Bachelor Thesis

The role of connectives in political speech

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ABSTRACT

Even though connectives are small parts of a text which could be easily omitted the opposite is true. Connectives play an important role as they procure discourse coherence by connecting utterances. Moreover, previous studies showed that connectives facilitate text comprehension and text recall and can positively or negatively affect persuasion.

This paper investigates the role of connectives in political speech by comparing the amount and type of connectives between the politicians who were announced the winners and those who were announced the losers of the presidential or vice-presidential debates. Although individual differences were found between politicians, there was no significant difference between announced winners and announced losers of the debates.

INTRODUCTION

To become a great speaker, one must master the art of argumentation, of which language is a key component. The question of argumentation was already dealt with in Ancient Greece when Aristotle established Rhetoric as a treatise on persuasion. Since then, many investigations have been conducted to study the use of language and its aspects. Language is a constructed system of sound, lexical and grammatical instruments through which one expresses their thought and communicates them with other people. There are several aspects of language and each of them is important for its functioning. This paper will focus on connectives, their role and the effect they have on language.

Connectives are words or short phrases, such as *and*, *indeed* or *as an alternative*, which connect different parts of speech or text. Moreover, connectives specify the relationship between utterances and make a smooth transition between them. Use of connectives also helps the listener to understand complex ideas and to select the main idea what the speaker consider to be important. Therefore, understanding discourse connectives is crucial for achieving an effective verbal communication (Zufferey & Gygax, 2019).

Politicians are those who must communicate their aims effectively and whose success heavily depends on their audience. Therefore, politicians must use strong argumentation and be able to support the attitude they have. Often, politicians have a clear perspective on particular topics which they must justify to convince other people about. In other words, a politician with democratic view might be in favour of abortion, however, a politician with republican view might be strongly against. Politicians must defend their perspective using argumentation to persuade as many people as possible. In order to do so, politicians take part in public discussions and give political speeches through which they communicate their intentions with the audience. The use of connectives plays an important role in language and it defines whether the message will be delivered successfully or not (Halliday & Hasan, 1976).

This paper will be divided into several parts. First, the theoretical framework will deal with the effect of connectives on language based on previous literature. In the second part, the research question and its sub-questions will be formed. Later, the method of the investigation including materials, procedure and statistical treatment will be described into detail. This part will be followed by the result section in which the findings of the statistical

analysis will be reported. And finally, along with the summary of this paper a conclusion will be made based on the possible findings obtained by the investigation.

THEORETICAL FRAMEWORK

The role of connectives in language has not been researched until the 70's of the last century when Halliday and Hasan (1976) defined connectives as words connecting two different clauses to become coherent. Since then, several studies have been conducted to investigate connectives, their use and function. It was found that connecting different utterances and procuring coherence is not the function connectives perform in language. This part of theoretical framework will focus on categorization of connectives, their role in language and on three specific aspects in which effect of use of connectives on language has been found by previous studies: context, text comprehension and persuasion.

Each connective have their own function based on which listeners make certain assumptions. At the level of argumentation, for instance, connectives such as *because* or *since,* are meant to prove one's own statement, whereas based on connectives such as *however* or *but* one interprets the new information as a contradiction of the previous assumption (Ben-Anath, 2005). As there are more connectives with the same function connectives are often categorized. Mentioned connectives *because* or *since* are usually known as causal connectives and connectives such as *however* or *but* belong under category of contrast connectives. Another of the categories are temporal connectives which includes connectives such as *then*, *after* and *next*. Temporal connectives can indicate a change of current conversation (Bestgen and Vonk, 1995; Fayol, 1986; Segal et al., 1991). As connectives help decoders to make certain assumption, interpret a new message in the right way (contradiction or support) and indicate them a change of conversation, it was conclude that connectives have contextual effects in the way that because of them it is easier for the listener to interpret the context (Halliday & Hasan, 1976; Blakemore, 1992; Blass, 1993). Rouchota (1996) proposed that contextual effects of connectives result from excluding (*whereas*) or confirming (*moreover*) specific assumption. In other words, the inferential phase of communication is limited by connectives guiding to the specific inferential process which the comprehender is expected to go through. For instance, connectives *whereas* or *but*

express contrast between two utterances and guides a listener to make a specific assumption about the main idea by excluding one of them. On the other hand, connectives *moreover* or *and* connect two or more utterances and support or add more information about the previous one and therefore, lead a listener to making confirm the assumption he or she had.

As mentioned above, the main function of connectives is to join different utterances of spoken or written discourse. Even though connectives are not substantial as a separate word omitting them in a sentence would make the text or speech incoherent since the relationship between utterances would not be specified and therefore a smooth transition between them would be absent (Halliday & Hasan, 1976).

Moreover, a relationship between connectives and text comprehension was found. Text comprehension occurs when decoder's anticipation of a text corresponds with the coherence of individual sentences as well as discourse coherence between more complex utterances (Haberlandt, 1982). Therefore, connectives as indicators of coherence are crucial for text comprehension (Ben-Anath, 2005).

There are several perspectives which discuss the role of connectives in text comprehension. First, it was suggested that the role of connectives in text is to facilitate the comprehension of it by decreasing reading time and helping to recall the content (Britton et al., 1982; Caron, Micko & Thuring, 1988; Meyer, Brandt & Bluth, 1980; Loman & Mayer, 1983; Spyridakis & Standal, 1987; Haberlandt, 1982). Furthermore, the next perspective discusses the causal relations in narrative comprehension (Golding et al., 1995; Keenan et al., 1984; Myers et al., 1987; Trabasso et al., 1984; Trabasso & Sperry, 1985). In narratives connectives *and* and *then* convey variation between contiguous utterances. The first one stressing continuity and the second one discontinuity (Segal, Duchan & Scott, 1991; Fayol,1986; Schiffrin, 1987). Additionally, Crible and Cuenca (2017) argue that despite the fact that connectives are used in both spoken and written language, the manner in which they are used differs. They differ in the amount and also in their function. In spoken discourse, a small number of connectives is used with high frequency and a range of specific functions, on the other hand, in written discourse a large number of connectives is used with more specific function.

Finally, another perspective focuses on understanding of how cognitive processing is stimulated by the use of connectives. In other words, this perspective investigates the cognitive nature of connectives and the meaning they have in communication. The meaning

is seen as one of the aspects which regulate the effectiveness of connectives. (Millis & Just, 1994; Millis et al., 1995; Murray, 1995, 1997; Sanders & Noordman, 2000). These studies evaluate influence of connectives on content recalling and reading time by comparing two versions of experimental sentences or short audio examples which were identical with the difference of including or omitting a connective. It was found that absence of connective takes additional effort to a reader to interpret the meaning between two clauses (Millis & Just, 1994).

Furthermore, another aspect in which effect of use of connectives on language was found was persuasion. Although, the occurrence of connectives in advertisement is not very common previous studies showed that connectives have a significant effect on persuasiveness which is crucial for advertising and marketing industry (Vivanco, 2005; Heller & Areni, 2004).

Using the right connective increases persuasiveness whereas by using an incorrect connective persuasiveness decreases. For instance, a sentence *This brand is the best because it is sustainable* would be more persuasive than a sentence *This brand is the best however it is sustainable.* This was found by conducting an experiment in which the correct connective was switched for another one. The study showed that the commercial claims in which the connective was replaced for the wrong one was less persuasive (Heller & Areni, 2004).

In contradiction with the findings of Heller and Areni (2004), Vivanco (2005) argued that the presence of connectives in technical advertising might have a negative effect on persuasion. He claimed that the fact that there were hardly any connectives found in this type of persuasive documents has other reason than just not paying more money for additional letters. Companies omit connectives in advertising in order to keep one's attention where needed Vivanco (2005).

Moreover, Kamalski et al. (2008) criticized the study by Heller and Areni (2004). The researchers argued that one type of connective cannot be just switched for a different type of connective as it can lead to conflict between connective and coherence relationship. Despite the fact that Kamalski et al. (2008) evaluated the idea of Heller and Areni (2004) positively, they did not think that the results are in fact valid due to the method used in the previous investigation. However, it was found that using one types of connectives over the other can be more persuasive as some connectives might help readers to reveal the attempt of encoder to persuade them and that might lead to their resistance towards it (Kamalski et al., 2008). In

other words, when a connective explicitly signal that something is a claim the persuasiveness of the statement automatically decreases.

The discussed studies showed that connectives have an important role in language as they procure discourse coherence (Halliday & Hasan, 1976), facilitate text comprehension (Ben-Anath, 2005) and can positively as well as negatively affect persuasion (Kamalski et al., 2008).

According to Chilton and Schaffner (2002), the existence of political activity would not be possible without language. They argue that only through language it is possible to achieve socio-political goals. Moreover, in politics, language is used as a tool to influence other people (Grabias, 2001). Politicians are fully aware of the power of words and their dependence on language, which is why their public performance is always prepared with assistance of professionals such as linguists. Therefore, political speech differs from other types of speech. In other words, political speech is in fact spoken, however, it is prepared in advance in a written form.

Moreover, researchers such as Graber (1993) and Van Dijk (1997) in their studies specifically focused on political speech. Van Dijk (1997) argues that political speeches have their own function through which politicians transmit their intentions. As mentioned above, connectives define whether the message will be delivered successfully or not (Halliday & Hasan, 1976) and therefore, their use can be crucial in political speech. This assumption can be supported by Zufferey and Gygax (2019) who claimed that understanding discourse connectives is important for achieving an effective verbal communication. Moreover, according to Graber (1993), a political speech is a tool which allows politicians to interpret their objectives and posture and thus influence the nation.

Furthermore, words are important tool for achieving argumentation and persuasion which is key for politicians to be elected Braun et al. (2015). Ismail (2012) investigated use of discourse markers, such as connectives, in political speeches. The results of the investigation showed that politicians often use particular discourse markers to influence the audience mentally or emotionally to change their beliefs, sentiment as well as their knowledge. However, based on the findings presented by Kamalski et al. (2008) this can have a negative effect on persuasion as connectives might explicitly indicate the speaker's intention to influence them. Therefore, a listener would build a resistance towards it which would lead to the fact that the message would be less persuasive.

The purpose of this paper is to examine the use of connectives in political speeches, as politicians' success significantly depends on effective communication. To find out whether using some particular type of connectives over other is more effective might help people to improve their performance when giving a speech, giving a presentation or basically in everyday social interaction.

Hence, the main research question of this investigation was: To what extent does the use of connectives differ between candidates who were announced winners of presidential or vice-presidential debates and those who were announced losers? The research question included two sub-questions: Does the number of connectives differ? Does the type of connectives differ? Considering that connectives procure discourse coherence and make a smooth transition between utterances (Halliday & Hasan, 1976) the hypothesis was that the announced winner would use more connectives than announced losers.

METHOD

This investigation consisted of one main research question and two sub-question which were answered by conducting a corpus analysis, in which the use and the amount of connectives was compared between announced winners and losers of presidential and vice-presidential debates. To begin with, the number of connectives used in presidential or vice-presidential debates was researched. Secondly, the types of connectives used were investigated and categorized. Finally, it was looked into if the political candidate won or lost the particular debate. Since there was be the same number of winners and runners up, the number and type of connectives used by them were compared between them to find out if there was any difference between the politicians who were announced winners and those who were announced to lose the debate.

Materials

To answer the research question, a corpus analysis was conducted. The corpus consisted of presidential and vice-presidential debates from the United States of America. The debates which were analyzed were selected from the last three presidential elections, omitting the one from 2008 because of occurrence of the same candidate as in the elections of 2012. Therefore, the debates from previous elections (2004) were preferred. In particular, the

analyzed debates in this investigation belonged to presidential debates and vice-presidential debates from the 2016, 2012 and 2004 general election in the United States of America.

Each year, there were three presidential debates between the candidates. The first out of the three debates were selected to be analyzed. To obtain sufficient information, six debates were analyzed, three presidential and three vice-presidential. The debates were selected from the database as selected by the Commission on Presidential Debates (CPD). Commission of Presidential Debates is an organization, which gathers election debates between leading candidates for the offices of president and vice-president of the United States of America since 1960.

There is one presidential and one vice-presidential debate from each year. The entire debates were coded, specifically the politicians' contributions and not the mediator's statements. The average length of each debate was 17.142 words.

Procedure

The corpus was coded for several variables. The year of the debate was coded (2004, 2012 or 2016). The number of the debate was coded from 1 to 6 in chronological order. The name of the politician who was talking in the debate was coded (Bush, Kerry, Cheney, Edwards, Obama, Romney, Biden, Ryan, Trump, H. Clinton, Kaine, Pence) under variable *speaker*. Politicians were grouped according the result in particular, if the politician won, lost or drew in the debate. This result was obtained from CNN articles. Moreover, speech act was coded as a separate variable. The speech acts had been already separated when taken from the transcript of the debate from Commission on Presidential Debates (CPD). Each speech act consisted of one or more sentences presented by particular politician in which he or she expressed one idea.

Furthermore, the specific connective and the type of connectives used were coded. These variables were coded within the variable *speech act*. The coders differentiated between 14 types of connectives, based on categories defined by Prasad et al. (2007) who introduced a model of connectives based on three levels. For this investigation, the researchers used only the first two levels. The types of connectives are as follows: temporal, asynchronous, synchronous, cause, condition, comparison, contrast, concession, expansion, conjunction, instantiation, restatement, alternative and exception. Each connective can be found in the table below (see appendix).

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The corpus was coded by a team of five coders, which are all students of the bachelor International Business Communication at Radboud University, Nijmegen. The researchers created two codebooks which they followed when coding. One codebook was specifically meant for coding the connectives and the other was meant for the rest of variables. Both codebooks precisely described all the steps the researches had to take. Moreover, as there were six debates and only five coders, each annotator coded one debate and the sixth debate was divided by all of them. The five debates were coded by a first and a second annotator, to ensure intercoder reliability. As can be seen in the table (see appendix), some connectives can be found in several groups, for instance, connectives *finally* or *meanwhile* belong to two groups. Both of these connectives might be categorized as a synchronous connective, as well as a conjunction connective. In this case, the coders had to look at the context in which the connective is used to categorize them.

Statistical treatment

To answer the research question and its sub questions, several statistical tests were used in this study. First, one-way ANOVA was applied to compare mean number of connectives used by each politician. Then, the means of number of connectives were compared between the politicians who were announced winners and those who were announced to lose the debate by using T-Test. Finally, a Chi-square test was performed to compare the occurrence of type of connectives between politicians who were announced to win the debates and those who were announced to lose the debates.

RESULTS

First, the total number of connectives used by each politician (N=12) was analyzed. The total amount of connectives was between 328 and 504. However, these numbers might be misleading because of the difference of the total number of words uttered by each politician. Therefore, the mean number of connectives per 100 words were counted and the politicians were listed by descending order *(figure 1)*. A statistical test one-way ANOVA and Bonferroni correction showed significant difference between speakers and the number of connectives used per 100 words [$F_{(11, 2649)} = 5.00$, $p < .001$]. Obama's number of connectives used per

100 words (M = 6.40, SD = 8.51) was significantly higher than the number of connectives per 100 words used by other speakers: Ryan (M = 4.42, SD = 4.85, p = .022), Kaine (M = 4.31, SD = 5.38, p = .008), Clinton (M = 4.30, SD = 4.10, p = .030), Romney (M = 4.23, SD = 3.41, p = .010), Trump (M = 3.91, SD = 4.19, p < .001), Biden (M = 3.54, SD = 5.07, p < .001) and Pence (p < .001, M = 3.45, SD = 6.20). The differences between Obama's number of connectives used per 100 words and the one of the other speakers were not significant: Cheney (M = 5.72, SD = 4.43, p > .05), Kerry (M = 4.92, SD = 7.47, p > .05), Edwards (M = 4.86, SD = 4.65, p > .05), Bush (M = 4.49, SD = 4.27, p > .05)
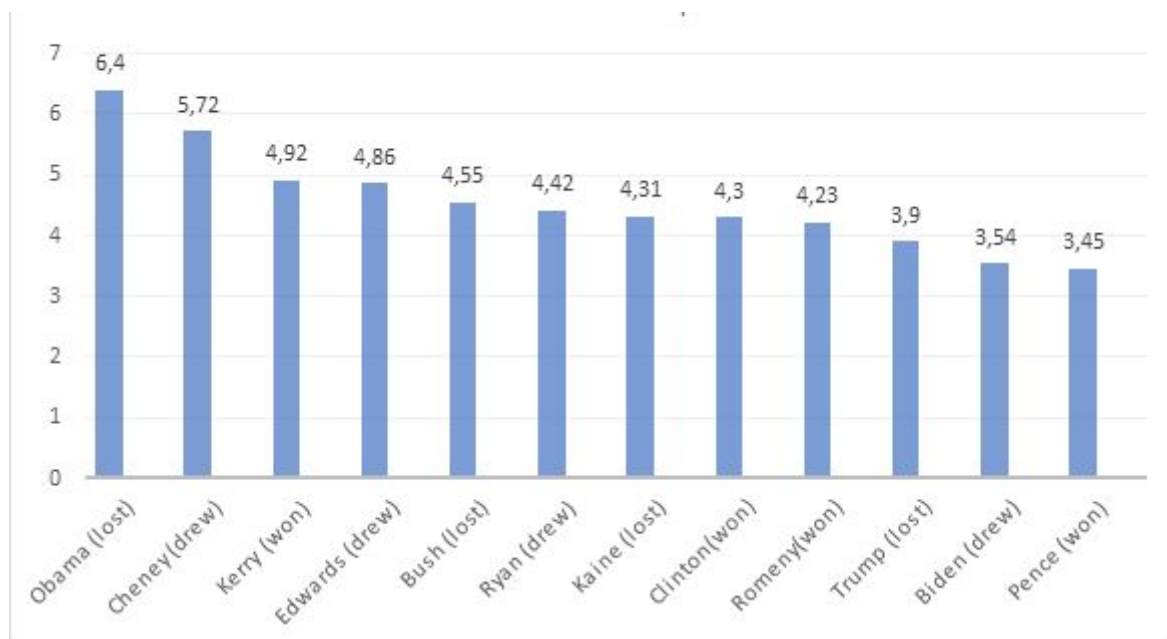

Figure 1. Number of connectives per 100 words (politicians)

Even though there were differences between particular politicians, a t-test showed no significant difference between the number of connectives used per 100 words by the winner and losers (t (1691) = -1.60, p = 0.275). Politicians who were announced to lose the debate (M = 4.63, SD = 5.62) showed similar results as politicians who were announced to win the debate (M = 4.19, SD = 5.69)
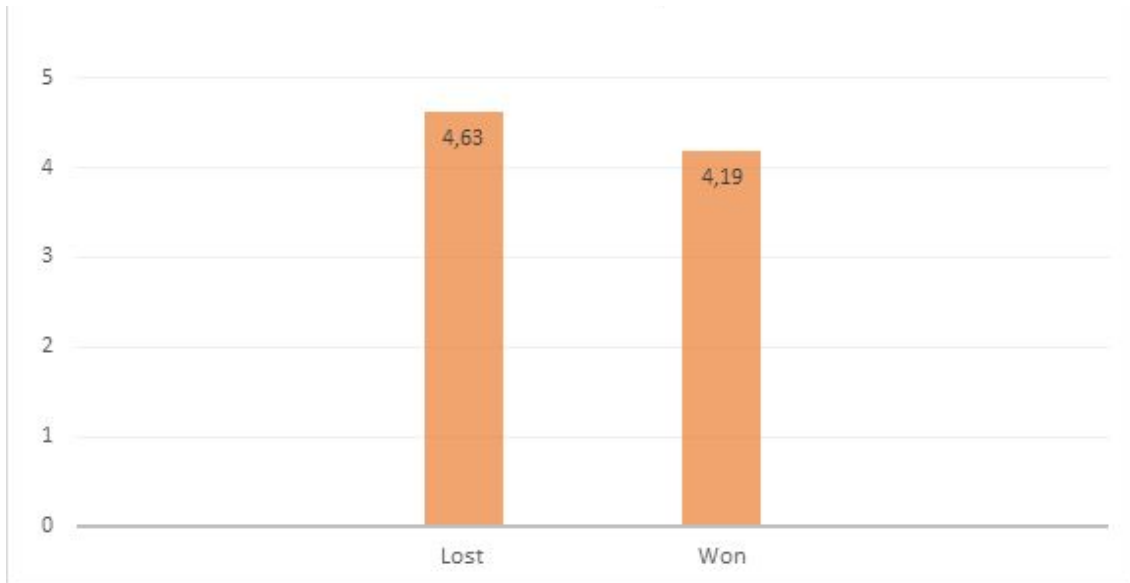
Figure 2. Number of connectives per 100 words (winners vs. losers)

The descriptive analysis showed that the most frequent type of connectives was undoubtedly conjunction (N=1013). It was followed by *contrast* type of connectives (N=264), *cause* type of connectives (N=210), *synchronous* type of connectives (N=175) and lastly, *condition* type of connectives (N=70). These five types of connectives made up 95.58% of the total. The 4.42% consisted of the other seven types of connectives (N=80).
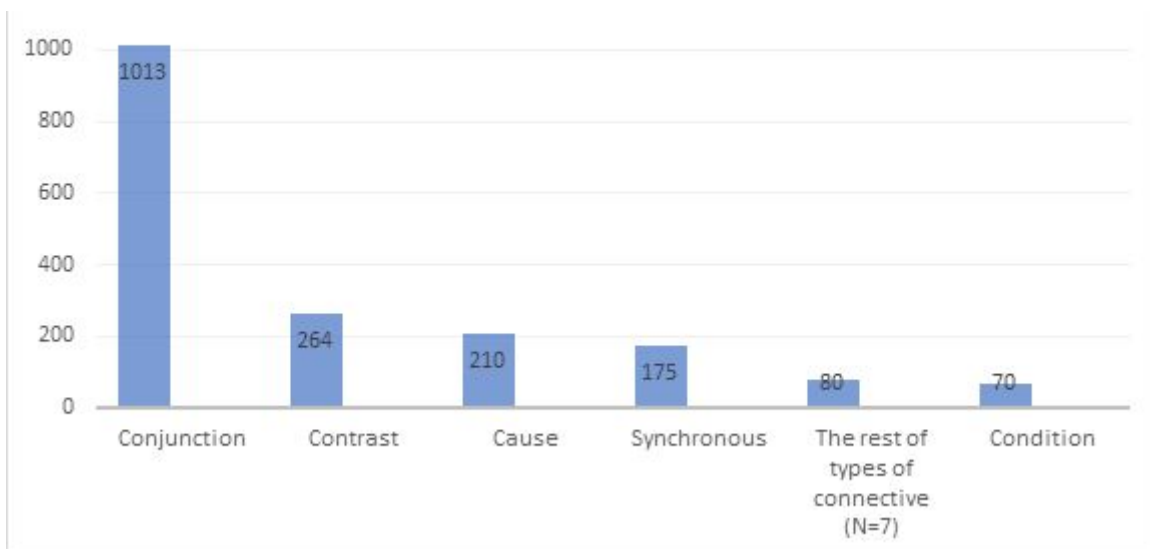

Figure 3. Total number of connectives by types of connectives

Furthermore, to find out rather there was a significant difference between the use of type of connectives between announced winners and losers of the debates a Chi-square test was performed comparing the occurrence of type of connectives between politicians who were announced to win the debates and those who were announced to lose the debates. No significant deviation was found in the use of type of connectives between the groups (χ^2 (10) = 15.900, p = .103).

DISCUSSION and CONCLUSION

This investigation found individual differences between the number of connectives used per 100 words by politicians. Obama seemed to use more connectives than the rest of the politicians. His number of connectives per 100 words was almost twice as high as the number of connectives per 100 words by Pence who uses the fewest connectives per 100 words out of all politicians in the corpus.

The hypothesis for this investigation was that the politicians who were announced to win the debate use more connectives per 100 words than those politicians who were announced to lose the debate as connectives procure discourse coherence, make a smooth transition between particular utterances and are crucial for delivering a message successfully (Halliday & Hasan, 1976). However, this hypothesis was not supported as Obama who used significantly higher number of connectives per 100 words than the rest of the politicians, was announced to lose the debate. Pence, on the other hand, used the lowest number of connections per 100 words and was announced to win the debate. Additionally, despite the fact that there were significant differences between particular politicians, no significant difference between the number of connectives per 100 words by the announced winners of the debates and the politicians announced to lose was found.

Furthermore, the second sub question of this investigation was whether the type of connective differs between the politicians who were announced the winners and politicians who were announced to lose the debate. As found in previous studies, using some types of connectives over other seem to be more persuasive since some connectives can explicitly signal the attempt of persuasion which can have a negative effect (Kamalski et al., 2008). Similarly to the first subquestion, there were some differences found between particular

politicians, however, no significant difference was found between the type of connectives by politician who were announced winners and politicians who were announced to lose the debate.

As mentioned in the introduction, Crible and Cuenca (2017) argued that despite the fact that connectives are used in both spoken and written form, the manner in which they are used differs. The researchers argued that the use of connectives between the written and spoken form differs in the amount and also in their function. According to them, in spoken discourse, a small number of connectives is used with high frequency and a range of specific functions, on the other hand, in written discourse a large number of connectives is used with more specific function. In this way, political speech differs from both of these forms. Meaning, political speech is in fact spoken, however, it is prepared in advance in a written form and therefore it is a combination of both written and spoken forms of discourse.

This investigation showed that based on the findings given by Crible and Cuenca (2017), political speech is more similar to spoken discourse in regard to use connectives rather than to written one. Politicians used a small number of connectives with high frequency. Out of 58 different connectives which occurred in the six political debates only seven of them *(and, but, also, for, because, when* and *so*) made up 82,5% of all connectives. Moreover, similar findings applied for the type of connectives. Politicians use a small number of type of connectives with high frequency. Five out of twelve types of connectives (*conjunction, contrast, cause, synchronous* and *condition*) made up 95,58% of total.

Moreover, this investigation had several limitations. First, the results only apply to the United states as all the data were collected from the one country. Second, there were only four representants per each group (winners, losers and politicians who drew in the debate). Furthermore, the group were not homogenous and the age, gender or backround could have had an effect on the politicians' use of connectives. And finally, different sources presented different results of the debate. In particular, one article may have have said that Clinton won another one that Trump won the debate since there was no official results. For instante, according to the source which was selected for this investigation all the politicians who were announced to win the debates actually lost the elections. Therefore, for future investigations it is recommended to distinguish between winners and losers based on the result of the elections or on the result of various sources. Moreover, it is recommended to implicated the study in a

different country than the United States to find out whether the finding would be similar to the ones of this investigation.

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APPENDIX

Table 1.

Type of connective	Connectives
TEMPORAL = 1	still, yet
Asynchronous = 11	before and after
Synchronous = 12	after, afterward, as, as long as, as soon as, before, by then, earlier, finally, in turn, later, meantime, meanwhile, next, once, previously, simultaneous, since, then, thereafter, till, ultimately, until, when, when and if, while
Cause = 21	accordingly, as a result, because, consequently, for, hence, insofar as, now that, since, so, so that, thereby, therefore, thus
Condition = 23	as long as, if, if and when, if...then, lest, when and if

COMPARISON = 3	although, as though, much as, nevertheless, nonetheless, still, though, yet
Contrast = 31	but, by comparison, by contrast, conversely, however, in contrast, on the contrary, on the one hand...on the other hand, on the other hand, rather, whereas, while
Concession = 33	regardless
EXPANSION = 4	as if, in the end, neither...nor, rather
Conjunction = 41	additionally, also, and, as well, besides, finally, further, furthermore, in addition, in fact, indeed, likewise, meanwhile, moreover, nor, plus, separately, similarly
Instantiation = 42	for example, for instance, in particular

Restatement = 43

as though, in fact, in other words, in particular, in short, in sum, indeed, overall, specifically

Alternative = 44

alternatively, as an alternative, either...or, else, instead, lest, or, otherwise, unless

Exception = 45

except