



Cyprus
University of
Technology

Department of
Communication and
Internet Studies

Doctoral Dissertation

THE DYNAMIC RELATIONSHIP BETWEEN NEWS
AND SOCIAL MEDIA AGENDAS IN THE
CONTEXT OF INFORMATION SOCIETY

Nelly-Maria Sergidou

Advisor: Vasiliki Triga

Limassol 2024

CYPRUS UNIVERSITY OF TECHNOLOGY

FACULTY OF COMMUNICATION AND MEDIA STUDIES

DEPARTMENT OF COMMUNICATION AND INTERNET STUDIES

Doctoral Dissertation

THE DYNAMIC RELATIONSHIP BETWEEN NEWS
AND SOCIAL MEDIA AGENDAS IN THE
CONTEXT OF INFORMATION SOCIETY

by

Nelly-Maria Sergidou

Advisor: Vasiliki Triga

Limassol, June 2024

Approval Form

Doctoral Dissertation

THE DYNAMIC RELATIONSHIP BETWEEN NEWS AND SOCIAL MEDIA AGENDAS IN THE CONTEXT OF INFORMATION SOCIETY

Presented by

Nelly-Maria Sergidou

Supervisor: Dr. Vasiliki Triga, Associate Professor,

Faculty of Communication and Media Studies, Cyprus University of Technology

Signature:

Member of the committee: Dr. Irene Martin, Professor,

Political Science and International Relations, Autonomous University of Madrid

Signature:

Member of the committee: Dr. Paschalia Spyridou, Associate Professor,

Faculty of Communication and Media Studies, Cyprus University of Technology

Signature:

Cyprus University of Technology

Limassol, June 2024

Copyrights

Copyright © Nelly-Maria Sergidou, 2024

All rights reserved.

The approval of the dissertation by the Department of Communication and Internet Studies does not necessarily imply the approval by the Department of the views of the writer.

To N.M, Nerida, Celisia and Savvas.

Acknowledgments

Throughout the extensive and difficult journey of composing this thesis, I have come to realize that undertaking such a scholarly endeavor is not a solitary pursuit. My sincere appreciation goes to Vasiliki Triga, my supervisor, who has not only guided me through my academic studies and research but has also been a steadfast presence in my personal life during difficult moments. Vicky has consistently supported and encouraged me, making herself available to provide insightful comments and guidance. Her warmth and unwavering support motivated me throughout this process. She was there to hear me and support me.

I extend my heartfelt gratitude to the esteemed members of the advisory committee, Dr. Demetra Milioni and Dr. Giannis Konstantinides, for their invaluable feedback, insightful comments, and meticulous corrections. Their dedicated involvement has significantly enriched the quality and depth of my work, and I am sincerely appreciative of the time and expertise they generously shared in guiding me through this academic journey. Acknowledgment is also extended to the esteemed members of the examining committee, Dr. Irene Martin and Dr. Lia Spyridou, whose scholarly insights and meticulous examination enriched the evaluation process of my thesis.

Special appreciation goes to Rafael Sophocleous for his assistance with the SPSS program, as well as to fellow Ph.D. students, particularly Andria Agesilaou, for engaging in discussions and providing support.

Additionally, I am thankful to Dr. Nicolas Tsapatsoulis, whose mentorship played a pivotal role in my decision to pursue a Ph.D. following my master's studies. The enduring impact of his unwavering support and guidance over the years has significantly influenced both my academic and personal perspectives, and I am genuinely appreciative of the profound contribution he has made to my intellectual and professional development.

The process of writing a Ph.D. thesis has been arduous and often solitary. Therefore, I express my deep gratitude to my family, including my parents, my husband's parents, and my daughters. Their unwavering support served as my strength, fortifying my resolve, and providing a compelling reason to persevere. I especially want to thank my husband, Savva, who stood by my side, offering support, correcting my English, reading my articles, helping me in my presentations, and engaging in discussions about the challenges I encountered. Savva's

unwavering patience, invaluable assistance, and profound understanding not only empowered me to persevere but also played a pivotal role in facilitating the successful culmination of my thesis. My family's love, patience, and support were instrumental in fostering the successful completion of this academic endeavor.

During the culminating phase of my thesis, characterized by heightened stress, I am fortunate to have encountered individuals, including my family, my supervisor Vicky, my colleagues, and my friends who demonstrated a profound understanding of the challenges associated with completing a doctoral thesis.

TABLE OF CONTENTS

TABLE OF CONTENTS..... **vii**

LIST OF TABLES **xii**

LIST OF FIGURES Error! Bookmark not defined.

LIST OF ABBREVIATIONS..... **xvi**

ABSTRACT **xvii**

PART I: INTRODUCTION, THEORY AND METHODS..... **1**

CHAPTER 1: INTRODUCTION **2**

CHAPTER 2: PROBLEM DESCRIPTION AND STUDY NECESSITY **5**

CHAPTER 3. THEORETICAL BACKGROUND **10**

 3.1 Introduction..... 10

 3.2 Agenda-Setting Theory 10

 3.2.1 First-level, Second-level, and Third-Level Agenda Setting 14

 3.2.2 Priming Effect: A Cognitive Approach to Agenda-Setting 15

 3.2.3. Network Agenda Setting..... 17

 3.3 Measurement of Issue Salience..... 18

 3.4 The Dynamics of Agenda-Setting in a Referendum Campaign 19

 3.5 Definition of News Media and Social Media 21

 3.5.1 News media..... 21

 3.5.2 Greek media landscape 22

 3.5.3 Why online press?..... 24

 3.5.4 Social media..... 25

 3.5.5 Why Twitter? 26

 3.5.6 Twitter in Greece during the economic crisis 27

 3.5.7 Twitter vs Online Press in Agenda-Setting Process 28

 3.6 Summary 31

CHAPTER 4. LITERATURE REVIEW: MEDIA, CAMPAIGNS, AND THE PUBLIC SPHERE	32
.....	
4.1 Introduction.....	32
4.2 Media and Politics: The Importance of Media	33
4.3 Media Crisis: The Arrival of Social Media	35
4.4 The Role of the Campaign in a Referendum: The Dynamics of Referendum Campaigns.....	41
4.4.1 Social Media in the Context of Campaigns	47
4.5 From the Public Sphere to the Twittersphere	50
4.6 Summary.....	52
CHAPTER 5: THE 2015 GREEK REFERENDUM AND ITS CAMPAIGN CONTEXT	53
5.1 Introduction.....	53
5.2 Referendums and their socio-historical Context.....	53
5.2.1 Conceptualization of Referendum	53
5.2.2 Referendums in Europe	54
5.2.3 Referendums in Greece.....	56
5.3 The Greece issue and its Referendum context.....	57
5.4 Setting the Scene of the Campaign: The Yes and the No Camps.....	58
5.5 Why the Greek Referendum of 2015?	58
5.6 Research Questions.....	59
CHAPTER 6: RESEARCH METHODOLOGY.....	61
6.1 Introduction.....	61
6.2 The analytical model of the present study	61
6.3 Online News Media Content Analysis.....	62
6.4 Social media Content Analysis.....	65
6.5 Social media analysis with the use of Topic Models.....	66
6.5.1 Topic Modeling.....	69
6.6 Data Collection Process.....	70
6.6.1 Research sample: Online press	70

6.6.2 Research sample: Twitter.....	73
6.7 Summary.....	74
CHAPTER 7: NEWS MEDIA AGENDA OF THE REFERENDUM CAMPAIGN.....	76
7.1 Introduction.....	76
7.2 Results.....	76
7.2.1 Setting the Agenda: Salient Issues in the Greek Referendum News Coverage.....	76
7.2.2 Overall Agenda in Online Press.....	79
7.2.3 Overall Online Press Agenda Overtime.....	83
7.2.4 Overall salient issues covered in different news media types	86
7.2.4.1 Legacy News media	90
7.2.4.2 Public Broadcasting Service.....	93
7.2.4.3 Web-native Media	95
7.2.4.4 Alternative Media.....	98
7.2.5 Summary	101
7.2.6 News Media Valence and Tone in the Greek Referendum Campaign	101
7.2.6.1 Overall Position in Online Press	102
7.2.6.2 The overall position of each media type	104
7.3 Discussion.....	107
CHAPTER 8: SOCIAL MEDIA AGENDA OF THE REFERENDUM CAMPAIGN	111
8.1 Introduction.....	111
8.2 Results.....	111
8.2.1 Setting the Agenda: Salient Issues in Twitter during the Greek Referendum Campaign.....	111
8.2.2 Analysis of Issues covered on Twitter.....	112
8.2.3 Overall Agenda on Twitter	113
8.2.4 Summary	118
8.2.5 Valence and Tone on Twitter during the Greek Referendum Campaign	118
8.2.5.1 Overall Position on Twitter	119
8.2.6 Summary	122
8.2.7 Comparing the agendas of Online Press and Twitter	122

8.2.7.1 Overall Differences between News Media and Social Media.....	122
8.2.8 Agenda-Setting Differences: News Media types vs Social Media.....	129
8.2.8.1 Overall differences between different media types	129
8.2.8.2 Legacy Media and Twitter	132
8.2.8.3 Public Broadcasting Service and Twitter	134
8.2.8.4 Web-native Media and Twitter.....	136
8.2.8.5 Alternative media and Twitter.....	138
8.3 Discussion.....	141
CHAPTER 9: THE TOPICS DISCOVERED ON “YES” AND “NO” SUPPORTERS ON TWITTER.....	145
9.1 Introduction.....	145
9.2 Results.....	145
9.2.1 The Topics Discovered on Twitter	145
9.2.2 Analysis of topics discovered on Twitter	151
9.2.2.1 “No” Supporters Topics	151
9.2.2.2 “Yes” Supporters Topics	152
9.2.2.3 Neutral Tweets	153
9.3 Comparative Analysis of News Media and Social Media	155
9.4 Methodological comparison: Content Analysis vs Topic Modeling	156
9.5 Summary.....	161
9.6 Discussion.....	161
CHAPTER 10: SUMMARY OF FINDINGS AND CONCLUDING REMARKS	164
10.1 Summary of the study.....	164
10.2 Discussion of Findings and Conclusion.....	166
10.2.1 The Online News Media Agenda.....	166
10.2.2 The Social Media Agenda.....	168
10.3.3 Comparing the Agendas on Twitter and in Online Press.....	169
10.3.4 Comparing the methods: Content Analysis and Topic Modeling.....	172
10.4 Final Conclusions	174

10.5 Future Work and Limitations.....	176
BIBLIOGRAPHY	179
APPENDIX.....	203
A. The Codebooks	203
A.1 The news media codebook	203
A.2 The Social media codebook.....	205
B. Statistics.....	207
B1. Intercoder reliability in Newspapers Content Analysis.....	207
B2. Intercoder reliability on Twitter Content Analysis.....	209
C. The plots of overall salient issues in the eleven online newspapers.....	212

LIST OF TABLES

Table 1: Intercoder Reliability Testing Though Cohen’s Coefficient for all eight variables ..	65
Table 2: Intercoder Reliability Testing Though Cohen’s Coefficient for all nine variables....	66
Table 3: Newspaper articles	71
Table 4: Newspaper articles per day	72
Table 5: Newspaper articles sample	73
Table 6: Tweets sample	74
Table 7: Salient issues in online press.....	77
Table 8: Overall agenda in online press	83
Table 9: Absolute differences in ranking of salient issues in news media.....	89
Table 10: Correlated issues in News media	92
Table 11: Salient issues in Legacy news media	93
Table 12: Salient issues in PBS (ert. gr).....	95
Table 13: Correlated issues: Web-native and Legacy media	97
Table 14: Salient issues in Web-native media	97
Table 15: Salient issues in Alternative media	100
Table 16: Vote position in Online Press.....	103
Table 17: Vote position in Online Press: “Yes” vote and “No” vote.....	104
Table 18: Salient issues on Twitter	112
Table 19: Overall Agenda on Twitter	113
Table 20: Vote Position on Twitter	121
Table 21: Vote Position on Twitter: “No” and “Yes” vote	121
Table 22: Correlated Issues News media vs Twitter	126

Table 23: Comparison of Online Press and Twitter	127
Table 24: Salient issues on different media types	131
Table 25: Correlated issues in Legacy media and on Twitter	134
Table 26: Correlated issues in the PBS and on Twitter.....	136
Table 27: Correlated issues in Web-native media and on Twitter	138
Table 28: Correlated issues in Alternative media and on Twitter	140
Table 29: Identified Topics from Tweets favoring “NO”	148
Table 30: Identified Topics from Tweets favoring “YES”	149
Table 31: Identified Topics favoring Neutral tweets	150
Table 32: The most common Hashtags per class	150
Table 33: Topics via manual content analysis and automated topic modeling on Twitter	160

LIST OF FIGURES

Figure 1: Basic Agenda-Setting Model	12
Figure 2: The process of agenda-setting	13
Figure 3: The dynamics of referendum campaigns	45
Figure 4: Factual and Evaluative Reporting in Online Press	80
Figure 5: Factual salient issues in online press	80
Figure 6: Evaluative salient issues in online press	81
Figure 7: Issue salience over time	86
Figure 8: Issue salience in different news media types	101
Figure 9: Vote Position in different media types	106
Figure 10: Vote Position in different media types: “Yes” vote.....	106
Figure 11: Vote Position in different media types: “No” vote.....	107
Figure 12: Factual issues on Twitter	114
Figure 13: Evaluative issues on Twitter	116
Figure 14: Overall agenda on Twitter	117
Figure 15: Correlated Issues News media vs Twitter	125
Figure 16: Issue salience in different media types	129
Figure 17: Comparison of Legacy media and Twitter	133
Figure 18: Comparison of PBS and Twitter.....	135
Figure 19: Comparison of Web-native media and Twitter	137
Figure 20: Comparison in Alternative Media and on Twitter.....	139
Figure 21: Hashtags wordcloud for NO, neutral and YES tweets	148
Figure 22: Keywords wordcloud for “NO”, neutral and “YES” tweets.....	149
Figure 23: Visual presentation of topics extracted from tweets expressing the “NO” opinion in the referendum.....	152

Figure 24: Visual presentation of topics extracted from tweets expressing the “YES” opinion in the referendum 154

Figure 25: Visual presentation of topics extracted from neutral (regarding the referendum) tweets..... 155

LIST OF ABBREVIATIONS

USA:	United States of America
EU:	European Union
UK:	United Kingdom
LDA:	Latent Dirichlet Allocation
NAS:	Network Agenda Setting
PBS:	Public Broadcasting Service
SYRIZA:	Left Wing Political Party in Greece
ANEL:	Independent Greeks, national-conservative political party in Greece
PASOK:	Panhellenic Socialist Movement, social-democratic political party in Greece
ND:	New Democracy, liberal-conservative political party in Greece

ABSTRACT

Greece has been in economic and sociopolitical turmoil since 2009. On the 27th of June 2015, the Greek coalition government led by left-wing SYRIZA announced the July 5th referendum calling citizens to decide whether the EU-proposed economic plan should be adopted or not. The referendums in Greece are rather uncommon and the decision triggered multiple competing narratives regarding the motives behind the referendum. The SYRIZA-led government supported the “No” vote, arguing that a rejection of the EU-proposed economic plan would provide Greece with the leverage to negotiate a better deal with the creditors. On the other side, established elite political forces advocated for the “Yes” vote, voicing concerns that a rejection of the deal would lead Greece to default, exit from the EU, and eventually international isolation. The present research aims to examine the media coverage of the referendum campaign and the sentiments that were expressed on social media, during an extremely short referendum campaign. More specifically, the research goals are: a) to explore the salient issues that emerged in the public debate around the Greek Referendum in the news media using press data to uncover the dominant topics that were put forward by journalists and columnists; b) to explore the salient issues and the sentiments that emerged in the public debate around the Greek Referendum in the social media using Twitter data as a tool to describe the patterns of the daily political discussions about the referendum and the two vote choices. Based on agenda-setting theory and priming theory, the main research question is: Which issues are made most salient in the online Press and on Twitter during the Greek bailout referendum campaign? To address this question, a dataset of newspaper articles and tweets was selected which was analyzed with the use of content and sentiment analysis. The findings of this doctoral research contribute to a nuanced understanding of the intricate interaction between different media types, news content, media agendas, and the formation of public opinion in the digital age. This complexity precludes the identification of a definitive agenda setter or gatekeeper. Notably, the emergence of social media as a formidable force in recent decades has compelled news media to undergo adaptation and formulate novel strategies for agenda regulation and setting. Our findings underscore the inherent unpredictability of media agendas, which cannot be predicted because it depends on many factors. Timeliness, the prevalence of fake accounts manipulating media discussion, and the unique characteristics of each media platform all contribute to the fluidity of agenda construction. In essence, the landscape of media agendas remains elusive, defying straightforward prediction. The mutual influence between news and social media, characterized

by constant adaptation and evolution, necessitates an ongoing and systematic exploration of their dynamics. In this context, our study advocates for a continuous examination of media agendas, recognizing the evolving nature of the media landscape. As media landscapes continue to evolve, fostering a society capable of critically evaluating media content becomes indispensable. The role of education emerges as paramount, underscoring the need to equip individuals with the skills to engage with media critically.

Keywords: News media, social media, Referendum Campaigns, Agenda Setting, Priming Theory, Content Analysis, Topic modeling, Greece