Summary

"Language is no longer regarded as peripheral to our grasp of the world in which we live, but as central to it. Words are not mere vocal labels or communicational adjuncts superimposed upon an already given order of things. They are collective products of social interaction, essential instruments through which human beings constitute and articulate their world." (Harris, 1988, p. ix)

Language and text are consequential to all aspects of social life and essential to our understanding of reality. Rather than being peripheral emanations of social activity, texts are collective products of social interaction and important instruments through which we constitute and articulate our world. Most of our knowledge of current and past world events, advances in science, or even elements of culture are gained, formed, and passed on through written and verbal text. But texts are not mere vehicles of factual information. They contain significant information about the orientations and beliefs of the actors generating them and the ways in which meanings are attributed. Furthermore, texts and the discursive strategies they contain have the potential to shape a reader's perceptions. In this sense, texts may become tools of influence, deception, and manipulation in the 'hands' of the writer or speaker, who may try to change the perceptions of their audiences or to impose a dominant narrative. Additionally, in the past decades, the increasing availability of such valuable textual information opened new venues for large-scale research in the social sciences, fostering an increase in attention given to text. The ease with which large volumes of data capturing social communication can be stored, accessed, and collected has risen to match the ambitions of social scientists in understanding behavior, structures, values or norms.

Given the ample availability of textual data and the valuable social information it contains, the question is no longer whether or not their content is worth investigating, but rather which approach is the most insightful for a given research goal. Hence, what motivated the aims and outcomes of the research

presented in this dissertation was the ambition to provide a model of inferring rich information from 'big text data' with different characteristics through relational text-analytical methods.

Exploiting automated and semi-automated text analysis tools, in this dissertation, I focused on expanding two relational analysis methods to text and meanings, namely semantic network analysis and topic modeling. The relational perspective on language and meaning posits that meaning is a relational phenomenon. Thus, it is not the individual words that generate meaning, but rather meaning is created through interrelated sets of words and concepts. Hence, words are mere symbols whose meaning is dependent on their use; that is, their relations to other words and the similarities and differences between these interconnected words. Analyzing text documents guided by this relational perspective on meaning entails moving beyond content analytic methods, towards the extraction of not only words and concepts, but also the complex relations that connect them. While semantic network analysis translates pre-selected text into networks of concepts and the links between them, topic modeling seek to identify, extract, and characterize the various (latent) topics contained by collections of texts. Topic models define a coherent topic as a set of word clusters, based on the same assumption regarding the relational aspect of meaning as semantic networks. These two text-analytical methods have become increasingly popular in many areas of social science research.

The main methodological contribution of this dissertation is an analytical approach to large collections of texts that allows for a comprehensive investigation of subtle discursive manifestations and their temporal dynamics. The structural space approach, based on the relational perspective to text and meaning, combines two classic social network analysis structural measures, degree centrality (i.e., popularity) and betweenness centrality (i.e., connectivity) of concepts, to create four structural roles for network nodes. This combination of structural measures, builds on the manner in which popular and connecting concepts play different roles in the structure and dynamics of texts, and allows for the identification of four structural roles. Ranking text concepts into four structural roles, then, exposes not only popular concepts, but also purely con-

nective concepts, marginal concepts, and those concepts that are both popular and connective. This approach allows analysts to uncover patterns of language use, subtle discursive shifts, and discursive dynamics in large text corpora with distinct characteristics.

Through the development of the analytic approach proposed (i.e., the structural space approach), the empirical chapters of this dissertation exposed key findings regarding the subtle shifts in the discursive practices of distinct social actors (e.g., central banks, media, parliament) in the context of the global financial crisis.

The three distinct discourses of social actors investigated in this dissertation (central bank discourses, media discourses, and political discourses), present distinctive characteristics, address different audiences, and fulfill different communicative purposes. Central bank discourses are highly formalized, leading to redundant, structured, and even predictable content. They also contain highly specialized information addressed mostly to those financial market actors interested in the actions and decisions of these banks. The media discourses on the other hand, present stories and employ various rhetorical devices to give these stories a newsworthy angle. News items are presented to large and relatively diverse audiences. Lastly, political discourses are characterized by normative as well as conventional or strategic practices that make the identification of meaningful information difficult. While in a general sense political discourses are addressed to the constituents or voters, here I focused on parliamentary speeches. These speeches are mostly addressed to other members of the parliament. The analysis of these distinct discourses produced important results, which I summarized below.

Chapter 3 investigates the discourses of the Federal Reserve System (Fed) and the European Central Bank (ECB) in the context of the financial crisis. The focus of the analysis in this chapter was directed at uncovering the shifts and adaptations of their discourse in a time of crisis and increased market volatility. Pursuing these aims, I explored the press releases of the ECB and Fed over a period of eight years, at the different stages of the financial crisis (i.e., pre-crisis, crisis, post-crisis, and the recovery period). The results revealed the

discourse of the Fed exhibiting greater attentiveness to the financial crisis, while the ECB's attention was delayed and increasing steadily. Furthermore, in this study both the Fed's and the ECB's discourses are shown to be transitioning into a new "hybrid" state in the economic recovery period (2012-2013), rather than returning to the pre-crisis status quo. Overall, this empirical chapter brings an important contribution to the understanding of financial-regulatory discourses and their dynamics during societal crises and high levels of financial market uncertainty.

The second empirical study presented in this dissertation (Chapter 4) focused on a different discursive space, namely that of the media. Investigating news items published by three newspapers (i.e., the Financial Times, the New York Times, and the Sun), I expose the ways in which metaphor families (i.e., sets of related metaphors) fulfill a translator role for emerging financial terminology in the media. This study brings a contribution to metaphor theory by widening the focus from conceptual metaphors to metaphor families, and exposes the expansion and evolution of the 'toxic' metaphor family, revealing subtle changes of metaphor use in three newspapers (i.e., the Financial Times, the New York Times, and the Sun) over time. I show a transition from generic image-creating metaphors toward financial-instrument targeted metaphors across three stages of the financial crisis, spanning a period of five years. Additionally, the results reveal that most of the 'toxic' metaphor family variations were created in the actual crisis period, not during the pre-crisis period. Overall, the findings of this study suggest that metaphor families are used as translating devices for unfamiliar terminology, practice which has the potential to influence perceptions of the financial crisis.

The last empirical study included in this dissertation, presented in Chapter 5, provided an account of the discursive space of the European Parliament (EP) in the context of the Eurozone financial crisis. The analysis in this study focused on the 7th European Parliament (2009-2014), whose rapid adoption of socio-economic legislative proposals played a key role in the European efforts to combat the rippling effects of the Eurozone financial crisis. With this study of parliamentary speeches I contribute to a better understanding of how pol-

icy issues are debated, the discursive practices employed, and the ideological divide in the European Parliament. The results presented in this chapter, uncovered a unified discursive space, with high levels of agreement on most issues of the Eurozone financial crisis between the two political groups investigated, and a moderate left-right ideological divide only when the unique topics of each political group are investigated.

The findings of these three empirical studies, show how different sets of social actors capture different aspects of the financial crisis through their discourses. For instance, while central banks focus on the immediate and localized events of the crisis within the financial markets, the medias' focus is on reporting emerging events and informing the public by covering a wider range of topics and events.

By investigating these discourses it is clear to see that, in a sense, a different 'version' of the crisis emerges from each of these discourses. Can we then talk about 'the financial crisis' as a unitary and single global event? If the argument is that a global 'definition' of the crisis emerges from combining the perspectives offered by various social discourses, what is the contribution of each perspective? While attaining such a global definition of the crisis might be intractable, these different perspectives have the potential to steer manifestations of the crisis by altering perceptions and prompting action. Hence, the analysis of multiple discursive sites can provide a more inclusive depiction of some of the mechanisms that contribute to the containment and/or amplification of a crisis.

Throughout this dissertation I argued and presented evidence in favor of relational text-analysis methods. By applying and expanding these methods, the contributions of my research have been both methodological as well as empirical. Methodologically, through the combination of text-analytical methods employed, and more specifically through the structural space approach, I provided compelling evidence for the great potential of relational text-analytic perspectives. While this dissertation is perhaps a (modest) first step, it indubitably confirms the remarkable value of these methods and the need for further methodological and theoretical development of relational text-analytical meth-

ods. Empirically, my research exposed key findings regarding the subtle shifts in the discursive practices of distinct social actors (e.g., central banks, media, parliament) in the context of the global financial crisis. By investigating multiple discourses with different characteristics, I have shown that discourses of distinct social actors capture different aspects of a societal crisis. Understanding how these different aspects are manifested in these discourses can reveal the extent to which the discourses of certain social actors (organizations or individuals) contribute towards the containment or escalation of a societal crisis. I anticipate these noteworthy empirical results, combined with my methodological contributions, to open new avenues for large scale textual data research dealing with various discourses, even beyond the context of the financial crisis.