different working groups and from different levels within an organization’ (ibid.: 8). In other words, professional discourse has a certain internal hierarchy; for that reason, he mentions that inside one professional discourse these exist several smaller groups of professional discourses. Next, Gunnarsson believes that professional discourse is dependent on four frameworks: ‘a legal-societal framework, a technical-economical framework, a socio-cultural framework and a linguistic framework’ (ibid.: 9). At the end, he states that nowadays, different discourses are constantly developing due to various factors. The scholar provides such instances as globalisation, multilingualism, multiculturalism, elimination of the “boarders” etc.

AlHaidari (2018) defines the notion discourse refereeing to Van Dijk (2009),

‘a multidimensional social phenomenon that can comprise the following components: a verbal language, an object, an action, a social interaction between speakers, a social practice, a mental representation, a communicative event, a cultural invention, and different entities speakers maintain’ (2018: 11).

However, describing business discourse, AlHaidari refers to Bargiela-Chiappini (2007) ‘who describes it as a social action that shows “how people communicate using talk or writing in commercial organizations in order to get their work done”’ (2018: 11). The researcher defines business discourse as a business communication between people who engage in the same working activities, which are certainly connected with the ‘domain of business’ (ibid.: 20). The scholar mentions that ‘the term “business discourse” – sometimes called workplace discourse, institutional discourse, or professional discourse (ibid.). The researcher mainly refers to Bargiela-Chiappini, quoting that: ‘business discourse is “how people communicate using talk or writing in commercial organizations in order to get their work done”’ (ibid.: 21).

Fox and Fox (2004) discuss the notion “CPD” (corporate and public discourse). They present many instances of events under the term CPD, some of the most relevant to this research topic are ‘a corporation’s statement of general business principles, a corporation’s media advertisement [...] a CEO’s media interview, a CEO’s media address’ (2004: 13). According to Fox and Fox, discourse as a part of CPD is ‘a key instrument of individuals’ and groups’ participation in social roles, social contexts, social situations, and social processes’ (ibid.: 15). The researchers mention that the original comprehension of discourse as spoken language evolved not just into spoken and written language but into ‘societal phenomenon’ (ibid.). Moreover, Fox and Fox state that

‘functional definitions of discourse, on the other hand, inquiring into how language elements and patterns are used as a means to an end, underline acts and events and recognize elements of discourse and the relations between those elements in terms of their contribution and function within the social situation’ (ibid.).

Bargiela-Chiappini and Zhang (2013) mostly observe Business English as an area of English for Specific Purposes (ESP); however, they also consider Business English from the perspective of business discourse. According to Bargiela-Chiappini and Zhang ‘discourse analysis, contrastive pragmatics, conversation analysis, occasionally combined with insights from ethnography, laid the foundations of a multimethod approach to “business discourse”’ (2013: 195). It could be highlighted that they discuss the notion business discourse in the context of international and intercultural relationships, which are feasible due to the English for Business Purposes (EBP) studies. Moreover, they mention that business discourse is a fundamental practice for Business English studies. It is important to specify that Bargiela-Chiappini and Zhang note that there are plenty of business discourses. For example, they report about the ‘development of Asian business discourse(s)’ (2013.: 207), ‘Western scope of business discourse research’ (ibid.), and differences between Japanese and English business discourse. Therefore, considering the “hierarchy” of discourse mentioned above, it might be

concluded that some features of business discourse are exclusive for a specific language or culture.

Bargiela-Chiappini, Nickerson, and Planken (2007) present business discourse as follows: ‘business discourse is all about how people communicate using talk or writing in commercial organizations in order to get their work done’ (2007: 3). They refer to early research of Bargiela-Chiappini and Nickerson (2002), who state that business discourse ‘is founded on the twin notions of discourse as *situated action* and of *language at work*’ (ibid.: 5). Moreover, the researchers make an important statement that ‘business discourse researchers do not consider language in isolation as their object of study, but they seek to establish how written texts and spoken events reflect the social and organizational contexts in which they are used’ (ibid.: 18). At the end it is considered appropriate to add that Bargiela-Chiappini, Nickerson, and Planken quote the description of the nature of Business English by Mike Nelson,

‘The world of business found in real-life language is a limited one made up of business people, companies, institutions, money, business events, places of business, time, modes of communication and vocabulary concerned with technology. The language found was surprisingly positive, with very few negative words featuring at all. It was also found to be dynamic and action-orientated and non- emotive’ (ibid.: 91).

The above-mentioned information is considered essential for this topic, as during the literature review (of Bargiela-Chiappini and Zhang 2013; Bargiela-Chiappini, Nickerson, and Planken, 2007) it was found that these authors usually separate these two notions: Business English and business discourse. However, considering the contents of the above-mentioned quotation it becomes clear that Business English and business discourse are closely related.

At the end of this part it is important to make several brief conclusions. Firstly, it might be concluded that business discourse is a more specified branch of the most general notion “professional discourse”. Consequently, it might be considered that the term business discourse comprises the general characteristics of the discourse and professional discourse. Secondly, it might be concluded that business discourse and discourse in general, as being more socially directed practices, are different according to many factors such as language, culture, hierarchy, etc. Therefore, considering that the language of the research corpus is English, this research deals directly with English business discourse. Summing up, it could be considered that this subchapter contains sufficient information about discourse, business discourse, and some additional information relatable to the topic. The following subchapter will supplement this bachelor thesis with the information concerning organisation of business speeches as part of a business discourse.

2.2 Organisation of business speeches

First, it is essential to describe how business speeches are organised. It is crucial to observe this topic, because this research is aimed to find ‘Which cohesive devices are typical for each organisational part of a speech?’. Before overstepping to the description of the organisational pattern of the speech it is considered important to clarify that this research accepts the general assumption that the organisation of a business speech or business presentation is the same as any other public speech or presentation. However, this chapter observes some features which are applicable only for business speeches.

University of Technology Sydney (UTS) provides the structure of a presentation on their official website. According to UTS, a presentation ‘has an introduction, body and conclusion’ (Online 2). This is an adequate structure of a product presentation and any non-specific presentations, texts, and speeches. University of Technology Sydney reports about each section of the presentation. According to UTS, ‘the introduction should orient the audience to your subject and purpose. To capture interest and set up rapport, it should tell the audience what to expect’ (ibid.). The university specifies that during the introductory part it is crucial to identify the main point of the discussion ‘and ensure that your supporting argument or information relates closely to it’ (ibid.). UTS presents the introduction as a funnel. This model is presented in Figure 2.1.

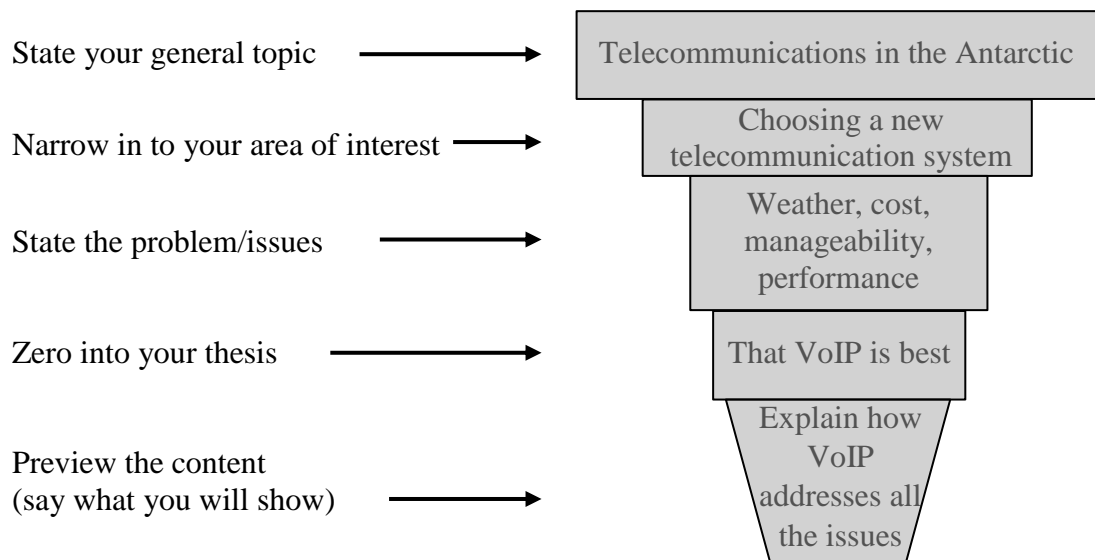


Figure 2.1 **Funnel-shaped introduction** (University of Technology Sydney (UTS), Online 2)

The next presentation section is called body. University of Technology Sydney describes that the body part demonstrates the information mentioned in the introduction. The

university specifies that the body part must be structured. UTS presents several ways of body organisations, ‘chronologically, by priority, or theme’ (Online 2). Moreover, UTS highlights that each idea can be reiterated several times during a presentation, because, that allows audience to fully understand the message. Also, UTS highlights that ‘you need to state clearly the links between your ideas and always signal when the next point is coming’ (ibid.); this point can be considered as a suggestion of applying grammatical cohesion by conjunction.

UTS does not mention many points about the last section of a presentation. It reports that ‘similar to a written assignment, the conclusion again states your main points and what has been learned or shown but you also may raise implications inherent in the findings and offer creative recommendations’ (ibid.).

Berdine (1973) broadly reports about how to structure a business speech. According to Berdine, a business speech should be prepared into eight phases. The scholar highlights that the first phase of business speech structuring process is to prepare it in advance. On this stage the goal of the speech should be identified and ‘knowledge of one’s purpose will influence the statement of the key idea, the type of audience analysis made, the order of arrangement of ideas, developmental devices, conclusion, and the introduction’ (1973: 28). The researcher considers that the aim or purpose of most of the business speeches is informative and describes three functions of informative speech: ‘to increase knowledge, [...] to facilitate a specific set of actions, [...] provide a foundation for subsequent persuasive appeals’ (ibid.). In addition, Berdine emphasises that a report is one of the main methods for informative speech and that report can be spoken and written. The researcher names the second type of business speech as persuasive. According to him, ‘many speeches will contain both informative and persuasive elements and purposes since persuasion depends on some degree of information’ (ibid.).

Berdine defines that the second stage ‘is to state the key idea’ (ibid.). The researcher reports more specifically about this stage as making an introduction, which was described previously. According to Berdine, the introduction should specify the limits of the topic and ‘test the material selected for the speech in terms of the limits defined by the key idea’ (ibid.). The scholar denotes that the introduction should ‘capture the attention and interest of the audience in the topic and should expose the general subject matter or preview the subject’ (ibid.: 32). In addition to that point, he mentions that introduction establishes the mood and determines the essential background of the speech. According to the researcher, ‘the introduction may help to assure a proper attitude especially when listeners are opposed to the main ideas’ (ibid.).

He describes that the third phase is the process of preparing the analysis of the audience. Berdine believes that 'by collecting relevant data on the audience, the speaker can increase the probability of getting across his intended meaning, of bringing about the desired persuasive effect, or of accomplishing his stated purpose' (1973.: 29). He specifies that the main purpose of the speech is to make the predictable effect on the audience; thus, the analysis of the audience for the speech giver is one of the most crucial steps.

Then, Berdine states the importance of having an order of arrangement of ideas. The researcher describes five ordering patterns: *topical order*, *chronological order*, *geographic order* (in case of relevancy), *cause-effect*, and *problem-solution approach*. The researcher comments that every approach or ordering system has certain advantages but the main point is that a well-established business should implement a specific ordering pattern.

Berdine mentions several devices for the information verifications: 'example, illustration, testimony, explanation, statistics and restatement' (1973: 31). All these sources or 'developmental devices' (ibid.) besides imparting the relevance to the speech 'elucidate the central ideas in order to bring about the intended interpretation or action on the part of the audience' (ibid.: 30).

At the end it is important to present four types of conclusion mentioned by Berdine. According to the scholar, 'conclusion gives the speaker one last chance to emphasize his purpose and to reinforce his central idea' (ibid.: 31) and gives to the audience the last impression. He states that the first type of conclusion is a summary of the principal ideas. However, the scholar specifies that sometimes summative conclusions are not the best choice for the business speech, as they might be boring for the audience. Instead, he recommends 'to make internal summaries during the speech at the end of each point rather than to attempt to summarize the whole speech at the conclusion' (ibid.). According to Berdine, the second type of conclusion is quotation. The next type of conclusion is illustration, which is at the same time one of the developmental devices mentioned above. The researcher names the last type of conclusion as personal conclusion, 'which involves the speaker alluding to a personal experience, attitude, belief, or relationship in order to increase credibility or reinforce the key idea of his speech' (ibid.).

Finally, it could be summarised that this chapter observed the information about the features of "discourse" and "business discourse", and the organisational pattern of a business speech. It was found that business discourse is a part of organisational discourse and that they are defined by specific features as conventionality. It was concluded that the organisational pattern of business speech is constructed by introduction, body, and conclusion.

3 ANALYSIS OF COHESION IN BUSINESS SPEECHES

This chapter presents the empirical study and its results. In the beginning, it provides information concerning the research methods, presents essential information about the corpus of the analysis and describes the procedure of the analysis. This chapter observes frequency analysis as the practical research method. Then, this chapter presents the findings of the analysis. Each sub-subchapter is dedicated to one cohesive device in business speeches. Finally, this chapter is supplemented by a short summary of the results of the analysis at the end of every sub-subchapter.

3.1 Research methods, materials, and procedure

Before proceeding to the practical results of the empirical study of this research, it is essential to identify the theoretical background for the research methods. In order to answer the research questions of this bachelor thesis, frequency analysis was applied as the main research method.

In the beginning it is decided to refer to Bussmann, Trauth, and Kazzazi (1996), who speak about “lexicostatistics”. They state that lexicostatistics is

‘the quantitative description of the vocabulary of a specific language, the frequency of specific devices or the stylistic characteristics of different texts. Lexicostatistical data are gathered by means of data processing’ (1996: 685).

According to Baker (2010) ‘the most basic aspect of frequency analysis simply allows us to derive frequencies of particular words (or phrases or tags), or lists of all of the words in a corpus, presented alphabetically or in order of frequency’ (2010: 103). He outlines that frequency analysis allows an analyst to find what is the difference in the use of e.g. words in a text. Baker believes that frequency analysis allows to distinguish high and low frequency.

According to the researcher,

‘a related form of frequency analysis involves calculating keywords. A keyword, put simply, is a word which occurs statistically more frequently in one file or corpus, when compared against another comparable or reference corpus’ (ibid.: 104).

Baker provides various examples and emphasises that different tendencies, might be collected by applying frequency analysis methodology.

Hossein (2012) defines that frequency ‘is merely a count of the number of cases in a particular category’ (2012: 235). The researcher states that a table or a graph is defined as frequency distribution. According to the scholar, ‘the importance of a frequency distribution

is simply that it allows the researcher to see the general characteristics of a particular variable for the cases or participants in the research' (2012: 236). Hossein emphasises that

'The frequency distribution may reveal important characteristics such as *asymmetry* and *skewedness*, [...] *extreme scores* [...], and so on, in the case of score data. For qualitative data, it may help reveal categories which are very frequent or so infrequent that it becomes meaningless to analyze them further' (ibid.).

According to Online 4, frequency analysis employs 'three types of measures' (Online 4). The first is Measure of Central Tendency which 'is a single measure that tries to describe the set of data through a value that represents the central position within that data set' (ibid.). The second is Measures of Dispersion which 'reflect the spread or variability of data within a data set' (ibid.). And the last is Percentile Values that 'show what percent of values in a data set fall below a certain percent' (ibid.). According to Online 4, 'used together, these tools of frequency analysis are extremely important for analysis and interpretation of any data at a glance' (ibid.).

The research corpus consists of three speeches from two online sources. The selection criteria of relevant business speeches were as follows: the business speech should present the achievements of a company or describe some economical, market, trade, or business-related events, the speech-giver should be a public person, the speech should be taken from the credible source, the speech should be held in 2017. Taking into consideration the above-mentioned criteria of relevant business speech, the business speech of E. Musk (2017) and T. May and S. Abe (2017) were selected for the analysis. These speeches are considered to be suitable for the analysis and correspond to selection criteria. The credibility of the source of Musk's speech was gained by the link to the recording of this speech supplemented to the transcript. Thus, it was possible to compare the quality of the transcript with actual speech. Finally, it was decided to analyse May and Abe's speeches as one, since the source provided these two speeches in one article.

The first speech, hereinafter referred as Speech 1, was held by E. Musk during International Astronautical Congress 2017. Speech 1 is titled *Making Humans a Multi-Planetary Species*. The purpose of this speech is to present the latest developments in the area of space-craft, space-engineering, and other nuances concerning space travel and the ambitions of the company 'SpaceX'. Moreover, Speech 1 observes some funding questions and future ambitions of the company. According to the source of the transcript of Speech 1,

'SpaceX CEO and Lead Designer Elon Musk will provide an update to his technical presentation from IAC 2016 regarding the long-term technical challenges that need to be solved to support the creation of a permanent, self-sustaining human presence on Mars' (Speech 1).

Considering that information, the business speech of Musk could be identified as a presentation of the product and a description of the current state of the company.

Speech 1 consists of 5095 words. This number includes some rare occasions of the emotes from the audience, e.g. '[Applause]' (Speech 1), numbers, description of the moderator, speaker, and the introductory speech of Le Gall. However, this number of words exclude the information from the slides, which is originally present in the transcript of Speech 1. In one occasion, in the next subchapter, it is necessary to separately observe both consistent parts of Speech 1: the business speech of Musk and the introductory speech of Le Gall. Therefore, it is essential to mention that separately the speech of Le Gall consists of 192 words.

The second speech, hereinafter referred as Speech 2, was held by the Prime Minister of the United Kingdom T. May and the Prime Minister of Japan S. Abe on UK-Japan Business Forum 2017. Both Prime Ministers spoke about the importance of the establishment of trade, investment, and innovation relationships between the UK and Japan. It is necessary to outline that May and Abe highlight some key reasons for the establishment of such relationships, providing statistics, historical data, and outlook for the future.

Speech 2 consists of 1567 words including numbers and headlines. As in case with Speech 1, in the following subchapter, the introductory parts and conclusions of the business speeches of May and Abe are analysed separately. Consequently, it is important to mention that the speech of May consists of 811 words and the speech of Abe consists of 756 words.

In conducting this research, the following research procedure was applied:

1. Identifying the research aim, enabling objectives and research questions;
2. Surveying the theoretical literature;
3. Narrowing down the research to 3 cohesive devices: reference, conjunction, and lexical cohesion;
4. Selecting a corpus of the analysis;
5. Conducting the frequency analysis;
6. Drawing conclusions.

The analysis was conducted according to the following pattern. It consisted of attentive reading of Speech 1 and Speech 2. Then, every element of the types and sub-types of the selected cohesive devices was determined and counted separately. Every example, number of the examples, type, and sub-type of reference and conjunction were outlined in tables which can be found in Appendix 1 and Appendix 2. These tables include detailed results of the analysis. However, it is important to note that as in most of the cases the of use of reference and conjunction are the same, these cases were not highlighted and commented individually.

However, the examples of the use of types of lexical cohesion were individually marked inside the transcripts of the business speeches, which can also be found in Appendix 4 and Appendix 5. Then the figures which present more visual examples of the use of the types of reference, conjunction, and lexical cohesion were drawn and included further in this chapter.

After that the frequency analysis was conducted. The frequency analysis was applied according to the following formula: if ($N_a = 100\%$) and ($N_b = x\%$), then

- $x = 100 * b / a$.

In terms of this research this formula was applied to count the frequency of cohesive devices in Speech 1 and Speech 2 and the frequency of types and sub-types of reference, conjunction, and lexical cohesion. The most common cohesive device in business speeches was determined when all essential data for this research were obtained.

3.2 Findings of the analysis of cohesive devices in business speeches

This subchapter presents the results of the analysis of the selected business articles. First, the frequency of the used cohesive devices will be considered, then will be the use of reference, conjunction and lexical cohesion in the selected business speeches. In order to structure the results of the analysis, there is designated a separate sub-subchapter for every cohesive device.

3.2.1 Frequency of cohesive devices in business speeches

This subchapter presents the results of the frequency analysis of the selected business articles. Figure 3.1 and Figure 3.2 show the total number of the cohesive devices selected for the analysis in the business speech of Musk (2017) and May and Abe (2017). In the beginning, this chapter observes the results of the analysis in the business speech of Musk, then in the business speeches of May and Abe, and at the end it answers the research question: ‘Which cohesive devices are typical for each part of a speech?’.

Primarily, it could be outlined that the total number of examples of cohesive devices in Speech 1 is 1984. It should be emphasised that 705 examples of conjunction, 650 examples of lexical cohesion, and 629 examples of reference were found in Speech 1.

Figure 3.1 presents that conjunction is the most common cohesive device in Speech 1. Conjunction compose ~35% of all cohesive devices in Speech 1. The next common cohesive device is lexical cohesion, which composes ~33% of the business speech of Musk. The least common cohesive device is reference. Reference constitutes ~32% of Speech 1. As it can be

noticed, there is a slight difference in the frequency of the three selected cohesive devices for the analysis. The average difference in frequency between these cohesive devices is ~3%. That could be considered as a sufficiently insignificant difference.

Next, it is important to outline the ratio between the use of cohesive devices and a raw text. During the analysis it was found that lexical cohesion, conjunction, and reference together comprise ~39% of Musk's business speech.

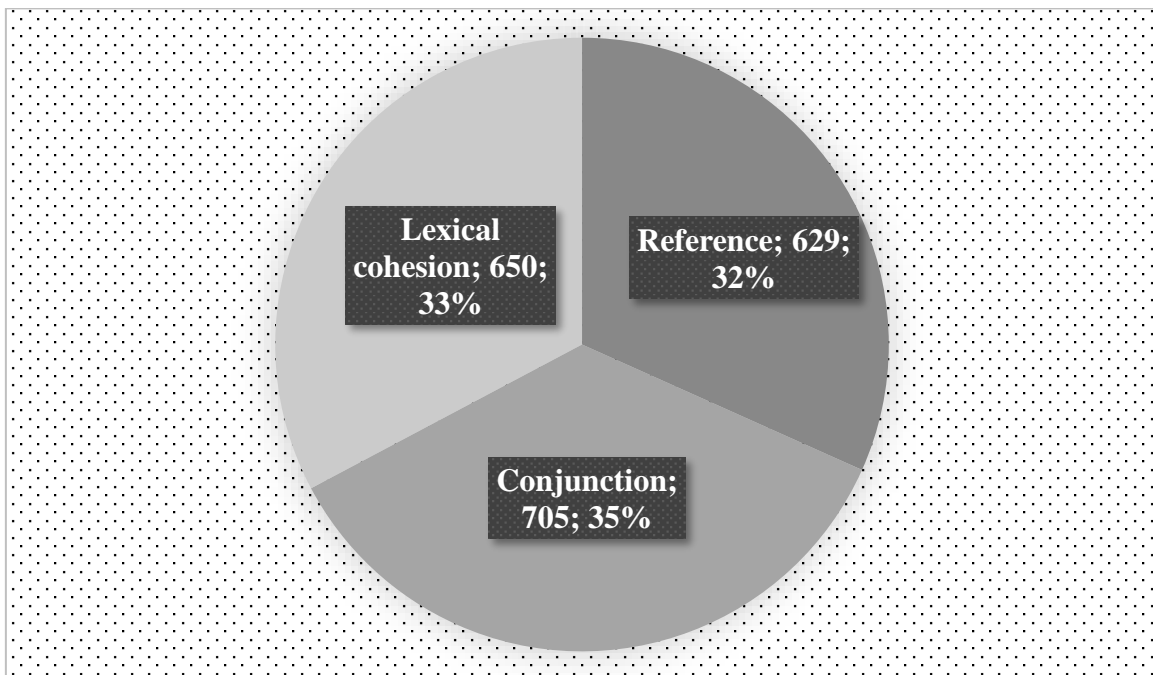


Figure 3.1 Cohesion in Speech 1

Secondly, it is important to observe the results of the analysis of the business speeches of May and Abe. Figure 3.2 presents that during analysis 214 examples of lexical cohesion, 211 examples of conjunction, and 180 examples of references were found. The total number of the selected cohesive devices is 605.

As it could be noticed in Figure 3.2, the most common group in Speech 2 is lexical cohesion, which comprises ~35% of all cohesive devices in Speech 2. Nevertheless, conjunction, as the next common cohesive device, comprises ~35% of all cohesive devices, but the actual number of the examples found in the business speeches is slightly lower. The least common cohesive device in Speech 2 is reference, which composes 30% of Speech 2. The average difference in frequency of lexical cohesion, reference, and conjunction is ~3%. It is considered essential to highlight that the average difference in frequency of Speech 1 and Speech 2 is almost identical. In addition, it could be noted that according to Figure 3.1 and Figure 3.2, the ratio of the use of the three cohesive devices in Speech 1 and Speech 2 is rather identical.

Next, the ratio between the use of cohesive devices and raw text in Speech 2. is as follows: all three selected cohesive devices for the analysis compose ~39% of Speech 2. It is considered vital to highlight that the same rate is present in Speech 1.

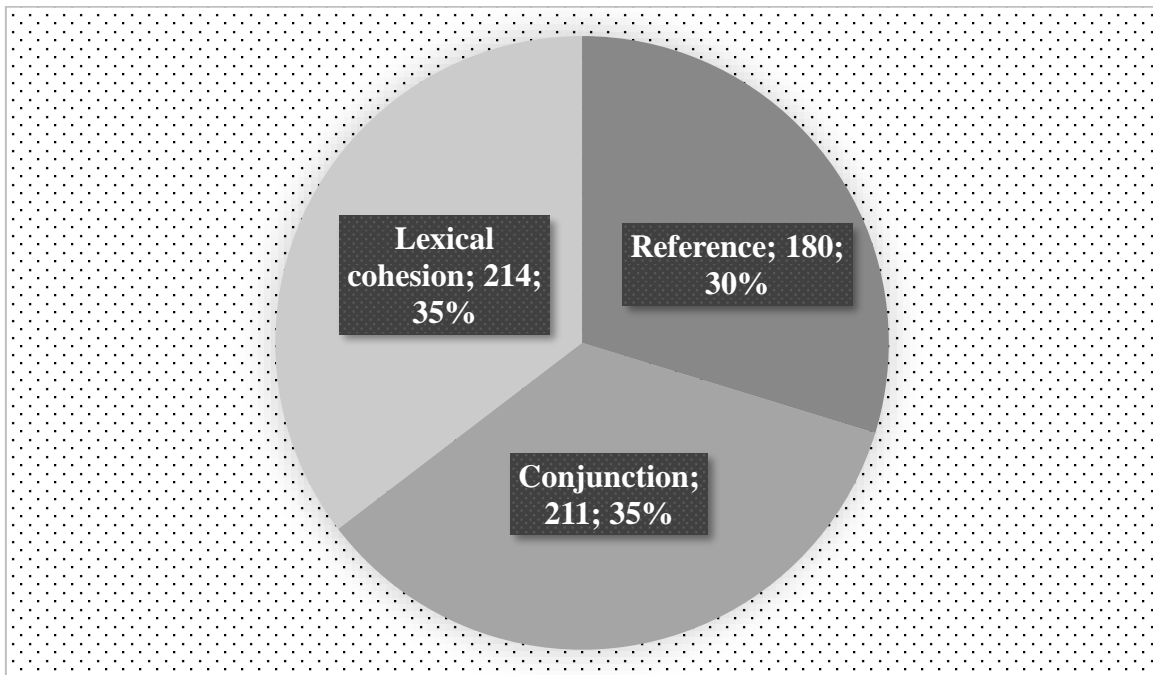


Figure 3.2 Cohesion in Speech 2

At the end of this subchapter it is necessary to answer the question: ‘Which cohesive devices are typical for each organisational part of a speech?’. Following the theoretical background established in the previous chapters, Speech 1 and Speech 2 were separated into three parts: introduction, body, and conclusion. However, it is important to mention that the business speech of Musk is supplemented by a short introductory speech of Le Gall. Therefore, it was decided to analyse the speech of Le Gall as a separate introduction. In addition to that, as Speech 2 consists of two speeches of Prime Minister May and Prime Minister Abe, it was decided to analyse the introduction and conclusion of each business speech of both Prime Ministers separately.

According to the results of the analysis of the introduction of the business speech of May, the most common cohesive device is conjunction – ~41%, then reference – ~31%, and lexical cohesion – ~28%. The conclusion of May’s speech consists of ~35% of reference, ~35% of conjunction, and ~30% of lexical cohesion.

The introduction of Abe’s speech consists of ~34% of reference, ~26% of conjunction, and 40% of lexical cohesion. According to the results of the analysis, the conclusion of his speech is composed from ~53% of reference, ~27% of conjunction, and 20% of lexical cohesion.

The introductory speech of Le Gall, which was separately analysed, consists of ~18% of reference, ~51% of conjunction, and ~31% of lexical cohesion. Considering the results of the analysis of the introduction of the business speech of Musk, reference composes ~54% of the cohesive devices in the introduction, conjunction composes ~37% and lexical cohesion ~56%. The conclusion of Musk's speech consists of ~30% of reference, ~29% of conjunction, and ~40% of lexical cohesion.

Considering both together the speeches of May and Abe, the body part consist of ~34% of reference, ~47% of conjunction and ~50% of lexical cohesion. Finally, the body part of Musk's business speech consists of ~32% of reference, ~36% of conjunction, and ~32% of lexical cohesion.

Summing up the results of the analysis it could be stated that lexical cohesion is the most typical group in the introductory parts. Conjunction is the second common cohesive device and reference is the least common one. Reference is the most common cohesive device in the conclusions of the analysed business speeches. Conjunction is the second typical cohesive device in the conclusion and lexical cohesion is the least typical group. Finally, conjunction is used by 1% more commonly in the body parts of the business speeches than lexical cohesion.

The following sub-subchapters provide more specific findings about each cohesive device selected for the analysis. These sub-subchapters present the findings about the frequency of the types and subtypes of the cohesive devices, give some examples from the research corpus, and provide some comments on the most important aspects of the analysis.

3.2.2 Reference in business speeches

Reference is the first cohesive device for the analysis. Table with complete results is available in Appendix 1. Figure 3.3 presents that in Speech 1 and Speech 2 the most prevalent type of reference is personal reference, then demonstrative reference, and the least common type is comparative reference. The most common examples of reference in Speech 1 and Speech 2 are presented in Figure 3.4.

It could be noted that personal reference composes ~58% of the total number of references in Speech 1 and ~51% in Speech 2. The most common sub-type of reference is expressed by personal pronouns as subject. As it was specified above, in Figure 3.4 the most common examples of use of reference in business speeches can be found. Nevertheless, it could be highlighted that the majority of those examples are not personal references expressed by personal pronouns as subject. Such results may be caused by the fact that two business

speeches include the use of different personal pronouns. For example, in Musk’s business speech the vast majority of personal references compose personal pronoun expressed as subject *you*, 105 examples, and *it*, 65 examples. In both speeches of May and Abe no examples of *you* were found and only 6 examples of *it*.

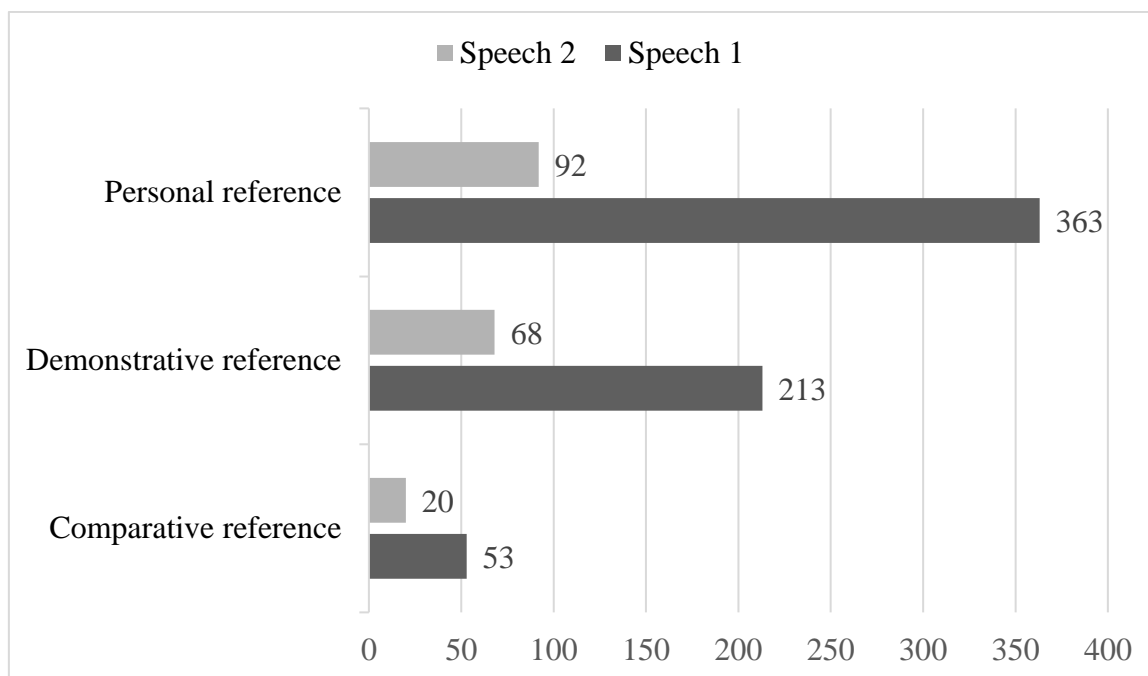


Figure 3.3 Reference in business speeches

Such difference in the use of personal pronouns can be explained by different styles of the speech. As it could be noticed, Musk had chosen more informal style of speech. For instance, such expressions as ‘[...] *you* need to be looking at *your* watch, not *your* calendar’, ‘[...] *you* have to balance the rocket out as it's coming in [...]’, ‘I said yes, *you* could also get more payload from an aircraft if *you* got rid of the landing gear [...]’, (Speech 1) etc. are very popular in Speech 1. As it was presented in the examples, Musk addresses the audience directly. According to Online 3, Speech 1 addresses in the first person point of view by 42%, in the second person by 33%, and in the third person by 23%.

In contrast, business speeches of May and Abe are executed more formally and there could be found less common use of personal reference. However, as May and Abe speak about the intercultural business relationships, in their business speeches there are very common such personal references as *we* (30 examples) and *our* (20 examples). Only these two personal references construct ~28% of all references in Speech 2. In comparison, the personal pronoun *we* composes only ~15% of all personal references in Speech 1. For example, ‘[...] deepening our trade relations with old friends and new allies around the world’, ‘*we* will ensure the greatest possible confidence in *our* economy and *we* will build the closest’ (Speech

2), etc. These examples show that in Speech 2, personal references *we* and *our* are used to refer to countries which they represent.

Moreover, another difference in the use of reference in business speeches of Musk and May and Abe should be highlighted. As Prime Minister Abe and Prime Minister May cross refer to each other, there could be found such personal references as *she* (1 example), *her*, (4 total examples), and *his* (1 example). According to Online 3, the business speeches of May and Abe addresses in the first person point of view by 77%, in the second person by 5%, and in the third person by 17%.

The next frequent type of reference is demonstrative reference. Speech 1 consists of ~34% of demonstrative references; Speech 2 consists of ~38% of them. Figure 3.4 shows that demonstrative reference *that* is the most common reference in Speech 1. However, the demonstrative reference *this* is one of the most common references in the business speeches of May and Abe.

It could be noted that singular demonstrative reference in *Near* and *Far* levels of proximity are the most common demonstrative references in business speeches. In addition, it should be highlighted that *Far* level of proximity is more common in Speech 1 as 158 examples were found, which comprise ~74% of all demonstrative references. Nevertheless, 37 examples of demonstrative references which demonstrate *Near* level of proximity, which is ~54% of all demonstrative references, were found in Speech 2.

In addition, it should be pointed out that in terms of this research, with accordance to theory presented by Halliday and Hasan (1976), *now* and *then*, *here* and *there* are counted as time and place related demonstrative references not as conjunctions. Figure 3.4 shows that place related demonstrative reference *there* is one of the most common references in business speeches.

The least common type of reference in business speeches is comparative reference. Only 53 examples were found in Speech 1 and 20 examples were found in in Speech 2. The only comparative reference which is common in Speech 1 and Speech 2 is *more*.

Was also observed that in Speech 1 and Speech 2 particular comparative references are more common than general personal references. In the business speech of Musk comparative references realised by suffix *-er* are rather common. For example, '[...] so took us a lot longer to get it done', 'but because Mars has lower gravity than Earth [...]' (Speech 1), etc. In contrast, such comparative references are not common in the business speeches of the Prime Minister May and the Prime Minister Abe.

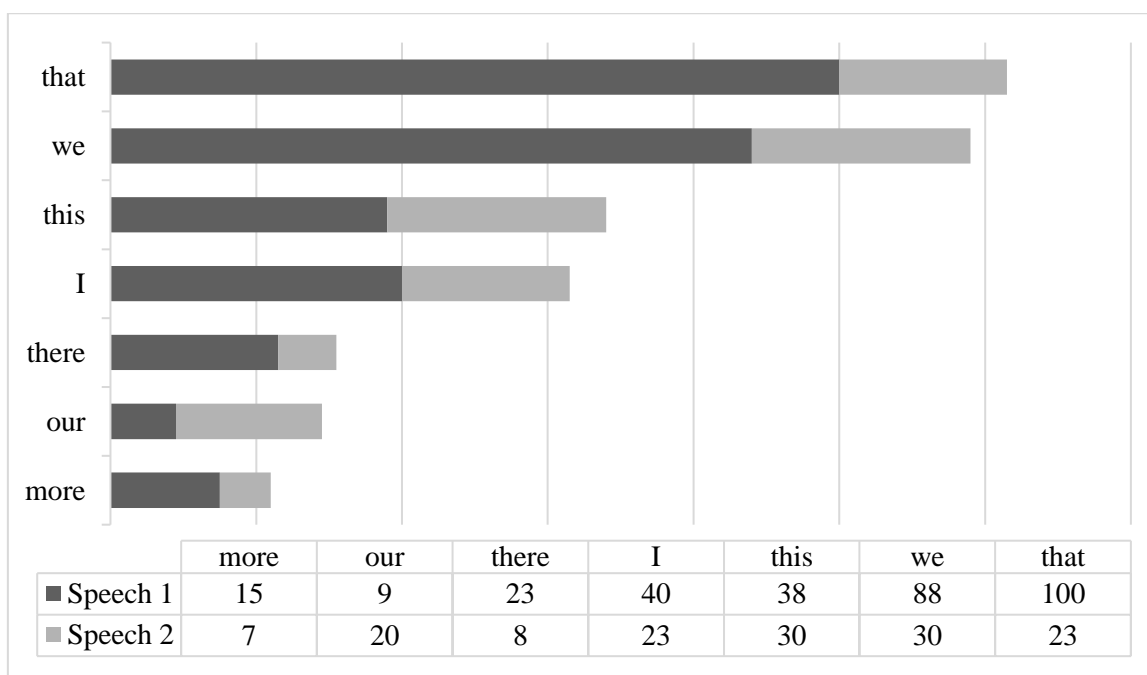


Figure 3.4 The most common examples of reference in Speech 1 and Speech 2

It can be noted that particular comparative references realised by *more+adv.*, *so+adv.*, etc. are rather equally common in Speech 1 and Speech 2. For instance, ‘Falcon Heavy ended up being a much more complex program [...]’ (Speech 1) and ‘[...] the opportunity to become an ever more outwardlooking Global Britain [...]’ (Speech 2).

At the end it can be summarised that personal references, demonstrative references, and comparative references are used sufficiently proportionally in the business speeches of Musk and May and Abe. The data of reference in Speech 1 is as follows: personal reference – ~51%, demonstrative reference – ~38%, and comparative reference – ~11%. The data of reference in Speech 2 is as follows: personal reference – ~58%, demonstrative reference – ~34%, and comparative reference – ~8%.

3.2.3 Conjunction in business speeches

The second cohesive device for the analysis is conjunction. Figure 3.5 presents which type of conjunction is the most common in the business speeches of Musk (2017) and May and Abe (2017). Figure 3.6 shows the most common conjunctions in Speech 1 and Speech 2. Full results of the analysis are available in Appendix 2.

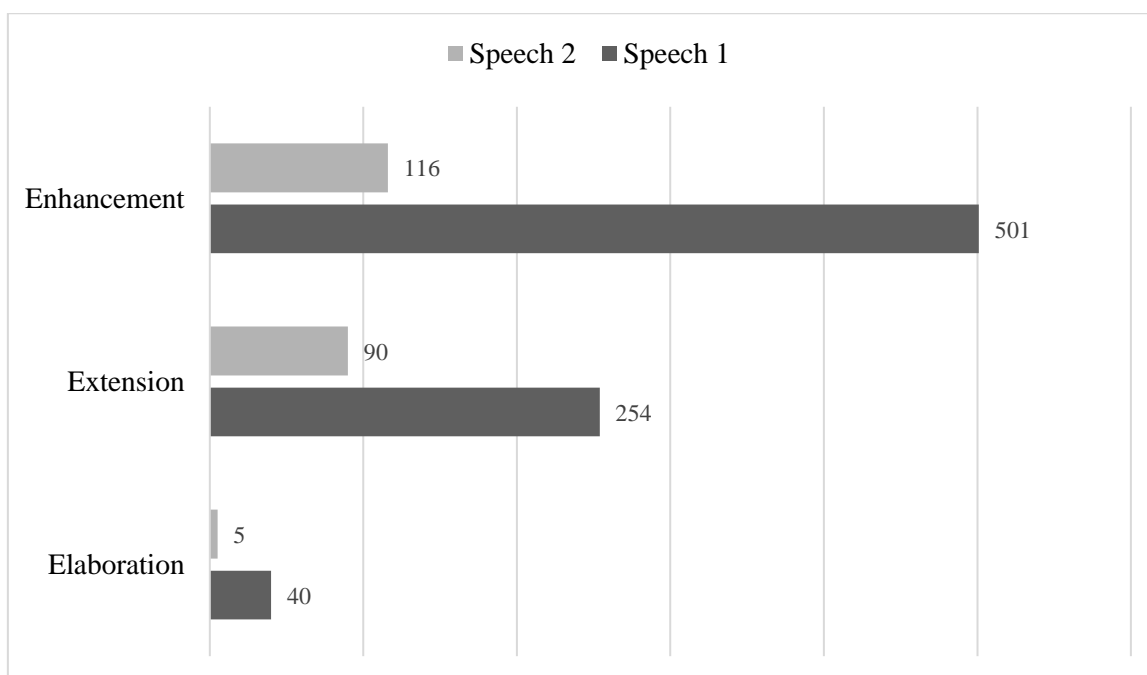


Figure 3.5 Conjunction in business speeches

Primarily, it should be noted that enhancement is the most common type of conjunction in Speech 1 and Speech 2. As it was outlined in the theoretical part of this research, enhancement has two subtypes: spatio-temporal and causal-temporal. However, during the analysis it was decided to follow the more expanded table of conjunctive relations presented by Halliday (1985). That table also includes two more subtypes of enhancement: manner and matter.

The results of the analysis show that in Speech 1 the frequency of subtypes of enhancement is as follows: spatio-temporal – 169 examples, manner – 123 examples, clausal temporal – 139 examples, and matter – 0 examples. In Speech 2 the frequency is as follows: spatio-temporal – 50 examples, manner – 27 examples, clausal temporal – 39 examples, and matter – 0 examples. As it could be noticed spatio-temporal conjunction is the most common sub-type of enhancement. However, spatio-temporal conjunction is not the most frequent conjunctive relation. The following examples of spatio-temporal conjunction can be given: ‘then the *next* key element is on the engine side’ (Speech 1), ‘during the period before we leave the European Union [...]’ (Speech 2), ‘[...] making the UK second only to America as Japan’s top investment destination [...]’ (Speech 2), etc.

Moreover, it is important to highlight that in Figure 3.6 from the six the most common conjunctions in Speech 1 and Speech 2 five are spatio-temporal conjunctions. In addition to that, as it was mentioned above, in terms of this research it was decided not to count *now*,

then, and *there* as demonstrative references, because Halliday (1985) adds them to the list of spatio-temporal conjunctions.

It could be added that Speech 1 presents another common conjunctive relation *so*, which is not indicated in Figure 3.6. These examples are not included, because 90 examples of *so* were found in Speech 1 and only 8 examples were found in Speech 2, and in Figure 3.6 only the examples of even use of conjunctive relations in Speech 1 and Speech 2 are present. The conjunction *so* composes ~73% of all manner conjunctive relations in Speech 1 and 30% in Speech 2. Finally, 3 examples of spatio-temporal relation *after* are present and no examples are present in Speech 1.

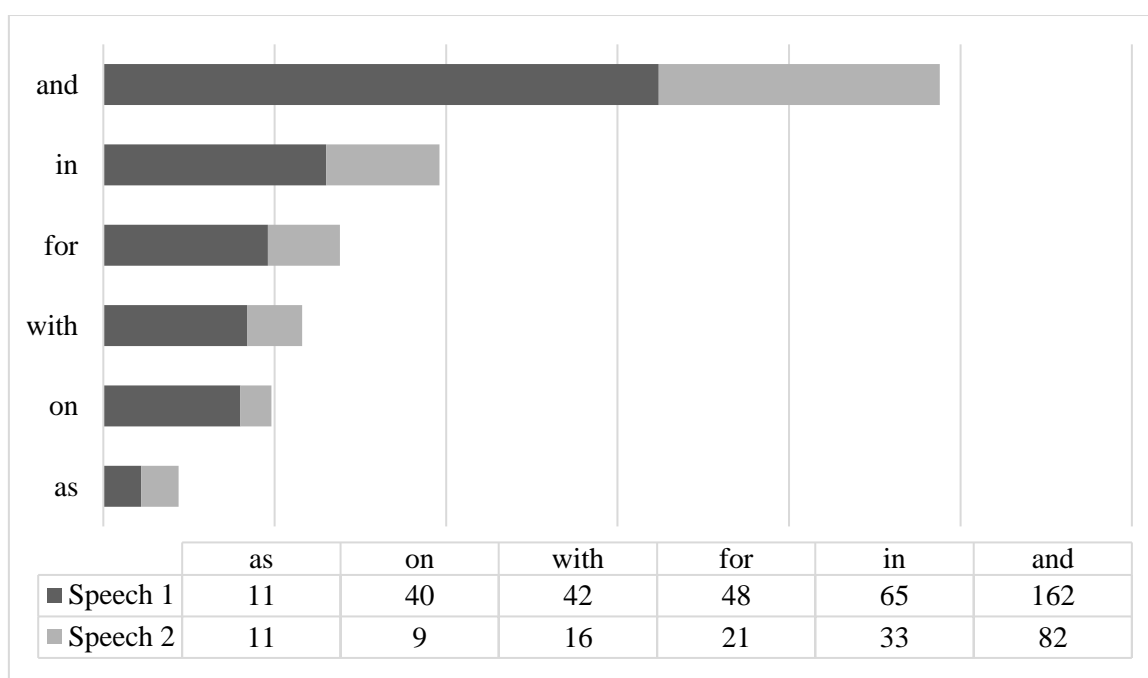


Figure 3.6 The most common examples of conjunction in Speech 1 and Speech 2

The second common type of conjunction in business speeches is extension. The sub-type of extension addition is more common in business speeches than variation. In Speech 1 addition composes ~88% of extension, and variation composes ~12%. In Speech 2 addition constitutes ~99% of extension, and variation composes only ~1%. However, the vast number of extension constitutes only one conjunction *and*. It is important to mention that 162 examples of this conjunction were found in Speech 1 and 82 examples were found in Speech 2. As a result, as it could be seen in Figure 3.6, *and* is the most common conjunction in business speeches.

It could be added that in Speech 1 there were found several examples of addition and variation which are significantly less commonly used in Speech 2 or are not present at all. For example, 28 examples of the variation *or* were found in Speech 1 and 0 examples were found

in Speech 2. In addition, 15 examples of *also* were found in Speech 1 and only 3 examples were found in Speech 2.

Finally, the least common type of conjunction in business speeches is elaboration. As it is presented in Figure 3.5, there were found 40 examples of elaboration in Speech 1 and only 5 examples in Speech 2. It should be noted that apposition is a more common sub-type of elaboration than clarification. More specifically, no examples of clarification were found in Speech 2 and 15 examples were found in Speech 1.

The most common example of elaboration in Speech 1 is the apposition *which*. This example is not included in Figure 3.6, because 17 examples were found in Speech 1, but only 1 example was found in Speech 2. Considering Speech 2, it could be noted that the rest of elaboration is composed from 2 examples of conjunction *that is* and 2 examples of the conjunction *who*.

Summing up, it could be stated that despite the fact that conjunction is almost the most common cohesive device in Speech 2, Speech 1 presents more variety of different conjunctive relations. Nevertheless, in both speeches the vast majority of the examples of conjunction are presented not by a variety of examples, but by few the most common conjunctive relations, which can be seen in Figure 3.6. In conclusion, it could be highlighted that the ratio of the use of conjunction in Speech 1 and Speech 2 is almost the same. For instance, ~14% of all words in Speech 1 are conjunctions and ~13% in Speech 2.

3.2.4 Lexical cohesion in business speeches

The last sub-subchapter is devoted to presentation of the results of the analysis of lexical cohesion in business speeches. The analysis was conducted in accordance with the theoretical model presented by Halliday and Hasan (1976). Therefore, there were analysed two types of lexical cohesion, which are presented in Figure 3.7. According to Figure 3.1 and Figure 3.2, it was observed that lexical cohesion is the most common group of devices in Speech 2 and the second common cohesive device in Speech 1.

The results of the analysis show that reiteration is the most common type of lexical cohesion in Speech 1 and Speech 2. Reiteration composes 70% of the examples in Speech 1 and ~80% of the examples of lexical cohesion in Speech 2. The most common cases of reiteration in Speech 1 and Speech 2 are expressed by repetition. For example,

‘Then the next key element is on the *engine* side. We have to have an extremely efficient *engine*. So the the Raptor *engine* will be the highest thrust-to- weight *engine*, we believe, of any *engine* of any kind ever made. We already have now 1200 seconds of firing across 42 main *engine* tests’ (Speech 1).

As it could be seen the word *engine* is repeated five times in a rather short section. The reiteration also includes the use of synonymy and other close substitutions in Speech 1 and Speech 2 such cases are very common. For example, in Speech 2 there can be found some cases where the Prime Ministers speak about the ‘UK leaving the European Union’, ‘the UK’s departure from the EU’, and ‘Brexit’ (Speech 2) which can be considered as the interchangeable notions.

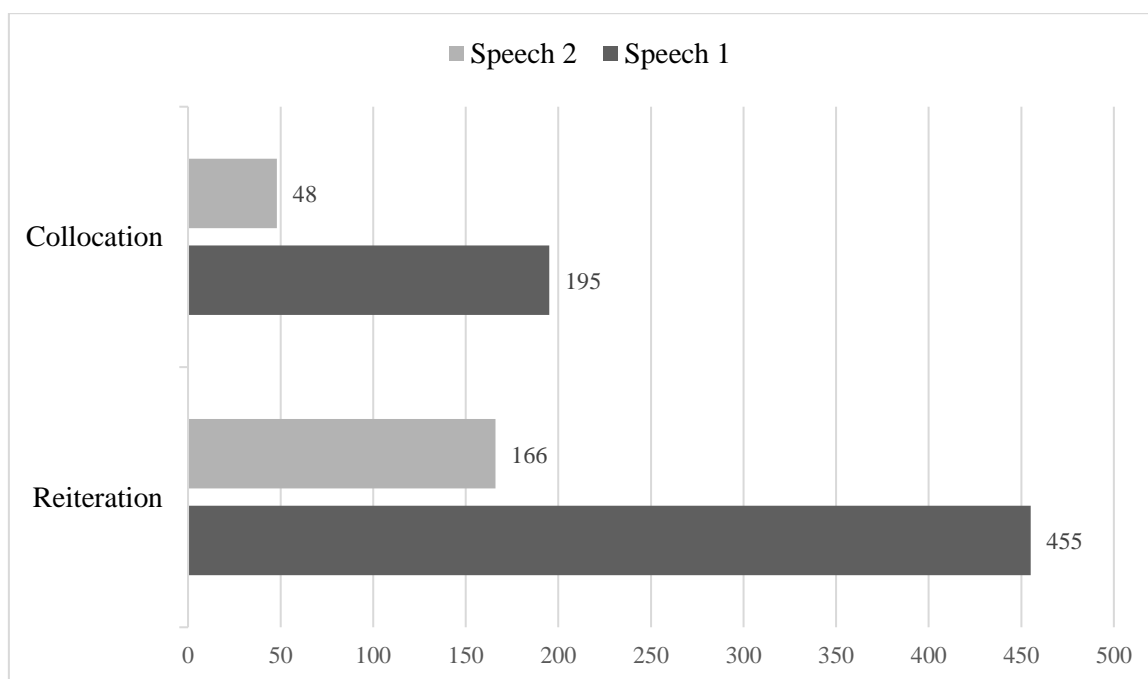


Figure 3.7 Lexical cohesion in business speeches

In addition, it should be mentioned that not all cases of repetition were counted in Speech 1 and Speech 2, because, in some cases, some words which determine, e.g. system units cannot be substituted in speech. For instance, ‘The test engine currently operates at 200 atmospheres, 200 *bar*, the flight engine will be at 250 *bar*, and then we believe over time we could probably get that to a little over 300 *bar*’ (Speech 1). However, this repetition is not considered as a case of cohesion, because in this case *bar* is repeated in order to enumerate a pressure in a metric system.

Nevertheless, it is important to mention that such repetitions as ‘and that’s *what what* being a spacefaring civilization [...]’ (Speech 1), which sometimes occur in the speech, are counted as the cases of repetition. It was observed, that Musk sometimes tends to repeat some words twice. That could be seen on the video recording of the Musk’s speech. The video is available in (Speech 1). Moreover, transcript of the speech of Musk precisely outlines the

language used during the speech. Thus, such cases of repetition can be considered as a feature of spoken language.

A less common type of lexical cohesion is collocation which comprises 30% of the examples in Speech 1 and ~20% of the examples in Speech 2. However, collocation is considered as a rather vague notion, as it was mentioned in subchapter 1.4 Lexical cohesion. It was stated that collocation deals with close associations and indirect semantic relations between the words. Therefore, the examples found in Speech 1 and Speech 2 mostly are the cases of collocation which corresponds to the interpretation of the author of this research. Considering that it should be noted that another reader might get another impression and associations after reading and analysing Speech 1 and Speech 2 on the presence of collocations. Nevertheless, in case of this research, according to the perception of the author of this paper, the number of the examples of collocations found in Speech 1 and Speech 2 is considered as a precise one and is included into the final results of the analysis.

Finally, some examples of the use of collocation from Speech 1 and Speech 2 will be presented. For example, the author of this research considers that there is a collocation between *human*, *species*, and *civilization*, because *civilization* currently is a prerogative of a human being. Also, *human* is a *species*; therefore, in Speech 1 *multiplanetary species* could be considered as a collocation towards *human*. Another example, in case of the use of the words *ship* or *rocket* and a subsequent use of such names as *Dragon*, *BFR*, *Falcon*, *Falcon 9*, *Falcon Heavy*, etc. In Speech 1 these cases were considered as examples of collocation, because these words are the names of the space vehicles and the word *ship* is not directly a *rocket* or *Dragon*; however, in that context these words are connected by one semantic field.

In Speech 2 many examples of the use of collocation are indirectly linked under the topic of *economy*. However, there are present different examples of collocation. For instance, the use of the words *friend* and *ally*. These two examples are not linked that directly by the same meaning; however, in the context of this text these words mean the same.

Taking into consideration that lexical cohesion is very common in business speeches and most of the examples are different it is impossible to outline all the examples of reiteration and collocation. Therefore, it should be noted that full results of the analysis are available in Appendix 4 and Appendix 5.

Summing up the results of the analysis, it could be noted that cohesive devices are used frequently in business speeches. It was found that reference, conjunction, and lexical cohesion are used almost with the same frequency in Speech 1 and Speech 2. Finally, it was found that each part of the speech tends to have different most common cohesive devices.

CONCLUSIONS

The goal of this bachelor thesis was to study cohesion and cohesive devices in business speeches. The background of this topic is indicated by the fact that cohesion is an integral part of any text; however, it is important to research which texts and which parts of a text comprise specific cohesive devices. Possessing the results of this research might help to reveal which aspects are already strong from the viewpoint of cohesion.

The present research sets the following research questions: What is the purpose of cohesion in business speeches?, How can cohesion be achieved in business speeches?, Which cohesive devices are the most common in business speeches?, and Which cohesive devices are typical for each part of a speech?. The principal research methods were literature review of different published sources and frequency analysis. In order to achieve the goal of the paper, the following enabling objectives were put forward:

The first enabling objective was to provide the theoretical background of the research reviewing published sources on cohesion, business discourse, and cohesive devices and their use in business speeches. Many different theoretical sources were examined in order to achieve this objective. The full list of the literature is available in references; however, especially could be highlighted the theory of Halliday and Hasan (1976), which generally was taken as the basis of this research, Halliday (1985), Brown and Yule (1983), McCarthy (2006), and Gunnarsson (2009). This research was aimed to observe as much theoretical information as possible; therefore, every reviewed literature source has significant impact on this research.

As a result, during the literature review the most important aspects of texts, texture, cohesion, and cohesive devices were outlined. It was concluded that the basis of the text composes texture, which is realised by the use of cohesive devices. It was concluded that cohesion is divided into two groups that are called grammatical and lexical cohesion. However, both groups are interrelated and are realised by semantic structure. It was concluded that cohesive devices are oriented on written text or spoken text; therefore, cohesive devices do not have any specific pattern of the use in business speeches or other spoken or written texts.

It was concluded that business discourse might be expressed as a branch of professional discourse. Primarily, business discourse is a social practice; therefore, it is defined as the language of the business environment which is spoken by professionals. It was concluded that

business discourse is a task-oriented process; thus, business discourse also possesses the characteristics of high accuracy, unemotionality, conventionality, etc.

The second enabling objective was to determine the characteristics of a business speech. During the analysis of different relevant sources, it was found that business speeches share the same structure as business presentations. It was concluded that a business speech is constructed from the introduction, body part, and conclusion. In conclusion, it could be highlighted that introduction has the most difficult and consistent structure; nevertheless, as a result neither Speech 1 nor Speech 2 introductions follow that structure.

The third enabling objective was to select business speeches for the analysis. The business speech of E. Musk (2017), which includes introductory note form Le Gall, and the business speeches of T. May and S. Abe (2017) were selected. All these speeches were grouped together and referred as Speech 1 and Speech 2. However, in case of the analysis of some individual elements of the text organisation in the business speeches of Musk, Le Gall, May, and Abe were analysed separately.

The fourth, and the last enabling objective was to analyse the use of cohesive devices in the selected business speeches. The results of the analysis presented that conjunction is the most common cohesive device in Speech 1 and lexical cohesion is the most common cohesive device in Speech 2. Taking into account the total number of the analysed cohesive devices in Speech 1 and Speech 2, conjunction is the most common cohesive device. Nevertheless, the average difference of the use of the three cohesive devices is ~3%. Therefore, it was concluded that conjunction, reference, and lexical cohesion are used equally frequently in business speeches. Concluding the results of the analysis of cohesive devices in different parts of the speech, it was noted that lexical cohesion is the most typical cohesive group in the introductions, reference is the most common cohesive device in the conclusions, and conjunction is the most common cohesive device in the body parts.

During the research, no significant limitations were experienced. For further research in this topic or for the research related to cohesion it could be recommended to analyse all cohesive devices in business speeches. That will provide more precise data about the use of cohesive devices in business speeches. In addition, it could be recommended to do a research only on lexical cohesion in business speeches, analysing different theoretical backgrounds and exploring which one is the most applicable for business discourse.

THESES

1. Texts can be spoken and written and the essence of written and spoken texts is very similar. The practical function of a text is to save and report an act of communication.
2. A text can be formulated in two short or long sentences. The method of producing a text and the format of it varies according to the author's preferences.
3. Spoken texts are highly dependable on the quality of the transcript of a speech and indication of the relevant background of the communicative event.
4. Texture is an inalienable element of a text; a text would not be a text without texture. Texture is realised by cohesive relations; cohesive tie is the most essential element for the creation of texture.
5. Cohesion contributes in creation of texture of a text. Cohesion is realised by grammatical cohesion and lexical cohesion. Cohesive devices as repetition, conjunction, ellipsis, and substitution are parts of grammatical cohesion group. Lexical cohesion is a group of cohesive relations and could be called an individual cohesive device.
6. Grammatical and lexical cohesion are two interdependent groups and a well-constructed text should combine both cohesive relations. Grammatical and lexical cohesion groups are primarily realised by semantic structure.
7. Some aspects of lexical cohesion are considered rather vague. Therefore, a frequency of collocation, a sub-type of lexical cohesion, varies according to features of perception of a reader.
8. Business discourse can be considered as a branch of professional discourse. Business discourse and discourse in general are more socially directed practices and they are influenced by various factors such as culture, hierarchy, language, etc.
9. Each group of cohesive devices has the most prevalent type. Personal reference is the most common type of reference, enhancement is the most frequent type of conjunction, and reiteration is the most common type of lexical cohesion in the analysed speeches.
10. Conjunction is the most prevalent cohesive device in the analysed business speeches. However, the average difference in the use of three cohesive devices is ~3%. Therefore, conjunction, reference, and lexical cohesion are used almost equally frequently.
11. Lexical cohesion is the most common cohesive device in the introductory part of business speeches. Reference is the most typical cohesive device in the conclusions. Conjunction is the most frequent cohesive device in the body part.

REFERENCES

1. AlHaidari, F. M. (2018). *The Discourse of Business Meetings*. 1st ed. Kuwait: Palgrave Macmillan.
2. Baker, P. (2010). Corpus Methods in Linguistics. In Litosseliti, L. (ed.) *Research Methods in Linguistics*. (pp. 93-113). London and New York: Continuum
3. Bakker, S. and Wakker, G. (eds.) (2009). *Discourse Cohesion in Ancient Greek*. Leiden: Brill.
4. Bargiela-Chiappini, F., Nickerson, C., and Planken, B. (2007). *Business Discourse*. Houndmills, Basingstoke, Hampshire, and New York: Palgrave Macmillan
5. Bargiela-Chiappini, F. and Zhang, Z. (2013). Business English. In Paltridge, B. and Starfield, S. (eds.). *The Handbook of English for Specific Purposes* (pp. 193-211). The Atrium, Southern Gate, Chichester, and West Sussex: Wiley & Sons.
6. Berdine, W. R. (1973). *Planning and Structuring a Business Speech*. ABCA Bulletin, vol. 36 (pp. 28-32).
7. Biber, D., Conrad, S. and Leech, G. (2011). *Longman Student Grammar of Spoken and Written English*. Harlow, Essex: Longman.
8. Brown, G. and Yule, G. (1983). *Discourse Analysis*. New York: Cambridge University Press.
9. Bussmann, H., Trauth, G., Kazzazi, K. (1996). *Routledge Dictionary of Language and Linguistics*. London: Routledge.
10. Camiciottoli, B. (2007). *The Language of Business Studies Lectures*. Amsterdam: J. Benjamins Pub.
11. Coghlan, D. and Brydon-Miller, M. (eds.), (2014). *The Sage Encyclopedia of Action Research*. London: Sage.
12. Fox, R. and Fox, J. (2004). *Organizational Discourse: A Language-ideology-power*. Westport, Connecticut, and London: Greenwood Publishing Group.
13. Gunnarsson, B. (2009). *Professional Discourse*. London and New York: Continuum International Publishing Group.
14. Halliday, M. A.K. (1985). *An Introduction to Functional Grammar*. London: Arnold.
15. Halliday, M.A.K; and Ruqayia Hasan (1976). *Cohesion in English*. London: Longman.
16. Halliday, M.A.K. and Ruqaiya Hasan (1985). *Language, context, and text: aspects of language in a social-semiotic perspective*. Oxford: Oxford University Press.

17. Hossein, T. (2012). *A Dictionary of Research Methodology and Statistics in Applied Linguistics*. Tehran: Rahnama Press
18. Johnson, K. and Johnson, H. (1998). *Encyclopedic Dictionary of Applied Linguistics*. Oxford: Blackwell.
19. Matthews, P. H. (2007). *The Concise Oxford Dictionary of Linguistics*. Oxford: Oxford University Press.
20. McCarthy, M. (2006). *Discourse Analysis for Language Teachers*. Cambridge: Cambridge University Press.
21. Meyer, C. (2009). *Introducing English linguistics*. Cambridge: Cambridge University Press.
22. Naciscione, A. (2010). *Stylistic Use of Phraseological Units in Discourse*. Amsterdam: John Benjamins Pub. Co.
23. Richards, J. and Schmidt, R. (2002). *Dictionary of language teaching & applied linguistics*. Harlow: Longman.
24. Tanskanen, S. (2006). *Collaborating towards Coherence*. Amsterdam [u.a.]: Benjamins.
25. Wales, K. (2001). *A Dictionary of Stylistics*. London: Longman.
26. Warren, M. (2009). Cohesive chains and speakers' choice of prominence. In Flowerdew, J. and Mahlberg, M. (eds.). *Lexical Cohesion and Corpus Linguistics*. (pp. 45-63). Amsterdam: John Benjamins.

Internet sources:

1. De Beaugrande, R. (1981). *Introduction to Text Linguistics*. Routledge. Available from <https://scribd.com/doc/127440992/105371243-Introduction-to-Text-Linguistics-Beaugrande-1-pdf> [Accessed April 2, 2018]
2. Available from <https://www.uts.edu.au/current-students/support/helps/self-help-resources/presentation-skills/structure-presentation> [Accessed April 2, 2018]
3. Available from <http://countwordsworth.com/> [Accessed April 30, 2018]
4. Available from <https://www.researchoptimus.com/article/frequency-analysis.php> [Accessed May 22, 2018]

Research corpus:

1. Musk, E. (2017) *Making Life Multiplanetary*. Available from

<http://shitelonsays.com/transcript/making-life-multiplanetary-elon-musk-adelaide-iac-2017-09-29> [Accessed April 26, 2018]

2. May, T. and Abe, S. (2017) Available from <https://www.gov.uk/government/speeches/transcript-of-speech-given-by-the-prime-minister> [Accessed April 26, 2018]

APPENDIX 1

Reference in the speeches of E. Musk (2017) and T. May, and S. Abe (2017)

Reference					
Type	Subtype		Pronoun & Comparison	E. Musk	T. May & S. Abe
Personal reference	Personal pronouns as subject		<i>I</i>	40	23
			<i>you</i>	105	0
			<i>he</i>	2	0
			<i>she</i>	0	1
			<i>it</i>	65	6
			<i>we</i>	88	30
			<i>they</i>	10	0
	Personal pronouns as object		<i>me</i>	5	0
			<i>you</i>	1	1
			<i>her</i>	0	2
			<i>it</i>	22	2
			<i>us</i>	4	0
			<i>them</i>	1	0
	Possessive determiners		<i>my</i>	0	2
			<i>your</i>	5	0
			<i>her</i>	0	2
			<i>its</i>	1	0
			<i>our</i>	9	20
			<i>their</i>	2	1
	Possessive pronouns		<i>mine</i>	1	0
<i>yours</i>			0	1	
<i>his</i>			0	1	
<i>its</i>			2	0	
Demonstrative reference	Near	Singular	<i>this</i>	38	30
		Plural	<i>these</i>	5	3
		Place	<i>here</i>	2	4
		Time	<i>now</i>	10	0
	Far	Singular	<i>that</i>	100	23
		Plural	<i>those</i>	2	0
		Place	<i>there</i>	23	8
		Time	<i>Then</i>	33	0
Comparative reference	General		<i>same</i>	5	0
			<i>such</i>	1	5
			<i>similar</i>	1	0
			<i>other</i>	3	1
			<i>else</i>	2	0
			Particular		<i>lower</i>
	<i>stronger</i>	1			0
	<i>more</i>	15			7
	<i>less</i>	2			0
	<i>further</i>	2			1
	<i>better</i>	1			0

		<i>so + adv.</i>	1	1
		<i>so + num.</i>	0	1
		<i>as + adv.</i>	4	0
		<i>as + adj.</i>	1	0
		<i>more + adj.</i>	6	2
		<i>more + adv.</i>	0	1
		<i>smaller</i>	2	0
		<i>greater</i>	2	1
		<i>lower</i>	1	0
		<i>slower</i>	1	0
		<i>later</i>	1	0
			Total: 629	Total: 180

APPENDIX 2

Conjunction in the speeches of E. Musk (2017) and T. May, and S. Abe (2017)

Conjunction				
Type	Subtype	Cohesion & Interdependency	E. Musk	T. May & S. Abe
Elaboration	Apposition	<i>for example</i>	3	0
		<i>that is</i>	3	2
		<i>which</i>	17	1
		<i>who</i>	2	2
	Clarification	<i>actually</i>	10	0
		<i>in fact</i>	2	0
<i>at least</i>		3	0	
Extension	Addition	<i>also</i>	15	3
		<i>however</i>	1	0
		<i>while</i>	2	1
		<i>whereas</i>	1	0
		<i>without</i>	3	0
		<i>and</i>	162	82
		<i>but</i>	39	3
		<i>in addition</i>	1	0
	Variation	<i>only</i>	1	1
		<i>if not ... then</i>	1	0
<i>or</i>		28	0	
Enhancement	Spatio-temporal	<i>since</i>	1	0
		<i>where</i>	9	2
		<i>next</i>	8	0
		<i>now</i>	10	0
		<i>when</i>	8	2
		<i>before</i>	6	1
		<i>until</i>	2	0
		<i>after</i>	0	3
		<i>in</i>	65	33
		<i>on</i>	40	9
	Manner	<i>so</i>	90	8
		<i>as</i>	11	11
		<i>by</i>	10	4
		<i>like</i>	12	4
	Causal-temporal	<i>therefore</i>	1	0
		<i>for</i>	48	21
		<i>because</i>	7	2
		<i>with</i>	42	16
		<i>so as</i>	1	0
		<i>in case</i>	2	0
		<i>though</i>	2	0
		<i>although</i>	1	0
		<i>if</i>	28	0
	<i>unless</i>	1	0	

		<i>without</i>	3	0
		<i>despite</i>	1	0
		<i>albeit</i>	2	0
	Matter	-	0	0
			Total: 705	Total: 211

APPENDIX 3

Lexical cohesion in the speeches of E. Musk (2017) and T. May, and S. Abe (2017)

Lexical cohesion			
Type	Subtype	E. Musk	T. May & S. Abe
Lexical cohesion	Reiteration	455	166
	Collocation	195	48
		Total: 650	Total: 214

APPENDIX 4

Lexical cohesion in Musk's speech

- Reiteration – **bold text**
- Collocation – underlined text in italics
- Both cohesive relations – **underlined bold text in italics**

Jean-Yves Le Gall:

[00:00] It's a pleasure for me as president of the **International Astronautical Federation** to welcome all you today to the concluding session of the global networking forum for this **IAC 2017**, which has been a huge success. In particular, I wanted to thank Premier Weatherill, Minister Hamilton-Smith, and Lord Mayor Haese for their support and presence.

[00:25] Now let me please introduce our distinguished speaker for today. Elon Musk is founder, CEO, and Lead Designer of **SpaceX**. Elon founded **SpaceX** in 2002 with the goal of revolutionizing space technology and ultimately enabling **humans** to become a multiplanetary species. Today he will provide an update on those plans first shared at **IAC 2016** in Guadalajara **last year**.

[01:00] **SpaceX** has had a number of **firsts** including **the first** private company to deliver cargo to and from the International Space Station, **the first** entity to land an **orbital class booster** back on land and on drone ships out at sea, and **the first** to reflly an **orbital class booster**. In addition to **SpaceX**, he's also the CEO of Tesla Motors and Chairman of Solar City.

[01:25] Please join me in welcoming Elon Musk.

Elon Musk:

[01:45] All right. Welcome everyone. I'm going to talk more about what it takes to become multiplanet species. And just a brief refresher on why this is **important**. I think **fundamentally** the **future** is vastly more exciting and interesting if we're a spacefaring civilization and a **multiplanet species** than if we're or not. **You want to be inspired** by things. **You want to** wake up in the morning and **think** the **future** is going to be great. And that's **what what** being a spacefaring civilization is all about. It's about believing in the **future** and **thinking** that the future will be better than the past. And I can't **think** of anything **more exciting** than going out there and being among the stars. That's why.

[02:28] Let me into more detail about becoming a **multiplanet species**. This is the updated design for the, ... well we're sort of searching for the right **name**, but the code **name** at least is **BFR**. Probably the most **important** thing that I want to convey in this **presentation** is that I think we have *figured out* how to **pay** for it. This is very **important**. In last year's **presentation**, we were really *searching* for what the right way, ... you know, how do we **pay** for this thing. We went through various ideas, with *Kickstarter*, you know, *collecting underpants*. These didn't pan out. But now we think we've got a way to do it, which is **to have** a *smaller vehicle* -- still pretty *big* -- but **one that can** serve, **one that can** do everything that's needed in the greater Earth orbit activity. So essentially **we want** to make our current **vehicles** redundant. **We want** to have one **system**, one booster and *ship* that replaces *Falcon 9, Falcon Heavy, and Dragon*. So if we can do that, then all the resources that are used for *Falcon 9, Heavy, and Dragon* can be applied to this **system**. So that that's really fundamental. So let's see. What progress have we made in this direction?

[04:27] So last time you saw the giant **tank**. That's actually a *12 meter tank* and you can see the relative *scale* of it. It's a *thousand cubic meters* of **volume** inside. That's actually *more pressurized volume* than an A380, just to put that into perspective. We developed a new carbon fiber matrix that's *much stronger* and *more capable* at **cryo** than anything before. And it holds 1200 tons of liquid oxygen.

[04:58] **So** we we tested it. **So** we successfully tested it up to its design pressure, ... and then *went a little further*. [Laughter] **So** we wanted to see where it would *break* and we found out where it would **break**. It shot about 300 feet into the air and landed in the ocean. *We fished it out*. But now we got a pretty good sense of what it takes to create a huge carbon fiber tank that can hold **cryogenic** liquid. That's actually extremely important for making a light spaceship.

[05:39] **Then the next key element** is on the **engine** side. We have to have an extremely efficient **engine**. So the the Raptor **engine** will be the highest thrust-to-weight **engine**, we believe, of any **engine** of any kind ever made. We already have now 1200 seconds of **firing** across 42 main **engine** tests. We've **fired** it for 100 seconds. It could **fire** for much longer than a hundred seconds. That's just the size of the test tanks. And then the duration of the **firing** you've seen right now is about 40 seconds, which is the length of the **firing** for landing on Mars. The test **engine** currently operates at 200 atmospheres, 200 bar, the flight engine will be at 250 bar, and then we believe over time we could probably get that to a little over 300 bar.

[06:37] **The next key element** is propulsive **landing**. So in order to **land on** a place like the moon where there is no **atmosphere** and certainly no **runways**, or to **land on** Mars where

the **atmosphere** is too thin to **land**, even if there were **runways**, to **land with with** the wing, you really have to get propulsive **landing** perfect. So that's what we've been practicing with Falcon 9. So this is just a series of **landing** but I think these are quite mesmerizing. But we now have **16 successful landings in a row** and that's with ... [Applause] So it's **sixteen in a row**, and that's really without any redundancy. So *Falcon* nine **lands** on a **single-engine**, and that the final **landing** is always done **with with** a **single engine** whereas the with *BFR* we will always have **multi-engine** out capability. So if you can get to a very high **reliability** with even a **single engine**, and then you can **land** with either of **two engines**, I think we can get to a **landing reliability** that is on par with the **safest** commercial airliners. So you can essentially count on the **landing**. It's not like the ... You want **minimum pucker factor** on **landing**. And it can **land** with also very **high precision**. In fact we believe the **precision at this point is good enough** for propulsive **landing** that we do not need legs for the next version. It will literally **land** with **so much precision** it will **land** back on its launch mounts.

[08:40] The **launch** rate is increasing exponentially. Particularly when you take **tanking** or refilling on orbit into account, and taking the idea of establishing a self-sustaining base on Mars or the moon or elsewhere seriously, you need ultimately thousands of ships and tens of thousands of **retanking** or **refilling** operations, which means you need many **launches** per day. In terms of how many landings are occurring, you need to be looking at your watch, not your calendar. So while this is a quite a high **launch** rate that we're talking about here, by conventional standards, it's still a very small **launch** rate compared to what will ultimately be needed. But just for those who are unfamiliar with how many **orbital launches occur every year**, it's approximately 60 **orbital launches occur per year**. Which means if SpaceX does do something like 30 **launches** next year, it'll be approximately half of all **orbital launches** that occur on Earth.

[09:57] The next thing, a key technology, is automated rendezvous and docking. So in order to **retank** or **refill** the **spaceship** in orbit, you have to be able to **rendezvous** and **dock** with the **spaceship** with very high precision **and and transfer propellant**. So that's one of things that we've perfected with *Dragon*. *Dragon 1* will do an automated **rendezvous** and **docking, without any pilot control**, to the **Space Station**. *Dragon 1* currently uses the Canadarm2 for the final placement onto the **Space Station**. *Dragon 2*, which launches next year, will not need to use the the Canadarm. So *Dragon 2* will directly **dock** with the **Space Station**, and it can do so with **zero human intervention**. You just press 'go' and it will **dock**. *Dragon* has also allowed us to perfect **heat shield technology**. So when you enter at a high velocity, you'll **melt** almost anything. The reason meteors don't reach Earth is they **melt** or disintegrate before they reach the ground, unless they're very big. So you have to have a

sophisticated **heat shield technology** that can withstand unbelievably *high temperatures* and that's what we've been perfecting with Dragon, and also a key part of any planet colonizing system.

[11:37] So Falcon 1. This is where we started out. A lot of people really only heard of SpaceX relatively recently, so they may think, say *Falcon 9* and *Dragon* just instantly appeared and that's how it always was. But it wasn't. We start off with just a few people who really didn't know how to make *rockets*. And the reason that I ended up being the chief engineer or chief designer, was not **because** I want to, it's **because** I couldn't hire anyone. Nobody good would join. So I ended up being that by default. And I **messed up the first three launches. The first three launches failed.** Fortunately the fourth launch which was -- that was the last money that we had for Falcon 1 -- **the fourth launch worked**, or that would have been it **for for** SpaceX. But fate liked us that day. So **the fourth launch worked.** And it's interesting -- **today** is the ninth anniversary of that **launch**. [Applause] I didn't realize that until I was told that just earlier **today**. [Laughter] This is a very emotional day, actually. But Falcon 1 was quite a **small** rocket. When we were doing Falcon 1 we were really trying to figure out what is the **smallest** useful payload that we'd get to **orbit**. We thought okay, something around *half a ton* to **orbit**, you know that could launch a decent sized **small** satellite to low earth orbit. And that's why we sized Falcon one. But it's it's really quite **small** compared to Falcon 9.

[13:43] So Falcon 9, particularly when you factor in **payload**, Falcon 9 is many times more, sort of on the order of 30 times more **payload** than Falcon 1. And Falcon 9 has **reuse** of the primary booster, which is the most expensive part of the rocket, and hopefully soon **reuse** of the of the fairing, the big nose cone at the front. So we think can probably get to something like somewhere between 70 and 80% **reusability** with the Falcon 9 system. And hopefully towards the end this year we'll be launching Falcon Heavy. Falcon Heavy ended up being a much more *complex* program than we thought. It sounds *easy*.

[14:39] It sounds like it should be should be **easy** because it's two first stages of Falcon 9's strapped on as boosters. It's actually not. We have to redesign almost everything except the upper stage in order to take be increased loads. So Falcon Heavy ended up being much more a new vehicle than we realized, so took us a lot longer to get it done. But **the the** boosters have all now been tested and they're on their way to Cape Canaveral. And we are now beginning serious development of BFR.

[15:27] So you can see that the **payload** difference is quite dramatic. BFR in fully reusable configuration, without any orbital refueling, we expect to have a **payload** capability of 150 tons to low Earth orbit. And that, you know, compares to about 30 for Falcon Heavy,

which is partial reusable. Where this really makes a tremendous difference is in the cost, which I'll come to in some of the later **slides**. So let's go to the next **slide**.

[16:13] And just, by the way, if ...

[16:18] So with **BFR**, you can get a sense of scale by looking at the tiny person there. It's really quite a big vehicle. Main body diameter is about 9 meters or 30 feet, and it consists of, the booster is lifted by thirty one Raptor engines that produce a thrust about 5,400 tons, lifting a 4,400 ton vehicle straight up.

[16:59] So then, just the basics about the **ship**. 48 meter length. Dry mass are expecting to be about 85 tons. Technically, our design says 75 tons, but inevitably there's mass growth. And that **ship** will contain 1,100 tons propellant with an ascent design of 150 tons and return mass of 50. So you can think of this as essentially combining the upper stage of the **rocket** with Dragon. It's like if Falcon 9 upper stage and Dragon were combined.

[17:38] I'll go into each of these **items** in detail. You've got the **engine section** in the rear, the **propellant tanks** in the middle, and then a large **payload bay** in the front. And that **payload bay** is actually eight stories tall. In fact, you can fit a whole stack of Falcon 1 rockets in the **payload bay**. [Laughter] Compared to the design I showed last time, you'll see that there is a small delta wing at the **back** of the **rocket**. The reason for that is in order to expand the mission envelope of the **BFR spaceship**. Depending on whether you're landing or you're entering a planet or a moon that has no atmosphere, a thin atmosphere, or a dense atmosphere, and depending on whether you're reentering with no payload in the **front**, a small payload, or a heavy payload, you have to balance the **rocket** out as it's coming in. And so the delta wing at the back, which also includes a split flap for pitch and roll control, allows us to control the pitch angle despite having a **wide range** of **payloads** in the nose and a **wide range** of atmospheric densities. So we tried to avoid having the delta wing, but it was necessary in order to generalize the capability of the **spaceship** such that it could land anywhere in the solar system.

[19:26] Let's look at a couple of things in detail. So the cargo area has a **pressurized** volume of 825 cubic meters. This also is greater than the **pressurized** area of an A380. So, really is capable of carrying a tremendous amount of **payload**. In a mass **transit configuration**, since you'd be taking three months in a really good scenario, but maybe as much as six months, some number of **months**, a single [?] of **months**, you probably want a cabin, not just a seat. So the Mars **transit configuration** consists of 40 **cabins**. You could conceivably have five or six people per **cabin** if you really wanted to crowd people in, but I think mostly we would expect to see two to three people per **cabin**, and so normally about a hundred people per flight to Mars. And then there's a central storage area and galley and a

solar storm shelter, entertainment area, and I think probably a good situation for at least **BFR** version one.

[20:50] Then going to the **main body** of the **vehicle**, the **center body** area. This is where the **propellant** is located. And this is sub-cooled **methane and oxygen**. So as you chill the **methane and oxygen** below its liquid point you get a fairly meaningful **density increase**. You get on the order of ten to twelve percent **density increase**, which makes quite a big difference for the **propellant** load. So we expect to carry 240 tons of CH4 and 860 tons of oxygen. In the fuel tank our header tanks. So when you come in for landing, your orientation may change quite significantly, but you can't have the **propellant** just sloshing around all over in the main tanks, you have to have the **header tanks** that can feed the main engines with precision. So that's what you see immersed in the **fuel tank**.

[22:04] Then the **engine section**. The **ship engine section** consists of four vacuum Raptor engines and two sea-level engines. All six engines are capable of **gimbaling**. The **engines** with the high expansion ratio have a relatively smaller gimbal area or gimbal range and slower gimbal rate. The two center engines have a very high **gimbal range** and can **gimbal** very quickly. And you can land the **ship** with either one of the **two center engines**. So when you come in for a **landing** you will light **both engines**, but if one of the **center engines** fails at any point it will be able to **land** successfully with the **other engine**. And then within **each engine** there is a great deal of redundancy. So we want the **landing** risk to be as close to zero as possible. And there's some basic stats about the **engines**. The **sea-level engines** are about a 330 Isp at **sea-level**. The **upper stage engine** is 375. You know, this is version 1, so I think over time there's potential to **increase** that specific impulse by 5 to 10 seconds, and as I was mentioning, also **increase** the chamber pressure by 50 bar or so.

[23:46] And then for refilling, which you just saw, the two **ships** would actually **mate** at the rear section. They would use the same **mating interface** that they used to **connect** to the booster on liftoff. So we would **reuse** that **mating interface** and **reuse** the propellant fill lines that are used when the **ship** is on the **booster**. And then to transfer propellant, it becomes very simple. Use control thrusters to accelerate in the direction that you want to empty. So if you **accelerate in this direction**, **propellant** goes that way, and you **transfer** the **propellant** very easily from the tanker to the **ship**.

[24:31] So going to **rocket capability**. This gives you sort of a rough sense of **rocket capability**, starting off at the low end with the Falcon 1 at a half-ton, and then going up to **BFR** at 150. So I think it's important note that **BFR** has more capability than Saturn V, even with full reusability. But here's the really **important, fundamental** point. Let's look at the launch cost.

[25:11] The order of reverses.

[25:24] I know at first glance this may seem **ridiculous**. But it's not. The same is true of **aircraft**. If you bought, say, a small, **single-engine turboprop aircraft**, that would be one and a half to two million dollars. To charter a **747** from California to Australia is half a million dollars, there and back. The single-engine turboprop can't even get to Australia. So a fully reusable giant aircraft like the **747** costs a third as much as an expendable tiny aircraft. In one case you have to build an entire **aircraft**, in the other case you just have to refuel **something**. So it's really crazy that we build these sophisticated **rockets** and then crash them every time we fly. This is mad. So yeah, I can't emphasize how **profound** this is and how **important reusability** is. And often I'll be told, 'but you could get more **payload** if you made it expendable.' I said yes, you could also get more **payload** from an aircraft if you got rid of the landing gear and the flaps and just parachute out when you got to your destination. [Laughter] But that would be **crazy** and you would sell zero **aircraft**. So **reusability** is absolutely **fundamental**.

[27:04] Now I want to talk about the **value** of **orbital refilling**. This is also extremely **important**. So if you just fly BFR to **orbit** and don't do any **refilling**, it's pretty good. You'll get a hundred and fifty tons to low Earth orbit, and have no fuel to go anywhere else.

[27:27] However, if you send up tankers and **refill** in **orbit**, you can **refill** the **tanks** all the way to the top and get 150 tons all the way to Mars. And if the **tanker** has high reuse capability, then you're just paying for the cost of propellant. And the **cost** of oxygen is **extremely low**. And the cost of methane is **extremely low**. So if that's all you're dealing with, the **cost** of **refilling** your spaceship on orbit is tiny and you can get 150 tons all the way to Mars. So automated rendezvous and docking and refilling, absolutely **fundamental**.

[28:20] So then getting back to the question of how do we pay for this system. This was really, I said quite a **profound** -- I won't call it **breakthrough** but **realization** -- that if we can build a **system** that **cannibalizes** our **own products**, makes our **own products redundant**, then all of the resources, which are quite enormous, that are used for Falcon 9, Heavy, and Dragon, can be applied to one **system**. Some of our **customers** are conservative and they want to see BFR fly several times before they're **comfortable launching** on it, so what we plan to do is to build ahead and have a stock of Falcon 9 and Dragon vehicles so that **customers** can be **comfortable**. If they want to use the old rocket, the old spacecraft, they can do that, because we'll have a bunch in stock, but all of our resources will then turn towards building **BFR**, and we believe that we can do this with the revenue we receive for launching **satellites** and for servicing the Space Station.

[29:42] So going to the **satellites** portion. The size of this being a **9 meter diameter** vehicle is a *huge* enabler for new **satellites**. We can actually send something that is almost **nine meters in diameter to orbit**. So for example, if you want to do a new *Hubble*, you could send a mirror that has ten times the surface area of the current *Hubble*, as a *single unit*. *Doesn't have to unfold or anything*. Or you can send a *large number of small satellites*. You do whatever you like. You can actually also go around and, if you wanted to, collect old **satellites** or clean up space **debris**. You can just use the sort of chomper over there and go around and collect **satellites** or collect **space debris** if you want. So that may be something we have to do in the future. But that fairing would open up and retract and then come back down, so it enables launching of Earth **satellites** that are **significantly** larger than anything we've done before or **significant** more **satellites** at a time than anything that's been done before.

[31:04] It's also intended to be able to service the **Space Station**. [Laughter] I know it looks **a little big** relative to the **Space Station**, but the *shuttle* also looked big, so it'll work. Looks a little **out size** but it'll work. So it'll be capable of doing what *Dragon* does today in terms of transporting **cargo** and what *Dragon 2* will do it in terms of transporting *crew* and **cargo**. So good at **Space Station** servicing. It can also go out to much further than that, like, for example, the **Moon**.

[31:54] Based on calculations we've done we can actually do **lunar surface** missions with no **propellant** production on the **surface of the Moon**. So if we do a high **elliptic parking orbit for for** the ship and retank in **high elliptic orbit**, we can go all the way to the **moon** and back with no local **propellant** reduction on the **moon**. So I think that would enable the creation of **Moon Base Alpha**, or some sort of **lunar base**. [Applause] Yeah, it's quite captivating.

[32:43] You can also see, for example, how do you transfer **cargo** from the **cargo** bay down to the ground is a crane, it's not very complicated. But this will enable the creation of a **lunar base**. It's 2017. I mean, we should have a **lunar base** by now. What the hell's going on.

[33:16] And then, of course, **Mars**. Becoming a *multiplanet species*. Beats the hell about of being a *single plant species*. So we'd start off by sending a mission to **Mars** where it would be, obviously, just landing on rocky ground or dusty ground.

[33:40] And it's the same approach that I mentioned before, which is you send the *spaceship* up to orbit, you **retank** it or **refill** it until it has full *tanks*, and it *travels* to **Mars**, *lands* on **Mars**. For **Mars** you will need local propellant production. But Mars has a CO₂ atmosphere and plenty of **water ice**. That gives you *CO₂* and *H₂O*, so you can make, therefore, *CH₄* and *O₂* using the **Sabatier Process** and or, ..., probably the **Sabatier Process**.

[34:15] And I should mention that, long term, this can also be done on Earth. So sometimes I get some sort of criticism for why are you using *combustion* and rockets and you have *electric cars*. Well there isn't some way to make an *electric rocket*. I wish there was. But in the long term you can use *solar power* to extract *CO2* from the atmosphere, combine it with **water**, and produce *fuel* and *oxygen* for the **rocket**. So the same thing that we're doing **Mars**, we could do on Earth in the long-term.

[34:51] But that's essentially what happens. Similar to the *moon*, you land on **Mars**, but the tricky thing with **Mars** is we do need to build a propellant Depot to *refill* the *tanks* and **return** to Earth. But because **Mars** has lower gravity than Earth, you do not need a booster. So you can go all the way from the surface of **Mars** to the surface of Earth just using the ship. Albeit, you need to go to a max payload number of about twenty to fifty tons for the **return** journey to work. But it's a single stage all the way back to Earth.

[35:30] So this is the true physics simulation. This will last about a minute. So you **come in**, you're **entering** very quickly, **going** seven and a half kilometers a second. For Mars, there will be some *ablation of the heat shield*. So it's just like a sort of *brake pad wearing away*. It is a multi-use **heat shield**, but unlike for Earth operations, it's coming in hot enough that you really will see some wear of the **heat shield**.

[36:05] But because Mars has an *atmosphere*, albeit not a particularly *dense*, one you can remove almost all the energy aerodynamically. And we've proven out supersonic retropropulsion many times with Falcon 9, so we feel very comfortable about that. You can see a sort of mesh system -- it's not meant to be particularly pretty because it just tries to simulate the physics of it -- but the size of the cone gives you a rough approximation for how much thrust the entrance are producing.

[36:56] That's not a typo. [Laughter] Although it is aspirational. [Laughter] So we've already started building the *system*. The *tooling* for the main *tanks* has been ordered, the *facility* is being built, we will start *construction* the first **ship** around the second quarter of next year. So in about six to nine months we should start building the first **ship**. I feel fairly confident that we can complete the **ship** and be ready for a launch in about **five years**. *Five years* seems like a long time to me. [Applause] The area under the curve of resources over that period of time should enable this *time frame* to be met, but if not this time frame, I think pretty soon thereafter. But that's our goal, is to try to make the 2022 **Mars** rendezvous. The Earth-Mars synchronization happens roughly every two years, so every two years there's an opportunity for just to **fly** to **Mars**.

[38:26] So then in 2024 we want to try to **fly four** ships. *Two cargo* and *two crew*. The goal of these *initial missions* is to find the best source of water, that's for the *first mission*,

and then the second mission, the goal is to **build** the **propellant plant**. So we should, particular with six **ships** there, have plenty of landed mass to **construct** the **propellant depot**, which will consist of a **large array** of solar panels, a **very large array**, and then everything necessary to mine and refine water, and then draw the CO2 out of the atmosphere, and then create and store deep-cryo CH4 and O2.

[39:19] Then build up the base, starting with one ship, then multiple ships, then start **building out the city**, then making **the city bigger**, and even **bigger**. [Laughter; Applause] And yeah, over time terraforming and making it really a nice place to be.

[39:56] [Shout from audience member, 'You can do it, Elon!'.] Thanks. [Cheers and applause] It's quite a beautiful picture. And on the prior slide, seriously note that on Mars dawn and dusk are **blue**. The sky is **blue** at dawn and dusk and red during the day. It's the opposite of **Earth**.

[40:24] But there's something else. If you **build** a **ship** that's capable of going to Mars, what if you take that same **ship** and go from one place to another on **Earth**? So we looked at that and the results are quite interesting. Let's take a look at that.

[41:58] We're traveling at 27,000 kilometers an hour, or roughly 18,000 miles an hour. This is where the propulsive landing becomes very important, to be [unintelligible] get it right. [Applause] So most of what people consider to be **long-distance** trips would be completed **in less than half an hour** which is [Applause] So the great thing about going to **space** is there's no friction, so once you're **out of the atmosphere**, it will be smooth as silk. No turbulence nothing. There's no weather. There's no atmosphere. And you can get to most **long-distance** places, like I said, **in less than half an hour**. And if we're building this thing to go to the Moon and Mars, then why not go to other places on Earth as well.

[43:20] All right. Thank you.

APPENDIX 5

Lexical cohesion in May and Abe's speeches

- Reiteration – **bold text**
- Collocation – underlined text in italics
- Both cohesive relations – **underlined bold text in italics**

Thank you. And I am delighted to be here today, together with so many leading **Japanese** and **British** businesses whose **trade** and **investment** is fundamental to the **jobs** and growth that underpin our shared prosperity. And I want to **thank** the Japan External Trade Organization for co-hosting this event, and Prime Minister Abe for his speech and for the deep and continued commitment that he is showing to the partnership between **our two countries**.

This is a formative period in shaping the future of **my country** and as we leave the European Union, so I am determined that we will seize the opportunity to become an ever more outward-looking **Global Britain**, deepening our **trade** relations with old *friends* and new *allies* around the world. And there are few places where the opportunities of doing so are greater than **Japan**, the third-largest *economy* in the world.

Japanese companies already **invest** over £40 billion in **the United Kingdom**, making **the UK** second only to America as **Japan's** top **investment** destination, while over 1,000 **Japanese companies** already *employ* over 140,000 people in **Britain**. And, as Secretary of State Fox said, the last 12 months have seen our bilateral **trade** increase by more than 12% and I very much welcome the commitment from **Japanese companies** – such as Nissan, Toyota, SoftBank and **Hitachi** – whose **investments** over the last year represent a powerful vote of confidence in the long-term strength of **the UK** *economy*.

And on **Hitachi**, I'm very pleased that the Chairman, Mr Nakanishi, is delivering a speech here today. **Hitachi's** relationship with **the UK**, in particular their **investments** into rail, nuclear and a range of other sectors, are truly impressive.

So, I am here together with a business delegation representing some of **Britain's** biggest **investors** in **Japan** because we want to build on that momentum and because I believe that this is a good moment for **like-minded partners** such as **Britain** and **Japan** to be doing more

together. For as we become a **Global Britain** – a *European nation* still, but one that is outside **the European Union** – so we will be **free** to engage more actively and **independently**, particularly in key *Asian* markets like *Japan*. And against the backdrop of a more uncertain world, it is *dependable* and **like-minded partners** such as **the United Kingdom** who will stand with **Japan** in defending the rules-based international system and the open markets on which so much of our **business** is based.

So, I come to this forum today seeking *to lay the foundations* to take our **trade** and **investment relationship** to a whole new level as we leave **the European Union**, and I've agreed with Prime Minister Abe that we will *develop an ambitious programme* of **joint working** to help achieve this.

So, we're instructing our ministers responsible for **trade, investment** and **business** to *develop a new framework*, to realise our shared long-term vision, to deepen our bilateral **prosperity relationship**. This will be supported by business-to-government engagement to ensure it serves the needs of **businesses** like yours, and it will include a new **Trade and Investment Working Group** to deliver across our **trade** and *innovation relationships*.

Government dialogues will be established on a range of key industrial policies where we *share* great strengths, such as aviation, space, life *sciences and advanced manufacturing*. And **the UK** is also providing £700,000 of new funding to promote opportunities for **UK businesses** around **Japan**. And we will continue to **collaborate** on *research* and *development*, *deepening* our **cooperation** in this *vital area* and seeking to spread **jobs** and **prosperity** across all regions of **our countries**.

During the period before we **leave the European Union**, **the UK** will continue to *champion* the early signature and implementation of the **Japan-EU Economic Partnership Agreement**. This will be our immediate priority, but as we **leave the EU**, so we will also *work* quickly to establish a new **economic partnership** between **the UK** and **Japan** based on the terms of this **EU agreement**.

We will also seek to ensure the **freest** and most *frictionless* **trade** possible between **the UK** and **the EU**, and this includes the imperative of a smooth and orderly transition for people and businesses in **the UK** and in **Japan**, in the remaining 27 Member States and for all our *partners* around the world.

Through all these steps, we will ensure the greatest possible confidence in our **economy** and we will build the closest, **freest trading relationship** between **our two countries** for when **the UK leaves the European Union**; that is the **magnitude** of our ambition and the **scale** of our commitment to it. And Prime Minister Abe and I look forward to working with you in the months and years ahead as we strive to achieve it, and with it to secure the **jobs and investments** that will bring **prosperity** to our peoples for generations to come.

Thank you.

Prime Minister Abe

Good afternoon. My name is Shinzō Abe. With Prime Minister May today we are able to make this address at this Business Forum between JETRO and DIT of UK who are to sign this memorandum of **cooperation**. We're very happy to be able to witness this.

For **Japan**, the **UK** represents freedom, democracy, and human rights and rule of law. We share these universal values with **the United Kingdom**. We are global strategic partners. Security and economy are the two wheels supporting this **relationship**. Active **trade and investment relationship** between the **two countries** is the solid foundation of our **relationship**.

This time around, Prime Minister May, out of her very busy schedule, has come to **Japan**, and we are **very, very** pleased to receive her. Yesterday, we met in Kyoto. **We had** a chance to familiarise Prime Minister May with the tea ceremony, and **we had** dined in Kyoto, and **we had a discussion** on a number of issues in front of us. Normally, we could have asked her to stay in Kyoto for one night, and I could have had more time – relaxing time in Kyoto, but Prime Minister May took a bullet train back to Tokyo, and this morning, a **vessel** – she went aboard Japanese Maritime Self-Defence Force **vessel, Izumo**. The original **Izumo** was built in **the United Kingdom**, this **vessel**, so from the olden times, **Japan** and **the UK** had this bond in the area of security. This is something that I want to make mention of here.

For **Japanese** businesses, **the UK**, for **manufacturing** and sales and R&D in Europe, is a very important base, this country **the United Kingdom**. And currently in **the UK**, about one thousand **Japanese companies have outlets**, and more than 160,000 people are being employed. Through these activities by Japanese companies with leading-edge technology,

innovation is being created, and through technological transfer, the domestic skill base is being enhanced and productivity and export capability is being strengthened. And with the vitalisation of local economies, *Japanese businesses* are making great contributions to **the UK** economy, supporting **UK systems** or *society* through provision of various **systems**, including, in the **manufacturing** sector, annual auto production units. There is 1.7 million and three **Japanese companies'** share is about 50% of this total production.

175 years ago, *Queen* Victoria for the first time in the *royal family* took a *train* trip between Slough and Paddington. *High-speed rail*, *new rolling stock* was used for her travel, and that **rolling stock** was produced by a **Japanese company**. In 2014, when I visited **the UK**, **Japanese companies manufactured high-speed rail**, I took a ride on that **high-speed rail**, and I was able to appreciate that **Japanese companies'** technology improves the daily lives of the **British people**. I witnessed that with great pleasure.

With **the UK leaving the European Union**, **the UK** is in the midst of **change**, great **change**. **The UK's departure from the EU** has to be **successful** for **the UK**, **the European Union** and the *global* **economy**. It is going to be quite important that this exit is going to be a **successful** one. I have trust in **the UK economy** after **Brexit**. Many **Japanese companies**, even after **the Brexit** vote, have decided on new investments into **the United Kingdom**. This is testimony to **Japanese companies'** expectations for **the United Kingdom**.

From **the UK**, in **the EU exit** negotiation, there has to be *transparency* and *predictivity*, to minimise any damage to businesses. We have received that commitment, and we value this greatly. Even after **Brexit**, **the UK**, for *business people*, it will continue to be an **attractive place**, a **compelling place**. I am convinced of that.

So today, in this Business Forum, there are many people attending both from **Japan** and **the UK**. This is a reflection of the high level of interest and expectation in each other. I do hope that this is going to be a great opportunity, under the participation and attendance of Secretary of State Fox. I do hope that there is going to be further development for **trade and investment** between the **two countries**, and I do hope that there's going to be a lot of **discussion** today in this forum. There's going to be a summit meeting with Prime Minister May this evening, and I do hope that there's going to be a strengthened economic **relationship** between the **two countries**. We will talk about some concrete matters, about such **cooperation** between the **two countries**. I look forward to that meeting. Thank you very much.

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Ar savu parakstu apliecinu, ka pētījums veikts patstāvīgi, izmantoti tikai tajā norādītie informācijas avoti un iesniegtā darba elektroniskā kopija atbilst izdrukai.

Autors: Valērijs Krasuckis

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