

# Gender, Speech, and Representation in the Galician Parliament: An Analysis Based on the ParlaMint-ES-GA Dataset

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## Abstract

This paper employs the ParlaMint-ES-GA dataset to scrutinize the intersection of gender, speech, and representation within the Parliament of Galicia, an autonomous region located in North-western Spain. The research questions center around the dynamics of women's participation in parliamentary proceedings. Contrary to numerical parity, we explore whether increased female presence in the parliament correlates with equitable access to the floor. Analyzing parliamentary proceedings from 2015 to 2022, our quantitative study investigates the relationship between the legislative body's composition, the number of speeches by Members of Parliament (MPs), and references made by MPs in their speeches. The findings reveal nuances in gender representation and participation, challenging assumptions about proportional access to parliamentary discourse.

**Keywords:** ParlaMint, Parliamentary debates, Gender, Representation

## 1. Introduction

Parliamentary discourse studies hold a crucial place in understanding the functioning of democratic institutions and the mechanisms that underpin political representation. The debates that take place within legislative bodies can be seen as a reflection of power dynamics, decision-making processes, and the overall health of democratic governance. In this context, an emerging area of focus within the analysis of political discourse centers on the analysis of gendered speech and language, specifically investigating the role of women in parliamentary settings.

Parliamentary debates have the potential to uncover hidden power structures and implicit biases that may affect the equitable participation of diverse voices in the political arena. Beyond the numerical representation of women in parliament, a deeper examination of their linguistic contributions becomes imperative. The frequency of speeches and the references made during parliamentary proceedings offer insights as valuable into the nuanced challenges faced by female representatives as the very content of the words that are spoken in the parliamentary context.

In this context, richly and homogeneously encoded comparable corpora such as ParlaMint (Erjavec et al., 2023), can offer researchers an interface between multiple academic fields and thus open the door to research that combines humanities and computational methods of analysis.

Within the realm of politics and gender studies, an ever growing body of work delves into women's representation in legislative contexts, especially from the perspective of gendered speech and language, emphasizing their pivotal roles in shap-

ing political representation (Raiber and Spierings, 2022).

Though modern democratic systems ensure that both genders are represented in the political system, recent studies show that numeric parity between females and males does not necessarily translate into a more equal parliamentary representation, as women are historically known to give fewer speeches than men (Bäck et al., 2014). That is, being included does not always guarantee being heard (Sanjaume-Calvet et al., 2023). Focusing on the case of the Spanish Parliament, Sanjaume-Calvet et al. (2023) argue that Parliaments perpetuate a gendered political structure, where an increased presence of female representatives is not necessarily indicative of an increased access to the floor. The authors further show that female participation in parliamentary proceedings in Spain is highly constrained by party structures, as access to the floor is always controlled by the organization of parliamentary groups, which represent specific political parties or coalitions.

The power relations in national parliaments are not only reflected in the access to the floor but also in the way speeches influence others and are referenced by others (Skubic et al., 2022). Skubic et al. (2022) argue that gender can affect argumentative power, as comparatively high numbers of female MPs do not generate high numbers of speeches made by female MPs nor high numbers of mentions by fellow speakers.

Another factor that can influence how female MPs interact and make use of their voice in parliamentary debates is their political position. Müller and Pansardi (2023) argue that female leaders usually use more effective communication skills and express either strong support or clear opposition

more emphatically than male leaders.

This paper aims to analyze the dynamics of women's participation in parliamentary proceedings by scrutinizing the number of speeches made by female and male participants, comparing it to the number of parliamentary members, and taking a closer look at the relationship between speeches and references or mentions among MPs, in order to shed light on the complex aspects of the power dynamics at play in parliamentary discourse and political deliberations.

The paper is structured as follows: Section 2 presents the research questions addressed. In Sections 3 and 4, we review the data used in our study and the methodology used to analyze it. Section 5 discusses the results of the analysis performed on the dataset. Finally, the conclusions highlight the most important outcome of our work.

## 2. Research Questions

We were interested in taking a closer look at the concepts of representation and gender (in the traditional terms of male and female) in the Galician Parliament through a quantitative analysis of the relation between the composition of the legislative body and the number of speeches made by MPs, as well as the references made by MPs in their speeches to others, both fellow MPs and persons outside the debate.

We base our interpretation of the concept of representation on the definition by Pitkin (1967), who states that representation is closely connected to the concept of power, which is mainly expressed through descriptive, substantive, and symbolic representation. Furthermore, by representation, following Raiber and Spierings (2022) and Skubic et al. (2022), we understand the following essential issues: the extent to which women are allowed to and do participate in political debate, as mirrored in the quantity of their speeches in the parliamentary context; and the relevance of their participation in such debates, as mirrored in the interaction with other fellow participants.

Thus, we explore the following research questions:

1. Does a relatively balanced male and female presence in the parliament correlate with equitable access to the floor?
2. How can the intersection between the number of speeches, number of mentions, gender, and identity of the speakers who participate in the debates of the Galician Parliament shed light on the representation that is made manifest by this participation?

## 3. Data

The data analyzed in this paper come from the ParlaMint-ES-GA dataset, a body of parliamentary debates in Galician language spanning over a period of approximately seven years and three legislative terms (2015-2022). The dataset is part of the larger, multilingual ParlaMint 4.0 corpus (Erjavec et al., 2023; Erjavec et al., 2023). In the subsections that follow, we take a closer look at the source of the data, the Galician Parliament, and at the ParlaMint-ES-GA dataset.

### 3.1. The Galician Parliament

The Galician Parliament is the legislative body governing the autonomous community of Galicia, in North-western Spain. Comprising 75 members, this assembly is elected every four years, known as legislative terms, through a proportional representation system. Its primary functions encompass the enactment of legislation and the oversight of the regional government's activities.

Characterized by a unicameral structure and a multi-party political system, the Galician Parliament is chaired by a President (or Chairperson) elected by the members. The Chairperson assumes the responsibility of ensuring adherence to procedural rules and fostering deliberation and debate among the members. The members of Parliament (MPs), referred to as "deputados" or "deputadas" in Galician, are organized into parliamentary groups, representing their respective parties or electoral coalitions. A "Mixed Parliamentary Group" is available for MPs who do not otherwise meet the requirements to form a parliamentary group. Traditionally, a limited number of parties, usually up to five, secure representation in the Galician Parliament. Members of the regional Government (ministers or MGs), "conselleiros" or "conselleiras" in Galician, can intervene at any time during the debates (Parlamento de Galicia, 2020). The regional Government traditionally comprises up to 12 MGs headed by a President.

The composition of the Parliament and Government tends to be slightly imbalanced in terms of gender. In the three legislative terms that overlap with the ParlaMint-ES-GA dataset, elected female MPs and MGs represent 43.2%, 42.2%, and 45.4%, respectively, whereas male MPs and MGs represent 56.7%, 57.8%, and 54.5%, respectively. The average gender representation throughout the three-term period is 43.6% female and 56.3% male.

### 3.2. The ParlaMint-ES-GA Dataset

The ParlaMint-ES-GA dataset comprises transcriptions of parliamentary proceedings spanning three legislative terms (2015 - 2022), with a total of 302

files representing individual sittings. The dataset is enriched with metadata about legislative periods, governments, speakers, and political parties. It is encoded in TEI ParlaMint format (Erjavec and Pančur, 2022, 2019) and linguistically annotated following the Universal Dependencies formalism (Nivre et al., 2017) and with named entities recognition (NER).

The dataset contains a total of 83,078 speeches from 227 individuals distributed as follows: 47.1% female speakers and 52.9% male speakers. The total number of speakers in the dataset comprises elected MPs and MGs, substitute MPs and MGs, and guest speakers. Figure 1 illustrates the apparent correspondence between the gender composition of the Galician Parliament and regional Government, and the ParlaMint-ES-GA dataset. In comparing these statistics, a note should be made to the fact that, as mentioned, the ParlaMint-ES-GA dataset also includes interventions from 14 guest speakers, more specifically 8 males and 6 females.

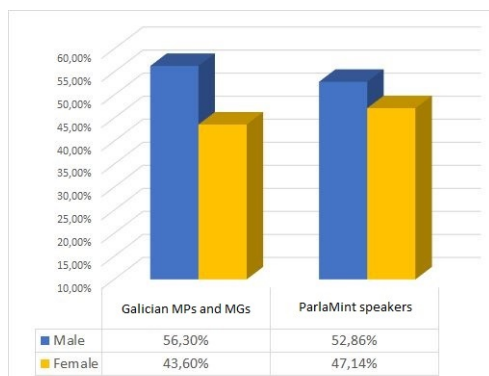


Figure 1: **Gender composition:** MPs elected to the Galician Parliament, together with MGs elected to the Galician regional Government, compared to speakers in ParlaMint-ES-GA.

However, more than 40% of all the speeches in the dataset are uttered by the Chairperson who, nevertheless, pronounces a very small percentage of the total number of words. Table 1 summarizes the relation between gender, role, number of speeches and number of words in ParlaMint-ES-GA.

With regard to political representation, the main parties of the Galician political scene are proportionally represented in the dataset (Partido Popular de Galicia 34.6%, Partido de los Socialistas de Galicia 22.2%, Bloque Nacionalista Galego 17.7%, En Marea 10.4%, and Alternativa Galega de Esquerda 4%).

An interesting particularity of the dataset, which distinguishes it from its Catalan (Pisani et al., 2023) and Basque (Escribano et al., 2022; Alkorta and Quintian, 2022) counterparts, is that ParlaMint-ES-

GA can be characterized as almost completely monolingual. With the rare exception of one guest speaker who intervened in Spanish, and leaving aside verbatim quotes from Spanish politicians or media, all speeches are made in Galician language, even though, as described in Vázquez Somoza (2015), the influence of the Spanish language on the speakers' Galician is apparent.

## 4. Methodology

We were interested in analyzing the number of speeches made by male and female speakers in the ParlaMint-ES-GA dataset, as well as retrieving the mentions made in the dataset to MPs and other individuals.

To this end, we used the TEI annotation of the dataset to retrieve speeches. Each speech is marked with a unique SpeakerID composed of the speaker's first surname and name, as well as with the speaker's role within the Parliament, among other metadata. Once we had carried out a quantitative mapping of the total number of speeches (see Table 1), we filtered out all speeches made by the Chairperson, identified in the dataset with the role "Chair", due to their mainly procedural function in the debates. We also discarded guest speakers, identified as "Guest" in the dataset, given their incidental presence in the debates. We used the metadata provided to divide the data into "male" and "female" speeches, as well as to identify speakers and quantify individual participation in the debates that make up the dataset.

In order to obtain the references or mentions, we used the NER annotation of the dataset to extract the named entities that designated persons from the speeches of MPs/MGs with the role of "Regular" (speaker). Again, as described above, we discarded speeches made by the Chairperson given their strictly procedural role in the debates, and guest speakers, who participation was merely incidental. As we were interested in unequivocally identifying persons mentioned in order to be able to compare data of speakers actively mentioning other persons and persons being mentioned by others, we restricted our analysis to individuals mentioned by name. Thus, using regular expressions, we filtered the results to include only those references that used a proper name. Finally, 45,051 named entities were selected that used the formula "(o/a) S/señor/a [Apellido/Nombre e Apellido(s)]", Galician for "Mr./Mrs. [Surname/Name and Surname]". This approach excluded from the results any references that made use of official titles not followed by a proper name (e.g., "señor/a concelleiro/a", "señor presidente") as well as all pronominal references.

In order to match the mentions to the speaker IDs of Galician MPs registered in the dataset meta-

Role	Speeches	Words	% of Total Speeches	% of Total Words
Male Chair	37,885	799k	45.6%	4.5%
Female Chair	7,103	141k	8.5%	0.8%
Male Regular	20,735	9045k	24.9%	51.1%
Female Regular	17,305	7601k	20.8%	43.1%
Male Guest	28	20k	0.03%	0.1%
Female Guest	22	28k	0.03%	0.1%

Table 1: Distribution of speeches and words according to gender and role in the dataset.

data, we used dedicated scripts that measured the Levenshtein distance of the identified mentions and checked gender accuracy with respect to the “señor/señora” gender marker in order to determine a list of probable IDs for each mention. However, the exact identification of each person referenced was not a straightforward task given the particularity of Galician (and generally Iberian) surnames. Individuals are identified by two surnames (one on the paternal side and one on the maternal side). In order to reference a person (e.g., “Paula Prado del Río”), the most common options are to use the paternal surname (e.g., “señora Prado”), the full surname (e.g., “señora Prado del Río”), or a combination of the name and paternal surname (e.g., “señora Paula Prado”). However, the maternal surname can also be used by itself, though less frequently. This complex way of referencing individuals, combined with the repetition of popular surnames (e.g., Rodríguez, Díaz, Sánchez, García) among Galician MPs, and other references such as Spanish politicians and other public figures, made it necessary to add further steps in order to ensure proper identification. If multiple possible matches were detected (i.e., identical surname/s and gender), we checked the names of the MPs that intervened in the Galician Parliament on the corresponding date and, out of the list of possible IDs, selected the ID that appeared closest to the processed mention. Any references that were not identified as matches were considered to be of persons outside the Galician Parliament.

A more complex issue was the surname coincidence between two Galician MPs and the head of the Spanish central Government, frequently referenced in the dataset, all three sharing the surname Sánchez. In the cases where the mention was a direct reference (i.e., the speaker was directly addressing the person referenced), the speaker ID was automatically assigned using the method described above. However, in the cases where there was an indirect mention (e.g., “o señor Sánchez”), the context of the mention was checked for specific terms referencing the Spanish central Government. If none were found in the ten words to the left and the right of the mention, the mention was considered to be of a Galician MP and the most probable ID was determined by the script described in the

previous paragraph.

We can argue, in line with Skubic et al. (2022), that a speaker’s relevance, and, thus, representativity, in the parliamentary context can be measured by the number of speeches they pronounce (active relevance or AR) and by the number of times they are referenced by others (passive relevance or PR). In our analysis we go one step forward and take into account the fact that parliamentary debate is by nature dialogic. We expect, then, not only the number of speeches pronounced to be relevant but also the number of times a person mentions another, as this is bound to trigger a response from the person who has been referenced. Thus, in the case of mentions or references, we calculated what we defined as active mention (AM) and passive mention (PM). An active mention is any reference made in a speech or speech fragment to another individual identifiable by name. We expected this metric to differ from AR, as one person can reference multiple other individuals (or none) in one single speech. By passive mention we understand the opposite, that is, quantifying how many times an individual is referenced by others. Again, this metric does not necessarily coincide with the total number of speeches.

## 5. Results and Discussion

### 5.1. Gender Representation

Female members represent a total of 43.6% of elected MPs and MGs throughout the three legislative terms analyzed. Similarly, 47.1% of the total number of speakers represented in the ParlaMint-ES-GA dataset are female. If representation were directly proportional with the numbers of male and female speakers who were elected to the Parliament and intervened in the plenary sessions collected in the dataset, we could expect a reasonably similar gender participation in the debates and proportional access to the floor. Indeed, the data in Table 2 seem to support this hypothesis by showing a less than 2% difference between the quantity of speakers and speeches in the dataset, positive in the case of males and negative in the case of females.

However, a more complex analysis is neces-



Gender	Speakers	Speeches
Male	52.9%	54.5%
Female	47.1%	45.5%

Table 2: Gender distribution in speakers and speeches in the dataset

sary in order to determine whether these numbers are actually representative of the distribution of speeches by gender in the dataset. We expected that a relatively small number of speakers would concentrate a large part of the speeches, given that political position greatly determines the number of interventions and amount of speaking time that an individual can benefit from in parliamentary sessions. The data show that fewer than 15% of all MPs and MGs accumulate more than 50% of the total number of speeches pronounced, each with more than 350 speeches amounting to a percentage of between 0.9% and 5.8% of the total number of speeches pronounced by regular speakers (AR). Table 3 below details the relation between number of speeches and gender in this subset of speakers, whereas Figure 2 illustrates the speakers with the highest number of speeches in the dataset (>0.8% of the total number of speeches made by regular speakers). As expected, the most prolific speakers occupy important positions in the Galician political system: head and vice-president of the regional Government (NúñezAlberto, RuedaAlfonso), heads and Parliamentary representatives of different political parties (PontónAnaBelén, SánchezAntón, FernándezXoaquínMaría), ministers of socially relevant ministries such as Education, Finance, or Health (RodríguezRomán, CondeFranciscoJosé, VázquezAlmuíñaJesús), etc. It is important to note that many of these top positions in the fabric of the Galician regional Government and parliamentary group representation are occupied by male politicians. In contrast, some of the more active female speakers are representatives of the main opposition party.

	Speakers (out of total no.)	Speeches (out of total no.)
Male	7.9%	33.6%
Female	5.6%	22.4%

Table 3: Distribution of speakers with >350 speeches in the dataset

## 5.2. Gender Referentiality

We have already shown that female MPs have a lower active relevance than male MPs, as the former pronounce fewer speeches than the latter (45.5% of the total speeches pronounced by reg-

ular speakers in the Galician Parliament, as compared to 54.5% in the case of male MPs), which is also a lower figure than the percentage of female speakers (47.1%) present in the dataset. We have also established that females are less present than males in the top list of speakers (5.6% of the total number of speakers are female MPs who pronounce more than 350 speeches in the dataset, as compared to 7.9% male MPs).

In the case of mentions or references, Table 4 details the numbers and percentages of AMs and PMs in the dataset. While AMs are in line with the general statistics for number of speeches by gender in the corpus, PMs are considerably lower in the case of female MPs, amounting to less than half of the numbers for male MPs. In these results we can safely say that the large number of PMs corresponding to the president of the regional Government (who sums almost as many mentions as the following six highest-ranking individuals combined, and more than triples the number of mentions of the second person in the PM ranking), the vice-president, and the president of the Spanish central Government, all male politicians, play an important role.

Gender	AMs	AM (%)	PMs	PM (%)
Male	25,485	56.6%	31,196	69.2%
Female	19,566	43.4%	13,855	30.8%

Table 4: Active and passive mentions by gender in number of mentions and percentage of the total number of mentions

By calculating AMs and PMs for individual speakers and comparing it to the subset of individual speakers with high AR, it becomes apparent that a small subset of speakers not only has higher access to the floor, and thus a higher number of speeches (AR), but also accumulates a higher number of both active and passive mentions. That is, these individuals are not only referenced, but also actively engage in debate by referencing others. However, out of these 15 speakers, only four are women. Three of these four female MPs also score higher in active mentions than in passive mentions, which means that they actively generate debate by referencing others, but are not similarly referenced. These results are illustrated in Figure 3.

As in the case of AR, high AM and PM results can be explained by various factors. One of the more evident is political position (e.g., the highest-ranking person in all three categories occupied the regional Government Presidency for the best part of the period covered by the dataset, and the second-highest ranking is the head of the opposing political party). Another possible factor is political party representation. The 15 higher-ranking individuals in all three categories proportionately represent the

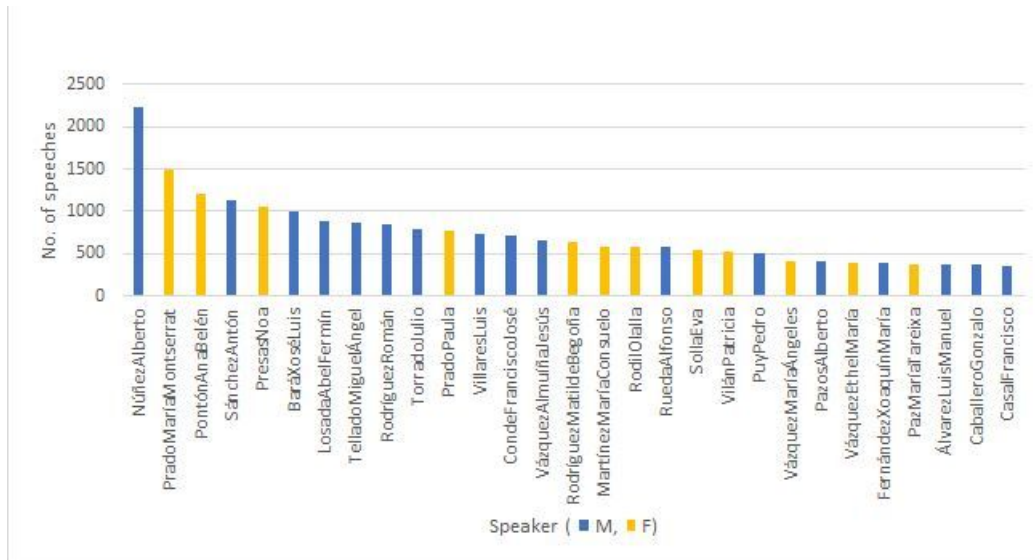


Figure 2: **Speakers with the highest numbers of speeches across the ParlaMint-ES-GA dataset.** The x-axis indicates the speaker ID and gender, while the y-axis indicates the number of speeches.

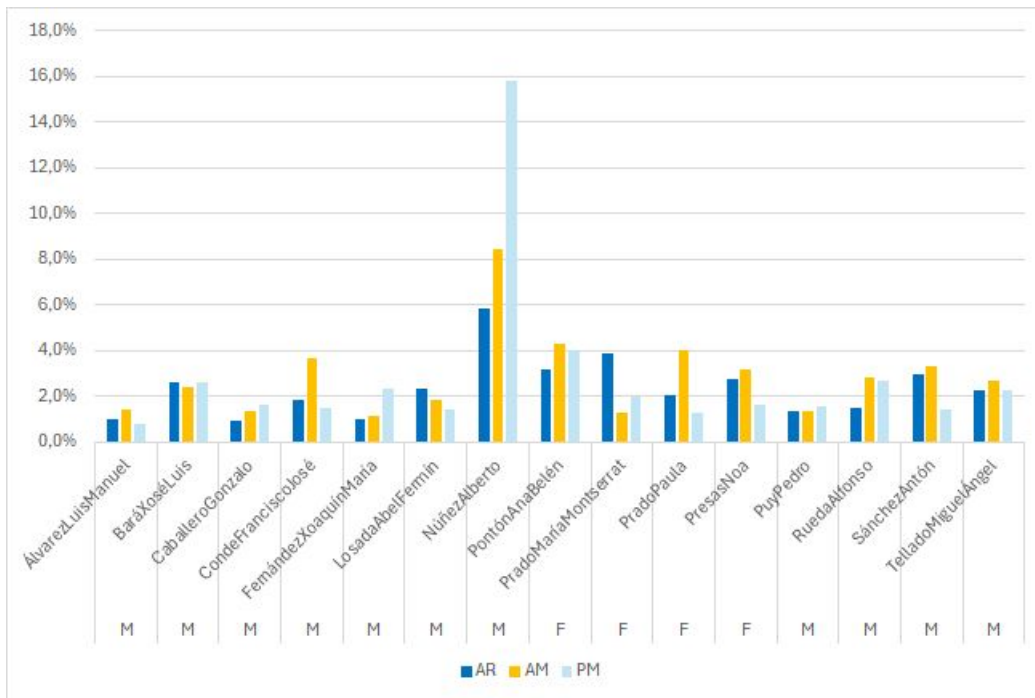


Figure 3: **MPs in the top 25 for all three categories: active relevance (number of speeches), active mentions, and passive mentions.** The x-axis indicates the speaker ID (in alphabetical order) and gender, while the y-axis indicates the percentage of speeches made by the speaker out of the total (AR), as well as the percentage of mentions made by the speaker (AM) or made of the person by others (PM).

main political parties in the Galician political system: six MPs represent the governing party (PPdeG) and nine the opposition (four BNG, four PSdeG-PSOE, and one AGE/En Marea/ANOVA). Finally, gender can play a role in high AM results, as women may feel obligated to generate debate in order to make their voice heard.

## 6. Conclusions

This paper aimed to analyze gender participation and representation in the parliamentary context. The analysis focused on evaluating the quantity of speeches delivered by both female and male participants in relation to the total number of parliamentary members. Additionally, the study delved

into the interplay between speeches and references among MPs by taking a closer look at personal name mentions within the dataset.

Our examination of the Galician Parliament through the ParlaMint-ES-GA dataset supports previous studies stating that gender balance in parliamentary representation does not necessarily ensure equal participation. Despite the proportionate presence of female MPs, our analysis indicates disparities in speech frequency and references. Female MPs are referenced less frequently than their male counterparts, although they can compensate by contributing to the debate through actively referencing other individuals. The disparities relate heavily to the political position of speakers within the Parliament and regional Government. Top political leaders, both present in the debates and referenced, are still predominantly male, which shifts the balance of power.

The study highlights the complexity of gender dynamics in the political context, emphasizing the need to go beyond numerical metrics to assess true parliamentary inclusiveness. The findings also underscore the role of political power structures and party affiliations in shaping participation patterns, which highlights the need for a comprehensive understanding of the multitude of factors influencing parliamentary discourse.

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## 8. Bibliographical References

- Jon Alkorta and Mikel Iruskieta Quintian. 2022. [Adding the Basque parliament corpus to ParlaMint project](#). In *Proceedings of the Workshop ParlaCLARIN III within the 13th Language Resources and Evaluation Conference*, pages 107–110, Marseille, France. European Language Resources Association.
- Hanna Bäck, Marc Debus, and Jochen Müller. 2014. [Who Takes the Parliamentary Floor? The Role of Gender in Speech-making in the Swedish "Riksdag"](#). *Political Research Quarterly*, 67(3):504–518.
- Tomaž Erjavec, Maciej Ogrodniczuk, Petya Osenova, Nikola Ljubešić, Kiril Simov, Andrej Pančur,

Michał Rudolf, Matyáš Kopp, Starkađur Barkarson, Steinþór Steingrímsson, Çağrı Çöltekin, Jesse de Does, Katrien Depuydt, Tommaso Agnoloni, Giulia Venturi, María Calzada Pérez, Luciana D. de Macedo, Costanza Navarretta, Giancarlo Luxardo, Matthew Coole, Paul Rayson, Vaidas Morkevičius, Tomas Krilavičius, Roberts Dargis, Orsolya Ring, Ruben van Heusden, Maarten Marx, and Darja Fišer. 2023. [The ParlaMint corpora of parliamentary proceedings](#). *Language Resources and Evaluation*, 57(1):415–448.

- Tomaž Erjavec and Andrej Pančur. 2019. [ParlaCLARIN: TEI guidelines for corpora of parliamentary proceedings](#).
- Tomaž Erjavec and Andrej Pančur. 2022. [The ParlaCLARIN recommendations for encoding corpora of parliamentary proceedings](#). *Journal of the Text Encoding Initiative (Selected Papers from the 2019 TEI Conference)*, (14).

Nayla Escribano, Jon Ander Gonzalez, Julen Orbegozo-Terradillos, Ainara Larrondo-Ureta, Simón Peña-Fernández, Olatz Perez-de Viñaspre, and Rodrigo Agerrí. 2022. [BasqueParl: A bilingual corpus of Basque parliamentary transcriptions](#). In *Proceedings of the Thirteenth Language Resources and Evaluation Conference*, pages 3382–3390, Marseille, France. European Language Resources Association.

Henriette Müller and Pamela Pansardi. 2023. [Women Leading the Opposition: Gender and Rhetoric in the European Parliament](#). *Politics and Governance*, 11(1):164–176.

Joakim Nivre, Željko Agić, Lars Ahrenberg, María Jesus Aranzabe, Masayuki Asahara, Aitziber Atutxa, Miguel Ballesteros, John Bauer, Kepa Bengoetxea, Riyaz Ahmad Bhat, Eckhard Bick, Cristina Bosco, Gosse Bouma, Sam Bowman, Marie Candito, Gülşen Cebirođlu Eryiđit, Giuseppe G. A. Celano, Fabricio Chalub, Jinho Choi, Çağrı Çöltekin, Miriam Connor, Elizabeth Davidson, Marie-Catherine de Marneffe, Valeria de Paiva, Arantza Diaz de Ilarraza, Kaja Dobrovoljc, Timothy Dozat, Kira Droganova, Puneet Dwivedi, Marhaba Eli, Tomaž Erjavec, Richárd Farkas, Jennifer Foster, Cláudia Freitas, Katarína Gajdošová, Daniel Galbraith, Marcos Garcia, Filip Ginter, Iakes Goenaga, Koldo Gojenola, Memduh Gökırmak, Yoav Goldberg, Xavier Gómez Guinovart, Berta Gonzáles Saavedra, Matias Gironi, Normunds Grūzītis, Bruno Guillaume, Nizar Habash, Jan Hajič, Linh Hà M~y, Dag Haug, Barbora Hladká, Petter Hohle, Radu Ion, Elena Irimia, Anders Johannsen, Fredrik Jørgensen, Hüner Kaşıkara, Hiroshi Kanayama,

- Jenna Kanerva, Natalia Kotsyba, Simon Krek, Veronika Laippala, Phng Lê Hồng, Alessandro Lenci, Nikola Ljubešić, Olga Lyashevskaya, Teresa Lynn, Aibek Makazhanov, Christopher Manning, Cătălina Mărănduc, David Mareček, Héctor Martínez Alonso, André Martins, Jan Mašek, Yuji Matsumoto, Ryan McDonald, Anna Missilä, Verginica Mititelu, Yusuke Miyao, Simonetta Montemagni, Amir More, Shunsuke Mori, Bohdan Moskalevskyi, Kadri Muischnek, Nina Mustafina, Kaili Müürisep, Lng Nguy~ên Thị, Huy~ên Nguy~ên Thị Minh, Vitaly Nikolaev, Hanna Nurmi, Stina Ojala, Petya Osenova, Lilja Øvreliid, Elena Pascual, Marco Passarotti, Cene Augusto Perez, Guy Perrier, Slav Petrov, Jussi Piitulainen, Barbara Plank, Martin Popel, Lauma Pretkalniņa, Prokopis Prokopidis, Tiina Puolakainen, Sampo Pyysalo, Alexandre Rademaker, Loganathan Ramasamy, Livy Real, Laura Rituma, Rudolf Rosa, Shadi Saleh, Manuela Sanguinetti, Baiba Saulīte, Sebastian Schuster, Djamel Seddah, Wolfgang Seeker, Morgan Seraji, Lena Shakurova, Mo Shen, Dmitry Sichinava, Natalia Silveira, Maria Simi, Radu Simionescu, Katalin Simkó, Mária Šimková, Kiril Simov, Aaron Smith, Alane Suhr, Umut Sulubacak, Zsolt Szántó, Dima Taji, Takaaki Tanaka, Reut Tsarfaty, Francis Tyers, Sumire Uematsu, Larraitz Uriá, Gertjan van Noord, Viktor Varga, Veronika Vincze, Jonathan North Washington, Zdeněk Žabokrtský, Amir Zeldes, Daniel Zeman, and Hanzhi Zhu. 2017. [Universal Dependencies 2.0](#). LINDAT/CLARIAH-CZ digital library at the Institute of Formal and Applied Linguistics (ÚFAL), Faculty of Mathematics and Physics, Charles University.
- Parlamento de Galicia. 2020. [Regulamento do Parlamento de Galicia](#).
- Marilina Pisani, Rodolfo Zevallos, and Núria Bel. 2023. [Catalan Parliamentary Plenary Session Transcriptions from 2015 to 2022](#). *The ParlaMintCAT Corpus*. *Procesamiento del Lenguaje Natural*, 71(0):125–136.
- Hanna F. Pitkin. 1967. *The Concept of Representation*. University of California Press, Berkeley/Los Angeles.
- Klara Raiber and Niels Spierings. 2022. [An agnostic approach to gender patterns in parliamentary speech: a question of representation by topic and style](#). *European Journal of Politics and Gender*, 5(3):361–381.
- Marc Sanjaume-Calvet, Joan-Josep Vallbé, and Marina Muñoz-Puig. 2023. [Can women take the floor in parliament? Evidence from the Spanish lower chamber](#). *Women's Studies International Forum*, 97:102694.
- Jure Skubic, Jan Angermeier, Alexandra Brun-crona, Bojan Evkoski, and Larissa Leiminger. 2022. [Networks of power: Gender analysis in selected european parliaments](#). In *Proceedings of the 2nd Workshop on Computational Linguistics for Political Text Analysis (CPSS-2022)*, Potsdam, Germany. CPSS.
- Xosé Luís Vázquez Somoza. 2015. [A lingua no Parlamento de Galicia](#). Universidade de Santiago de Compostela. Facultade de Filoloxía. Departamento de Filoloxía Galega.

## 9. Language Resource References

- Tomaž Erjavec, Matyáš Kopp, Maciej Ogrodniczuk, Petya Osenova, Rodrigo Agerri, Manex Agirrezabal, Tommaso Agnoloni, José Aires, Monica Albini, Jon Alkorta, Iván Antiba-Cartazo, Ekain Arrieta, Mario Barcala, Daniel Bardanca, Starkađur Barkarson, Roberto Bartolini, Roberto Battistoni, Nuria Bel, María del Mar Bonet Ramos, María Calzada Pérez, Aida Cardoso, Çağrı Çöltekin, Matthew Coole, Roberts Dargis, Jesse de Does, Ruben de Libano, Griet Depoorter, Katrien Depuydt, Sascha Diwersy, Réka Dodé, Kike Fernandez, Elisa Fernández Rei, Francesca Frontini, Marcos Garcia, Noelia García Díaz, Pedro García Louzao, Maria Gavriilidou, Dimitris Gkoumas, Ilko Grigorov, Vladislava Grigoro-va, Dorte Haltrup Hansen, Mikel Iruksietta, Johan Jarlbrink, Kinga Jelencsik-Mátyus, Bart Jongejan, Neeme Kahusk, Martin Kirnbauer, Anna Kryvenko, Noémi Ligeti-Nagy, Nikola Ljubešić, Giancarlo Luxardo, Carmen Magariños, Maans Magnusson, Carlo Marchetti, Maarten Marx, Katja Meden, Amália Mendes, Michal Mochtak, Martin Mölder, Simonetta Montemagni, Costanza Navarretta, Bartłomiej Nitoń, Fredrik Mohammadi Norén, Amanda Nwudukwe, Michael Ojsteršek, Andrej Pančur, Vassilis Papavasiliou, Rui Pereira, María Pérez Lago, Stelios Piperidis, Hannes Pirker, Marilina Pisani, Henk van der Pol, Prokopis Prokopidis, Valeria Quochi, Paul Rayson, Xosé Luís Regueira, Michal Rudolf, Manuela Ruisi, Peter Rupnik, Daniel Schopper, Kiril Simov, Laura Sinikallio, Jure Skubic, Minna Tamper, Lars Magne Tungland, Jouni Tuominen, Ruben van Heusden, Zsófia Varga, Marta Vázquez Abuín, Giulia Venturi, Adrián Vidal Miguéns, Kadri Vider, Ainhoa Vivel Couso, Adina Ioana Vladu, Tanja Wissik, Väinö Yrjänäinen, Rodolfo Zevallos, and Fišer, Darja (2023). Linguistically annotated multilingual comparable corpora of parliamentary debates ParlaMint.ana 4.0. Slovenian language



resource repository CLARIN.SI. Retrieved from <http://hdl.handle.net/11356/1860>.

Tomaž Erjavec, Matyáš Kopp, Maciej Ogrodniczuk, Petya Osenova, Rodrigo Agerri, Manex Agirrezabal ... and Fišer, Darja (2023). Multilingual comparable corpora of parliamentary debates ParlaMint 4.0. Slovenian language resource repository CLARIN.SI. Retrieved from <http://hdl.handle.net/11356/1859>.