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« Nous sommes en guerre sanitaire contre le COVID-19 » – A Corpus-based Approach of Official French, Italian, and Spanish Social Media Discourse in the Light of the Coronavirus Crisis

France, Italy, and Spain are three Romance-speaking countries which – at least in Europe – have been affected to a very high degree by the consequences of the Corona pandemic. This paper examines discursive strategies on social media (Twitter and Facebook) by the three heads of government/state of the aforementioned countries – namely Emmanuel Macron (France), Giuseppe Conte (Italy), and Pedro Sánchez (Spain) – from a corpuslinguistic point of view. For this purpose, a corpus was created which contains all Twitter and Facebook messages posted by these heads of government/state from the beginning of February until the end of April 2020. By applying corpus-linguistic methods we find that all three politicians consciously use social media to sensitize, inform, and – in view of a dramatic pandemic situation – unite their respective populations behind them.

Keywords: corpus linguistics; coronavirus; Covid-19; political discourse; social media; lexical co-occurrences;

1 Introduction

At the beginning of 2020, a new type of coronavirus originating from Asia reached the European continent and triggered an unprecedented health crisis in different countries of the continent. France, Italy, and Spain were seriously hit by this disease and their health systems suffered harsh consequences as a result. According to John Hopkins University (USA), France, Italy and Spain, were among the countries worldwide with high numbers of infected and deceased people:



	Number of infections	Number of casualties	Overall population ¹
France	167,303	24,594	67,064,000
Italy	207,428	28,236	60,359,546
Spain	213,435	24,543	47,100,396

Tab. 1: Number of infections and casualties for France, Italy, and Spain (on May 1st, 2020) indicated by John Hopkins University (JHU)

Governments all across Europe had to take unprecedented measures to slow down the spread of this viral disease. These measures included a series of ordinances which, among other things, massively restricted the population's freedom of movement. In order to take these measures, the heads of government/state had to carefully explain their actions when speaking or writing to their citizens. The quote mentioned in the title of this paper was taken from a tweet by Emmanuel Macron, the President of France, when addressing his compatriots on March 16th: « Nous sommes en guerre sanitaire contre le COVID-19 » ('We are in a sanitary war against the COVID-19').² The following screenshot shows the quote along with both the number of retweets and the numbers of users liking this tweet:



Fig. 1: Tweet by Emmanuel Macron (Tweet-ID: 1239647350936788993; @EmmanuelMacron; March 16th, 2020)

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Numbers according to the Italian National Institute of Statistics (*Istituto Nazionale di Statistica*) on January 1st, 2019 (INS), the Spanish National Institute of Statistics (*Instituto Nacional de Estadística*) on July 1st, 2019 (INE) and the French National Institute of Statistics and Economic Studies (*Institut national de la statistique des études économiques*) on January 1st, 2020 (INSEE).

² All translations are by the author of this article.

A similar war metaphor can be found in the following tweet by Sánchez, who refers to the efforts waged against the Corona pandemic as a battle: «Esta batalla la vamos a ganar con el compromiso y la responsabilidad de todos y todas. Protégete para proteger a los demás. #EsteVirusLoParamosUnidos» ('We will win this battle with the commitment and responsibility of everyone. Protect yourself to protect others. #ThisVirusWeWillStopItTogether'; Tweet-ID: 1239128958534332417; @sanchezcastejon; March 15th, 2020). By focusing on these three Romance-speaking countries, we will discuss the use of language in social media posts by President Macron, Prime Minister Conte, and Prime Minister Sánchez during the coronavirus crisis in this article. From a corpus-linguistic perspective,3 particularly frequent words and their lexical co-occurrences need to be identified more precisely in order to highlight similarities and differences in the leaders' explanation of the political measures taken. Therefore, we will first discuss the importance of social media for political discourse in these Romance-speaking countries, particularly Twitter and Facebook. Afterwards, the compilation of the corpus investigated and the method applied will be presented and explained, before illustrating the results in a comparative manner.

2 Social Media, Political Discourse, and Linguistic Analysis

At the latest since Donald Trump's presidential election campaign in 2016, the importance of social media for the formation of political opinion has moved into the focus of a broader public. The popularity of social networks such as Twitter and Facebook among representatives of government and state is often explained by politicians themselves by the fact that they can send their messages to their followers unfiltered, i.e. without the intervention of journalists. It is therefore not surprising that politicians in Romance-speaking countries also make use of this opportunity in order to interact with their fellow citizens. As

³ Due to the coronavirus crisis more and more corpus-linguistic projects are dedicated to the linguistic implication of this crisis, cf. *The Coronavirus Corpus* (https://www.english-corpora.org/corona/; last access: July 15th 2020) with an increasing growth rate of 3-4 million words per day.

this article will show, Conte, Sánchez, and Macron make intentional use of social networks such as Twitter and Facebook, and thereby achieve a considerable number of followers, as can be seen in the following table:

	Number of followers	Number of followers
	(Twitter)	(Facebook)
Giuseppe Conte	611,788	3,913,620
Pedro Sánchez	1,300,000	323,868
Emmanuel Macron	5,100,000	3,143,550

Tab. 2: Number of followers on Twitter and Facebook (as of May 1st, 2020)

While Emmanuel Macron has the most followers on Twitter with more than five million people, Giuseppe Conte holds this position on Facebook with almost four million followers. These numbers clearly underline the importance of digital discourse (via Twitter and Facebook) for those bearing political responsibility.

It is therefore not surprising that internet-based communication is increasingly becoming the focus of linguistic research (cf. the notion of «media linguistics 3.0» by Baechler et al. 2016; Rentel/Schröder 2018). The research interest for web-based political discourse can be very different: one can find publications on stylistic variation in Twitter discourse (e.g. by Donald Trump, Clarke/Grieve 2019), linguistic patterns (Afonso 2017), discourse analysis (Mazzuchino 2017) or multimodal semantic framing (Mencke 2018).⁴

From a linguistic point of view, the two Internet platforms examined here are particularly interesting. While Facebook does not provide entries with a character limit, the 280-character count limit is one of the most striking features of Twitter communication. In this respect, Twitter is somewhat similar to SMS-based communication,⁵ and elements of linguistic scarcity can be studied in

⁴ In addition to studies on web-based communication, a number of linguistic studies on communication in times of the Corona crisis are now available, such as the comparison of TV addresses by Merkel and Macron (cf. Spieß 2020), the use of popular hashtags in Italian (cf. Pietrini 2020) or – for German – Corona-related word networks (cf. Möhrs 2020).

⁵ Cf. also the multilingual *Swiss SMS corpus* at the University of Zurich (Stark/Überwasser/Ruef 2009-2014).

particular (abbreviations, the use of emoticons, etc.). Both providers enable communicative exchange with other users via comment functions, meaning that dialogical forms of communication are possible. In addition, questions also arise with regard to linguistic conceptualization, for example with regard to the continuum between orality and literacy (Koch/Oesterreicher 1990; 2007 and 2011) and the conceptual reliefs of the individual tweets.⁶

In the sense of discourse-oriented corpus linguistics (Bubenhofer 2009), which focuses on the study of language in use (and not a description of the language system itself),⁷ this study takes a closer look at lexical co-occurrences of certain keywords. A comparative perspective should provide information as to whether linguistic similarities and differences can be found in the internet-based discourses of the three Romance-speaking politicians.⁸

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The communication condition of *spontaneity* mentioned by Koch/Oesterreicher is also referred to by Eckkrammer (2018, 13) in this context, for example when she speaks of the *spontanization of communication* by means of mobile interaction via smartphones, tablets, etc. («Das Internet hat in seiner Weiterentwicklung, insbesondere im Web 2.0 (Social Web), eine Evolution von Kommunikationsformen eingeleitet, die durch neue Applikationen der mobilen Interaktion via Smartphone oder Tablet stetig angetrieben wird. Diese ermöglicht eine Spontanisierung der Kommunikation»).

⁷ «Es muss deshalb das Ziel [...] sein, diese typischen Sprechweisen über eine Analyse des musterhaften Sprachgebrauchs zu erfassen, um daraus Schlüsse über Diskurse zu ziehen» (Bubenhofer 2009, 5; 'Therefore, the goal [...] must be to capture these typical ways of speaking by analyzing the exemplary use of language in order to draw conclusions about discourse').

Although this study examines only the linguistic characteristics at the production level, questions about the perception of utterances (e.g. through analyses of comments) can provide valuable results for research on the reception of social media entries, especially in the sense of perceptual linguistics (cf. Krefeld/Pustka 2010 & 2014).

3 Official French, Italian, and Spanish Social Media Discourse: A Corpus-based Approach

In order to answer the question of the present study, a corpus-based method was chosen. In the next section, the composition of the corpus will be discussed first, including an overview of the chronological sequence. Section 3.2 then presents the results of the corpus linguistic analysis for the individual politicians, followed by a linguistic interpretation of the results.

3.1 Composition of the Corpus

As the most politically drastic measures were taken during the first peak of the Corona pandemic in March 2020, all tweets and Facebook posts from the three politicians in the period between February 1st and April 30th were considered. For the analysis, only tweets and Facebook posts which contained text were taken into consideration. Simple re-tweets and tweets which only contained videos or images were not considered. If texts contained emoticons or other graphical representations (i.e. flags, emoticons, etc.), the texts were cleaned of these, so that in the end pure text files were available for analysis. The following diagram relates the chronological progression to the number of individual social media postings and shows that there is an increased need for communication particularly in the middle of March.

Although these elements did not play a role in this study, reference should be made to the work of Dürscheid, who analyses the functional use of these graphic representations in computer-mediated communication (cf. Dürscheid 2020a, b, c; Dürscheid/Meletis 2019).

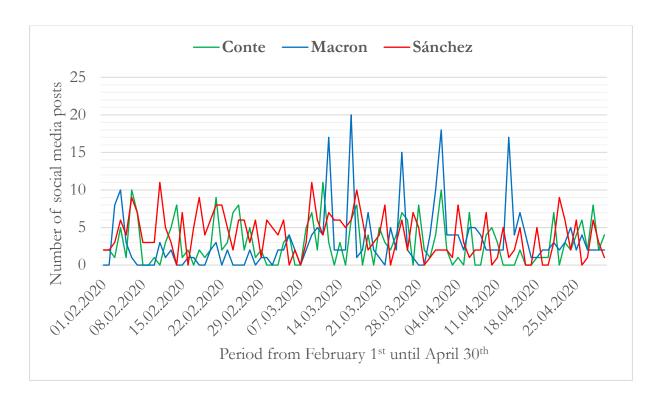


Fig. 2: Number of daily social media posts by Conte, Macron, and Sánchez from February 1st until April 30th, 2020

Whereas Giuseppe Conte tends to make less use of the communication possibilities offered by social media, the graph shows that Pedro Sánchez uses these means of communication quite continuously. Especially at the peak of the pandemic (middle of March 2020), Emmanuel Macron shows increased communication behavior, which can also be seen from the five maximum values in the graph. Nevertheless, Macron has the smallest number of tokens (9,305), although with 279 posts in total, he published more posts than Conte (267). Conte, on the other hand, uses Facebook as a platform more often than Macron and Sánchez do. This may be related to the facts that Facebook – in Italy¹0 – seems to be much more popular than Twitter and that Conte may appreciate the possibility of being able to write longer entries on Facebook, while Macron and Sánchez tend to use shorter communication strategies with Twitter. This

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¹⁰ Data for 2020 shows that Facebook has about 29 million users in Italy, while Twitter has a much smaller presence with approximately 3.17 million (cf. Digital 2020 Italia).

behavior is reflected in the following table,¹¹ which lists the number of analyzed texts for the individual politicians as well as the number of tokens.

	Number of texts,	Number of texts,	Total number of
	tokens, and ratio	tokens, and ratio	texts, tokens, and
	(tokens per text):	(tokens per text):	ratio (tokens per
	Twitter	Facebook	text)
Giuseppe Conte	114	153	267
	3,250	12,490	15,740
	(28.5)	(81.6)	(59.0)
Emmanuel Macron	195	84	279
	6,064	3,241	9,305
	(31.1)	(38.6)	(33.4)
Pedro Sánchez	273	84	357
	12,508	13,839	26,347
	(45.9)	(164.8)	(73.8)
Total	582	321	903
	21,822	29,570	51,392
	(37.5)	(92.1)	(56.9)

Tab. 3: Distribution of the different corpora with information on the number of texts, tokens, and ratio

It can be seen from the table that the total corpus for the study presented here comprises 903 texts with a total of 51,392 tokens and that Pedro Sánchez is the politician who holds the highest total numbers for social media posts during this period (357 compared to the 267 entries by Conte and 279 by Macron).

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¹¹ In accordance with the FAIR principles, all research data are available in a data repository for subsequent use and can be accessed via the following link: https://doi.org/10.5281/zenodo.4553894

3.2 Results

In accordance with a discourse-oriented corpus linguistics approach (Bubenhofer 2009), we are concerned here primarily with lexical co-occurrences of certain keywords. Therefore, it is necessary to determine first which are the most frequently occurring lexemes or keywords. The top five positions are displayed in Table 4:

	Conte	Macron	Sánchez
1.	Italia	#FranceUnie	España
	(68)	(57)	(137)
2.	emergenza	COVID-19	gobierno
	(36)	(39)	(100)
3.	cittadino	français	país
	(35)	(34)	(64)
		France	
		(34)	
4.	paese	crise	ciudadanía
	(34)	(24)	(53)
5.	misura	période	#COVID19
	(33)	(23)	(49)
	lavoro	Europe	
	(33)	(23)	
	governo		
	(33)		

Tab. 4: Most frequent nouns (with number of absolute frequency) in the examined corpus

By comparing the politicians' enunciations, it becomes clear that among the most frequent lexemes one can find references to their own countries (Conte: *Italia*, *paese*; Macron: #FranceUnie, France, français; Sánchez: España, país) as well as to the exceptional situation in which they found themselves at that time (Conte: emergenza, misura; Macron: COVID-19; crise; Sánchez: #COVID19). While Conte and Sánchez both often talk about the government (governo and gobierno) and the citizens (cittadino and ciudanía), only Macron refers to Europe as the following example shows:

(1) Face au Coronavirus, ne laissons aucune place à la spéculation et à l'instabilité. L'Europe devra faire tout ce qui est nécessaire sur le plan sanitaire comme sur le plan économique.

(Tweet-ID: 1237447186834763778; @EmmanuelMacron; March 10th, 2020) 'In the face of the Coronavirus, let us leave no room for speculation and instability. *Europe* will have to do all that is necessary in the fields of both health and economics.'

From a semantic point of view, the given example makes it clear that Macron calls for a European solution to the crisis: *Europe* shall take action and thus has the semantic role of the *agent*. In both Conte's (2) and Sánchez's texts (3) this role can also be determined for the identified frequent lexemes, such as *governo* and *Italia* (Conte) or *gobierno* (Sánchez):

- (2) Il *Governo* ha appena stanziato 7,5 miliardi di euro per aiutare concretamente famiglie, lavoratori e imprese. Continuiamo a lavorare uniti per fronteggiare al meglio l'emergenza #coronavirus. L'*Italia* ce la farà. (Tweet-ID: 1235597757060177920; @GiuseppeContelT; March 5th, 2020) 'The *Government* has just allocated EUR 7.5 billion to help families, workers, and businesses. We continue to work together to cope better with the #coronavirus emergency. *Italy* will make it.'
- (3) El *Gobierno* aprobará en los próximos días, tal y como está previsto en la Constitución, ampliar el estado de alarma en todo el territorio nacional por otros 15 días.

(page-ID: 750689868285972; post-ID: 3108806192474316; @pedro.sanchezperezcastejon; March 22th, 2020)

'The *Government* will approve in the coming days, as foreseen in the Constitution, extending the state of alarm throughout the national territory for another 15 days.'

In the following subsection, the discourses of the individual politicians will be examined more closely. In a concluding comparison, we will try to highlight the differences and similarities with regard to discursive strategies in online-mediated communication during the Corona pandemic.

3.2.1 Conte

As seen above, Giuseppe Conte uses Facebook much more intensively than Emmanuel Macron and Pedro Sánchez, while these two are more likely to make use of Twitter. Therefore, the majority of the Conte corpus consists of Facebook messages (cf. Tab. 3). In order to find out how to describe Conte's webbased discourse at the height of the Corona crisis, particularly frequent lexemes such as *Italia* and the related reference to its inhabitants (*italiani*) are examined to determine which lexical co-occurrences are predominantly frequent. In addition, lexical co-occurrences related to the coronavirus (*coronavirus*, #coronavirus, Coronavirus, #Coronavirus, virus, covid, Covid, Covid-19, #COVID19, #COVID19italia)¹² were studied in more detail. The following word clouds represent the corresponding co-occurrences for the Conte corpus:¹³

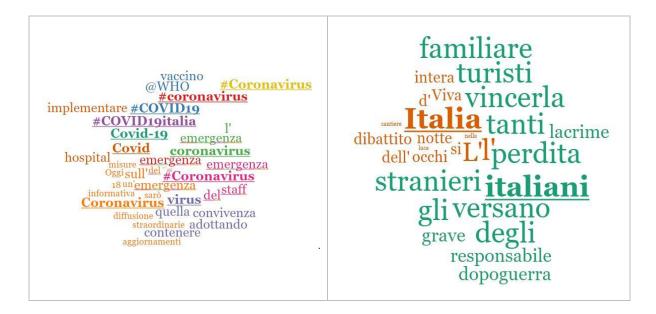


Fig. 3: Lexical co-occurrences in the Conte corpus

Looking at the results in the left figure, the frequent use of words like *emergenza* 'emergency' and *straordinarie* 'extraordinary' (Fem. Pl.) makes it clear that this is

Hashtag-mentions, such as #coronavirus, had to be included in the analysis as well because they can take over all syntactical functions in social media texts (cf. Mencke 2018).

The visualizations of the co-occurrences as word clouds were made with the software *CorpusExplorer* (Rüdiger 2018). The weight of the corresponding lexemes indicates the greater statistical significance value for the fact that the two lexemes occur together within a sentence. The significance measure used here is the Poisson distribution.

an exceptional emergency situation, as highlighted by Conte, and for which extraordinary measures (*misure*) had to be taken.¹⁴ In the case of the co-occurrences for lexemes related to *Italia*, the adjectives are the first to catch the eye: grave 'serious', responsabile 'responsible', dopoguerra 'postwar'. With the help of these adjectives, Conte tries to convey the historical significance of the crisis situation, which can also be seen in the following examples taken from the corpus:

- (4) [...] Ringrazio tutti gli *italiani* per i piccoli e grandi sacrifici che stanno compiendo in questi giorni.
 - (page-ID: 383458618802776; post-ID: 865510863930880; @GiuseppeConte64; March 11th, 2020)
 - 'I thank all the *Italians* for the small and large sacrifices they are making these days.'
- (5) [...] Oggi stiamo affrontando una nuova prova. Difficilissima. Sono tanti gli *italiani* che in queste ore versano lacrime per la perdita di un familiare, che vivono l'angoscia di un ricovero, che soffrono per la lontananza dei propri cari, per la chiusura della propria attività commerciale, per l'incertezza del futuro. (page-ID: 383458618802776; post-ID: 871272406688059; @GiuseppeConte64; March 17th, 2020)
 - 'Today we are facing a new challenge. A very difficult one. There are many *Italians* who in these hours shed tears for the loss of a family member, who live the anguish of hospitalization, who suffer because of the distance of their loved ones, because of the closure of their business, because of the uncertainty of the future.'
- (6) [...] In un momento così difficile, questa è l'ennesima risposta generosa di cui tutti noi italiani possiamo andare fieri. (page-ID: 383458618802776; post-ID: 875132996302000; @GiuseppeConte64; March 21th, 2020)
 'In such a difficult moment, this is yet another generous response of which all of us Italians can be proud.'
- (7) Dopo diciotto ore di un lungo e approfondito confronto, è stato finalmente siglato tra sindacati e associazioni di categoria il protocollo di sicurezza nei luo-

¹⁴ In the entire corpus of Conte's texts, the combination *misure straordinarie* occurs four times alone and thus most frequently.

ghi di lavoro. Per il bene del Paese, per la tutela della salute di lavoratrici e lavoratori. L'*Italia* non si ferma. (Tweet-ID: 1238748427464454144; @GiuseppeConteIT; March 14th, 2020)

'After eighteen hours of a long and in-depth discussion, the safety protocol for the workplace was finally signed between trade unions and trade associations. For the good of the Country, for the protection of the workers' health. *Italy* does not stop.'

While in example (4) *italiani* holds the semantic role of the *beneficiary/recipient* (i.e. receives Conte's gratitude, who appreciates the sacrifices the population makes in this state of emergency), in example (6) he includes himself by using the 1st person plural *tutti noi italiani*. Both statements should serve to strengthen the feeling of unity and pride (*fieri*) of the country's inhabitants. Example (5) shows the sympathy of the head of state with those fellow citizens who have to mourn the loss of family members due to the coronavirus. That this is without a doubt a challenging situation for the country becomes clear by the use of the different forms of the adjective *difficile* in examples (5) and (6): (*una prova*) *difficilissima* and *un momento così difficile*. The last example is an interesting case in that it underlines that even in times of the greatest crisis, life does not stand still and politicians take measures to protect the working population. In this case *Italia* acts as the subject of the sentence in *L'Italia non si ferma* and has the semantic role of the *agent*.

In summary, it can be said that Conte's communicative strategy aims to strengthen the sense of unity among the country's citizens so that they will support the necessary measures in the fight against a common enemy, the coronavirus. In the next subchapter, we will analyze the extent to which this strategy can also be detected in the texts of Macron.

3.2.2 Macron

Compared to the Conte corpus, the corpus on Macron's social media posts contains more texts (279 vs. 267, cf. Tab. 3), but has a significantly lower number of tokens (9,305 vs. 15,740). This suggests that Macron, whose increased social media activity can be observed clearly at the peak of the Corona crisis in

mid-March 2020 (cf. Fig. 2), is more likely to rely on tweets or Facebook posts that contain little text, but rather multimodal elements (such as videos, images, etc.). In this case also, the lexical co-occurrences, which are either related to the coronavirus (*Coronavirus*, *coronavirus*, *virus*, *COVID-19*, *Covid-19*) or the country (*France*, *français*/*e*/*s*),¹⁵ were determined by the Corpus Explorer and displayed as a word cloud.

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spéculation
                                                                                           travailler
                 professionnels
                                                                                         territoire distance
                  distribuerons Chercheurs
                                                                                        bloqués trajets
      laissons Coronavirus place
                                                                           vaincre quand
comme prêter physique
unissent public place
unissent public Face atteints
faire, forces secteurs aucune
épidémie contre face privé instabilité

COVID-19
les
virus grâce
                                                                             France physique personnels français demeurer
                                                                          forte Lapartout Partout
nos image industrie seuls
françaises outre-mer
        hommes fermés virus grâce lutte lycées médecine vaincre Covid-19 C'est ordre freiner lundi science collèges G7nouvel P
                                                                        Kolmi-Hopen française Un
                                                                     équiper entreprises parmi
              es G7nouvel Pour propagation vaincrons
                                                                          engagées Nos tant faire capable
engagent! exemple
                         universités
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Fig. 4: Lexical co-occurrences in the Macron corpus

In the left figure, we can find lexical co-occurrences which are located in the semantic field of science (chercheurs 'researcher', médecine 'medicine', science 'science'), which can be seen as a clear indication that Macron attributes a key role to science in fighting (lutte 'fight', vaincre 'defeat') the virus. The lexical units which are more commonly associated with France and the French can be identified in the figure on the right. Also, reference is made to the work domain (travailler 'to work', entreprises 'enterprises', industrie 'industry') and it is made clear that the fight against the virus is an effort which affects all French people in all

¹⁵ Some remarks on the selection of lexemes must be made, as these lexemes do not necessarily have to correspond to those of Conte or Sánchez. This refers, on the one hand, to the different terms relating to the disease (and their different spellings, which need not be identical and therefore do not appear in every corpus), and on the other hand to the fact that female forms (*française*, *françaises*) also appear in the Macron corpus. The tagging by the *CorpusExplorer* ensures that only nominal and no (identical) adjective references are included for the analysis.

regions (partout 'everywhere', outre-mer 'overseas'). The following posts show examples of Macron's communication strategies:

- (8) Pour protéger et *freiner* la propagation du *Covid-19* : dès lundi et jusqu'à nouvel ordre, les crèches, les écoles, les collèges, les lycées et les universités seront fermés. (Tweet-ID: 1238192561858269184; @EmmanuelMacron; March 12th, 2020)
 - 'To protect and *stop* the spread of Covid-19: from Monday and until further notice, nurseries, primary and middle schools, high schools, and universities will be closed.'
- (9) C'est grâce à la science et à la médecine que nous vaincrons le virus. Je réunis aujourd'hui nos meilleurs chercheurs pour progresser sur les diagnostics et les traitements. Notre effort de recherche est totalement mobilisé dans la lutte contre le COVID-19. (page-ID: 1535230416709539; post-ID: 2707486299483939; @EmmanuelMacron; March 24th, 2020)
 'It is through science and medicine that we will defeat the virus. Today I am bringing together our best researchers to make progress on diagnostics and treatments. Our research effort is fully mobilized in the fight against COVID-19.'
- (10) Le *Covid-19* qui affecte tous les continents et frappe tous les pays européens, est la plus grave crise sanitaire qu'ait connue la *France* depuis un siècle. (Tweet-ID: 1238180948518350849; @EmmanuelMacron; March 12th, 2020) '*Covid-19*, which affects all continents and strikes all European countries, is the most serious health crisis *France* has experienced in a century.'
- (11) Pour vaincre le COVID-19, la France est engagée dans un effort de production sans précédent. À Saint-Barthélemy-d'Anjou, avec les salariés de l'entreprise Kolmi-Hopen qui produisent des masques chirurgicaux et FFP2. (page-ID: 1535230416709539; post-ID: 854696961710823; @EmmanuelMacron; March 31st, 2020)
 - 'To defeat COVID-19, France is engaged in an unprecedented production effort. In Saint-Barthélemy-d'Anjou, with the employees of the Kolmi-Hopen company, which produces surgical and FFP2 masks.'

The examples show that in most cases the lexical references related to the virus/disease, such as *Covid-19* in (8), suffer the consequences of an action, i.e. freiner la propagation du Covid-19 'stop the spread of Covid-19', nous vaincrons le

virus 'we will defeat the virus' in (9) or pour vaincre le COVID-19 'to defeat COVID-19' in (11). This metaphor of defeat can also be found in example (9) when Macron speaks of 'the fight against the virus' (la lutte contre le COVID-19). Example (10) represents one of the rare cases where COVID-19 syntactically functions as the subject of the sentence that influences la France as the subject of the subordinate clause. In (9) the focus is on the importance of science and research, whereby the use of personal pronouns is interesting. While the post contains predominantly 1st person plural pronouns (nous, nos, notre) and thus also wants to evoke a feeling of togetherness, Macron presents himself at one point as a politician who takes action when he 'brings together our best researchers' (je réunis aujourd'hui nos meilleurs chercheurs). Lastly, the corpus on social media posts by Pedro Sánchez is examined.

3.2.3 Sánchez

With 357 texts, the Sánchez corpus is the most extensive of the subcorpora analyzed here. It contains over 10,000 tokens more than the second-largest corpus (Conte: 15,740 vs. Sánchez: 26,347). The five most frequent lexemes in the Sánchez corpus already show (cf. Tab. 4) that in this exceptional situation caused by the virus (#COVTD19) in Spain (país, España), cooperation between the government (gobierno) and the citizens (ciudadanía) is vitally important. As previously with the two preceding subcorpora, the statistical relevant lexical co-occurrence for the lexemes related to the disease (coronavirus, Covid-19, COVTD-19) and to the country (España) or its inhabitants (español/a) are determined and visually displayed in Fig. 5:



Fig. 5: Lexical co-occurrences in the Sánchez corpus

In the corpus of Pedro Sánchez's online posts, co-occurrences can also be found, as displayed to the left in Fig. 5, which indicate a fight against the virus by using particular verbs (vencer 'defeat'), nouns (lucha 'fight') but also (adversative) prepositions (frente 'opposite; in the face of', contra 'against'). In the right figure one can see that e.g. with español there are more and more co-occurrences, which points to the necessity of (scientific) innovations (innovación 'innovation', tecnología 'technology', ciencia 'science') to overcome (logramos 'we achieve') the crisis. In addition, a number of other co-occurrences can be found that relate to Spanish 'society' (sociedad, ciudananía 'citizenry') and its responsibility and 'behavior' (comportamiento) in overcoming this critical situation. The following examples from the corpus will give an impression of Sánchez's discourse:

(12) El *Gobierno* hará todo lo que esté en su mano para amortiguar los efectos sociales y económicos del *Covid-19* (page-ID: 750689868285972; post-ID: 927430854371808; @pedro.sanchezperezcastejon; March 15th, 2020) 'The *Government* will do everything in its power to cushion the social and economic effects of *Covid-19*.'

- (13) Trabajamos sin descanso para frenar el #COVID19. Esta tarde he conversado también con el director de la #OMS, @DrTedros, ambos estamos comprometidos en reforzar la coordinación, colaboración y comunicación permanente en la *lucha* a escala española y global contra el *coronavirus*.

 (Tweet-ID: 1239662725292269572; @sanchezcastejon; March 16th, 2020)

 'We are working tirelessly to stop #COVID19. This afternoon I also talked with the director of the #OMS, @DrTedros, both of us are committed to strengthening coordination, collaboration, and permanent communication in the *fight* against the *coronavirus* on a Spanish and global scale.'
- (14) Lo peor está por llegar. Recibiremos el impacto de la ola más dura, que nos pondrá al límite. Para vencerla, los españoles y españolas deben permanecer unidos, en sus casas, mientras su país les protege, les cuida y la combate con tesón. Lo lograremos, #EsteVirusLoParamosUnidos.

 (Tweet-ID: 1241491930560843777; @sanchezcastejon; March 21st, 2020)

 'The worst is yet to come. We will be hit by the hardest wave, which will push us to the limit. To defeat it, Spaniards must remain united, in their homes, while their country protects them, takes care of them, and fights it with determination. We will succeed, #ThisVirusWeWillStopItTogether.'
- (15) [...] Debemos ganarle la partida al *Covid-19* y debemos hacerlo unidos. Para lograrlo, para que esta emergencia dure lo menos posible y tenga el menor coste en vidas, en empleos y en empresas, estamos poniendo al servicio del conjunto de España todos los recursos a nuestro alcance. (page-ID: 750689868285972; post-ID: 3108806192474316; @pedro.sanchezperezcastejon; March 22th, 2020) We must win the game against *Covid-19* and we must do it together. To achieve this, so that this emergency lasts the shortest time possible and has the least cost in lives, jobs, and companies, we are making all resources available for the service of Spain as a whole.'

Example (12) shows very clearly that Sánchez describes his government as capable of action, which is why the syntactic subject *gobierno* 'government' can be described semantically as the *agent*. The same applies to (13), in which Sánchez again describes the government's active measures (*Trabajamos sin descanso para frenar el #COVID19* 'We are working tirelessly to stop #COVID19.') and finally also chooses a metaphorical comparison of the 'fight against the coronavirus' (*lucha* [...] contra el coronavirus). The strategy in (14) aims to sensitize the population and to prepare them for even more difficult times (*lo peor está por llegar* 'the

worst is yet to come'). It also calls for a consensus between the state and the citizens (los españoles y españolas deben permanecer unidos 'Spaniards must remain united'), who can do their own part to defeat the virus. It is interesting in this case that Sánchez, by using the 1st person plural (recibiremos el impacto 'we will be hit', nos pondrá al límite 'will push us to the limit', lo lograremos 'we will succeed'), includes himself in the enunciation and speaks of the Spaniards in the third person only when he contrasts the tasks of the state (mientras su país les protege, les cuida y la combate con tesón 'while their country protects them, takes care of them, and fights it with determination') with those of the citizens. This strategy can also be seen in the use of the hashtag #EsteVirusLoParamosUnidos ('#ThisVirusWeWillStopItTogether'), which is used 89 times in the Sánchez corpus. In the last example, one can note once more the use of a metaphor in which Covid-19 is again described as an opponent, even though in this case Sánchez speaks of a sporting game that has to be won (Debemos ganarle la partida al Covid-19 y debemos hacerlo unidos We must win the game against Covid-19 and we must do it together') and not, as in the previous examples, referring to a warlike conflict.

In the last chapter, we will briefly summarize the results of this study in comparative terms. This is followed by further concluding remarks.

4 Linguistic Interpretation and Conclusion

The aim of this study was to use an – admittedly relatively small – corpus to reconstruct the social media discourse of Giuseppe Conte in Italy, Emmanuel Macron in France, and Pedro Sánchez in Spain at the height of the Corona crisis in early 2020. As an exemplary approach, the focus was placed on particularly frequent lexemes and their co-occurrences; of course, further studies on the recognition of patterned speech or more extensive analyses for additional lexemes, which must be left out of consideration here, would be desirable. Despite the different quantitative uses (cf. Fig. 2 and Tab. 3), a number of common features have been identified. If one examines the social media posts of the three politicians, several pragmatic functions of this type of communication stand out, which can be found in the Conte corpus as well as in the Macron

and Sánchez corpus. Firstly, attempts are made in each case to depict the dramatic extent of this situation, so that the population is made aware of the present danger. This serves the purpose of informing. As a next step, the corpus data show the function of thanking the population for the implementation of the necessary measures. This is followed by an explanation of the actions which the respective governments have to take in order to contain the incidence of infection, which pragmatically serves the purpose of explaining. In many cases, the metaphor of an adversative conflict, such as in war or a sports game, plays an important role. From this, it is also understandable that in the majority of cases the heads of government take on the semantic role of the agent, while the names for the coronavirus and the associated disease Covid-19 can often be described as the patient, understood as the target of the actions. 16 The last pragmatic function that can be found in the texts of all three politicians is that of appealing to their citizens, which is supported by the fact that they use the first person plural in their communications and thus include themselves in their petitions. This should also ensure that a sense of unity is generated among the population, which is indispensable in combating the pandemic.

The data and results presented here could serve as the starting point for further research, especially with regard to the perception of these posts (cf. Krefeld/Pustka 2010 & 2014) by the population or the respective speakers.¹⁷ In addition, the available data could also be supplemented by, for example, journalistic discourse in order to obtain a holistic view of the topic.

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¹⁶ In this study it was not systematically determined to which percentage lexemes like *gobierno* or *coronavirus* take which semantic role. This represents nonetheless another interesting approach to the investigation of Internet-based political communication.

Especially from a perceptual point of view, the effect and recognition potential of the recurring hashtags, such as #iorestoacasa (Conte), #FranceUnie (Macron) or #EsteVirusLoParamosUnidos (Sánchez), could be studied more intensively.

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