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MULTILINGUAL CORPUS AS RESOURCE FOR WORKING WITH POLITICAL SPEECHES BY EUROPEAN PUBLIC FIGURES

Abstract

The article examines the use of the multilingual corpus as a tool for analyzing political speeches by European public figures. The novelty of the article lies in the automatic and semi-automatic compilation of the corpus, focusing on speeches delivered by European leaders, key figures and economists. It introduces a novel approach to the analysis of political speeches by European public figures through the compilation of a multilingual corpus. The semi-automatic compilation mode, facilitated by Sketch Engine functionalities, allowed for efficient processing and visualization, offering course participants a unique insight into influential speeches in the contemporary digital era. This corpus approach facilitated the creation of a comprehensive library of political speeches, serving as a valuable resource for teaching European Studies. The compilation of the corpus primarily includes famous speeches delivered by European leaders, key figures and economists. The process of compilation involved several stages resulting in the corpus of speeches available for in-depth analysis and study. Using the functionalities of Sketch Engine, we processed the compilation in a semi-automatic mode. The focus on visualization aimed at making the course participants aware of the most prominent speeches in the modern digital era. The speeches available for the public access were formatted into txt files to supplement the corpus. The remaining part was entered in the automatic mode of corpus compilation. The results of the study included Good Academic Examples extraction from Sketch Engine and the corpus of European public figures' speeches verified by popularity (the frequency score).

Keywords: Sketch Engine, PSEPF, Good Academic Examples extraction, European public figures, corpus compilation, automatic compilation mode, semi-automatic compilation mode, frequency score by popularity in the corpus.

Анотація

У статті розглянуто багатомовний корпус як інструмент для роботи з політичними виступами європейських громадських діячів. Новизна статті полягає в укладанні цифрового корпусу автоматично та напівавтоматично, зосередженому на промовах європейських лідерів, ключових діячів та економістів. У роботі впроваджено новий підхід до аналізу політичних виступів європейських громадських діячів шляхом укладання багатомовного корпусу. Режим компіляції, що підтримується функціями Sketch Engine, забезпечив ефективну обробку та візуалізацію, пропонуючи учасникам курсу унікальне уявлення про впливові виступи в сучасну цифрову епоху. Корпусний підхід дає змогу створити бібліотеку європейських політичних промов, яка є цінним ресурсом для викладання європейських студій. З погляду компіляції корпусу, це добірка текстів, що містить промови переважно відомих європейських лідерів, відповідальних осіб та економістів. Процес компіляції охоплює декілька етапів, у результаті чого утворюється корпус промов, доступний для аналізу. Корпус задіяно під час викладання курсу з Європейських студій. Можливості Sketch Engine дозволили створювати корпус у напівавтоматичному режимі. Функціональність інструмента Sketch Engine сприяє кращій візуалізації. Корпус побудовано таким чином, щоб учасники курсу з Європейських студій змогли ознайомитися з найвидатнішими та найбільш резонансними промовами сучасної Європи. Виступи, доступні для загалу, були переведені у формат txt для подальшого додавання до корпусу. Іншу частину під час компіляції корпусу доповнили можливості Sketch Engine в автоматичному режимі. Результати дослідження — Good Academic Examples, створені на платформі *Sketch Engine* та перевірена за популярністю в корпусі (частотністю) бібліотека виступів європейських публічних діячів.

Ключові слова: Sketch Engine, PSEPF, завантаження з корпусу найкращих академічних прикладів, європейські громадські діячі, компіляція корпусу, автоматичний режим компіляції, напівавтоматичний режим компіляції корпусу, оцінка популярності на основі частоти вживання в корпусі.

Introduction. Modern corpus studies encompassing various corpus types (see O. I. Andrushenko, Ya. V. Kapranov, A. V. Korolyova and others) have opened avenues to leverage digitalised data to the fullest potential. The evolution of corpus compilation owes itself to technological advancements, granting linguists access to massive data bases. Our focus is on exploring the functionalities of the new corpus of political speeches by European public figures (hereinafter referred to as PSEPF) that contains transcripts of political speeches (converted from srt to txt), predominantly derived from European Parliament sessions. This corpus provides access to both video speeches and the bank of the transcripts available on the official page (https://multimedia.europarl. europa.eu/en/video). The creation of this corpus involved integrating files from the web resources available for Sketch engine platform and utilizing them for automatic data processing. Additionally, the process was facilitated by manual inclusion of speeches by established European figures, such as Roberta Metsola, President of the European Parliament. After the corpus had been built, the dataset was sent to Lexonomy which has the feature to develop a dictionary of terms based on PSEPF, opening potential applications of this resource.

In recent years, the study of *PSEPF* has gained significant importance in the field of European Studies. Understanding the rhetoric, linguistic choices and persuasive techniques employed by prominent European leaders, responsible individuals and economists provides valuable insights into the political landscape of Europe. One of the key challenges in this endeavour is the compilation and analysis of a diverse and comprehensive corpus of multilingual political speeches. This article delves into the methodology and advantages of utilizing a multilingual corpus as a resource for working with political speeches delivered by European public figures. Such multilingual corpora serve as an invaluable resource for linguistic and socio-political analyses, enabling researchers and students to explore various language subtleties, cultural contexts and rhetorical strategies used by public figures across European languages. By compiling a multilingual corpus of political speeches, scholars can gain a deeper understanding of the linguistic diversity within Europe and the ways how political discourse manifests across different linguistic and cultural boundaries.

Creating the PSEPF Corpus

The process of compiling the multilingual corpus of European political speeches involves meticulous stages. Initially, a selection of texts is made, focusing on noteworthy speeches delivered by prominent European leaders, influential personalities and esteemed economists. These speeches are selected to represent a spectrum of political ideologies, historical contexts and societal concerns. The compilation process embraces several stages, including data collection, transcription, translation (if applicable) and annotation. Leveraging advanced tools like Sketch Engine streamlines this compilation process, facilitating the efficient organization and analysis of vast amounts of textual data (see Figure 1).



Figure 1. The Process of the PSEPF Corpus compilation

Using Sketch Engine

During the process of the *PSEPF* Corpus compilation we used Sketch Engine, a powerful corpus tool, that plays a pivotal role in the compilation and analysis of political speeches. Employing the functionality of Sketch Engine, the *PSEPF* Corpus benefited from a semi-automatic compilation, which enabled the efficient processing of the collected speeches. Notably, the tool's visualization features are particularly important, as they allow course participants to grasp the most prominent and noteworthy speeches in the modern digitalized era. Additionally, Sketch Engine's automatic mode assisted in expanding the corpus, ensuring that a diverse range of speeches is included for comprehensive analysis. In the process of work the material was selected by subject area, necessitating the removal of potential technical data noise (see Figure 2).

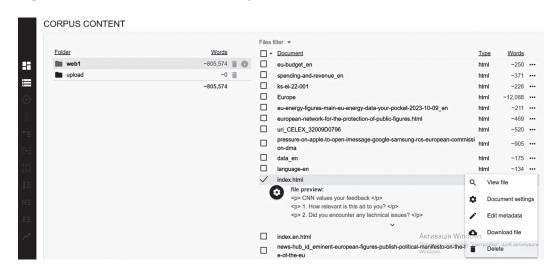


Figure 2. Adjusting corpus content: deleting technical data noise

The selection of the Public Figures' Speeches for the PSEPF Corpus

The compiled multilingual corpus serves as a rich source for analyzing speeches delivered by public figures. One of the primary objectives is to extract Good Academic Examples (hereinafter referred to as GAEs) from the corpus using Sketch Engine. These examples represent linguistic constructs, persuasive techniques and rhetorical devices that can be utilized as educational resources in European Studies programs. The frequency score derived from the corpus analysis verifies the popularity of these GAEs, providing valuable insights into the impact and effectiveness of specific language choices made by public figures. To enhance the *PSEPF* Corpus, we added data, mainly transcripts of political speeches converted from *srt* to *txt* format (Figure 3). Thus, manual adding guarantees that the *PSEPF* Corpus includes accurate and complete transcripts of the speeches.

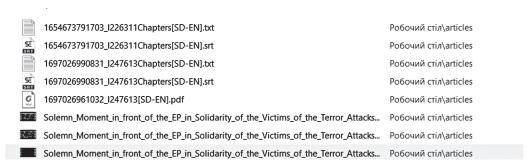


Figure 3. Speeches of public figures extracted from video files in subtitles format (srt) and then converted into text format (txt)

Having added our text to the library and web searches, the *PSEPF* Corpus (807, 217 words) has the potential for expansion through the inclusion of texts of the political leaders which have high frequency in query searches (Figure 4).

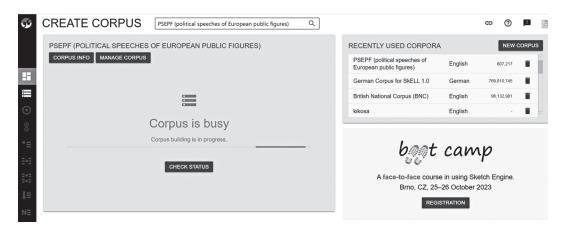


Figure 4. The PSEPF Corpus compilation

Using the corpus feature to visualize keywords, we can extract the terminology for offline use.

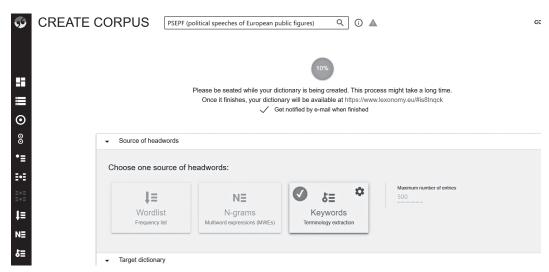


Figure 5. Keywords extraction from the PSEPF Corpus

The selection process prioritizes multi-word units which demonstrate the data, key figures in the *PSEPF* Corpus and general lexicon creation (Figure 5). Thus, the emphasis on such units is a strategic and insightful approach. Besides, the multi-word units within the *PSEPF* Corpus vividly illustrate the corpus data, offering a rich source for analyzing the political language of European public figures. As long as political speeches encapsulate social ideologies and concerns, studying these key figures' language use provides valuable insights into political strategies, societal values and public discourse dynamics. The inclusion of the general lexicon in the *PSEPF* Corpus ensures a selection based on frequency of the returned queries, enriching the corpus with a diverse range of words and phrases of specialized political terminology. Additionally, the focus on multi-word units, key figures and general lexicon in the *PSEPF* Corpus boosts the dataset, enabling researchers to delve deep into the complexities embedded in political language. Therefore, this nuanced approach not only captures the intricacies of political discourse but also facilitates a broader understanding of societal values and linguistic patterns, making the corpus a valuable asset across diverse fields of research.

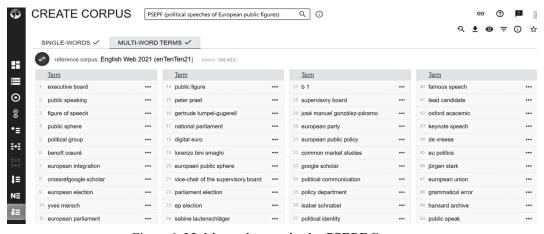


Figure 6. Multi-word terms in the PSEPF Corpus

It is necessary here to clarify exactly that the multi-word terms, commonly referred to as N-grams, consist of several words. In this context, we trace and analyze the most valuable 3-4

N-grams (see Figure 7). To understand the significance of these N-grams, it is vital to delve into their context. For instance, the N-grams 'European public policy' and 'European public sphere' indicate broad areas of European policies, with speeches giving a strong connection between public perspectives and the decision-making within European institutions.

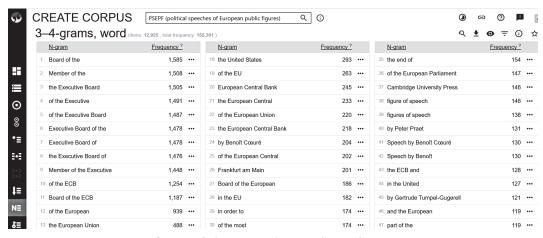


Figure 7. 3-4 N-grams in the *PSEPF* Corpus

The further computations comprised the creation of one-click Dictionary based on the *PSEPF* Corpus lexicon.



Figure 8. Computations in the PSEPF Corpus

The *PSEPF* Corpus dataset comprises 807, 217 words, encompassing speeches delivered by prominent economists and political leaders. Among these, speeches by the most influential figures were selected to generate good academic examples, intended for study in our classes (see Figures 8-9).

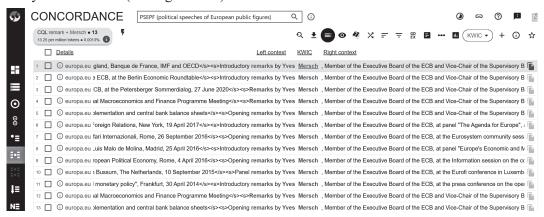


Figure 9. The extraction of speeches based on their popularity in the *PSEPF* Corpus



Yves Mersch

Yves Mersch was born in Luxembourg City, Luxembourg. He has the Order of the Legion of Honor and was educated at the Paris 1 Panthéon-Sorbonne University. Mersch served as a member of the European Central Bank's Executive Board and as Vice-Chair of the Supervisory Board of the ECB.



Renoît Cœuré

Benoît Georges Cœuré is a French economist who has been the president of the Autorité de la concurence since 2022. Previously, he served as a member of the Executive Board of the European Central Bank from 2012 to 2019.

Figure 10. Prominent speech givers in the PSEPF Corpus

Based on the findings within the *PSEPF* Corpus, we have observed the correlation between the popularity of political speech givers and the effective selection and expansion of the corpus, adding new data available online in the current mode of time. Our analysis showed that certain leaders consistently deliver articulate and argumentative speeches available for observation in online media. Yves Mersch, for instance, exhibits a distinct and elaborated manner of speech. His speeches, encompassing various events, exemplify his consistent delivery of cogent and wellstructured remarks across diverse platforms. To illustrate it, we suggest such speeches as panel remarks at the Eurofi conference in Luxembourg, opening remarks at the Eurosystem community session at Sibos, Geneva, Introductory remarks at the Salzburg Global webinar, opening remarks at the Information session on the consultative report on RTGS services, Frankfurt am Main, remarks at Roundtable Discussion on Central Bank Independence, introductory remarks at the press conference on the opening of cooperation programme in Western Balkans, Tirana, Albania, remarks at the Reinventing Bretton Woods Committee Webinar Series, opening remarks at the "Getting to know the EU Institutions and Organisations in Luxembourg" event, introductory remarks at "The Agenda for Europe", at Ambrosetti's Finance Forum on "The Outlook for the Economy and Finance", Villa d'Este, Cernobbio, introductory remarks at panel "Europe's Economic and Monetary Policy" during the Ambrosetti Conference on the Outlook for the Economy and Finance, Villa d'Este, Cernobbio, introductory remarks at the MNI Connect Roundtable, remarks at Roundtable Discussion on Central Bank Independence, opening remarks at the "Getting to know the EU Institutions and Organisations in Luxembourg" event.

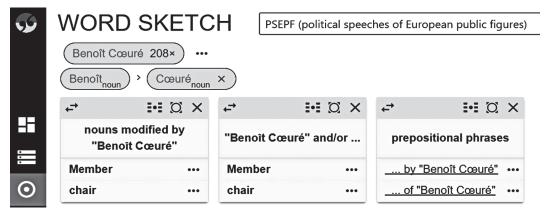


Figure 11. Word Sketch in the PSEPF Corpus

The speeches delivered by Yves Mersch are a valuable resource for studying exemplary and well-crafted European argumentative discourse. Consequently, these speeches have been systematically extracted and curated as Good Academic Examples (GDEX) in the *PSEPF* Corpus (refer to Figure 12).

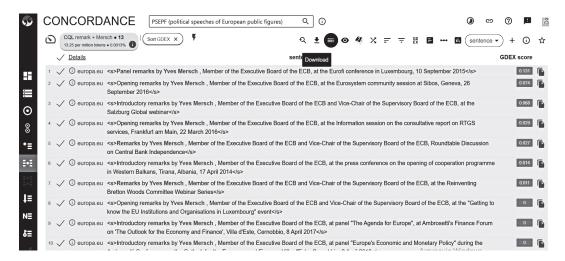


Figure 12. Good Academic Examples (GDEX) in the *PSEPF* Corpus

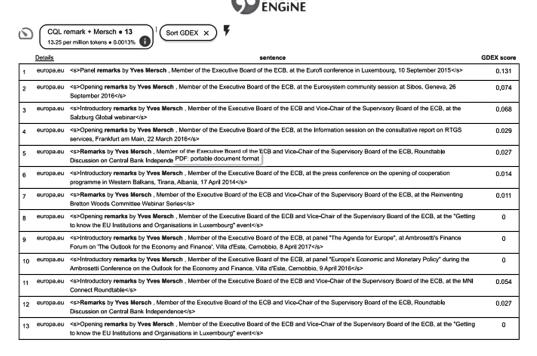


Figure 13. The GDEX results exported from the *PSEPF* Corpus

Having downloaded the extraction results from Sketch Engine, we leveraged its automatic generation of Good Academic Examples, which serve as valuable teaching resources for

European Studies classes. Furthermore, these extracted speeches play a significant role in Interpretation classes owing to their value, soft tone and exceptional clarity.

Another popular speech giver we'd like to mention within our analysis is Benoît Cœuré, who is recognized for his notably quicker delivery and advanced speech content. The *PSEPF* Corpus collection comprises his contributions, including remarks, speeches, addresses, presentations, interventions, contributions, lectures, articles and statements (Figure 14).

✓ Show frequencies	/ Show scores		
remark	47	12.1	•
speech	142	11.9	•
address	4	9.0	•
presentation	3	8.5	•
intervention	2	8.2	•
contribution	2	8.2	•
lecture	2	8.1	•
article	1	7.3	•
statement	1	7.0	•

Figure 14. Selection of speeches by Benoît Cœuré in the PSEPF Corpus

Thus, within our analysis, we highlight distinguished speech givers known for their advanced speech content. The PSEPF Corpus includes a collection of their contributions to be investigated in further research.

Conclusion

Based on the results, it can be concluded that the development of a multilingual corpus, coupled with advanced tools such as *Sketch Engine*, significantly enhances the study of political speeches delivered by European public figures. This comprehensive and diverse collection of speeches, empowers researchers and educators to explore the intricate linguistic nuances and persuasive strategies employed by European leaders. The invaluable insights gleaned from this analysis greatly contribute to the nuanced understanding of European political discourse within the realm of European Studies. As digital tools continue to evolve, the study of political speeches in a multilingual corpus framework remains a dynamic and essential area of research. Features such as text analysis, concordance search and other functionalities, including sharing function and online storage, offer invaluable resources for both academia and society at large.

The extraction of *Good Academic Examples* from *Sketch Engine* represents a novel contribution to the field, offering a systematic way to identify and understand effective rhetorical strategies employed by European public figures. This approach goes beyond mere frequency analysis, delving into the qualitative aspects of speeches and enriching corpus studies.

This comprehensive study allows for an in-depth exploration of public speeches delivered by European leaders. Besides, it fosters a closer understanding of the perspective integration of Ukraine into the European community. Moreover, the incorporation of both common language and political jargon within the *PSEPF* Corpus provides a broader view of communication dynamics. This integration bridges the gap between political rhetoric and everyday language usage.

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