

The language and motivations of expertise in political discourse

Characteristics of specialised communication in the Hungarian ParlaMint corpus

The study aims to explore how language elements of specialised and political communication are represented in parliamentary discourse. Within the ParlaMint corpus, we examine Hungarian parliamentary speeches between 2020 and 2022 on the ‘KATA’ (specific tax of small taxpayer businesses). The specialised terms, terms used in standard language, sentiment and attitude values are analysed. Results show that there is a significant difference in term use and the sentence sentiments between the different discourse participants (policy actors, opposition, governing party). There are only a few emotionless speeches, and no large differences in the proportion of terms and emotions are observed. The results can be relevant for studies on populist communication, the relationship between technocracy and democracy, and the methodological aspects of computer-assisted discourse analysis. The paper also outlines future orientations for research, including extended thematic analysis and investigation of contextual shifts in the actual meaning of terms within political discourse.

Keywords: *terminology usage, sentiment analysis, parliamentary discourse, ParlaMint corpus, specialised communication*

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1. Introduction

The study presents an analysis of the discourse of Hungarian parliamentary sessions. Parliamentary sessions exhibit distinctive discourse characteristics: they address policy issues, thereby incorporating elements of both specialised discourse and political discourse. Additionally, they target a diverse audience, reflecting multifaceted goals. The study corpus consisted of speeches delivered from 2020 to 2022 within the Hungarian ParlaMint subcorpus (Ligeti-Nagy et al. 2023), focusing on the topic of the KATA (acronym of the ‘kisdózó vállalkozások tételes adója’, the specific tax of small taxpayer businesses in Hungary). The research aimed to explore how the linguistic and language usage elements of specialised and political communication manifest within parliamentary discourse. It sought to determine to what extent these elements could be considered specialised or political communication based on linguistic, language usage and contextual features. To achieve this, we examined terminologies, sentiment and attitude values commonly used in both specialised and political discourse, which are most readily identifiable using computational tools. Beyond contributing to the discussion on the use of specialised language in political discourse, the study also contributes to the methodological aspects of computer-assisted analysis of specialised and political discourses. Importantly, the research highlights the existence and research potential of the ParlaMint corpus (Erjavec et al. 2023) and emphasises the societal importance of responsibly and critically interpreting statements made within the parliamentary environment.

2. Political discourse and specialised discourse

The utterances made during parliamentary sessions belong to political discourse, but they also occupy a specific place in it:

1. Policy issues are also discussed in parliamentary sessions, so there are also elements of specialised and political discourse.
2. Parliamentary sessions are highly regulated, institutionalised, with a set agenda (the language, types of speeches, duration, order of speakers and other rules of the session are laid down in the Rules of the Hungarian National Assembly n.d.), but there are also somewhat spontaneous speeches alongside speeches written in advance (van Dijk 1997).
3. Public accessibility is regulated by law (speeches given in the Hungarian Parliament are available in the form of transcripts and video recordings), so they necessarily become part of the public discourse.

The linguistic and language-using features of parliamentary utterances are thus influenced by multiple purposes, audiences and discourse features. Due to the policy themes, elements of specialised discourse appear alongside political and social issues (van Dijk 1997). This is also reflected in the fact that the political terminology is characterised by the mixing of specifically political terms, units of general language, terms from different fields, diplomacy, economy, culture (Kotenko et al. 2023) and the multiple target audiences, which also imply the intention to persuade and

inform. The main characteristics of specialised communication and political communication can be described on the basis of several analytical frameworks.

2.1. Specialised discourse

Specialised communication is carried out by a group of specialists embedded in their specialised cultures, based on a specialised language, which they use according to the goals and expressive needs of the community (Kurtán 2010). The specificity of terminological units (the units of specialised language), as opposed to other language units at the same structural level and with the same meaning, lies in the fact that all three of their components (cognitive, grammatical and pragmatic) satisfy restrictive conditions. Among other things, they depend on the context of the subject (cf. also Faber 2009); they have a well-defined place in the conceptual structure, which determines its explicitly recorded meaning recognised and used by the specialised community. As a lexical unit, it may coincide formally with units of standard language use (Cabré 2003).

Specialised speech communities represent specialised cultures in which common knowledge and specialised background knowledge play a significant role. With regard to the community of speakers, it is crucial whether communication takes place between specialists in the same field, between a specialist in one field and a specialist in another field, or between a specialist and a non-specialist or the public (Kurtán 2010). However, a text is specific only if it is written by a specialist in the field; for example, a text about a disease is specialised if it is written by a doctor (Cabré et al. 2014). Nevertheless, many communicative scenarios fit into this communicative framework, with one important condition: they convey specialised knowledge. For example, it covers communication between specialists, between specialists and technicians, and the sharing of scientific or technical information widely with non-specialists (Cabré 2003).

Participants in communication communicate in different ways regarding the level of abstraction, the level of specialised knowledge and preparedness, and the intentions. In terms of context, language use is manifested in a variety of situations, in typical activities and in typical texts. What distinguishes special discourse (specialised language use) from others, apart from its preference for certain text types and strictly controlled knowledge structures, is that it presents information in a systematic way; it uses linguistic units that either are exclusively used in the subject or are more widespread but have limited meaning in this context; it works with texts with a specific content and a more concise, systematic, explicit and less inferential way of expression.

2.2. Political discourse

Based on these findings, parliamentary discourse may be one of the scenarios of specialised communication, but the contextual features of the parliamentary discourse

influence the features of specialised communication in this case. The presence of different audiences at the same time, the institutionalised framework in which spontaneous linguistic utterances can occur, the different goals and intentions, the fact that the participants in the parliamentary session refer to their own politics, ideologies, evaluations, attitudes towards political issues and their political actions in the decision-making discourse – all this means that the discourse is at least partly about politics itself (van Dijk 1997). Speeches in parliamentary sessions can be of various kinds (motions for a resolution, interpellations, reports, questions, requests, draft policy statements, policy debates, bills), and are mostly characterised by formal style and an argumentative, debating character, but they can also be characterised as political discourse by insulting the interlocutor and by influencing the public (Schirm 2009; Zimányi 2008). The role of the public in political communication has been particularly relevant since the emergence of new media (see, e.g., Merkovity 2012).

The persuasion strategy (Wilson 2015) can be based on *ethos* (the authority/credibility of the speaker); *pathos* (emotional appeal to the audience); and *logos* (proof of real or apparent truth, supporting reasons and information, argumentation). Political discourse analysis looks more broadly at the use of the linguistic choices of a political utterance for political purposes and their function in the construction of political reality (van Dijk 1997; Wilson 2015). Influence is also a prominent element here: the relationship between language and the image of the world is one in which politics is able to manipulate language for its own ends, to create worldviews that suit its goals and to negate others (Wilson 2015). Critical political discourse analysis has already argued that political utterances are tools of persuasion and power struggles, and this character determines the linguistic and stylistic features of texts: ‘language is politics, politics assigns power, and power governs how people talk and how they are understood’ (Lakoff 1990, 7). The main analytical focus is on the emergence and interaction of ideologies, power techniques and manipulation in texts, for example through linguistic constructions of polarisation, speech acts, implicatures, topical focus (see, e.g., Wodak and Chilton 2005; Vadai 2016).

2.3. Using specialised language in the political discourse

The appearance, function and even the meaning of the units of specialised language must therefore be investigated in this political context: ‘whereas metaphors in classroom discourse may have an educational function, metaphors in politics will function in a political context, for instance in the attack on political opponents, the presentation of policies or the legitimisation of political power’ (van Dijk 1997, 24).

Expertise and its linguistic representation are fundamentally related to legitimisation in political discourse (Reyes 2011). Studies on public policy emphasise the role of knowledge in the political process, with different definitions of the concept of knowledge utilisation pointing, among other things, to its symbolic use as an expression of the perceived rational basis for decisions. Justifying a decision with information is one way of symbolising the decision-making process as legitimate (Radaelli 1995). Politicians use legitimisation (a purposeful process to justify, which aims to

gain the support or approval of the interlocutor and thus persuades them) to justify their political agenda, in which different linguistic choices can be made, with strategies including appeals to emotion and authority. Politicians are inherently authoritative, as is (the appearance of?) expertise. The elements that represent expertise (such as reliable sources, figures) are thus legitimisation tools (Reyes 2011). Specialised language use can be such a tool too, as ‘terms carry the specific knowledge that experts have but lay people do not (necessarily), and which knowledge can put experts in a dominant position, asymmetric relations with lay people, and make it easier to influence lay people (Falyuna 2017, 96); if only because, for example, readers make judgements about the communicator’s reliability based on the use of specialised language (Hendriks and Kienhues 2019 based on Thon and Jucks 2017). The use of specialised language is ... about the demarcation of boundaries and, in a sense, about control and power (over knowledge)’(Falyuna 2022, 56–7). So credibility, (the appearance of) expertise and authority are the basis of persuasion, but these can also be tools of manipulation, especially when the speech is addressed to non-specialist people (cf. the publicity of parliamentary sessions):

for meaningful political discussion to take place a basic prerequisite is some degree of comprehension of the subject matter being discussed ... In the case of expert knowledge, Turner maintains ‘there is very often no such comprehension [by the masses] and no corresponding ability to judge what is being said and who is saying it’ ... both expert knowledge and the ability to identify who is an expert and can speak on a given matter being potentially inaccessible or incomprehensible to the public. (Thomas and Buckmaster 2013 based on Turner 2003, 46)

In addition to manipulation, they are also tools of power. Márton Szabó contrasts the ‘boredom’ of public policy, sectoral policies with ‘the colourful world of party battles’, and argues that the approach to the success of public policy proposals is often to remove politics from them, ‘i.e., to reduce them to a simple technical issue in a narrow field’ (Szabó 2003, 51). This relates to his statement that ‘public policy programmes are implemented by experts and advisors, and decision-makers and executors usually defend their positions with scientific arguments’ (Szabó 2012, 1). He further explains that

state and party bureaucracies have monopolised the management of public policy, and through the positivist-objectivist language of thematization, have removed the presuppositions and political constraints of interpretations and proposals ... Even those interested in public policy were confronted with the fact that the real problem in formulating and answering questions was the uncharacteristic jargon, or language itself, which assumed the appearance of neutrality and objectivity. (Szabó 2003, 52)

On this basis, he argues that two approaches have emerged in the development and implementation of public policy programmes and recommendations: ‘One is

that the implementation of public affairs is a special professional task involving trained specialists in law, economics, sociology, management and leadership' (Szabó 2012, 2). Relating to the other approach,

[a] public policy programme is only effective if it is not set and managed solely by the specialised apparatus, but also involves the citizens concerned in some way. ... This enhances the role of values in decision-making and makes it clear that specialised knowledge does not take precedence over lay knowledge in a self-evident way in public and policy issues to be implemented collectively. (Szabó 2012, 3)

Compare also in this respect the relationship between technocracy and democracy, where democracy is based on legitimate consensus, free elections and participation, and technocracy sees expertise as the sole basis of power and authority (see, e.g., Radaelli 1995; Stehr 2007). See also the problem of expertise, where knowledge becomes part of politics but enters the political process along with interests (Collins and Evans 2007; summarising this specifically in public policy, Thomas and Buckmaster 2013). Compare also with topics of knowledge policy (see, e.g., Stehr 2010). Thus, the publicity of parliamentary sessions without their being publicly understandable does not in fact give the public insight into the political process, and the lack of clarity and transparency results in it being only the discourse of politicians and experts.

2.4. Emotions and attitudes in political discourse

In the context of the study, the means of public comprehensibility and public involvement may mean reducing the number of terms and using terms that exist in the standard language and are publicly understandable instead. But comprehensibility can also refer to the importance of interpretative frameworks in the political discourse (Szabó 2012), in the construction of which emotions, ideologies and beliefs play a prominent role. Although the percentage of emotions in political discourse depends on the choice of genre, discursive events and topics, for example in the case of routine legislative activity, informational content is stronger than emotional content, while the reverse is true for 'hot' political issues (Kenzhekanova 2015). Gennaro and Ash (2022) developed a measure based on computational linguistics tools to scale the emotionality of political language. In their study, they looked at how using emotion and reasoning in the US Congress has changed over the past 150 years, by topic and congressional speakers. They mention that emotional displays spike in wartime, but since the late 1970s there has been a significant increase in emotionality, coinciding with the introduction of television coverage of congressional debates. Further, patriotism, foreign policy and social issues are the most emotionally debated, while within economic policy, issues of taxation and redistribution have seen the greatest increase in emotion in recent years (particularly among Republicans) (Gennaro and Ash 2022). They also find that emotions are prominent among disadvantaged, minority groups (emotions can help politicians cope with loss of control or frustration of expectations, Gennaro and Ash

2022 based on MacLeod 1996; Lin et al. 2006, or serve to enforce policy positions, Gennaro and Ash 2022 based on Jerit, Kuklinski and Quirk 2009).

3. Empirical study

In our research, utilising the Hungarian subcorpus of the ParlaMint corpus, containing parliamentary speeches and their metadata from 6 May 2014 to 31 July 2023, we examined speeches on an economic issue, the KATA. The study corpus encompasses speeches delivered from 2020 to 2022, considering this period as changes to the law on KATA began during this time. It was a popular form of taxation in Hungary for self-employed individuals, but was significantly restructured in 2022. It was a hot and complex topic of social, political and economic discourse in Hungary. This is mainly because the government's proposals to amend the KATA came on the agenda after social discontent during the pandemic and inflation following the Russia–Ukraine war. The ParlaMint corpus (2023) is freely accessible and provides a rich research material for researchers in humanities and social sciences.

3.1. Hypotheses

Taking into account that discourse is specialised, scientific, political and general at the same time – targeting multiple audiences – we examine terms used in scientific context, terms used in standard language, sentiment values and attitude values (emotions and ideologies), which are among the most graspable elements of specialised and political discourses using computer tools.

Sentiment analysis examines the polarity of texts and evaluates/emotional content (positivity, negativity, neutrality) expressed in texts. Sentiment analysis can be carried out in various ways within a given text. We can examine the sentiment value of a given text or text segment (e.g., sentence) (Mifrah and Benlahmar 2022), as well as evaluative expressions related to a particular entity (whether it be a proper noun or a common noun) (Laki and Yang 2023).

We formulated the following hypotheses:

H1: There is a lower proportion of terms in the speeches of opposition and governing party actors, particularly a lower proportion of specialised terminologies, than in the speeches of policy actors.

H2: The opposition will make negative statements while the governing party will express positivity.

H3: Policy actors will express themselves neutrally.

3.2. Method

The participants of the parliamentary discourse were divided into groups based on the metadata of the ParlaMint corpus:

1. Members of Parliament (LMP [‘Politics Can Be Different’], MSZP [‘Hungarian Socialist Party’], Jobbik [‘Jobbik-Conservatives’; the name comes from ‘Movement for a Better Hungary’, and Jobbik means ‘better’ in English], DK [‘Democratic Coalition’], Mi Hazánk [‘Our Homeland Movement’]) – opposition parties
2. Members of Parliament (Fidesz, KDNP [‘Christian Democratic People’s Party’]) – governing party
3. non-members of Parliament, policy actors (state secretaries, experts, guests such as the state secretary in charge of tax issues).

We compared the speeches of Members of Parliament and non-members of Parliament because political affiliation can influence the political stance and communication of a person (van Dijk 1997). The next preparatory phase involved extracting texts related to KATA using the NoSketch Engine corpus querying tool (Sketch Engine 2024a). We examined the context of the extracted sentences and gathered those text excerpts for further research that touched upon the specific tax of small taxpayers, not just instances where the term was explicitly mentioned. The search was conducted for the terms *kisadózó* (‘small taxpayer’) and *KATA*, resulting in a total of 185 occurrences. Table 1 shows the total number of text words in the text excerpts. The number of tokens in the text excerpts was important information for calculating the proportion of term candidates.

	Max.	Min.	Average	Median
No. of tokens in an excerpt	2576	72	495	287

Table 1. Total number of text words in the text excerpts (compiled by the authors)

3.2.1. Extraction and analysis of term candidates

We manually extracted term candidates from the text excerpts containing the terms *KATA* and *kisadózó* as described above. This step will also be performed automatically in the future.

In our research we refer to the extracted expressions as term candidates, since we are not professionals in the field. Also, we have not verified the expressions in any terminology databases; thus, they can only be considered as term candidates.

Examples of selected term candidates: *NAV-törvény* (law related to NAV [Nemzeti Adó- és Vámhivatal ‘National Tax and Customs Administration’]), *adóhatóság* [‘tax administration’], *munkabér* [‘wage’], *feketefoglalkoztatás* [‘illegal employment’], *jogviszony* [‘legal relationship’], *kamara* [‘chamber’], *büntetőadó* [‘penalty tax’], *bevétel* [‘income’], *juttatás* [‘allowance’], *tevékenység(i kör)* [‘scope of activities’], *adótanácsadó* [‘tax consultant’], *adó* [‘tax’], *kisvállalkozás* [‘small businesses’].

We then decided whether the expression is specialised (clear in meaning only for the specialised context) or commonly used in standard language, understandable

for non-specialised (comprehensibility). To determine this, we employed the following method.

Based on the initial idea by Fóris (2005), if a term appears in a general dictionary, it can be considered commonly used in standard language beyond the specialised community. Nowadays, the role of general dictionaries has been taken over by general corpora. One such publicly available Hungarian corpus is the Hungarian Web 2020 (huTenTen) corpus (Nemeskey 2020), which is accessible in NoSketch Engine (Sketch Engine 2024a).

We used the frequency of occurrence of term candidates to determine whether such a sequence is an expression of the standard language and understandable for the general public. We set the threshold at 10,000 occurrences. Therefore, if a term candidate appeared between 0 and 10,000 times in the corpus, we marked it as a specialised term candidate, and if it appeared more than 10,000 times, it was considered an expression of plain language.

The advantage of corpora and corpus query tools is that they allow searching for multi-word expressions in various ways.

However, a disadvantage of using a web corpus as reference is that the principles of representativeness, balance and sampling (Sinclair 1991) are not upheld because it contains texts from various sources unchecked. The threshold of 10,000 occurrences was our own decision based on observation, but there are some cases where it did not prove to be adequate. For instance, *adónem* ('types of tax') occurred 11.022 times; however, *kisadózó* with 2.413 occurrences is a specialised term, although, due to the law, it is known by quite a lot of people (but this does not necessarily mean that they also know the meaning of it).

Table 2 shows the term candidates and their proportion compared to the words of the text, as well as the special term candidates and their proportion compared to the term candidates. It shows the highest, lowest proportion, and the average and median. Median is more tolerant of outliers.

	No. of term candidates	Proportion of term candidates (%)	No. of specialised term candidates	Proportion of specialised term candidates (%)
Max.	75.0	16.8	48.0	90.0
Min.	4.0	2.5	2.0	25.0
Average	24.4	6.4	14.2	57.1
Median	17.0	5.4	9.0	56.7

Table 2. Numbers and proportion of term candidates (compiled by the authors)

3.2.2. Measurement of sentiment values and attitude values

The importance of sentiment analysis lies in its ability to capture, through automated means, when text aims to evoke emotions or convey ideology, and when it seeks to persuade. As Laki and Yang (2023) express, there are various approaches under development for sentiment analysis; initial efforts have focused on categorising documents and texts according to their overall polarity (negative, positive or neutral) (Pang, Lee and Vaithyanathan 2002). Another approach is the aspect-based method, which offers a more detailed analysis by identifying specific aspects of an object or entity that contribute to the overall sentiment (Pontiki et al. 2014). An alternative strategy is referred to as sentence-level sentiment analysis, where the focus is on examining individual sentences within a document to ascertain their level of opinionisation (Feldman 2013).

The provision of sentiment and attitude measurements for statements containing references to *kisadózó* and/or *KATA* was done automatically using tools developed at the Hungarian Research Centre for Linguistics (Laki and Yang 2023). The values can be: 1 (positive), 0 (neutral), -1 (negative). These values are compared in the following manner:

- How are they distributed relative to each other in the speeches of politicians and other participants (experts)?
- What are the proportions concerning political affiliation?

Table 3 shows the sentence-label and aspect-label values of all speeches.

	negative	neutral	positive
sentence-label	88	57	40
aspect-label	125	33	27

Table 3. Sentence-label and aspect-label values of all speeches (compiled by the authors)

4. Results

4.1. Results of usage of term candidates

The hypothesis related to usage of terms was as follows:

H1: There is a lower proportion of terms in the speeches of actors of the opposition and governing parties, particularly a lower proportion of specialised terms, than in the speeches of policy actors.

Opposition parties		Governing party		Policy actors	
Proportion of term candidates (%)	Proportion of specialised term candidates (%)	Proportion of term candidates (%)	Proportion of specialised term candidates (%)	Proportion of term candidates (%)	Proportion of specialised term candidates (%)
4.9	51.5	6.8	60.0	7.9	61.4

Table 4. Proportion of terms in the speeches of opposition parties, governing party and policy actors (compiled by the authors)

The results show (Table 4) that speeches of opposition members have the lowest proportion of term candidates, especially specialised term candidates, followed by speeches of government party members. The highest proportion of terms and specialised terms use is observed among policy actors. In Figure 1, it is also apparent that the opposition not only uses fewer terms but also uses them with less diversity.

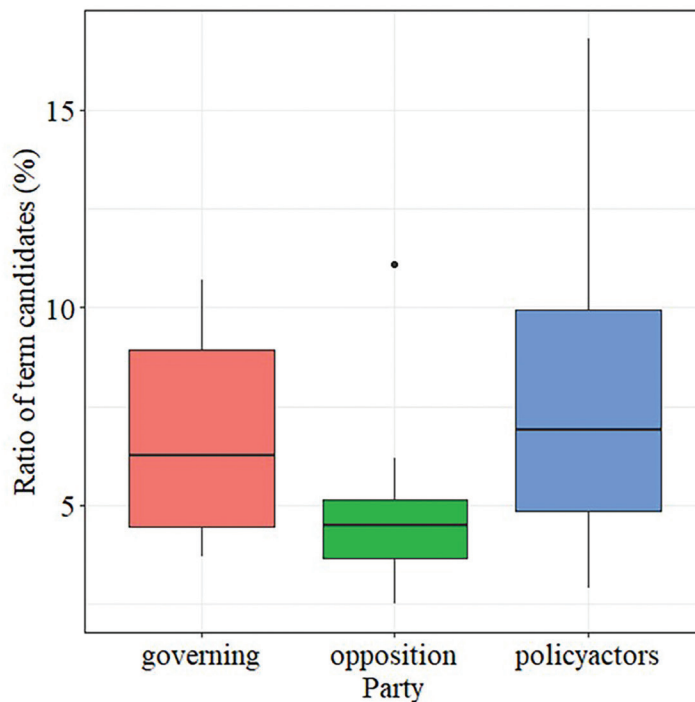


Figure 1. Ratio of term candidates among governing party, opposition parties and policy actors (compiled by the authors)

We conducted a Kruskal–Wallis test in R (R Core Team 2022) to compare the proportions of terms in text among the three groups. Based on the results, there is a significant difference among the groups ($\chi^2(2, 46) = 8.542, p = 0.013$). For pairwise comparisons between groups, we used Dunn’s (1964) Kruskal–Wallis multiple comparison p-values adjusted with the Benjamini–Hochberg method (FSA [Ogle et al. 2023]). According to this, significant differences are observed between policy actors and the opposition parties, as well as between the opposition parties and the governing party. We conducted a Kruskal–Wallis test to compare the proportions of specialised term candidates among the three groups. Based on the results, there is no significant difference among the groups. Based on Spearman’s correlation, it is observed that the longer the text, the fewer terms it contains ($\rho = -0.465, p = 0.001$). However, it is noteworthy that there is high variability in shorter texts and lower variability in longer texts. Based on these results H3 has been confirmed.

4.2. Results of sentiment analysis

The hypotheses related to sentiment were as follows:

H2: The opposition will make negative statements while the governing party will express positivity.

H3: Policy actors will express themselves neutrally.

Table 5 presents the distribution of sentiment values for aspect sentiment and sentence sentiment separately for each group.

	Sentence sentiment			Aspect sentiment		
	negative	neutral	positive	negative	neutral	positive
Opposition parties	54,29%	31,43%	14,29%	75,71%	17,14%	7,14%
Governing party	14,81%	40,74%	44,44%	55,56%	22,22%	22,22%
Policy actors	52,27%	27,27%	20,45%	64,77%	18,18%	17%

Table 5. Result of the sentiment values governing party, opposition parties and policy actors (compiled by the authors)

Figure 2 illustrates the proportion of sentence sentiment broken down by text for all three groups. It is shown that negative sentiment is very rare in the texts of government members, while in texts of the opposition, positive sentiment is below 25% in most cases. In texts of policy actors, multiple sentiments are present, but positive sentiment appears in the most diverse range (regardless of the number of occurrences in the text), while neutral sentiment is the least diverse among policy actors. The distribution of different sentence sentiments across groups is significantly different according to the chi-square test.

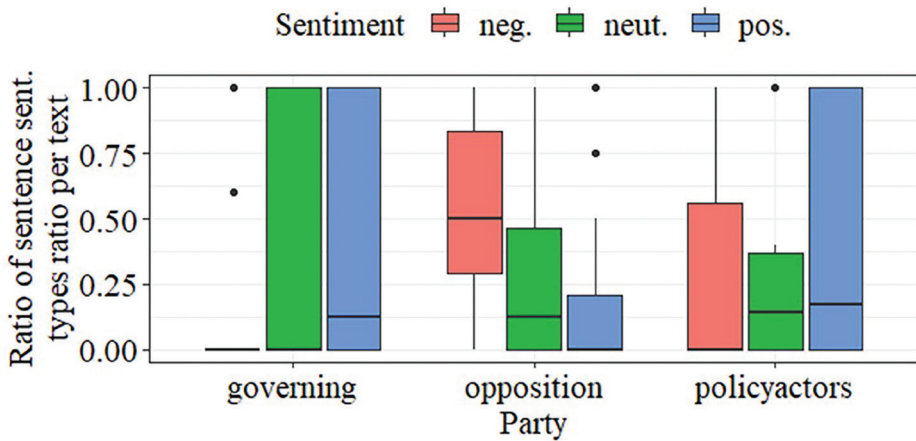


Figure 2. Result of the sentence sentiment ratio per text among governing party, opposition parties and policy actors (compiled by the authors)

As seen in Figure 3, the appearance of aspect sentiment emotions is as follows: it is rare for all groups to be neutral, but it is more common among policy actors to have predominantly neutral text. Positive sentiment is the rarest, and in the case of the opposition, positive sentiment occurs only randomly.

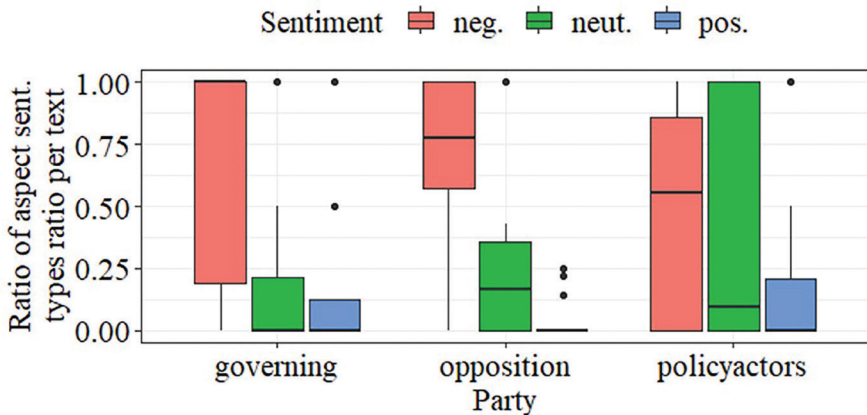


Figure 3. Result of the aspect sentiment ratio per text among governing party, opposition parties and policy actors (compiled by the authors)

However, it should be noted that the results of the aspect sentiment analysis were obtained for *kisadózó* and *KATA* expressions. While this is less problematic for *kisadózó*, *KATA* can appear in various contexts such as ‘*KATA* modification’,

‘KATA cancellation’, ‘KATA acceptance’, etc. In this sense, associated opinions cannot be consistent because someone who expresses negative sentiment about cancellation may express positive sentiment about acceptance. Consequently, we may choose not to use or apply a different method for the aspect sentiment values in the future.

The opposition party, at the same time, uses more negative utterances regarding the *KATA*. The (sentence) sentiment of the governing party is more positive (44,44%) and neutral (40,74%) compared with opposition party and policy actors, however, their opinion (aspect sentiment) shows negativity (55,56%). However, policy actors are not neutral.

Therefore H1 has been confirmed, but H2 has not.

4.3. Further results and observations

We were also curious about how emotions generally relate to term candidates and specialised term candidates. Thus, we examined whether there is any emotion present in a given text, regardless of its polarity. We can conclude that absolutely emotionless texts are rare.

For all texts, there is no significant difference observed between the ratio of term candidates and emotions, and there is no significant difference between specialised term candidates and emotions, either. In neutral texts, the proportions of specialised term candidates appear to be more balanced. However, when analysed by group, for term candidates, the rho value consistently remains below 0.2. In the case of specialised term candidates (as seen in Figure 4), a negative strong correlation is observed within the governing party ($\rho = -0.712$, $p = 0.002$), indicating that the more emotional the text, the rarer the presence of specialised term candidates. This correlation is somewhat weaker and not significant in the case of the opposition ($\rho = -0.496$). However, a moderately strong positive correlation is found among policy actors ($\rho = 0.586$, $p = 0.022$). This suggests that in their case, the more emotional a text, the higher the ratio of specialised term candidates.

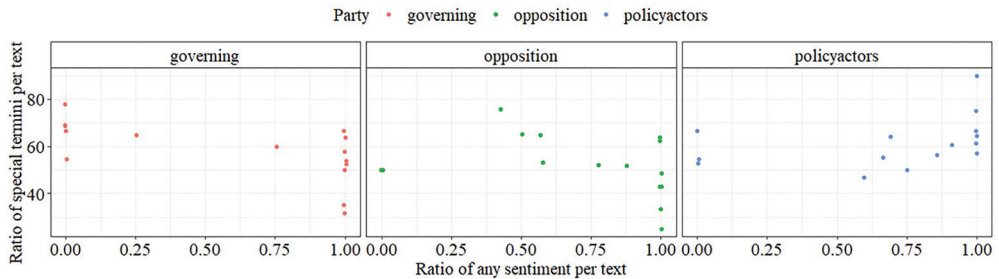


Figure 4. Ratio of specialised term and sentiment per text among the three groups (compiled by the authors)

5. Conclusion and further lines of research

The theoretical findings suggest that parliamentary discourse can be included in the scenarios of specialised communication, but the context and the level of knowledge and intentions of the participants are crucial. For example, the public participates in the parliamentary discourse only as receivers, and utterances must be interpreted in the context of political interests, attitudes and actions.

In this context, using terms can be political tools. As a persuasive strategy, they can be tools of appealing to the authority and credibility of the speaker. Based on political discourse analysis, they can be both tool for constructing reality (as they show that the speaker has specific knowledge) and tool for legitimisation (using language for its own purposes). They can also be tools of power: the use of terms, in the absence of comprehensibility, can control who can be a participant, and an informed recipient and interpreter of a discourse.

Policy actors use a high number of terms, and in particular specialised terms, and this suggests that they are primarily expressing expert utterances. The use of terms by government party members was only slightly behind that of policy actors. In their case, a deliberate, high proportion of terms can indicate professionalism. For them, however, it can be a means of legitimisation (appealing to credibility and competence), a strategy of influence (the public cannot check the credibility of the content due to lack of intelligibility, but can consider the speaker credible on the basis of authority) and a technique of power (if the discourse is not understandable to the public, understandable accessibility does not apply, and public policy discourse is controlled). The slight use of terms by opposition political actors may reflect either a focus on informing the public (comprehensibility) or the appearance of it, in order to build trust.

The speeches also express evaluations, political and ideological opinions and attitudes. As a persuasive strategy, these can appeal to the emotions of the audience. These can be tools of reality construction and legitimation, by which the speaker can present his or her own claims as positive, credible and legitimate, while others' are negative and delegitimised.

These can also shape the framework of interpretation, which can help to make the topic more understandable. Referring to Gennaro and Ash (2022), although the proportion of emotions in political discourse depends on both genre and topic, the emergence of public coverage of congressional or parliamentary debates correlates with an increase in emotionality within debates; the emotionality of taxation and redistribution issues has increased in recent years; and emotional rhetoric is highlighted for those in minority positions (e.g. opposition).

The taxation topic we examined was a hot topic in Hungary during the period under study, and the results of the research also show that emotionless speeches were rare. The result that there is no significant difference between the proportion of terms and emotions, or between specialised terms and emotions, suggests that all speakers appeal to both authority and emotions. However, the result that the more emotional a speech of a governing party or opposition party actor is, the less frequent the presence of specialised terms in it, while the more balanced proportion of

specialised terms in neutral polarity texts shows that speakers with less emotionality tended to use specialised communication, while speakers with more emotionality tended to use political communication.

Both the sentence and the aspect sentiment of the opposition parties is more negative, which may indicate a polarisation strategy, a negative framing of the proposals of the other side. The texts of governing party actors are rarely negative, so they can build on the positive framing. For policy actors, several types of emotion appear, but positive is the most varied (regardless of the number of utterances in the text), while neutral is the least varied. However, for policy actors, the more emotive a text is, the higher the proportion of specialised terms, which is a surprising result.

This may point to methodological limitations of the research, but it may also suggest that policy actors, however much they want to engage in professional communication, are still engaged in a political discourse, the contextual factors of which may influence their utterances. The possible interpretations of aspect values are also limited (see Section 4.2): although these showed negative values for all actors, it is hard to interpret without context, so there is a need to improve the methodology.

The empirical results are well positioned in the discourse on the relationship between public policy and expert knowledge (technocracy and democracy). One way to ensure comprehensibility and public engagement could be to reduce the number of specialised terms, but comprehensibility is not just about avoiding terms because terms convey accurate specific knowledge. Appealing to emotions, attitudes and beliefs can be a useful tool for comprehensibility, because they can shape the interpretative framework. However, this framing should not be a tool for manipulation in order to ensure truthful and credible informing and engagement. The topic under discussion needs to be framed in a way that makes it clear to the public how it is relevant to their lives, so that they are motivated to engage with the discourse (cf. Falyuna 2022).

Our results can also provide insights for studies on populist communication. As argued by Gennaro and Ash (2022), the increasing trend of emotional rhetoric is accompanied by an increase in polarisation, so there may be a shift towards a rhetoric that appeals to voters rather than politicians and elites.

The results of the research also contribute to the computer-assisted methodological aspects of the analysis of both specialised and political discourses. In our opinion, terms and emotionality are elements of discourses that can be well analysed quantitatively and with computer tools.

The linguistic and social context of the discourse is important for interpreting the results and clarifying the aspects of the analysis, so that further development of the methodology is needed. At the same time, the research methodology highlights the existence of the ParlaMint corpus, which provides a rich, open-access resource for researchers in the humanities and social sciences.

The results and methods of the research suggest further lines of research. An exciting approach could be to explore extended topics (e.g. taxation) or to select a sub-corpus to be examined with automatic topic detection. The automated term extraction mentioned earlier is also one of the developments in the research that we would like to use.

An interesting research question might be how the type of parliamentary utterances (speeches or comments, i.e., pre-written texts or spontaneous comments) influences the presence of emotions and terms. Further, the reality-constructing nature of political discourse raises the question of whether terms are used with their specialised meanings or whether the context – even during the transition to standard language – shapes their meanings, thus potentially losing their terminological character. Exploring this raises new perspectives on certain questions.

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