

# Emotion in the European Political Language

*Keywords: European parliament, political rhetoric, voting behavior, word embedding, TextAsData.*

## Extended Abstract

*What explains the use of emotion by Members of the European parliament (MEPs) in their debates and what are the implications? A primary function of Members of parliaments is to debate to improve the quality of the assembly’s deliberation. Debates at the European Parliament are largely perceived by political commentators and voters as technocratic. Yet, we find that MEPs frequently rely on emotional rhetoric and that the level of emotion of debates in the European Parliament has rocketed since 2014. While the factors that shape a politician’s decision to use emotion are not fully understood, our results suggest that the use of emotion is largely ideology-dependent and also driven by the MEPs’ voting strategy.*

**In short**, this paper provides both a methodological and a substantive contribution to that specific question. First, we developed an innovative database on all speeches and votes in the European Parliament from 1999 to 2022. Second, we push forward the use of text analysis in economics and political economy. We implement a new method, developed by Ash and Gennaro (2022) using word embeddings and word dictionaries to scale ‘emotionality’. This allows to address the technical limitations of dictionary methods while still targeting a specific dimension of discourse. Third, we add to the literature on rhetorical choices in political communication and demonstrate the strategic use of emotions in politics, particularly in the case of rebel votes.

**Data collection.** Our main contribution is that we have been able to link speeches with the texts being debated and then to subsequent votes. Our new corpus was scrapped from the [European Parliament website](#) and comprises transcripts of 686,439 speeches pronounced by 2,675 different MEPs discussing 5,870 texts of law in plenary session both in Brussels and Strasbourg between 1999 and 2022. Thanks to an innovative matching, we were able to associate each intervention with the texts debated and finally link them to their subsequent vote. Additionally, to the meta data included in the scrapping we have been able to match our database to both the [Chapel Hill](#) and [Comparative Manifesto](#) projects.

**Our methodology** is built upon recent advances in computational linguistics that employ word embedding algorithms to represent the meaning of language using geometric dimensions in a vector space. Words and phrases are transformed into vectors, where elements with similar meanings are positioned closely together, and the directions within the vector space correspond to semantically meaningful concepts (Mikolov et al., 2013). As in Ash and Gennaro (2022), our objective is to create a semantic dimension in these vector spaces that captures the concept of cognition at one end and emotion at the other. We achieve this through validated word lists (LIWC) for cognition and emotion, and averaging the vectors of their respective word groups to create their opposite poles. The ‘emotionality’ of a word or phrase is then determined by its proximity to the emotion or the cognition pole.

**Findings**, our article sheds new light on the strategic use of language by MEPs in relation to their voting behaviours and the political environment in their country. We find that the

context in which a speech was delivered better predicted its emotional content than the MEPs' individual characteristics.

The level of emotional language used in debates at the European Parliament has significantly increased in the last two legislatures, coinciding with the end of the euro-zone debt crisis and debates on Brexit. Interestingly, differences between EU countries have also increased following the European sovereign debt crisis. The left-leaning political group used less emotional language compared to the right-wing populist group. There is no evidence of changes in the topics discussed, but two potential explanations for the increase in emotional language are that the same MEPs are becoming more emotional or emotional MEPs are speaking more frequently. Women and older MEPs are more likely to speak, and increasing an MEP's average emotion score by one standard deviation raises their probability of taking the floor by almost 8%, which suggests that there may be specific factors in the European Parliament that favor emotional MEPs.

(i) the use of emotion varies according to the politicians' characteristics: most notably we find that women used less emotional speech (-0.35 standard deviation) than men, and that ideological positioning (right-left and pro-anti EU) had large effect on the level of emotion used in speeches. While the level of the MEPs' educational background did not seem to influence their use of emotional speech, we find that their field of studies did: MEPs who studied agriculture delivered the most cognitive speeches.

(ii) MEPs resorted more to emotion depending on contextual factors. We find that those from countries where a general election was due in the next six months were on average -0.11 standard error less 'emotional'. And a significant and positive relationship appeared between emotional rhetoric and an MEP's rebellion against their party line. Rebellious members showed a higher emotion level (by 0.21 standard error) than non-rebel ones.

The literature on rebellion suggests that MPs use it to connect with their constituents, gain their recognition, and differentiate themselves from the rest of their party (Kirkland and Slapin (2018)). But contrary to us, these authors did not examine the language MPs use in their speeches when rebelling. We find that when an MEP took the floor to discuss a text for which their vote would differ from their European group majority, they tended to resort more to emotional speech, in order to deal with situations of voters' disempowerment or frustrated expectations.

This article attempts to disentangle the relative uses of emotional and cognitive discourse. Understanding the determinants of these uses in political debates is all the more important as the increased use of emotion can impoverish the quality of debate. Moreover, having a high level of emotionality in a parliament that is still not scrutinized by its voters demonstrates the increasing political divide in the European Union.

## References

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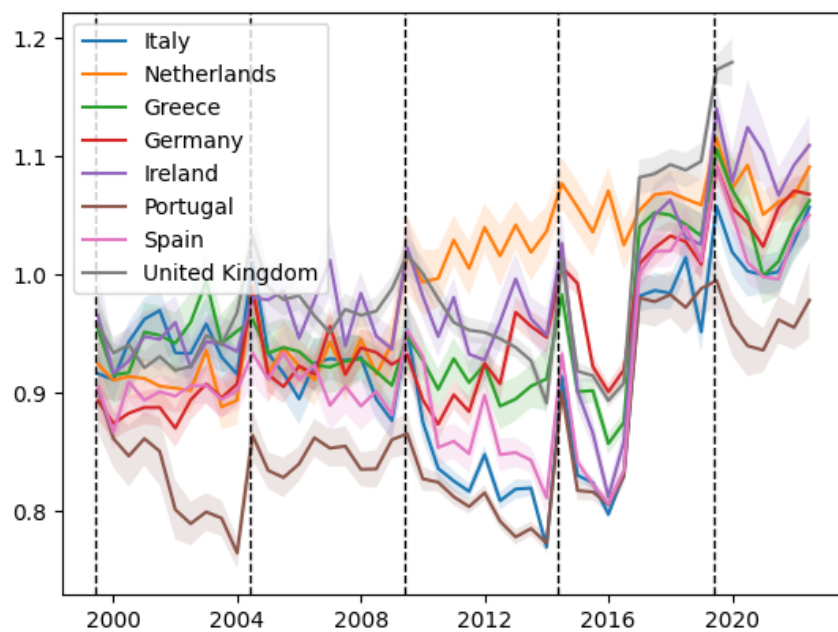


Figure 1: Time serie of emotionality by Countries

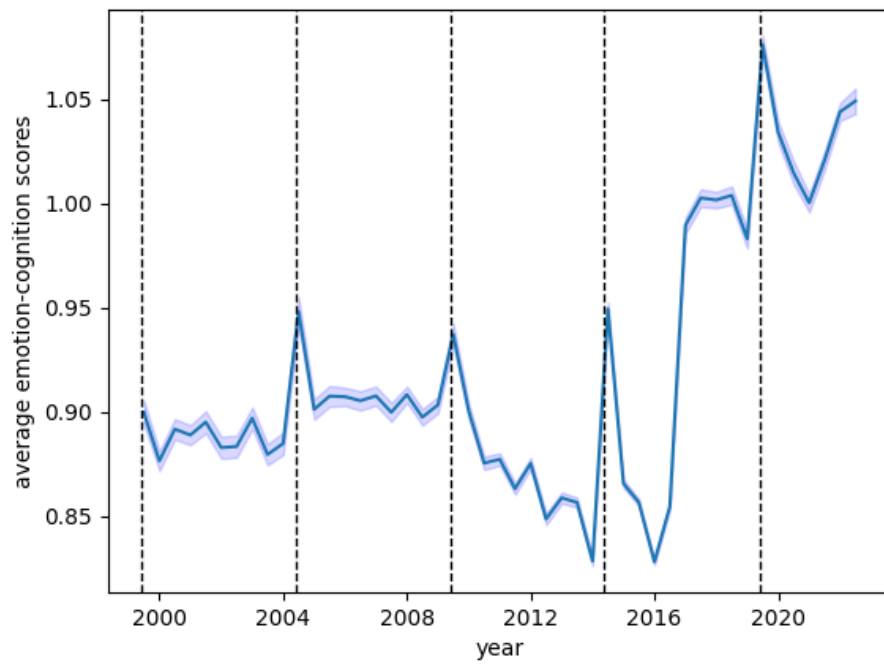


Figure 2: Time series of emotionality in the European parliament, 1999-2022

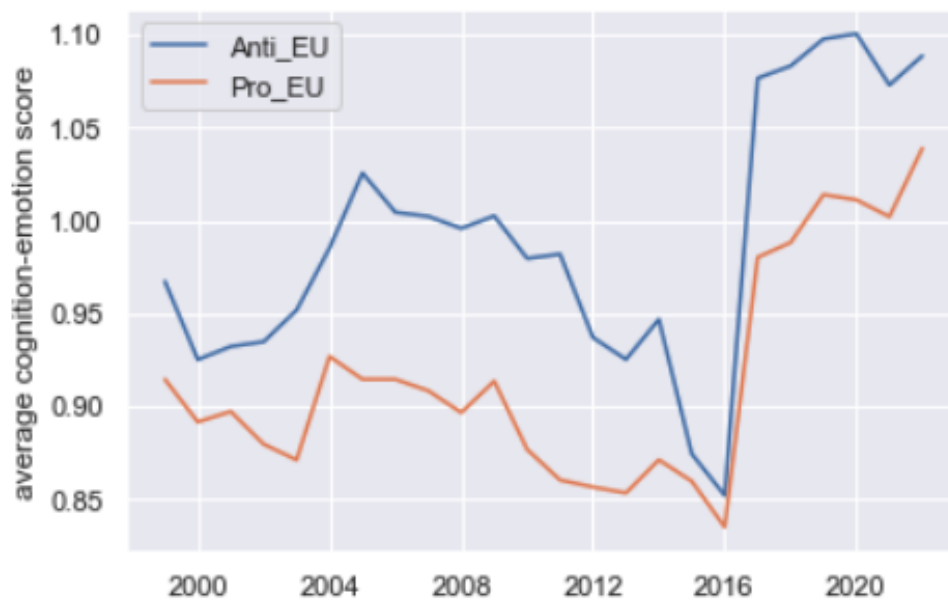


Figure 3: Time serie of emotionality by political preferences for MEPs