Cultural differences in the use of epistemic modality in the European Parliament

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July 1, 2016 Supervisor: Dr. B.J.M. van Halteren

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1. Abstract

Language plays an important role in politics and culture influences the use of language. Therefore, are cultural differences reflected in the language used by politicians? This question was the basis for our research, which focused on the use of epistemic modality (the expression of certainty) in political speeches in the European parliament. Specifically, our research question was: "Are there (national or party political) cultural differences in the use of modal adverbs and dismissive adjectives?"

The research was conducted by counting the number of times modal adverbs (sure and unsure) and dismissive adjectives were used in speeches by English, Dutch and Belgian politicians in the European parliament. These results were analyzed according to country, political party differences and word type.

Ultimately, we found that populist parties stand out in their use of epistemic modality, especially in their use of dismissive adjectives. Between the other political parties there is no clear trend or correlation for all three word categories - dismissive, sure, and unsure - in all three countries.

Further research, for example with a larger database, looking at different ways of expressing epistemic modality or taking into account factors such as individual party properties may result in different conclusions.

2. Introduction

Van Halteren (2008) shows that it is often possible to recognize the original language of a translated speech based on the frequency of word n-grams. One of the observations that arises from his research is that speakers of Dutch seem to exaggerate their viewpoint more than other speakers. For us, this raised questions about cultural differences in political speeches. Do politicians from different countries, and maybe political parties, really have significantly different ways of speaking? Is it possible to quantify these differences? Which aspects of language play a role in this phenomenon? These questions were the basis for our research, in which we analyzed political speeches to find if politicians from different countries and political parties have different ways of expressing themselves.

Politics can be viewed in two ways: as a struggle for power or as cooperation (Chilton, 2004). This struggle for power is "between those who seek to assert and maintain their power and those who seek to resist it", while cooperation is defined as "the practices and institutions that a society has for resolving clashes of interest over money, influence, liberty and the like". In both of these aspects of politics, language plays an important role. In Chilton's (2004) words, "political activity does not exist without the use of language". Language is the way to express opinion, to share ideas and to convince others; essential parts of politics. Additionally, politicians have to pay special attention to their phrasing and word choice, because of how their audience will react to these choices.

In communication, including political speeches, both speakers and hearers have two goals, which Christopher Hart (2011) describes as follows. The goals of speakers are "to be understood and to affect the beliefs and behaviors of their audience". While the goals of hearers are "to understand and to acquire true and useful information". The speakers' goals are especially relevant in politics, where convincing your audience that you are right is paramount. Speakers use different strategies to achieve these goals. According to Hart, one of these strategies involves epistemic stance: the use of epistemic modality in positioning oneself. Through evidentiality and modality, speakers legitimize their assertions to their audience. For example,

"by saying that an observation is 'clear' or 'obvious', authors imply that it is so not only to themselves but should be to their readers as well, based on their ability to make the same inferences. They also make it very difficult for readers to disagree with or oppose the claim, as readers who do not find the claim 'obvious' or 'clear' may 'suspect their own judgments' rather than the authors', and think that 'they are missing the obvious'. Certainty adjectives and adverbs are also used to evaluate a proposition as 'expected' or 'concurred'" (Koutsantoni, 2005, p. 132-133).

When analyzing speech from different countries, one is actually analyzing speech from different cultures. Koutsantoni (2005) describes that cultures differ on parameters such as power distance and individualism-collectivism, and that these factors "affect a society's intellectual activity" and their intellectual style, specifically their persuasive style. Therefore, there should be differences in political speeches from different cultures. Not only do different countries have their own culture, cultural differences are also found between smaller social groups, such as political parties. It is thus conceivable that language differences can be found between these groups. In analyzing political speeches we will therefore compare both different countries and political groups. Most parties have existed for many years, and we can assume that they have an established own party culture. Populist parties, however, are often young parties who are against the establishment. We can imagine that this may be visible in their language use.

There are many aspects of language that can be studied to find differences between speakers. We have chosen to focus on epistemic modality for this research. Epistemic modality, a sub-category of modality, is the linguistic expression of "an estimation of the likelihood that (some aspect of) a certain state of affairs is/had been/will be true (or false) in the context of the possible world under consideration" (Nuyts, 2001, p.21-22). In this paper we will hold to Nuyts' definition, specifically because of the inclusion of the idea that epistemic modality is an expression of an evaluation, while not necessarily being the speakers' full opinion.

Epistemic modality is expressed through various linguistic forms, including modal verbs, adverbs, and adjectives. We have chosen to limit this research to one category of words, namely adverbs. This is a category of words that includes both words that convey certainty as well as uncertainty, is extensive and can be recognized automatically with quite satisfactory quality. Furthermore, adverbs are used regularly in both English and Dutch.

One could say that modal adverbs are a way of describing one's certainty about the desirability of their own ideas. When describing certainty about the (un)desirability of someone else's ideas, the modal adverbs are not always enough. If one wishes to express that what the other is saying is undesirable, one needs words that are strongly dismissive, such as "terrible" or "incredible". We think that this will often occur in politics, especially when criticizing opposing parties, so we have chosen to add an extra category of words: the strongly dismissive words. Because positive expressions about another's ideas are often zero-marked or ambiguous (for example sarcastic) we have chosen not to include these in our research. The words in the category "dismissive" are all adjectives.

For this research we will be using the EUROPARL corpus, an extensive corpus made up of proceedings from the European Parliament in the period between 1996 and 2011.

We have chosen to focus on speeches from politicians from The Netherlands, Belgium (Flanders) and Great Britain. The inclusion of speeches in Dutch from both the Netherlands and Belgium will give the extra dimension of culture differences within the Dutch language.

In conclusion, the main research question is: Are there (national or party political) cultural differences in the use of modal adverbs and dismissive adjectives, as witnessed in European Parliament speeches in Dutch and English?

In this paper, we will describe the methods used to research the use of modality and the main results, followed by a discussion of these results and our conclusions.

3. Background

In this chapter we will discuss and explain the most important aspects of and terms used in this research paper, including the Europarl corpus, epistemic modality, and adverbs.

3.1 The European Parliament and Europarl

Our research focuses on the use of epistemic modality in political speeches by Dutch, Belgian and English politicians. To be able to compare these speeches, we decided to use speeches from a comparable setting: the European parliament.

The European Parliament consists of politicians from all member states of the European Union, with seats allocated according to the population of each state. Parliamentary members are "grouped by political affinity, not nationality" (European Parliament, n.d.). Members of the European Parliament (MEP's) are chosen through elections in their country of origin, but there is no uniform electoral procedure or common date (Kiesraad, n.d.). In the United Kingdom, the country is divided into twelve electoral regions (including Scotland, Wales, and Northern Ireland). In the Netherlands, members are chosen nation-wide (Parlement & Politiek, n.d.). In Belgium, MEP's are chosen from the Flemish, French and German communities (Europees Parlement Informatiebureau in België, n.d.). On a national level, these politicians are a member of their own national political parties, while in the European parliament they join one of the different political groups. It is therefore possible that not all politicians from one national political party are part of the same political group in the European Parliament.

When comparing texts from different languages it is important to work with a set of "comparable original texts". Using such a corpus limits the amount of confounding factors, which makes it possible to make more reliable observations on the possible effect of language and culture factors (Conner, Nagelhout & Rozycki, 2008). The Europarl corpus is a comparable corpus made up of proceedings from the European Parliament and is thus exactly what we needed.

The Europarl corpus is a corpus made up of proceedings from the European Parliament in the period between 1996 and 2011 (Koehn, 2005). It consists of versions in 21 European languages: French, Italian, Spanish, Portuguese, Romanian, English, Dutch, German, Danish, Swedish, Bulgarian, Czech, Polish, Slovak, Slovene, Finnish, Hungarian, Estonian, Latvian, Lithuanian, and Greek. Each language version has about 60 million words. The Europarl corpus is organized as a sentence aligned text, originally so that it could be used for statistical machine translation systems.

Apart from being a comparable corpus with English, Dutch and Belgian speakers - the languages we can and want to research - Europarl is comparable because the context of all the speeches is the same. In addition, it includes metadata about the speeches, such as the language spoken and information about the speaker. It is of course possible that not all speakers write their own speeches, but we can assume that their speechwriters are from the same country and political party.

3.2 Epistemic Modality

In this research we are focusing on epistemic modality, which is a sub-category of modality. Modality is the grammatical category concerned with "the expression of obligation, permission, prohibition, necessity, possibility and ability" (Trask, 2007). Epistemic modality is defined in many ways, and linguists quarrel over the "precise extension" of the definition, its subtypes and its distinction from other grammatical categories (Nuyts, 2001). As stated in the introduction, we use Nuyts' definition of epistemic modality: a linguistic expression concerning "an estimation of the likelihood that (some aspect of) a certain state of affairs is/has been/will be true (or false) in the context of the possible world under consideration".

Other definitions of epistemic modality include "a modality that connotes how much certainty or evidence a speaker has for the proposition expressed by his or her utterance" (SIL International, 2004), and that it "pertains to speakers'/writers' estimation concerning the veracity of the event designated and the likelihood of its realization" (Marín-Arrese, 2011). It is important to note that not all definitions include that epistemic modality concerns the expression of certainty (vs. actual certainty), while in this research we hold to the idea that epistemic modality concerns the expressed, and not necessarily actual, certainty of the speaker.

As mentioned before, the precise 'boundaries' of epistemic modality are hard to define. Certainly it is closely related to and often difficult to distinguish from evidentiality, but there is an important difference between these two categories. Evidentiality concerns (the nature of) the evidence presented while not concerning itself with whether or not the state of affairs is true, in contrast with epistemic modality which does the opposite (Nuyts, 2001).

In our research we have not included speakers from other countries speaking in Dutch or English, the main reason being that for second language learners, epistemic modality is a difficult area to master. There are three main reasons for this difficulty. The first is that the categories involved in expressing modality are "by no means clear-cut". Secondly, there is a wide range of linguistic and non-linguistic devices with which one can express modality, all with different ranges and degrees. Thirdly, many of the modal expressions and linguistic forms available for expressing epistemic modality are ambiguous in meaning and so can also be used in different settings (Holmes, 1982).

3.3 Adverbs and Dismissive adjectives

In this research we focus on modal adverbs and dismissive adjectives. English and Dutch grammar are in some ways very similar, but in some parts grammarians have a very different way of looking at words. In English, there is a clear difference between adjectives and adverbs, both grammatically and morphologically. Morphologically speaking, there are two kinds of adverbs, mostly with the specific ending -ly or -ally. But there are also many adverbs without this ending. An adverb usually describes "the circumstances of an action" Those ending with -ly are often adverbs describing how something is done and derived from the corresponding adjective (Trask, 2007). In Dutch however, the distinction between adjectives and adverbs is less clear.

Most of the adverbs are actually often viewed as adverbially used adjectives. Morphologically, they are thus indistinguishable from adjectives (Aarts & Wekker, 1993). According to the Algemene Nederlandse Spraakkunst, an adverb expresses a more specific property (such as a degree, a circumstance etc) of the working, a property or a state expressed by a verb phrase or adjective clause (Stichting ANS, 2002).

One would expect that a speaker's use of sure, unsure and dismissive words is related to each other. If someone is sure of what they say, they will use more sure words and less unsure words. Using dismissive words is also a way to express that you are certain of what you say. So we would expect that politicians that are sure of themselves will use more sure and dismissive words and less unsure words and vice versa. Which implies that there should be a correlation in the relative frequencies of the three classes.

We also expect that overall - in political speeches - 'sure' will have the highest scores, with unsure and dismissive both significantly lower. When convincing your audience, you want to come across as sure, not unsure, and focus on that what you say is right, not on what is wrong (in what you or others say).

However, it is possible that politicians use a different strategy. For example, speakers can choose to express themselves in a more neutral manner and use less modal and dismissive words overall. Or they might use different strategies to express their certainty, for example through modal verbs. Other speakers might prefer using more modal and dismissive words overall, to express themselves more eloquently.

4. Methodology

In this chapter we will describe the steps taken to find an answer to the research question, namely compiling word lists, defining categories of political parties, and the process of data extraction.

4.1 Compiling word lists

To be able to research the measure of certainty expressed by politicians, we compiled lists of words to look for in the speeches. These words would then be counted in the speeches and these numbers analyzed. As there is no set list of modal words, this list had to be assembled. Holmes (1988) lists adverbs expressing epistemic modality which became the basis for my English list. We expanded this list using Roget's thesaurus. The Dutch list was compiled by translating the English list, as there was no comprehensive Dutch list in for example the Algemene Nederlandse Spraakkunst. By translating the two lists back and forth we found more useful synonyms to add to both lists, taking care that no ambiguous words were included that could contaminate the results.

The list of dismissive adjectives was compiled by using WordNet and Similarity Service. For Dutch, we expanded the lists by consulting a similarity database based on several years of Twitter posts (van Halteren, in prep.). All word lists are found in Appendix 2.

4.2 Speakers and Party categories

To compile the list of English, Dutch and Belgian parliamentarians in the European Parliament between 1996 and 2011 (the span of the Europarl corpus) we searched for all speeches by Dutch and English speakers (according to the Europarl annotation). From those results we were able to make a comprehensive list of all English, Dutch and Belgian parliamentarians, including the different ways their names were spelled in the corpus. To avoid confusion we deleted two members who had the same name. Though Europarl included some of the political parties in the metadata with the speeches, this information was not complete. Therefore, we used the information on the website of the European Parliament¹ to mark each speaker for membership of national and European parties during his or her time at the European Parliament.

As one of our goals was to see the difference in expressed modality between parties, we needed to list and classify the relevant parties, both on national and European level. Taking the information from the list of parliamentarians, we made a list of all the relevant political parties. Most parties have changed names one or more times, so we combined these names and used the current name (or most recent name in the case of former parties). In some cases, political parties have had temporary alliances. In these cases, we chose only the party that the parliamentarian had belonged to when they were separate. In other cases, political parties have merged and split. In these cases we have attempted to label the politicians as correctly as possible. There were also politicians who during their career have switched between political parties, we will go into this further on.

As comparing results between all the parties would be impossible due to the amount of parties and the fact that from some parties we only had one or two representatives, we decided to divide the parties into categories. We thereby assume that political parties that are close on the political spectrum have similar party cultures. We thereby also assume that

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we can compare the different categories between countries. On many occasions, political parties are described as being 'left' or 'right'. This is often based on their economic position. We found this dichotomy to be too one-dimensional and looked for a second possible classification. We chose the dimension conservative-progressive, based on the political compass by André Krouwel (Trouw, 2012). For the Netherlands and Belgium we added a fifth category "populist". In both countries there were categories from which there were no or single politicians, in which case the category was excluded from the analysis.

As for the political parties from the United Kingdom, the majority fall in the same quadrant of the political compass. We therefore chose to do our analysis at the party level, but only for the three major parties in the United Kingdom: the Labour Party, the Conservative Unionist Party, and the Liberal Democrats. Together, these parties make up 70% of the British politicians in Europarl.

For the European Parliament alliances it was not possible to find a satisfying second dimension so we settled for a more specific division including "centre-left" and "centre-right". We also added a sixth category for members that are not affiliated with a political group.

Most of the parliamentarians fit into this classification, even when they switched between parties. However, there were some who switched between parties that did not fall in the same category, for example from Right-Conservative to Centre-Conservative. This happened both on a national and on a European level. Because these switches were so extreme we decided to exclude these politicians from the investigation.

The definitive distribution of the parties is found in Table 1 below. Tables 2 and 3 show the numbers of members of parliament per category. A list of the political parties and their abbreviations is found in Appendix 1.

Table 1: Classification of Political Parties

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The Netherlands								
Left-Progressive		Right-Progressive		Right-Conservative		Populist		
SP		D66		VVD		PVV		
GL				CDA				
PvdA				SGP				
	Belgium							
Left-Progressiv	re	Centre-Conservative		Right-Conservative		Populist		
Groen		CD&V		Open VLD		LDD		
SP		CSP		VU		VB		
SP.a								
	United Kingdom							
Labour Conservative and			I Unionist Party	Liberal Democrats		crats		
European Parliament								
Left Centre-L		-Left	Centre	Centre-Right	Right		Non-Affiliated	
ERA S&D			ALDE	UEN	ECR		NA	
Greens/EFA					EFDD			
GUE/NGL					EPP	·		
RBW					ITS			

Table 2: Number of members per national category

	The Netherlands		Belgium		United Kingdom	
Left-Progressive	28	Left-Progressive	10	Labour Party	62	
Right-	o	Right-	7	Conservative	48	
Progressive	8	Conservative	/	Unionist Party	40	
Right-	34	Centre-	4	Liberal	15	
Conservative	Conservative		4	Democrats	13	
Populist	3	Populist	3			

Table 3: Number of members per European category

Left	12
Centre-Left	84
Centre	40
Right	70
Not Affiliated	3

4.3 Extracting data

After compiling these lists of words and parliamentarians we could begin gathering the results. We automatically counted the number of times each word in each category (sure, unsure, dismissive) was present in all speeches by a certain parliamentarian in his or her native language. From the absolute counts, we derived relative counts per thousand words.

As described above, Dutch adjectives and adverbs are morphologically indistinguishable in most cases. In order to count only the adverbially used words in Dutch, we extracted the relevant instances from Alpino parses of the Dutch part of the Europarl corpus (van Noord, 2006).²

Using these results, we could compare the use of sure, unsure, and dismissive words between the political party categories. Because the word lists and search strategies differ too much between English and Dutch, it is only possible to compare the results within each language.

4.4 Analysis

To test for correlation between the different factors, we used cross-tabulations and Cramer's V test³. We tested each country separately for between-party correlations and for correlations between sure, unsure, and dismissive.

The results were analyzed according to the different categories: country, national political party category, European political party category, and the three types of words (dismissive, sure, and unsure).

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² We thank Gert Jan van Noord for providing us with these parses.

³ Using IBM SPSS Statistics 22

5. Results

5.1 General remarks

Earlier, we mentioned that we expected that politicians use more sure words and less unsure and dismissive words. Table 4 shows that on average this prediction holds true. However, the differences between sure and unsure are smaller than expected and this relationship is not reflected in the statistical tests performed in the next section.

Table 4: Averages of instances per 1,000 per country

	. , ,			
Country	Dismissive	Sure	Unsure	
United Kingdom	0.62	2.20	0.74	
The Netherlands	0.48	2.69	1.64	
Belgium	0.50	3.08	1.56	

The extensive within-party variation (which can be seen in the figures further on) makes it hard to distinguish between-party differences.

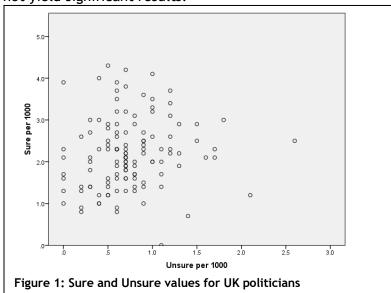
5.2 Correlation

Between parties (for the United Kingdom, the Netherlands, and Belgium separately), cross-tabulation and Cramer's V test yielded no significant results, except for the dismissive category in the Netherlands. For the national parties, Cramer's V=0.651, p=0.000. For the European parties, Cramer's V=0.589, p=0.003.

Scatterplots such as the one in Figure 1 showed that there is no clear correlation between the each pair of the factors dismissive, sure, and unsure. This was confirmed by cross-tabulation which yielded no significant results.

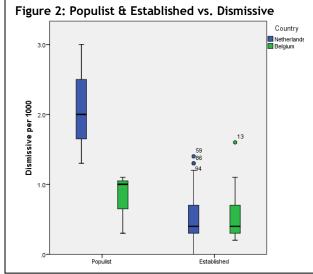
For the Netherlands and Belgium, we repeated the cross-tabulation and Cramer's V test while excluding the populist parties. Within each country between parties this yielded no significant results, including the dismissive category.

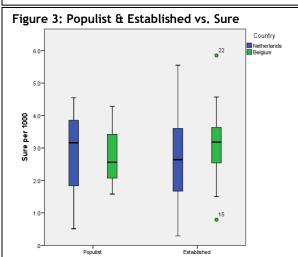
For the pairs of dismissive, sure, and unsure, cross-tabulation without the populist parties did not yield significant results.

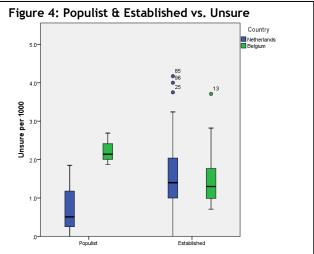


5.3 Populist vs. Establishment

The cross-tabulation showed that for the Netherlands and Belgium, the populists influence the results significantly, at least in the dismissive category. Therefore we analyzed the results of the populists vs. the other, more established, political groups. The results are shown in figures 2-4.







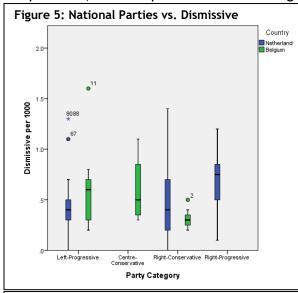
In the dismissive category, the populists score considerably higher than the established parties, especially those from the Netherlands. For the sure and unsure categories the differences are less consistent. In the unsure category there is a difference in countries, with the Dutch populists scoring decidedly lower and the Belgian populists scoring higher than the established parties.

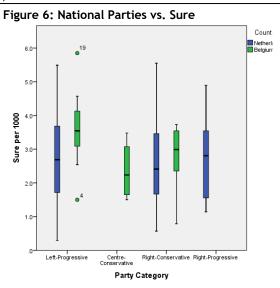
Overall, the populist parties clearly have different scores than the established parties, especially in the dismissive category.

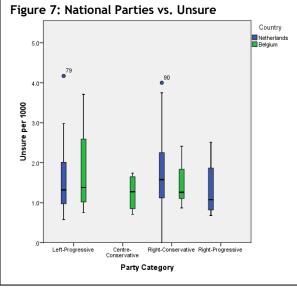
Based on these results, we re-examined the data, this time excluding the populist politicians from both the national party categories and the European party categories.

5.4 The Netherlands and Belgium: National Parties

Figures 5-7 show the scores for Dutch and Belgian politicians sorted per national party category. When the populist parties are excluded, there are no clear trends or differences between the different party categories or between the two countries. There is quite a lot of variation within each party category. There seem to be more differences between the Belgian party categories than between the Dutch party categories. This could be due to the smaller sample size (70 Dutch politicians vs. 21 Belgian).

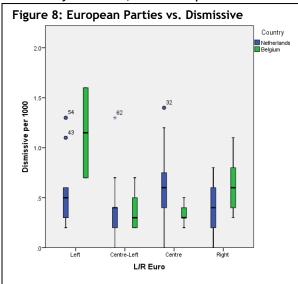


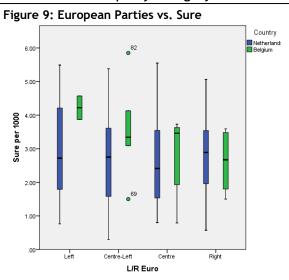


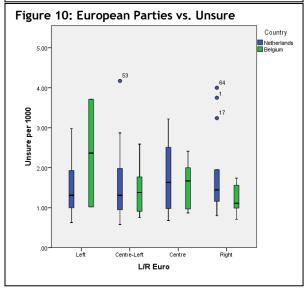


5.5 The Netherlands and Belgium: European Parties

Figures 8-10 show the scores for Dutch and Belgian politicians sorted per European party category. When comparing the Dutch and Belgian politicians according to their European political groups, we can see that the Belgian left has higher scores overall: both compared to the other parties and to the Netherlands. The Belgian Left consists of only two politicians from the Belgian Green party. Apart from this, there is no clear trend between party category or country. Overall, there is quite a lot of variation within each party category.







5.6 The United Kingdom: National and European Parties

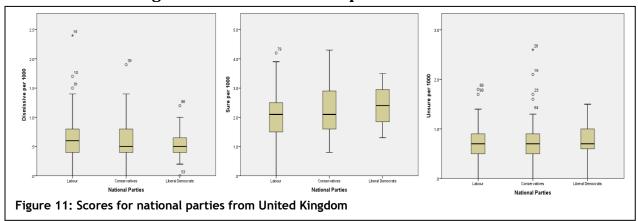


Figure 11 shows the scores for the national parties from the United Kingdom. When comparing the United Kingdom national parties, there is almost no difference between the scores for either the dismissive, sure, or unsure words.

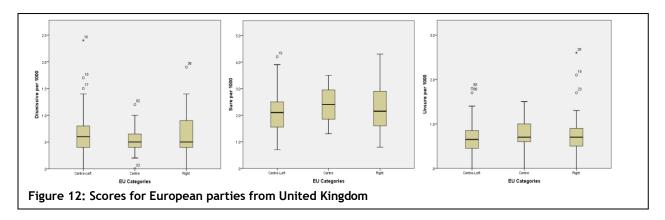


Figure 12 shows the scores for the English politicians sorted by European party. When comparing the United Kingdom politicians in their European party categories, there is almost no difference between the scores for either the dismissive, sure, or unsure words.

6. Discussion

In this research we have limited ourselves to modal adverbs and dismissive adjectives, mainly to restrict the scope of this project, considering the time available. Furthermore, there is no set list of modal adverbs. Though we believe the list we compiled to be comprehensive, there are other adverbs that could also be included, which might lead to different results. Additionally, there are various other strategies to express epistemic modality and including these would give a more complete view of the expression of epistemic modality in the European Parliament. For example, one can also use modal verbs such as "assume", "could", and "believe". Our recommendation for further research would consequently be to perform similar research with more ways of expressing epistemic modality, such as verbs and modal adjectives.

In our research we have not made the comparison between countries with different languages, because of the differences in word lists. Further research could focus on this by using different word lists and using the translations of the speeches. However, this would not be simple as translators translate modality in a variety of ways, or not completely.

There are a number of factors which may affect the use of modal adverbs and dismissive adjectives that we have not taken into account in this research paper. For example, how experienced the politician in question is and the topic he is speaking about. The size of the political party and whether or not they are in the opposition may also play a role. Additionally, the proceedings of the European Parliament are generally not followed by the general public. It is therefore possible that politicians speak differently in the European Parliament than when they are, for example, giving a speech in their own parliament or at a convention.

Though Europarl was a good choice for this research project, it is possible that speeches given in the context of national politics give a more complete depiction of the use of epistemic modality by politicians. In national politics, the politician probably has a stronger bond with his party. The topics in question may also concern the speaker (and his supporters) more, but this will differ per speaker.

Finally, if this research was conducted with a larger set of data, it would be possible to zoom in more; to analyze the results per party instead of per party category. Perhaps this would show differences and correlations that are invisible now.

7. Conclusions

The results show that there is a clear difference between the populist parties from the Netherlands and Belgium and the other, more established parties from those countries. The populist parties are significantly more dismissive than the other parties, and they also differ in the sure and unsure categories. Therefore, we can conclude that the populist parties use modal adverbs and dismissive adjectives differently than the other parties, and deduce that the culture in these parties stands out from the rest. We hypothesize that presenting certainty and dismissing other views flow from the choice for populism. This trend is stronger for the Dutch politicians than for the Belgian politicians. This could be caused by the trend that populism is declining again in Belgium (Naegels, 2010).

When examining the established parties, however, there is no clear relation between the factors. Cross-tabulation shows that there is no correlation between the political party groups within the three countries and the three word groups (dismissive, sure, and unsure). Looking at the different scores from each country for each political party group, there are various differences between parties, but none show a clear trend. This is true for the United Kingdom, the Netherlands, and Belgium, both for national party categories and European party categories. The fact that there is no correlation between the factors suggests that the politicians do not use modal adverbs and dismissive adjectives consciously in formulating their speeches.

In comparing the sure and unsure categories, we found that, relatively, unsure was used more often than expected. This could mean that politicians express themselves more unsure than expected, or that this use of unsure words is part of a larger rhetorical structure. For example, they may use the construction "possibly..., but I believe that this is false", which makes use of an unsure word but in the end is quite sure. Further research, including annotation of individual instances, might bring more clarity here.

In conclusion, our analysis appears to show that there are no trends in national or party political differences in the use of modal adverbs and dismissive adjectives in Dutch and English speeches in the European Parliament. An exception is the populist parties, which distinguish themselves, especially in the use of dismissive adjectives. Furthermore, use of modal adverbs and dismissive adjectives does not seem to be part of the conscious rhetorical repertoire of the investigated Euro-parliamentarians. This includes the populist politicians, who seem to use these words mostly subconsciously, stemming from their party's position.

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Appendix 1: Party names and abbreviations

Abbreviation	Party Name	Country
ALDE	Alliance of Liberals and Democrats in Europe	European Parliament
CD&V	Christen-Democratisch & Vlaams	Belgium
CDA	Christen Democratisch Appèl	Netherlands
CSP	Christliche Soziale Partei	Belgium
CUP	Conservative and Unionist Party	United Kingdom
D66	Democraten 66	Netherlands
ECR	European Conservatives and Reformists Group	European Parliament
EFDD	Europe of Freedom and Direct Democracy	European Parliament
EPP	European People's Party (Christian Democrats)	European Parliament
ERA	European Radical Alliance	European Parliament
GL	GroenLinks	Netherlands
Greens/EFA	Parliamentary Group of The Greens/European Free Alliance in the European Parliament	European Parliament
Groen	Groen	Belgium
GUE/NGL	European United Left - Nordic Green Left	European Parliament
ITS	Identity, Tradition and Sovereignty Group	European Parliament
LD	Liberal Democrats	United Kingdom
LDD	Lijst Dedecker (Libertair, Direct, Democratisch)	Belgium
LP	Labour Party	United Kingdom
NA	Non-Affiliated Members	All
Open VLD	Open Vlaamse Liberalen en Democraten	Belgium
PvdA	Partij van de Arbeid	Netherlands
PVV	Partij Voor de Vrijheid	Netherlands
RBW	Rainbow Group in the European Parliament	European Parliament
S&D	Group of the Progressive Alliance of Socialists and Democrats	European Parliament
SGP	Staatkundig Gereformeerde Partij	Netherlands
SP	Socialistische Partij	Netherlands
SP	Socialistische Partij	Belgium
sp.a	Socialistische Partij Anders	Belgium
UEN	Union for Europe of the Nations	European Parliament
VB	Vlaams Belang	Belgium
VVD	Volkspartij voor Vrijheid en Democratie	Netherlands

Appendix 2: Sure, Unsure & Dismissive Words

English:

English:					
Sure	Unsure	Dismissive			
actually	apparently	abhorrent	irrational		
assuredly	dubiously	abominable	irrelevant		
believably	expectably	absurd	laughable		
certainly	expectedly	appalling	ludicrous		
clearly	hypothetically	atrocious	mad		
convincingly	improbably	bizarre	misguided		
credibly	likely	crazy	nonsensical		
definitely	maybe	cringeworthy	objectionable		
doubtless	mayhap	deplorable	offensive		
essentially	perchance	detestable	outrageous		
evidently	perhaps	discreditable	preposterous		
feasibly	possibly	disgraceful	reasonless		
impossibly	potentially	dreadful	regrettable		
inconceivably	presumably	egregious	reprehensible		
incontestably	probably	exorbitant	repugnant		
incredibly	questionably	far-fetched	repulsive		
indeed	roughly	flawed	ridiculous		
indubitably	seemingly	foolish	rude		
inevitably	supposedly	frightful	scandalous		
infallibly	uncertainly	ghastly	senseless		
irrefutably		horrible	shameful		
naturally		horrid	shocking		
necessarily		illogical	shortsighted		
obviously		impermissible	terrible		
plainly		implausible	toe-curling		
plausibly		inadequate	unacceptable		
self-evidently		incapable	unbelievable		
substantially		incoherent	uncalled-for		
surely		incompetent	unfounded		
truly		incomprehensible	unimaginable		
unavoidably		inconceivable	unintelligible		
undeniably		incredible	unjustified		
undoubtedly		inexcusable	unprovoked		
unmistakably		inexplicable	unreasonable		
unquestionably		insane	untenable		
unthinkably		insulting	unthinkable		
		intolerable	unwarranted		

Dutch:

Sure		Unsure	Dismissive	
absoluut		bedenkelijk	aanstootgevend	ongerijmd
alleszins		blijkbaar	abominabel	onhoudbaar
allicht		denkelijk	absurd	onlogisch
definitief		hypothetisch	afgrijselijk	onredelijk
doorgaans		misschien	afkeurenswaardig	onsamenhangend
duidelijk		mogelijk	afschuwelijk	ontoelaatbaar
echt		mogelijkerwijs	belachelijk	onvergeeflijk
eenvoudigweg		ongeveer	beschamend	onverklaarbaar
eigenlijk		onzeker	bespottelijk	onverstandig
essentieel		schijnbaar	betreurenswaardig	onverteerbaar
evident		toch	bizar	onvoorstelbaar
feitelijk		twijfelachtig	buitensporig	onzinnig
gegarandeerd		vermoedelijk	choquerend	overdreven
gewoon		waarschijnlijk	dwaas	potsierlijk
glashelder		wellicht	inacceptabel	redeloos
hoogstwaarschijr	nlijk		incapabel	ridicuul
inderdaad			incoherent	scandaleus
kennelijk			incompetent	schaamteloos
klaarblijkelijk			intolerabel	schandalig
logisch			irrationeel	schandelijk
natuurlijk			irrelevant	schokkend
noodzakelijk			jammerlijk	stuitend
normaal			kortzichtig	tenenkrommend
onbetwist			krankzinnig	verfoeilijk
ondenkbaar			lachwekkend	vergezocht
ongetwijfeld			misplaatst	verschrikkelijk
onmiskenbaar			onaanvaardbaar	verwerpelijk
onmogelijk			onacceptabel	vreselijk
onomstotelijk	onomstotelijk		onbegrijpelijk	weerzinwekkend
ontwijfelbaar			onbekwaam	
onvermijdelijk			onbeschoft	
onwaarschijnlijk			ondenkbaar	
onweerlegbaar			ondoorgrondelijk	
onwrikbaar			ongegrond	
overduidelijk uiteraard			ongelooflijk	
overtuigend	vanzelfsprekend		ongeloofwaardig	
sowieso werkelijk			ongeoorloofd	
stellig	stellig zeker		ongerechtvaardigd	