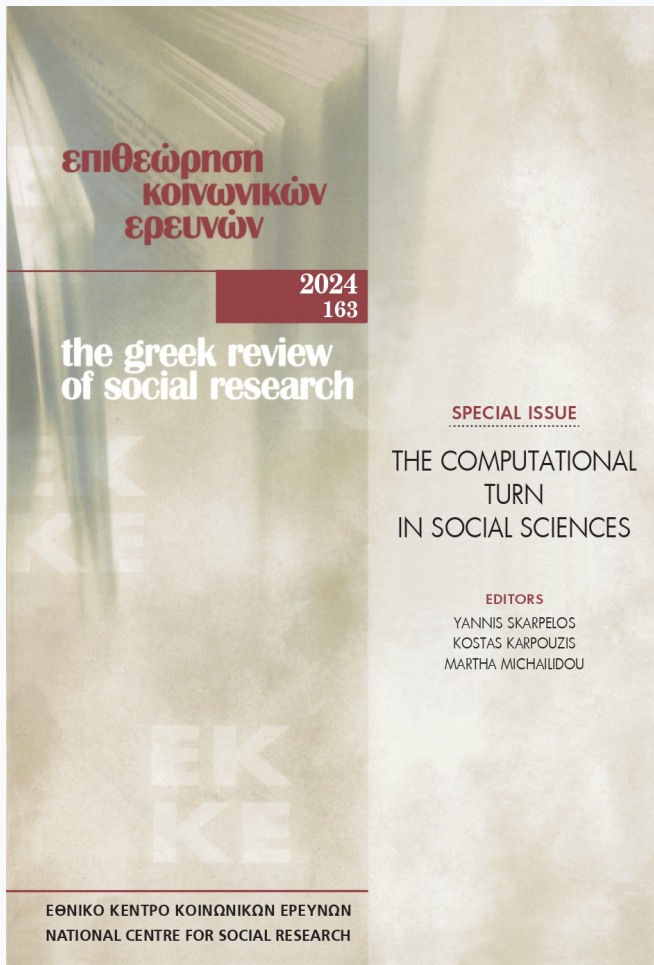


The Greek Review of Social Research

Vol 163 (2024)

163 Special Issue: The computational turn in social sciences. Editors: Yannis Skarpepos, Kostas Karpouzis, Martha Michailidou



The Covid-19 pandemic in Greece through the lens of methodological synergy: Combining corpus linguistics and critical discourse analysis approaches

Dimitris Elafropoulos

doi: [10.12681/grsr.38498](https://doi.org/10.12681/grsr.38498)

Copyright © 2024, Dimitris Elafropoulos



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0](https://creativecommons.org/licenses/by-nc/4.0/).

To cite this article:

Elafropoulos, D. (2024). The Covid-19 pandemic in Greece through the lens of methodological synergy: Combining corpus linguistics and critical discourse analysis approaches. *The Greek Review of Social Research*, 163, 37–66. <https://doi.org/10.12681/grsr.38498>

*Dimitris Elafropoulos**

THE COVID-19 PANDEMIC IN GREECE THROUGH
THE LENS OF METHODOLOGICAL SYNERGY:
COMBINING CORPUS LINGUISTICS AND CRITICAL
DISCOURSE ANALYSIS APPROACHES

ABSTRACT

Computational approaches have been increasingly used in social sciences in recent years. The present study investigates to what extent a triangulated framework of corpus linguistics and critical discourse analysis can shed light on cutting-edge approaches and offer new insights into social research. Big data sets that may be examined computationally reveal patterns, trends and co-occurrences of elements (Teubert & Krishnamurthy, 2007, p. 6). This research is based on analysing a 720-text corpus of political and scientific discourse (March 2020 - May 2022) of representatives of three main institutions (government, main opposition party, and Greek public health organisation). Mediated political and scientific discourse has been the primary source of information regarding the Covid-19 pandemic crisis. The computational techniques focus on the representation of the pandemic and the relevant collocations and concordances in an attempt to navigate afterwards through qualitative analysis. Findings indicate that the government constructed a “rescue narrative” while the main opposition party advocated working-class priorities. Conceptual metaphors regarding the pandemic were pervasive both in political and scientific discourse. Comparative studies among different countries could be conducted in the future.

Keywords: *pandemic, Covid-19, discourse analysis, corpus linguistics, political communication*

*Researcher, Laboratoire d’Études et de Recherches Appliquées en Sciences Sociales, University of Toulouse, e-mail: dimitriselafropoulos@gmail.com

Δημήτρης Ελαφρόπουλος*

Η ΠΑΝΔΗΜΙΑ COVID-19 ΣΤΗΝ ΕΛΛΑΔΑ ΥΠΟ
ΤΟ ΠΡΙΣΜΑ ΜΙΑΣ ΜΕΘΟΔΟΛΟΓΙΚΗΣ ΣΥΝΕΡΓΕΙΑΣ:
ΣΥΝΔΥΑΖΟΝΤΑΣ ΤΙΣ ΠΡΟΣΕΓΓΙΣΕΙΣ
ΤΗΣ ΓΛΩΣΣΟΛΟΓΙΑΣ ΣΩΜΑΤΩΝ ΚΕΙΜΕΝΩΝ
ΚΑΙ ΤΗΣ ΚΡΙΤΙΚΗΣ ΑΝΑΛΥΣΗΣ ΛΟΓΟΥ

ΠΕΡΙΛΗΨΗ

Τα τελευταία χρόνια οι υπολογιστικές προσεγγίσεις χρησιμοποιούνται όλο και περισσότερο στις κοινωνικές επιστήμες. Η παρούσα μελέτη διερευνά σε ποιο βαθμό ένας μεθοδολογικός τριγωνισμός της γλωσσολογίας σωμάτων κειμένων και της κριτικής ανάλυσης λόγου μπορεί να ρίξει φως σε καινοτόμες προσεγγίσεις και να προσφέρει νέες προοπτικές στην κοινωνική έρευνα. Τα μεγάλα σύνολα δεδομένων που μπορούν να εξεταστούν υπολογιστικά αποκαλύπτουν μοτίβα, τάσεις και συν-εμφανίσεις στοιχείων (Teubert & Krishnamurthy, 2007, σελ. 6). Η παρούσα έρευνα βασίζεται στην ανάλυση ενός σώματος κειμένων πολιτικού και επιστημονικού λόγου 720 κειμένων (Μάρτιος 2020 - Μάιος 2022) εκπροσώπων τριών βασικών θεσμών της κυβέρνησης του κόμματος της αξιωματικής αντιπολίτευσης και του Ελληνικού Οργανισμού Δημόσιας Υγείας. Ο διαμεσολαβημένος πολιτικός και επιστημονικός λόγος αποτέλεσε την κύρια πηγή πληροφόρησης σχετικά με την κρίση της πανδημίας της νόσου Covid-19. Οι υπολογιστικές τεχνικές επικεντρώνονται στην αναπαράσταση της πανδημίας μέσα από τις λεξιλογικές συνάψεις, προχωρώντας στη συνέχεια σε μια εκ του σύνεγγυς ανάγνωση. Σύμφωνα με τα αποτελέσματα, η κυβέρνηση κατασκεύασε ένα «αφήγημα διάσωσης», ενώ η αξιωματική αντιπολίτευση υποστήριξε τις προτεραιότητες της εργατικής τάξης. Οι εννοιολογικές μεταφορές σχετικά με την πανδημία ήταν διάχυτες τόσο στον πολιτικό όσο και στον επιστημονικό λόγο. Μελλοντικές έρευνες θα μπορούσαν να στραφούν στη συγκριτική μελέτη δειγμάτων από διαφορετικές χώρες.

Λέξεις κλειδιά: πανδημία, Covid-19, ανάλυση λόγου, γλωσσολογία σωμάτων κειμένων, πολιτική επικοινωνία

*Έρευνητής, Laboratoire d'Études et de Recherches Appliquées en Sciences Sociales, University of Toulouse, e-mail: dimitriselafropoulos@gmail.com

INTRODUCTION

The rise of computational power, data storage and retrieval, and machine learning algorithms have caused a significant shift in social sciences research over the past few decades. As a result of this shift, commonly referred to as the computational turn, social scientists have been able to analyze large datasets, develop complex models, and simulate social phenomena in new ways. It has also led to new insights and understandings of social behaviour, transforming social scientists' approach to human behaviour and society. A major driver of the computational turn has been the emergence of big data. This refers to the massive amounts of data generated by digital technologies and social media platforms. According to Lazer et al. (2009), computational social science encompasses the use of big data and machine learning algorithms to explore social phenomena in real time and on a large scale. In this field, a variety of innovative research projects and tools have been developed, ranging from social media analysis to simulation modelling.

Considering the unprecedented amount of data generated by COVID-19, researchers in the social sciences have a unique opportunity to examine the impact of the pandemic on society. However, traditional qualitative methods may not be sufficient to deal with the scale and complexity of this data. The computational turn in social sciences has become increasingly critical in analysing this data and providing new insights into the social impact of the pandemic. Corpus linguistics coupled with critical discourse analysis has attracted particular attention. This triangulated framework offers new insights into social research by shedding light on cutting-edge approaches and providing a more nuanced understanding of language use in social contexts.

The COVID-19 pandemic represents a multifaceted phenomenon with extensive global implications. It emerged unexpectedly in the West as a holistic social event (Kasuga, 2010) which reshaped many aspects of personal and public life. A health crisis of this magnitude is not a natural phenomenon, but rather a destabilizing event for a global society (Baecker, 2020b). During the turmoil caused by the pandemic, political and scientific discourse played a pivotal role in managing the health crisis.

This study focuses on the discourse of three main actors, both political and scientific, in the Greek public sphere during the period of the pandemic, especially from March 2020 to May 2022. Political and scientific discourse about the pandemic has attracted strong public interest. Several different

views were expressed regarding the origin of the disease, the appropriate measures to be taken, and the mortality rate of the disease. The field of public discourse has served as a forum for discussing scientific issues that have subsequently generated intense controversy. Due to the unprecedented nature of the medical condition, there was a great deal of interest in the public's understanding of specialist knowledge. Scientists gain greater visibility during health crises (Bucchi & Trench, 2014).

Mediated political and scientific discourse has been the primary source of information about COVID-19 disease for citizens. According to the literature, mediated discourse can have a significant impact on the way the public functions concerning a medical issue (Biener & Siegel, 2000; Hornik, 2002; Jones & Iverson, 2008). In particular, during the pandemic, various terminologies for the related concepts were encountered. For example, former U.S. President Donald Trump referred to the virus as Chinese virus or kung flu instead of its scientific and official name. It becomes evident that such wordplay carries multiple connotations regarding the origin of the disease and predisposes individuals to a specific interpretation of the real-world circumstances regarding the pandemic.

Language, particularly in the context of Critical Discourse Analysis (CDA), occupies a central position during periods of widespread crisis, such as the pandemic. It serves a multifaceted purpose, as it is both a descriptive tool for describing the conditions in which social actors must operate and an interpretive tool for interpreting the new facts of everyday life that the power dictates. Thus, discourse can be utilized as a means for the establishment of power relations and the reinforcement of social inequality through the construction of reality. According to CDA, discourse shapes our perception of reality. Through an in-depth analysis of the social conditions and linguistic elements subject to investigation, CDA research aims to deconstruct the phenomenon. This paper aims to identify the dialectical relationships between political and scientific discourse within the context of the computational turn in social sciences.

RELATED WORK

The theoretical frameworks of corpus linguistics and critical discourse analysis have significantly contributed to social research over the past few years. According to McEnery & Hardie (2011), CL constitutes an empirical methodology which involves the use of language corpora to examine linguistic features and patterns. On the other hand, CDA is an approach

that aims to reveal the social and ideological implications of discourse in a particular context (Van Dijk, 2017). By combining these two approaches, scholars have been able to analyse texts more comprehensively and gain a deeper understanding of social issues.

In corpus linguistics (CL), it is posited that language use reflects social practices, and patterns of language use may reveal underlying social structures and ideologies (Baker et al., 2008). Corpus linguistics reveals patterns, trends and co-occurrences of elements (Teubert & Krishnamurthy, 2007, p. 6). CL is an approach that is particularly useful for analysing large datasets and can help researchers identify patterns and quantify linguistic features that may be difficult to discern through manual analysis.

According to CDA, language is shaped by power relations and discourse may reinforce or challenge existing power structures. CDA is particularly useful for analysing political discourse, media discourse, and other forms of public discourse that have a significant impact on social practices and ideologies. Discourse is defined as a form of social practice that is simultaneously charged with values and ideologies (Fairclough, 1993, p. 134).

The combination of corpus linguistics and CDA has been employed extensively in social research, particularly in political discourse analysis (Baker et al., 2008). It has shed light on how discourse constructs and reinforces political ideologies. For example, a study by Baker et al. (2008) utilized this combination in the language of British newspapers in their coverage of refugees and asylum seekers. It was found that the language used in the press reinforced negative stereotypes of refugees and asylum seekers and portrayed them as potential threats to British society. The study has been regarded as a landmark for its triangulated approach. Since this study's publication, many corpus-based critical discourse analysis (CDA) studies have followed a similar methodology. Scholars like Taylor (2009), Freake et al. (2011), and Subtirelu (2013) have described their work as replicating or following the "eclectic approach" by Baker et al. (2008). Numerous studies emphasize the analysis of keywords and key clusters, including those by KhosraviNik (2008), Mulderrig (2008), O'Halloran (2008), Prentice & Hardie (2009), Don et al. (2010), Augoustinos et al. (2010) and Gee (2014). The combination of corpus linguistics and CDA allows researchers to analyse language use in a more comprehensive and nuanced way (McEnery & Hardie, 2011).

In recent research on the COVID-19 pandemic, CL and CDA have been used to examine various aspects of the outbreak. For example, Kalil et

al. (2021) examine the politics of fear in Brazil and the role of far-right conspiracy theories in shaping public perceptions of the pandemic. They demonstrate, through the analysis of social media posts, how misinformation and conspiracy theories have contributed to the politicization of the pandemic and undermined public health efforts. Similarly, Jaworska (2021) examined Angela Merkel's discourse and highlighted how she constructed a narrative of competence, collaboration and collectiveness. Through this discourse, the government's response to the pandemic was legitimized and public trust was established. In their study, Florea and Woelfel (2022) compared TV news discourses on COVID-19 in Romania and Germany; they argue that language constructs different narratives and shapes public perceptions. Chepurnaya (2023) examined how Donald Trump used various discursive strategies to downplay the severity of the pandemic and shift responsibility to others. Musolff (2022) examined the use of war metaphors related to the pandemic and explained that these metaphors can be both helpful and harmful in shaping societal perception. War metaphors can mobilize public support for government action, but they also militarize public health and obscure pandemic complexities. Computational methods were also employed to analyse hate speech. Lee (2021) examined COVID-19 "hate" and analysed the #HateIsAVirus campaign on social media.

Several studies have demonstrated that computational methods have contributed to the social sciences by providing new approaches for analyzing different aspects of the pandemic. The combination of these methods is vital, as they complement each other (Van Dijk, 2013).

METHODOLOGY

This research examines the speeches of government representatives (Prime Minister - Kyriakos Mitsotakis), the major opposition party (Alexis Tsipras, President of SYRIZA) and the Greek Public Health Organization (EODY) regarding the SARS-Cov-2 pandemic. This study explores the following research questions.

- RQ1. What are the lexical choices made by public actors?
- RQ2. What are the discourse strategies employed by each other?
- RQ3. What characteristics are attributed to the pandemic and the social actors involved?
- RQ4. In what ways do political and scientific discourses intersect?

For this paper, a combination of qualitative (CDA) and quantitative (CL) methods has been chosen in an attempt to complement each other, drawing on the advantages and limiting the disadvantages of each. This is an attempt to perform triangulation in social research. The concept of triangulation, derived from trigonometry, is defined as “the calculation of the exact position of a point through measurements taken from two different fixed points” (Kelle, 2007, p. 51). Methodological triangulation constitutes a multidimensional research process with one method working against the other to ensure that the research results are governed by as much validity as possible (Denzin, 2017). The combination of methods overcomes the limitations of each approach and, therefore, leads to a more accurate result. This research will use a combination of quantitative and qualitative methods, beginning with quantitative methods and proceeding to qualitative methods.

First, the data were compiled into text corpora, then automatic extraction was carried out using discourse analysis software to identify statistically significant discourse segments. Utilizing the DHA (Discourse Historical Approach) methodological tools, we conducted a close analysis of the linguistic elements that were evaluated as most significant based on these data. The research concluded by outlining general observations regarding the discourse strategies adopted by the actors studied and decoding their interplay.

A single language corpus is used in this study, as all texts were extracted from Greek sources, and the language data is mainly verbal and is presented as transcribed from the official websites of the institutions, namely, <https://primeminister.gr/>, <https://www.syriza.gr/> and <https://eody.gov.gr/>. The criteria for the selection of the texts were their thematic relevance to the issue under consideration in this paper. The data collection for this study was conducted using the following keywords: κορονοϊός (coronavirus), πανδημία (pandemic), επιδημία (epidemic), κρούσμα (outbreak), ιός (virus), Covid-19, μετάλλαξη (mutation), εμβόλιο (vaccine), ασθενής (patient), εγκλεισμός (lockdown), and νόσος (disease). March 2020 through May 2022 constitute the period under consideration. The corpus contains 720 texts, including 263 from the government, 123 from the opposition, and 191 from the EODY. The text corpus consists of 1,841,503 tokens, 1,608,105 word types and 85,342 sentences.

Table 1: *Linguistic Corpus Data*

Actors	Tokens	Word types	Sentences
Government	538.516	473.925	25.488
Main opposition party	814.962	709.627	38.495
EODY	488.025	424.553	21.359
TOTAL	1.841.503	1.608.105	85.342

This volume of linguistic data was analyzed quantitatively using computational tools. An automated analysis of the lexicometric and textual data was conducted following data collection. Sketch Engine text corpus analysis software was used which offers the possibility for automated “retrieval of terms in a branch of language” (Kilgarriff et al., 2014, p. 30). Based on the principle of total accountability, the segments of the corpus were exhaustively analysed and measured.

Finally, a qualitative analysis was conducted under the theoretical background of critical discourse analysis. Based on Reisigl and Wodak (2005), five discourse strategies were examined: *nomination*, *predication*, *argumentation*, *perspectivization*, and *intensification* or *mitigation*. An important analytical framework is also drawn from Van Leeuwen and Wodak’s (1999) research on how through certain argumentation schemes the content of discourse is “legitimized” in an attempt to convince of the necessity of a particular action or policy. According to Van Leeuwen and Wodak’s (1999) theory, there exist four distinct discursive strategies for legitimation, namely legitimation as authorization, legitimation as realization, legitimation as moralization, and legitimation as mythopoesis.

FINDINGS

The computational analysis started with word lists per institution, where the lexical profile of statistically significant word types was reported. The CDA and DHA frameworks are used to analyze the collocations of these words. As the software offers search criteria based on grammatical categories, nouns were prioritised in the search results.

GOVERNMENT – PRIME MINISTER

In the governmental discourse, the words *country* (n. = 2,612), *government* (n. = 2,592), *pandemic* (n. = 1,624), *time* (n. = 1,495) and *citizen* (n. = 1,317) are found with greater frequency.

Table 2: Word frequency list - Government - Prime Minister (Mitsotakis)

N/N	Lemma	Frequency
1	country (χώρα)	2612
2	government (κυβέρνηση)	2592
3	pandemic (πανδημία)	1624
4	time (χρόνος)	1495
5	citizen (πολίτης)	1317
6	human (άνθρωπος)	1214
7	crisis (κρίση)	1199
8	euro (ευρώ)	955
9	business/ operation (επιχείρηση)	949
10	health (υγεία)	918

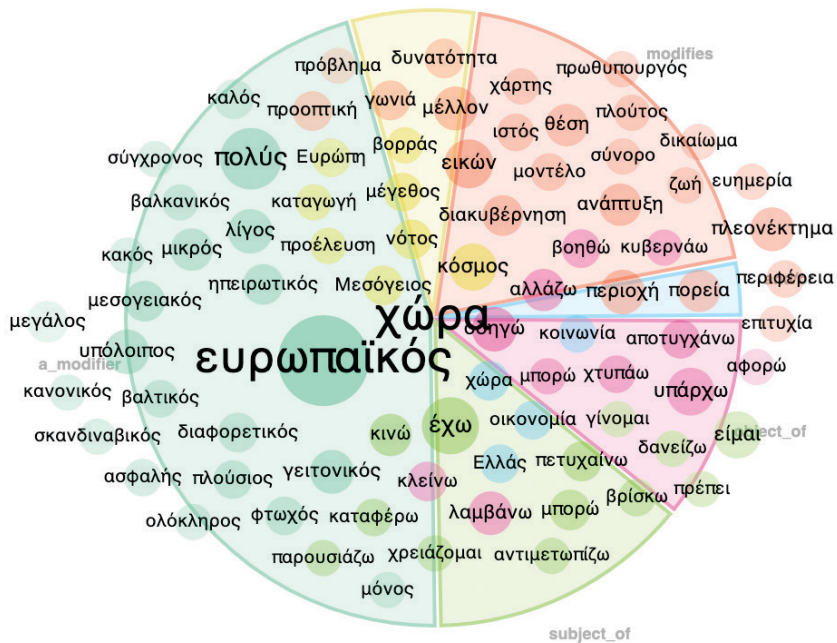


Figure 1: Lexical profile - country (χώρα)

The connections between the examined words were highlighted. These associations are also depicted in the following visualizations (Figures 1-5), where the examined word is shown in the centre of the circle and surrounded by its lexical connections. The size of the circles reflects the frequency of the word in question, the colour of the circle indicates which grammatical relation category the word belongs to, and each piece of the pie reflects the total size of the collocation referred to. The distance from the centre indicates the typicality of the word within the text corpus. In the lexical profile visualizations (Figures 1-5), the lexical connections are depicted as follows: noun modifiers (n.modifier) are highlighted in yellow, adjective modifiers (a.modifier) in green, objects of the main examined word in pink, instances where the examined word modifies other words in orange, connectors (and/or) in light blue, and cases where the main analyzed word is the subject of other words in yellow-green.

Through the extraction of the above linguistic data, the most frequent and significant lexical elements and the connections between them, as articulated by the public actors, were identified. Based on these, a close reading was conducted to identify the discourse strategies employed.

- (1) *I have a duty, therefore, not to allow our country to suffer such an ordeal. We must not reach the point of choosing who will live and who will perish. (Έχω χρέος, λοιπόν, να μην επιτρέψω να υποστεί μια τέτοια δοκιμασία και η χώρα μας. Δεν πρέπει να φτάσουμε στο σημείο να διαλέγουμε ποιος θα ζήσει και ποιος θα χαθεί) [22-03-20]*

The government seems to organize its communication strategy around a “topos of saviour” narrative, where the government, led by the prime minister, rescues the country from the evils of the health crisis (Wodak, 2021, p. 76). In critical circumstances, political figures use this strategy, where they attribute positive attributes to themselves (argumentum ad verecundiam) by targeting the public’s feelings (argumentum ad populum), often using some logical fallacy. It is noteworthy that the Prime Minister refers to himself as a member of the entire nation by using the possessive “our country”. As the nation’s success against the pandemic is overemphasized, he emphatically states his membership in “the country”. Finally, in (1) there is a strong intensification “we must not reach the point of choosing who will live and who will perish”, as it highlights the biopolitical dimensions of the pandemic (Boin et al., 2020; Wodak, 2019, 2021) and the possibility of implementing death policies (Mbembé & Meintjes, 2003).

- (2) *The response, however, is mainly national. The outbreaks and losses in countries of very different strengths, of very different sizes, is evidence of this. And in this case, the numbers tell the truth. (Η αντιμετώπισή της, ωστόσο, είναι κυρίως εθνική. Το πιστοποιούν τα κρούσματα και οι απώλειες σε χώρες με πολύ διαφορετική ισχύ, με πολύ διαφορετικό μέγεθος. Και στην περίπτωση αυτή, οι αριθμοί λένε την αλήθεια) [02-04-20]*
- (3) *[...] vaccinate your elderly relatives and stop making excuses for mortality. We chose as a country to be the tail end of vaccination, justifying our Balkan origins, and now we are trying to say what? (να εμβολιάσετε τους ηλικιωμένους συγγενείς σας και αφήστε τις δικαιολογίες για τις θνητότητες. Διαλέξαμε ως χώρα να μείνουμε ουραγοί στον εμβολιασμό, δικαιώνοντας τη βαλκανική μας καταγωγή και τώρα προσπαθούμε να πούμε τι;) [18-10-21]*

The use of the “us-them” schema (Van Dijk, 1998), where the progress of Greece to the other countries is presented, can be found in these extracts. This ‘correlational contrast’ is based on an ethnocentric narrative of the government comparing Greece’s statistics (cases, deaths, vaccinations) with those of other countries. Indeed, the Prime Minister uses a strategy of legitimisation through rationalisation in (2) “the numbers tell the truth”. The reference that “the response is mainly national” (2) alludes to what Wodak (2021a, p. 337) calls “nationalist competition”. Countries compete with each other for medical supplies and vaccines. Considering this, it appears that the European Union’s vision of European integration and cooperation has been challenged amid the health crisis. The Greece-foreign (us-them) scheme highlights the priority of the local over the hyper-local. Finally, the Prime Minister uses the comparison in two ways. On the one hand, Greece’s better performance in terms of the number of cases, and on the other hand, Greece’s less effective performance in terms of population vaccination. Unexpected in (3) is the attribution of the non-vaccination of Greek citizens to their Balkan origin with apparent negative connotations.

- (4) *But also, to show the path of defence that we must follow. With the advice of science as a foundation. Guide, the measures of the State. And as a constant lever, discipline, because individual responsibility is the other side of social. (Αλλά και να δείξω το δρόμο της άμυνας που πρέπει να ακολουθήσουμε. Με θεμέλιο τις συμβουλές της επιστήμης. Οδηγό, τα μέτρα της Πολιτείας. Και σταθερό μοχλό την πειθαρχία, γιατί η ατομική ευθύνη είναι η άλλη όψη της κοινωνικής) [22-10-20]*

Government narratives seem to revolve around the concept of the citizen, its derivatives (human being, fellow citizen, compatriot), and its implications (individual responsibility, prevention).

(6) *We will use every measure at our disposal to convince citizens that this is the appropriate strategy. (Θα επιστρατεύσουμε κάθε μέτρο το οποίο έχουμε στη διάθεσή μας για να πείσουμε τους πολίτες ότι αυτή είναι η ενδεδειγμένη στρατηγική).* [18-10-21]

(7) *The message is clear: A consistent citizen is a vaccinated citizen! In the 21st century, science and the data of billions of people cannot be doubted. (Το μήνυμα είναι σαφές: Συννεπής πολίτης είναι ο εμβολιασμένος πολίτης! Στον 21ο αιώνα δεν επιτρέπεται η αμφισβήτηση της επιστήμης και τα δεδομένα δισεκατομμυρίων ανθρώπων).* [24-07-20]

The government's communication policy focused on the nomination discursive strategy of citizens. The "rescue narrative" (Wodak, 2021b, p. 76) implies that the prime minister, presenting himself in the role of "leader-rescuer", is called upon to manage the health crisis by convincing citizens of his strategy (6) or, when necessary, by imposing it. Between persuasion and imposition, the boundaries seem blurred.

At the same time, he refers to an "appropriate strategy", legitimizing through rationalization and taking what is needed to ensure this management is effective. Within the governmental narrative, an attempt is made to construct the profile of the citizen with the characteristics of one who follows the state's dictates regarding the health crisis. In fact, with intensification and legitimization as rationalisation discursive strategies, only the vaccinated citizen is described as a consistent citizen (7), while science is posited as an indisputable principle. With such absolute authority, the concept of citizenship is constructed based on correlative opposites. A citizen is often presented as an idealized concept accompanied by semantic prosodies. A citizen seems to faithfully follow the health crisis instructions and measures. Thus, he starts by framing a positive concept of citizen as a way to motivate and convince citizens, then gradually constructs the citizen's decline through dipoles. For example, consistent-inconsistent, responsible-responsible, vaccinated-unvaccinated, young-older, etc.

(8) *[the cause of the spread] of the virus in Greece and throughout Europe was the entertainment of young people. I don't say that as a criticism. Obviously, young people are more prone to such*

behaviour. But it is an observation and it needs to be heard. ([η αιτία διάδοσης] του ιού στην Ελλάδα και σε ολόκληρη την Ευρώπη ήταν η διασκέδαση νέων ανθρώπων. Αυτό δεν το λέω ως κριτική. Προφανώς οι νέοι άνθρωποι είναι πιο επιρρεπείς σε τέτοιες συμπεριφορές. Είναι όμως μία διαπίστωση και αυτό πρέπει να ακουστεί). [26-05-20]

In the government's discourse, the word "young" is often associated with the words "child" and "human being". Displays are remarkable that there is no reference to younger age groups with the word "citizen". Young people are represented as a group of people in need of other actors' care. He even blames young people for the failure to comply with the measures and their subsequent consequences for the country (8). This is a social problematization strategy, where social actors are represented as problems. In a clear and straightforward attribution of responsibility to young people (8), there is an alternation between intensification and mitigation. While blaming young people for "having fun", it is explained that it is not criticism in an attempt to blunt the direct attribution of responsibility to young people. However, he concludes with a deontic expression that he "needs to be heard" by self-contradicting his statement about avoiding criticism. In other words, this point (8) is a set of contradictions that confuse the audience but insist on a blame game.

MAIN OPPOSITION – PRESIDENT TSIPRAS

The words *country* (n. = 2,612), *government* (n. = 2,592), *pandemic* (n. = 1,624), *time* (1,495), and *citizen* (n. = 1,317) have a higher frequency in Alexis Tsipras' speech.

In the speech of the parliamentary main opposition president Alexis Tsipras, strategies of strong criticism against the government's political management of the pandemic can be found. Below are some indicative excerpts from the opposition's speech.

- (9) *you are trying to exploit and politically credit the positive course of the country, to which all Greek citizens and all political parties contributed. That is what you have done. You declared yourself as a messiah. (προσπαθείτε να αξιοποιήσετε και να πιστωθείτε πολιτικά τη θετική πορεία της χώρας, στην οποία θετική πορεία της χώρας συνέδραμαν όλοι οι Έλληνες πολίτες και όλα τα πολιτικά κόμματα. Αυτό κάνατε. Αυτοανακηρυχθήκατε ως μεσσίας). [12-11-20]*

- (10) *Not to impose clear and binding health protocols. Not investing in proper traceability. Trivialize science, instrumentalize scientists and impose silence on those who dare to raise its criminal mistakes. (Να μην επιβάλλει σαφή και δεσμευτικά υγειονομικά πρωτόκολλα. Να μην επενδύει στη σωστή ιχνηλάτηση. Να ευτελίζει την επιστήμη, να εργαλειοποιεί τους επιστήμονες και να επιβάλλει σιωπητήριο σε όσους τολμούν να θίγουν τα εγκληματικά λάθη του). [17-07-21]*
- (11) *I think Mr. Tsiodras is a good scientist who does his job well. It is not up to him to make political decisions. (Νομίζω ότι ο κ. Τσιόδρας είναι ένας καλός επιστήμονας, που κάνει καλά τη δουλειά του. Δεν είναι δικές του οι πολιτικές αποφάσεις). [06-06-20]*

Table 3: *Word frequency list - Main opposition party - President Tsipras*

N/N	Lemma	Frequency
1	country (χώρα)	2612
2	government (κυβέρνηση)	2592
3	pandemic (πανδημία)	1624
4	time (χρόνος)	1495
5	citizen (πολίτης)	1317
6	human (άνθρωπος)	1214
7	crisis (κρίση)	1199
8	euro (ευρώ)	955
9	business (επιχείρηση)	949
10	health (υγεία)	918

The main opposition appears to be focused on deconstructing the government's narrative on the coupling of government and science. With the positive evaluative predication "Mr. Tsiodras is a good scientist" he tries to separate him from "political decisions", which are connoted as bad. In this vein, they attempt to construct a positive representation of science and a negative representation of government. By using the professional anthroponym "scientist" and the conjunction of "good", positive semantic prosody is given, which is bivalent. It has to do with both his professional abilities and ethics. Accordingly, the explanation "does his job well" serves as an affirmation, contrary to politicians who "do not do their job well". The strategy of legitimization as moralization constructs a dipole

of “good and moral” science against “bad and immoral politics”. There is even a reference to the “instrumentalization of science” by politics (7). The government is portrayed as a force that oppresses science by building a hegemonic relationship with it and using it for its ends. Finally, an attempt is made to decode and disentangle the abstract character of science in the government’s narrative. The opposition president attempts to deconstruct the narrative of a general, abstract, unapproachable authority that is exempt from criticism and to emphasize the individuals who analyse the pandemic data and ultimately make political decisions.

In Alexis Tsipras’ discourse, the concept of the citizen is often expressed with the phrase “average citizen”. In its argumentation, the main opposition party seeks to challenge the government’s narrative from within society itself, highlighting the difficulties facing the “average citizen” in the face of this pandemic.

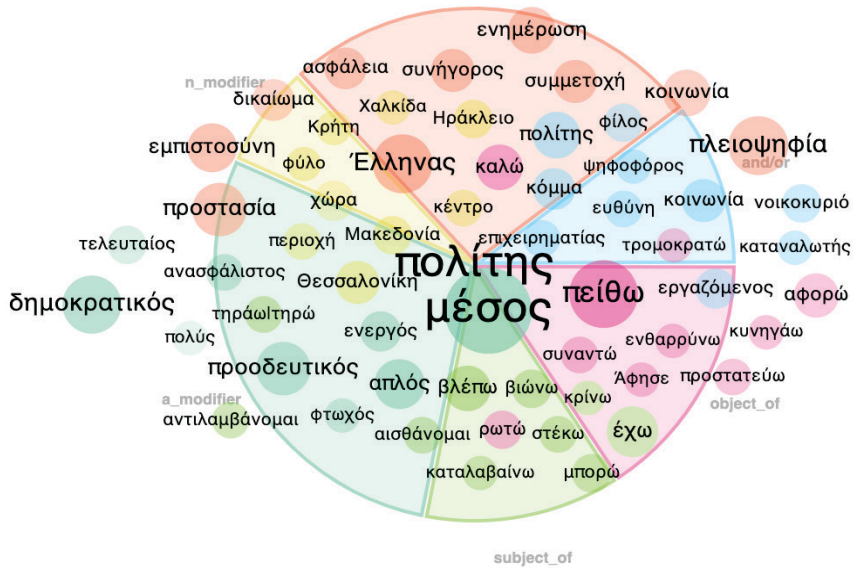


Figure 3: Lexical profile citizen (πολίτης)

- (11) *I accept that to a certain extent this may be the case. But is everything in any case charged to the average citizen? (Εγώ να δεχτώ ότι σε ένα βαθμό μπορεί να συμβαίνει και αυτό. Αλλά τα πάντα εν πάση περιπτώσει τα χρεώνεται ο μέσος πολίτης;)* [06-04-21]
- (12) *I repeat, Mr. Mitsotakis, that we do not have the luxury of time when dozens of our fellow citizens are losing their lives every day. Every day is precious*

because every day we can save people. (Επαναλαμβάνω, κύριε Μητσοτάκη, ότι δεν έχουμε την πολυτέλεια του χρόνου, όταν δεκάδες συμπολίτες μας καθημερινά χάνουν άδικα τη ζωή τους. Κάθε μέρα είναι πολύτιμη, γιατί κάθε μέρα μπορούμε να σώσουμε ανθρώπους)
[15-01-21]

- (13) *To protect the weakest and to give perspective to the most dynamic part of our society, the young people, who today are mercilessly persecuted and targeted. (Να προστατεύσει τους πιο αδύναμους και να δώσει προοπτική στο πιο δυναμικό κομμάτι της κοινωνίας μας, στους νέους ανθρώπους, που σήμερα λιοδορούνται ανελέητα και στοχοποιούνται).* [24-11-20]

It is observed that there is a difference in the use of the phrase “fellow citizen” between the government and the main opposition party. Mitsotakis refers to “my fellow citizens” and Tsipras concludes with “our fellow citizens”. The president of SYRIZA uses generic (“people”) and ideological nominations (“citizens”, “fellow citizens”) to demonstrate the adversities faced by citizens in the health crisis with clear references to government management. By adopting the ‘rescue’ narrative (12), he aims to promote an alternative policy for managing the crisis. At the same time, there is an emphasis on the government’s attribution of responsibility to citizens (11) and attempts to overturn the government’s narrative of “individual responsibility”. In particular, Tsipras argues against the government’s attribution of responsibility to young people (13). The strategy of legitimization as moralization is an attempt to bring to the fore the issues faced by average citizens with less visibility in the public sphere.

GREEK PUBLIC HEALTH ORGANIZATION – REPRESENTATIVE(S)

The list of frequency of the speech of the representatives of the Greek Public Health Organization. The words *virus* (n. = 1,842), *country* (n. = 1,794), *outbreak* (1,589), *vaccine* (n. = 1,480), and *vaccination* (n. = 1,292) emerge with the highest frequency in the discourse of the representatives of the National Public Health Service.

The EODY discourse is more technical and scientific than the discourses we have already examined. In particular, during the first period of the pandemic, there was systematic information about what was happening.

Αυτό είναι η επιστήμη, έτσι πορευτήκαμε ως τώρα έτσι θα πορευτούμε και από εδώ και πέρα). [22-04-20]

However, to describe a health situation, strategies of discourse legitimation are used as rationalization and authorization by invoking mathematical models and appealing to science's authority (14). By using the indicative “this,” it determines what is ultimately scientific. This self-reference gives an institutional and rational character to the EODY's panel of experts' judgments.

(15) *When the picture changes, we reposition and make recommendations, we discuss and suggest things, the Government decides. We are not opposing or fighting against anyone. Together we try to solve the riddle. (Όταν αλλάζει η εικόνα επανατοποθετούμαστε, ξανακάνουμε εισηγήσεις, συζητούμε και εισηγούμαστε κάποια πράγματα, η Κυβέρνηση αποφασίζει. Δεν είμαστε αντίθετοι ούτε παλεύουμε ενάντια σε κάποιον. Μαζί προσπαθούμε να λύσουμε το γρίφο).* [04-08-20]

(16) *the most difficult of all in this management is when some of our fellow citizens suddenly appear to mix science with politics. To confuse truths with lies and condemn strategies out of hand. (το πιο δύσκολο απ' όλα σε αυτή τη διαχείριση, είναι όταν κάποιοι συμπολίτες μας εμφανίζονται αιφνιδιαστικά να μπλέξουν την επιστήμη με την πολιτική. Να μπλέξουν αλήθειες με ψέματα και να καταδικάσουν στρατηγικές εκ του ασφαλούς).* [19-03-20]

It is worth noting that in (15) an attempt is made to separate the EODY's role from that of the Greek Government. In a rapid alternation between intensification and mitigation, the phrase “the Government decides” is highlighted. By legitimacy as a delegation of authority, clarity is provided regarding the allocation of powers and the subsequent sharing of responsibilities regarding the management of the health crisis. It concludes with a conceptual metaphor of a “riddle”, with a tendency towards legitimization through mythopoesis, where the two forces that have just separated are called upon to cooperate because of the necessity of solving the “riddle” of the Coronavirus health crisis. Lastly, in (16), they demonstrate a strong opposition to the mixing of politics and science by using a negative connotation of “truths and lies”, which is mitigated by the term “our fellow citizens”.

METAPHORICAL CONCEPTUALIZATION OF THE COVID-19 PANDEMIC

In this study, the linguistic analysis of the text corpus revealed extensive use of conceptual metaphors related to the pandemic. Thus, it was deemed important to present them in aggregate form in this section.

The theory of conceptual metaphor became widely known in the book ‘Metaphors we live by’ by Lakoff and Johnson (1980). They argue that metaphor is “pervasive in everyday life, not only in language but also in thought and action” (Lakoff & Johnson, 1980, p. 3). They pointed out that our actions and thinking are fundamentally metaphorical. According to Lakoff and Johnson (1980), metaphors function by illuminating some aspects of reality and obscuring others.

The metaphor of war dominates the corpus of texts related to the COVID-19 pandemic. This metaphorical conceptualization depicts the pandemic as a war, a virus that is the enemy, with attributes such as insidious and invisible attached to it, the government as the central force, the health workers as soldiers and heroes, weapons are medical equipment, shields are protective measures, the fortress is the National Health System, and the victims of the war are the COVID-19 patients.

METAPHORICAL CONCEPTUALIZATION - GOVERNMENT

The government’s discourse during the pandemic period was characterized by conceptual metaphors of the virus as an external enemy. Within this warfare metaphor, the government is presented as the force leading the coordination of this battle. Within this context of dread of death (Bauman, 2006), the government is presented as a rescuing force (rescue narrative) led by the Prime Minister.

- (19) *In our previous communication, I stressed that in the battle against Covid-19, April is the most crucial month. Today I tell you that this is the most crucial week! A truly Holy Week. In which are reflected, this year, our Passion and our sacrifices to overcome the Calvary of the pandemic and reach the Resurrection. This Easter will be remembered as the Easter of Love. But also, of Responsibility. (Στην προηγούμενη επικοινωνία μας, είχα τονίσει ότι στη μάχη κατά του Covid-19, ο Απρίλιος είναι ο πιο κρίσιμος μήνας. Σήμερα σας λέω ότι αυτή είναι η πιο κρίσιμη εβδομάδα! Μία πραγματικά Μεγάλη Εβδομάδα. Στην οποία αποτυπώνονται, εφέτος, τα Πάθη και οι θυσίες μας*

για να ξεπεραστεί ο Γολγοθάς της πανδημίας και να φτάσουμε στην Ανάσταση. Αυτό το Πάσχα θα το θυμόμαστε ως το Πάσχα της Αγάπης. Αλλά και της Ευθύνης). (13-04-20)

- (20) *The effort of those still fighting on the front lines for public health. But also the hope that the gift of vaccination brings for all. [...] All of this declares that the country has succeeded in making the health siege an opportunity for progress. [...] The Divine Light becomes a sun of optimism for the exit from the global adventure of the pandemic. (Την προσπάθεια εκείνων που εξακολουθούν να μάχονται στην πρώτη γραμμή για τη δημόσια υγεία. Αλλά και την ελπίδα που φέρνει για όλους το δώρο του εμβολιασμού. [...] Όλα αυτά δηλώνουν πως η χώρα πέτυχε να κάνει την υγειονομική πολιορκία, ευκαιρία προόδου. [...] Το Θείο Φως γίνεται ήλιος αισιοδοξίας για την έξοδο από την παγκόσμια περιπέτεια της πανδημίας).*

The pandemic is presented as an external force threatening Greece (19) and as a long and difficult road (20). Using a communication strategy of positive self-presentation and negative other-presentation (Van Dijk, 1998), the Prime Minister constructs a narrative of success in managing the pandemic. In fact, he emphasizes the government's success in both the health sector and the economy. In the Prime Minister's message for Easter 2020 (19), there is the conceptual metaphor of the path or journey embedded within a religious context. It is a combination of strategies of mythopoesis, moralization and authorization. After a painful ordeal, a hopeful future is depicted. Prime Minister argues - in a narrative full of religious symbolism - that after suffering and trials and sacrifices, people will be saved by a resurrection. In other words, he draws an analogy between Christ's sufferings and the difficulties that citizens lived through during the pandemic. In short, he argues that if citizens remain humble and patiently endure suffering, their sacrifices will be rewarded. Finally, PM's message for Easter 2021 (20) includes similar strategies and a religious framing. There is a reference to the metaphor of war (battle, siege) and a hopeful future is outlined, "the Divine Light becomes a sun of optimism". The metaphor of the gift of science for the vaccine is added, with the connotation that this "hopeful gift" must be accepted.

Table 5: *War metaphor summary*

Enemy	COVID-19 disease
Weapon	Medical material
Soldiers/ Heroes	Medical and nursing staff and scientists
Fortress	National Health System (hospitals)
General commander	Prime Minister

METAPHORICAL CONCEPTUALIZATION – MAIN OPPOSITION PARTY

It is evident from the main opposition leader's speech that conceptual metaphors are widely used in his attempts to blame the government for the mismanagement of the health crisis in comparison with the rest of Europe. A metaphor of war is used to emphasize the role played by science in the pandemic.

- (21) *To offer security and hope to those you love. In the battle against the pandemic, we have science, evolution and technology as our weapons and we will defeat the virus. (Για να προσφέρεις ασφάλεια και ελπίδα σε αυτούς που αγαπάς. Στη μάχη απέναντι στην πανδημία, έχουμε όπλο μας την επιστήμη, την εξέλιξη και την τεχνολογία και θα νικήσουμε τον ιό).* [20-06-20]
- (22) *And of course, I told you initially that it's not just the pandemic. It is the second pandemic, of high prices. But don't worry about that either, Mr. Mitsotakis has been declaring the end of high prices for months now. (Και βεβαίως, σας είπα αρχικά ότι δεν είναι μόνο η πανδημία. Είναι και μια δεύτερη πανδημία, αυτή της ακρίβειας. Και σ' αυτό όμως μην ανησυχείτε, ο κ. Μητσοτάκης εδώ και μήνες έχει κηρύξει το τέλος της ακρίβειας).* [02-12-21]

Tsipras' criticism seems to go beyond pandemic issues and involves other sectors, like the economy or labour. It is worth noting that the use of the conceptual metaphor of war (21) refers to science as a “weapon” against the virus along with “technology” and “evolution”. In this strategy of mythopoesis, he suggests that the ultimate goal of prevailing against the pandemic is “safety and hope for those you love”. The concept of love functions as a mitigation to the powerful metaphor of war.

METAPHORICAL CONCEPTUALIZATION – EODY

Finally, the discourse of the EODY representatives, consistently as the official scientific briefing on the issue of the health crisis, contains conceptual metaphors to explain or popularize the progression of the pandemic.

- (23) *Given all these facts, the vaccine announcements give us a bright light in the tunnel of the pandemic. However, we must not forget that the epidemic has explosive potential. (Βλέποντας όλα αυτά λοιπόν τα δεδομένα, οι ανακοινώσεις του εμβολίου μας δίνουν ένα σαφέστατο φως στο τούνελ της πανδημίας. Ωστόσο, δεν πρέπει να ξεχνάμε ότι η επιδημία έχει εκρηκτικές δυνατότητες).* [10-11-20]
- (24) *[...] measures according to the health needs of the population. These circles simulate the way to overcome the pandemic as driving a car on a long winding road with many turns. You may have to brake, release the brakes a few times over and over again while the car continues to move forward, without crashing, carefully until it reaches the final destination safely. ([...] μέτρων ανάλογα με τις ανάγκες υγείας του πληθυσμού. Αυτοί οι κύκλοι παρομοιάζουν τον τρόπο για να ξεπεράσουμε την πανδημία σαν την οδήγηση ενός αυτοκινήτου σε ένα μακρύ δρόμο με πολλές στροφές. Μπορεί να χρειαστεί να φρενάρεις, να αφήσεις τα φρένα κάποιες φορές ξανά και ξανά ενώ το αυτοκίνητο συνεχίζει να κινείται προς τα εμπρός, χωρίς να τρακάρει, με προσοχή μέχρι να φτάσει με ασφάλεια στον τελικό προορισμό).* [07-04-20]

Greek public health organization representatives employed the conceptual metaphor of the journey to describe the disease process. In (23) it is described as a path through a “tunnel”, where the “light” on the horizon is vaccine announcements. The pandemic course is conceptualised as a dark path, where its end remains unknown until the arrival of vaccines. The conceptual metaphor of driving in (24) is interesting, as it is descriptive of almost all of the social actors involved. Here, the EODY representative chooses the conceptual metaphor to explain the constant changes in the measures against the health crisis. A multitude of correspondences can be found in this conceptualization, in which the brakes represent anti-pandemic measures, the course of the pandemic is driving with turns (indicating the successive unexpected changes of the crisis), the car represents society, and the final destination symbolizes the end of the health crisis. Following

this conceptualisation, the political leadership could be implied as the driver, the scientific committee advising on the course but not driving the car itself as the co-driver, and the citizens as passengers.

Table 6: *Journey metaphor summary*

Car	Society
Brakes	Measures against the pandemic
Driving with turns	Pandemic course
Final destination	End of the pandemic
Driver	Political power
Co-driver	Science
Passengers	Citizens

Experimental research has shown that metaphors can shape our beliefs and determine our decisions. Individuals were exposed to the conceptual metaphor of crime as a wild beast and, on the other hand, as a virus. In the first case, they appeared to more often choose law and order enforcement solutions over social reform solutions (Thibodeau & Boroditsky, 2011). This according to Semino (2021, p. 52) is an indication that the metaphor of war can lead to support for disproportionately authoritarian measures that go beyond addressing the health crisis. The war metaphor is used for a wide range of issues from medical to climate change (Atanasova & Koteyko, 2017). Semino (2021) launched a remarkable initiative called #ReframeCovid, about reframing the pandemic. It proposes the use of fire transfer as a more efficient way of recruiting pandemics.

CONCLUSION

In the western world, the dominant narrative refers to a modern reality of democracy, equality, freedom of ideas and people, as well as a healthy and prosperous society in which central power is viewed as a caring force for well-being, security, and health. (Dardot & Laval, 2014). This superficial equilibrium was disrupted by the emergence and spread of COVID-19 disease, which rapidly became a pandemic. The concepts of instability and uncertainty came to the fore highlighting the fluidity of modern society as described by Bauman (2000). He refers to a society characterized by

instability and contestation where life undergoes successive changes. In his work *Liquid Fear* (2006, p. 3) he points to the existence of derivative fear due to the adoption of the idea that “the world is characterised by insecurity and vulnerability”. The COVID-19 pandemic seems to have triggered a ‘dread of death’. Institutional discourse during the pandemic was formulated in this context of generalised insecurity.

Through the analysis of the language data in this study, the findings noted in the previous chapter surfaced. Discourse strategies were employed in an attempt to structure a coherent narrative about each public actor according to its agenda. Political orientation and institutional positioning appear to have played a significant role in communication strategy and audience targeting.

The conservative government, in particular, prioritized its institutional role as the government in terms of its managerial positioning regarding the COVID-19 pandemic. The following concluding observations summarize the government’s discursive strategies identified in this research.

1. Constructing a success story in managing the crisis and presenting a self-positive image. The framing of its discourse is mainly related to the narrative of rescue (“topos of saviour”) with the PM in the role of the rescuer. There is extensive use of conceptual metaphors that simplify the pandemic issue by emphasizing meanings that lead the citizens towards specific thoughts and thus behaviours. The analysis revealed that the war metaphor was the most prevalent. The PM was also portrayed as a wise, strict, but loving father and the country is conceptualized as a family (Lakoff, 2014).
2. The “wise” element is founded on science’s authority. There was an attempt to transform science into a co-governing force. At this point, an attempt is made to establish an unconstrained and unassailable character for the government with the central argument that “science is not contested”.
3. PM emphasized the importance of “individual responsibility” as a means of informing citizens about the measures. This is also reflected in the references to the progress of the pandemic, wherein in the positive scenario he refers to the country as a whole, as a collective entity, while in the negative scenario, he makes a distinction between citizens. Dilemmas are constructed and communicated concerning the concept of citizenship.

With the declarations of SYRIZA President Alexis Tsipras, the primary opposition party is attempting to demonstrate its opposition to the government's pandemic management. The following concluding observations summarize the discursive strategies utilized by the main opposition party, as identified in this research.

1. It appears closely monitoring Mitsotakis's political communication and countering any government actions. At the beginning of this crisis, it adopted a mild tone and then intensified his criticism. It systematically used discursive strategies of moralizing and blaming to evaluate government management and the prime minister in particular. It is worth noting that it presented itself as part of society and tried to reverse the government's narrative of "individual responsibility" to the political or even criminal responsibility of governors. The comparison with other countries highlights Greece's negative course or the inadequacy of the measures taken. There was an emphasis on the need for measures with a social impact and humanitarian character, as opposed to the government's "law and order" policy.
2. The point of emphasis placed on communicating the defence of weak citizens is noteworthy, as it refers to them as the 'average citizen' while referring to their adversities.
3. The main opposition's speech incorporates a plethora of metaphors to document the government's failures and criticize them. Interestingly, in terms of the metaphor of war, unlike the government, which refers to an "external enemy", it also refers to an internal enemy to highlight the shortcomings of the National Health System or the economic difficulties.

Representatives of the National Health Service present their speech from a scientific perspective to describe the characteristics of the disease, its treatment, and the evolution of the pandemic. The following concluding observations summarize the discursive strategies employed by the Hellenic National Public Health Organization (EODY), as identified in this research.

1. Remained broadly technocratic, quoting statistics or medical data. It is worth noting that an attempt was made to distance itself from the pandemic's political management.
2. At certain points, unexpectedly, the EODY discourse appeared in a more familiar style, defying technocratic jargon. These statements were an expression of familiarity and care about citizens and their

health stakes. At the same time, they soften daily death statistics reports, where dead bodies are “dematerialized numbers” (Papailia, 2015).

3. There was significant use of conceptual metaphors to popularly describe the duration and justify the variations of the pandemic.

Table 7: *Comparative table on discursive strategies*

Government	Main Opposition Party	EODY
<ul style="list-style-type: none"> › Success story › Rescue narrative › Positive self – Negative other 	<ul style="list-style-type: none"> › Counter-narrative; blaming the government › Comparison with other countries 	<ul style="list-style-type: none"> › Technocratic discourse based on medical data › Descriptive stance on the pandemic evolution
<ul style="list-style-type: none"> › Science as an unassailable co-governing force 	<ul style="list-style-type: none"> › Division between government and science 	<ul style="list-style-type: none"> › Distance from the politics
<ul style="list-style-type: none"> › Individual responsibility of citizens 	<ul style="list-style-type: none"> › Emphasis on “average” citizens’ adversities 	<ul style="list-style-type: none"> › Informal tone to humanize medical reports for citizens

This research highlights the communicative strategies of constructed representations by public actors. The analysis of discourse strategies contributes to the deconstruction of the dominant discourse and enables the unravelling of what is presented as natural, logical or given a priori. The current study provides a methodological synergy that combines corpus linguistics and critical discourse analysis to examine political and scientific speeches during the pandemic in Greece. This approach reveals the power of computational methods in social research and demonstrates how they can be effectively used to investigate societal issues. However, while computational methods have revolutionized social research, they cannot replace qualitative methods entirely. Rather, it is essential to combine both approaches, as they complement each other. Qualitative methods provide a nuanced understanding of societal phenomena that cannot be captured by computational methods alone, while computational methods offer a quantitative and systematic way to analyse large datasets.

The synergy of corpus linguistics and critical discourse analysis provides an excellent example of how combining computational and qualitative methods can produce a more comprehensive and insightful analysis of social phenomena (Baker et al., 2008). This approach offers a promising direction for future research in the social sciences, particularly in the context of the pandemic, where large amounts of data require in-depth analysis. Furthermore, the methodological synergy of corpus linguistics

and critical discourse analysis offers a rigorous and transparent approach to data analysis that enhances the reliability and validity of findings (McEnery & Wilson, 2003). This approach allows researchers to be systematic and thorough in their analysis while also providing a transparent framework that allows others to scrutinize their findings.

Overall, this study highlights the importance of combining computational and qualitative methods to gain a more comprehensive understanding of societal issues. The approach adopted in this study provides a useful template for future research, emphasizing the need to adopt a methodological synergy that leverages the strengths of computational and qualitative methods to generate new insights into complex social phenomena (Baker et al., 2013).

REFERENCES

- Atanasova, D., & Koteyko, N. (2017). Metaphors in Guardian Online and Mail Online opinion-page content on climate change: War, religion, and politics. *Environmental Communication*, 11(4), pp. 452-469.
- Baker, P., Gabrielatos, C., Khosravini, M., Krzyżanowski, M., McEnery, T., & Wodak, R. (2008). A useful methodological synergy? Combining critical discourse analysis and corpus linguistics to examine discourses of refugees and asylum seekers in the UK press. *Discourse & Society*, 19(3), 273-306.
- Baker, P., Gabrielatos, C., & McEnery, T. (2013). *Discourse analysis and media attitudes: The representation of Islam in the British press*. Cambridge University Press.
- Bauman, Z. (2000). *Liquid modernity*. John Wiley & Sons.
- Bauman, Z. (2006). *Liquid fear*. John Wiley & Sons.
- Biener, L., & Siegel, M. (2000). Tobacco marketing and adolescent smoking: more support for a causal inference. *American journal of public health*, 90(3), p. 407.
- Boin, A., Lodge, M., & Luesink, M. (2020). Learning from the COVID-19 crisis: an initial analysis of national responses. *Policy Design and Practice*, 3(3), pp. 189-204.
- Bucchi, M., & Trench, B. (2014). *Routledge handbook of public communication of science and technology*. Routledge New York.
- Chepurnaya, A. (2023). Modeling public perception in times of crisis: discursive strategies in Trump's COVID-19 discourse. *Critical Discourse Studies*, 20(1), pp. 70-87.
- Dardot, P., & Laval, C. (2014). *The new way of the world: On neoliberal society*. Verso Books.
- Denzin, N. K. (2017). *The research act: A theoretical introduction to sociological methods*. Routledge.
- Fairclough, N. (1993). Critical discourse analysis and the marketization of public discourse: The universities. *Discourse & Society*, 4(2), pp.133-168.
- Fairclough, N. (2013). *Critical discourse analysis: The critical study of language*. Routledge.
- Florea, S., & Woelfel, J. (2022). Proximal versus distant suffering in TV news discourses on COVID-19 pandemic. *Text & Talk*, 42(3), pp. 327-345.
- Gee, J. P. (2014). *An introduction to discourse analysis: Theory and method*. routledge.
- Hornik, R. (2002). *Public health communication: Evidence for behavior change*. Routledge.

- Jaworska, S. (2021). Competence and collectivity: The discourse of Angela Merkel's media communications during the first wave of the pandemic. *Discourse, Context & Media*, 42, 100506.
- Jones, S. C., & Iverson, D. (2008). What Australians know and believe about bird flu: Results of a population telephone survey. *Health Promotion Practice*, 9(4_suppl), 73S-82S.
- Kalil, I., Silveira, S. C., Pinheiro, W., Kalil, Á., Pereira, J. V., Azarias, W., & Amparo, A. B. (2021). Politics of fear in Brazil: Far-right conspiracy theories on COVID-19. *Global Discourse*, 11(3), pp. 409-425.
- Kasuga, N. (2010). Total social fact: structuring, partially connecting, and reassembling. *Revue du MAUSS*, 2(36), pp. 101-110.
- Kelle, U. (2007). Die Integration qualitativer und quantitativer Methoden in der empirischen Sozialforschung [The integration of qualitative and quantitative methods in social research]. In: Wiesbaden, Germany: VS Verlag für Sozialwissenschaften.
- Kilgarriff, A., Baisa, V., Bušta, J., Jakubíček, M., Kovář, V., Michelfeit, J., Rychlý, P., & Suchomel, V. (2014). The Sketch Engine: ten years on. *Lexicography*, 1(1), pp. 7-36.
- Lakoff, G. (2014). *The all new don't think of an elephant!: Know your values and frame the debate*. Chelsea Green Publishing.
- Lawler, J. M., Lakoff, G., & Johnson, M. (1980). Metaphors We Live by. *Language*, 59, 201.
- Lazer, D., Pentland, A., Adamic, L., Aral, S., Barabási, A.-L., Brewer, D., Christakis, N., Contractor, N., Fowler, J., & Gutmann, M. (2009). Computational social science. *science*, 323(5915), pp. 721-723.
- Lee, C. (2021). HateIsAVirus: Talking about COVID-19 "hate". *Viral discourse*, pp. 61-68.
- Mbembé, J.-A., & Meintjes, L. (2003). Necropolitics. *Public culture*, 15(1), pp. 11-40.
- McEnery, T., & Hardie, A. (2011). *Corpus linguistics: Method, theory and practice*. Cambridge University Press.
- McEnery, T., & Wilson, A. (2003). Corpus linguistics. *The Oxford handbook of computational linguistics*, pp. 448-463.
- Musolf, A. (2022). "War against Covid-19": Is the pandemic management as war metaphor helpful or hurtful? *Pandemic and Crisis Discourse: Communicating COVID-19 and Public Health Strategy*, 307.
- Reisigl, M., & Wodak, R. (2005). *Discourse and discrimination: Rhetorics of racism and antisemitism*. Routledge.
- Semino, E. (2021). "Not soldiers but fire-fighters"—Metaphors and Covid-19. *Health communication*, 36(1), pp. 50-58.
- Thibodeau, P. H., & Boroditsky, L. (2011). Metaphors we think with: The role of metaphor in reasoning. *PloS one*, 6(2), e16782.
- Van Dijk, T. A. (1998). Opinions and ideologies in the press. *Approaches to media discourse*, 21(63).
- Van Dijk, T. A. (2013). Discourse, power and access. In *Texts and practices* (pp. 93-113). Routledge.
- Van Dijk, T. A. (2017). *Discourse and power*. Bloomsbury Publishing.
- Van Leeuwen, T., & Wodak, R. (1999). Legitimizing immigration control: A discourse-historical analysis. *Discourse studies*, 1(1), pp. 83-118.
- Wodak, R. (2019). Entering the "post-shame era": The rise of illiberal democracy, populism and neo-authoritarianism in Europe. *Global Discourse*, 9(1), pp. 195-213.
- Wodak, R. (2021). Crisis communication and crisis management during COVID-19. *Global Discourse*, 11(3), pp. 329-353.