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Framing affects what meaning a specific piece of information can assume. As a consequence, frames influence people's interpretations in at least three interrelated ways: First, frames selectively direct attention toward specific knowledge already available to a person. Second, famously, frames affect people's evaluations of issues by rendering different aspects more or less salient. Third, frames influence what further information coheres with a train of thought pursued, thereby directing the integration of information into people's complex understandings of the world they live in. This study focuses on the understudied first and last of the above aspects. It develops and tests a theory of cognitive frame processing and aims to shed light on the role of frames in the formation of coherent, integrated social knowledge from discrete information.

The present study makes four main contributions to the academic debate on frames and framing. First, it integrates, further specifies, and extends existing theoretical approaches to framing within a network conceptualization of meaning. This conceptualization is compatible with linguistic theories of semantics as well as psychological theories of memory, and allows a much more encompassing view upon frames within social discourse and imagination. Second, it tests several theoretical propositions regarding the cognitive mechanisms underlying the processing of frame-embedded information, supporting the view that frames mostly affect the semantic information brought to attention.

Focusing on the interpretations of the European Constitution, third, this study compares the range of frames proliferated in Dutch public discourse with those formed by voters during the referendum campaign in the Netherlands. It finds that frames undergo a substantial degree of transformation during the acquisition of knowledge, reflecting people's selective use and re-interpretation of the available information. Finally, the study advances a novel methodology based on semantic network analysis that allows studying the embedding of frames within wider accounts discourse.

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Communication, Contextualization, & Cognition
Patterns & Processes of Frames' Influence on
People's Interpretations of the EU Constitution

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FACULTEIT DER MAATSCHAPPIJ- EN GEDRAGSWETENSCHAPPEN
Communication, Contextualization, & Cognition
Patterns & Processes of Frames' Influence on
People's Interpretations of the EU Constitution

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Prologue

Among all the varieties of academic publications, the dissertation is a curious one: Standing at the beginning of an academic career, it might appear a minor contribution to scientific knowledge – certainly in view of what is promised to follow. Yet, all too often it also is the one precious occasion when a scientist enjoys the liberty of pursuing one question, and nothing but this question, over many years. Dissertations are criticized for being relatively inaccessible, both physically and intellectually, and in consequence their impact factors and citation frequencies are low. Yet, unlike the many papers and chapters which are ripped out of them (to improve impact), dissertations are privileged venues where one can explore things beyond their immediate isolated context, and bridge the gaping abyss between itemized, specialized scientific knowledge and the real, messy, contextualized world of societal relevance. Also, unlike other academic monographies, dissertations underlie a scrutinuous process of repeated review and incremental refinement. Dissertations, in short, are a curious chimera somewhere between a new author’s debut and an unusually resource-rich and well-scrutinized contribution to academic theorizing.

The most curious property of a dissertation, however, lies in its function to demonstrate the academic maturation of an individual scientist. Dissertations represent the culmination point of a years’ long process of learning and specialization, of theory building and empirical research. They are treated as the outcome of an individual’s ripening process, and their quality and ingenuity are taken as a measure of a candidate’s readiness to be admitted to the world of trusted academics. Yet, research is never, can never be, an individual process: Standing on the shoulders of not giants, but a whole population of women and men whose ideas inspire, enhance and advance the scientific work, crediting a dissertation to the abilities of an individual researcher does gross injustice to a great many people. I have had, throughout my dissertation, the privilege to enjoy the support of many inspired and inspiring people – a privilege that, I am painfully aware, many of my colleagues and friends do not share. If I present to you this dissertation as the result of many years of my studies, beginning long before I formally entered my PhD candidacy, I am proud and honored to present to you also the collaborative work of many people without whom this book could never exist:

Many of the ideas I am about to present to you have derived from the spirited discussions I’ve enjoyed with my colleagues, many of whom I have the pleasure of calling my friends. Among the most important discussions which have advanced my work, I need to name the Political Communication PhD Club at Amsterdam, chaired for most of the time I attended by Jochen Peter. His sense of precision and rigor has greatly influenced my own research. Among the participants, probably the most important exchange I have had with Sophie Lecheler, whose research on framing has challenged my ideas and inspired many improvements over the course of the years. A particularly fruitful moment was the convention of the Framing Reading Club at the initiative of my supervisor Claes de Vreese, who brought together some of the most inspiring people I know in the field of framing research – notably, himself, Rune Slothuus, Hajo Boomgaarden, Andreas Schuck, Sophie Lecheler, as well as James Druckman as a special guest. I am indebted to the participants of the panels I organized at various ICA conferences: The work of Swantje Lingenberg on audience perspectives in
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for Adrian
Introduction

In most common language uses of the term, a frame refers to a structure that surrounds and supports something else - something which is the actual focus of attention. When the concept took off in the study of communication, the role of the frame was the same: Researchers studied frames as the context structure that surrounded something they were primarily interested in (e.g., Graber, 1988; Iyengar, 1991; Neuman, Just, & Crigler, 1992). Quickly they were fascinated by the difference that frames could make to the perception of the same image. The interest in frames gained in momentum, and framing incrementally advanced from being an approach to the study of other things to becoming the focus of study itself: Frames became the image.

At the same time, researchers have developed their perceptions as to what frames are made of. For uncounted times over the last decade, reviewers have complained about applications that, in their views, should not be called framing, and they begin to be heard. Although frames continue to be inconsistently defined and theorized against the background of various paradigms, the view on frames has narrowed considerably. Already, subfields are being distinguished from framing research as related but different. The image of frames has been framed itself (D'Angelo, 2002; Iyengar, 2010; Tewksbury & Scheufele, 2009).

Both developments have proven fruitful, to say the least: Taking their pictures of countless frames, researchers have catalogued various properties and capabilities, and the debate on which conditions allow frames to impress the most is well under way (Chong & Druckman, 2007c). Closely observing also the visitors marveling at framed images, they have begun to explain why and how frames unfold their powerful appeal (Nelson & Oxley, 1999; Price & Tewksbury, 1997). Supported by the fragile but growing agreement on the kinds of frames, experiences have been collated from a variety of exhibitions and made available to the field in a first wave of synoptic surveys (Iyengar, 2010; Tewksbury & Scheufele, 2009). Drawing upon the available catalogues of frames and experiences, the multiparadigmatic research agenda begins to converge into a limited set of key approaches, tackling a range of commonly acknowledged quests.

However, the establishment and conventionalization of the field has come at a price. On the one hand, emerging conventions on what frames are not only paint a clearer image of the phenomenon under consideration, they also exclude related phenomena from the picture. Keen on getting a grip on the notoriously slippery concept, researchers have drawn some relatively clear-cut types of frames at the centre, pushing aside messier kinds: While message frames are prominently depicted at the core of the research field, frames in thought have been pushed close to the frame and the edge of the canvas (Berinsky & Kinder, 2006; B.T. Scheufele, 2004a). Discourse, culture, and understanding project into the picture but remain mostly outside (van Gorp, 2007). Knowledge,
schemata and attitudes appear blurred in the background, while situation cues, keyings and motivations are hidden below the picture frame, or were cut off when the image was framed. The image of frames is gaining depth and detail, but its scope is narrow.

Simultaneously, the pronounced interest in frames has in large parts crowded out those images that initially motivated the use of framing approaches. The concerns of (mostly political or sociological) research have been degraded to mere cases for the study of a communication phenomenon. In the pictures of documented and analyzed frames, mere stubs of social relevance remain visible – unfocused glimpses at the large old paintings of victorious election campaigners, mobilized publics or disengaged cynics (Caragée & Roefs, 2004; Iyengar, 1991). Research into framing has become an ends in itself. The question why frames matter, for whom, and how, remains unanswered in much recent theorizing.

Framing research has attracted many skilled and ingenious painters, coloring the picture with various paradigms, and adding detail and structure to the scene (D'Angelo, 2002; Entman, 1993). However, the rich picture squeezes into a tight frame that stands out clearly against the wall. Beyond the frame, several corners have fallen into neglect. This dissertation aims to extend the view onto frames, looking beyond the frame that conventionally delimits the research field. It expressly departs from a concern with the formation of social meaning, conceptualizing frames against this backdrop alongside several other, related concepts. Asking how frames contribute to people’s ability to make sense of the world they live in, it develops several important links that embed frames within the wider context of social communication and comprehension. At the same time, this study hopes to convince the reader that this widening of scope does not have to come at the cost of conceptual blurriness that has long haunted framing research (Entman, 1993). It advances a conceptualization of frames that builds upon, but formalizes and further specifies existing definitions of frames. The formal structure of the advanced theory in particular allows an integration of related concepts in information processing within the same general framework. Unrolling the canvas tucked in underneath the tight frame of framing research, it provides a grid that holds existing frames of reference in their places while their boundaries are transgressed.

I.1. Research interest

The research interest of this dissertation can be framed in multiple ways. Looking at the grand picture, the overarching question is how people manage to draw upon frames for making complex information useful for their understandings (Berinsky & Kinder, 2006; Graber, 1988; Neuman et al., 1992). Starting from the recognition that frames play a crucial role in structuring information and relating it to relevant contexts, this dissertation develops and tests theoretical expectations about the use of communication frames in the acquisition of knowledge. The theoretical model developed below rests, chiefly, on four main propositions that will be tested subsequently: First, this thesis proposes that the function that frames perform in a person’s reasoning is first and foremost a semantic function and consists in the formation of coherence among selected propositions. Second, it proposes that people form frames in response to internal or external stimuli, but the information used for formation is mostly drawn from memory. Third, this thesis
argues that people are usually capable of forming many different frames to contextualize the same information, and therefore able to select frames that support their prior ideas and goals. Fourth and finally, the above three propositions taken together imply that frames enable people to form interpretations and judgments by discriminating relevant from peripheral information, and integrating it into larger, coherent accounts. Frames, hence, perform a crucial function for people’s attempts to make sense of the world, allowing the formation of coherent meaning from disparate information. From this broad, overarching perspective, this study integrates knowledge from framing effects research with the relevant theories of semantic meaning construction, cognitive structure and knowledge organization. It aims to provide a theory of how processed frames can feed into schematic knowledge, and enable people to form reasoned, personalized understandings.

At the same time, this study pursues a range of more specific research interests which support the overarching ambition. The first important building brick concerns the cognitive processes underlying the acquisition of frames. While several process models of framing have been advanced in the literature, these stand mostly apart and make different predictions about how frames are integrated into a person’s knowledge (Nelson & Oxley, 1999; Price & Tewksbury, 1997; Slothuus, 2008). Aiming to resolve these inconsistencies, this dissertation develops an integrated process model which locates the existing approaches as subsequent stages within frame processing. Testing the derived predictions, this study thus provides a more detailed view at the cognitive responses to framed messages, and assesses the relative importance of the integrated subprocesses (Greenwald, 1968).

The second building brick concerns the uses that people make of frame structures acquired and integrated into their knowledge. While it has recurrently been stated that frames enable people to flexibly apply their knowledge to make sense of their worlds, there is hardly any empirical research available on the subject matter (Druckman, 2001; Graber, 1988; Neuman et al., 1992). In particular, the role of frames for the integration of diverse, possibly contradictory considerations lies at the heart of this study. Thus, the present dissertation aims to provide answers to the question whether, how, and how well frames enable people to flexibly handle the information available to them.

A third important brick concerns the comparative structures of information in communication, cognitive storage, and ongoing information processing (van Dijk & Kintsch, 1983). Referring to the distinction between frames in communication and in thought (Berinsky & Kinder, 2006; B.T. Scheufele, 2004a), it investigates to what degree these aggregate states of frames share comparable structures or deviate systematically from one another. It also relates either to the third advanced variety – frames in culture (B.T. Scheufele, 2004a; van Gorp, 2007) – and sketches the theoretical grounds on which the differences can be conceptualized.

These three concerns are integrated on three levels. Theoretically, they form the main building bricks that support the overarching research question stated above. Formally, they refer to a common conceptual metaphor that understands information as a network of propositions (Collins & Loftus, 1975; Kintsch, 1998; Tourangeau & Rasinski, 1988). This conceptualization is referred to throughout this study and serves as a grid enabling the integration of various theoretical contributions from different disciplines. Simultaneously, this conceptual grid is matched, third, by a methodological approach.
based on a semantic network representation of the empirically recorded information (Carley & Kaufer, 1993; van Atteveldt, 2008). This highly flexible data structure thus both facilitates the integration of different research designs and measurement strategies and supports a close correspondence between theoretical modeling and empirical operationalization. A final aim of the present dissertation thus consists in the better integration of related theoretical approaches and empirical strategies. Countering the widely criticized tendency to collapse differentiated concepts into compound measures and differentiated data into aggregate concepts (Haste, 1992; Reese, 2007), this approach allows a rigorous analysis of both micro and macro level patterns in information. This dissertation thus hopes to contribute to a sharpening of both conceptual definitions and their corresponding operationalizations, increasing flexibility and precision in the study of frames.

I.2. Plan of the study

This dissertation consists of three empirical studies tied together by a common theoretical framework and a comparative analysis of the data gathered in two of the studies. Chapter II sketches a theory of semantically context-dependent information acquisition in three main steps, drawing upon psychological, linguistic, and communication research as its three main foundations: First, information is described as semantically dependent on other information that is seen as related to it, based on psycholinguistic theories of meaning in language (Carley & Kaufer, 1993; van Dijk & Kintsch, 1983). Second, drawing upon research in discourse linguistics and journalism research in communications, the structure of information content in communicated messages is determined (Grice, 1975; B.T. Scheufele, 2006; van Dijk, 1985). Analogously, third, psychological theories of schematic memory will be drawn upon for the conceptualization of the cognitive storage of information (Axelrod, 1973; Kuklinski, Luskin, & Bolland, 1992). Based on these steps, the processes governing the processing and acquisition of information and the construction of coherence among gathered information will be modelled, drawing upon research in research in communication science and political psychology. Throughout these steps, the concept of frames plays a central role in relating the theoretical building blocks to one another. In addition, the semantic network theory of information serves as a conceptual metaphor and operational data structure throughout the entire study.

Based on the theoretical framework, specific predictions will be derived regarding the organization of information in communicated messages and semantic memory, as well as the processing of message-provided information in memory. These propositions are tested empirically in the three studies constituting the subsequent chapters, making use of a case that naturally constrained the range of external influences interfering with the acquisition of information from public communication: As spelled out in chapter III, the Dutch referendum on the European Constitution provides an unusually well-delimited case for the study of discourse based information acquisition in a natural setting. Assessing Dutch voters' processing of information related to European politics, and investigating both the structure of information provided to them and the knowledge derived from it, the main propositions of the developed theory can be tested.
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As a first step, the propositions regarding the mechanics of information processing are tested in chapter IV. Based on an online framing experiment recording cognitive responses to provided communication frames, the theoretical assumptions are validated. The two other studies assess the context structures of information on the EU Constitution in publicly proliferated messages and in the understanding acquired by Dutch voters: Chapter V investigates which frames have been made available to the Dutch public over the duration of public discourse on the EU constitution. It presents the results of a fine grained content analysis of Dutch news coverage, televised talk shows and political groups’ campaign activities, forming semantic network representations of the introduced information contexts. In close analogy to this, the study presented in chapter VI analyzes the frames and context associations acquired by Dutch voters at the end of the public debate on the EU constitution. Based on the data gathered in these two studies, it is subsequently possible to conduct a detailed comparative analysis of the provided and acquired frames. Chapter VII presents the results of this analysis and discusses the implications of detected similarities and dissimilarities for the acquisition processes governing people’s use of proliferated frames. Chapter VIII, finally, revisits the main findings from the empirical chapters and discusses their relevance in light of the proposed theoretical framework. The technical annex in chapter IX contains sample descriptions, coding instructions and interviewer guides. This chapter also includes the complete results tables where truncated tables have been presented throughout the study.1

A schematic network theory of framing

Information without context is meaningless. For information to become meaningful, it must be related to other information, and relatable to questions that matter to the individual (Eveland, 2001; Ingwersen, 1992; Kintsch, 1998; Lowe, 2001; Neuman et al., 1992; Raaijmakers & Shiffrin, 1992; Schaap, 2006; Shah, Kwak, Schmierbach, & Zubric, 2004; van Dijk & Kintsch, 1983). In the social sciences, the embedding of information into a particular context has become known under the name ‘framing’ (Iyengar, 2010; van Atteveldt, Ruigrok, & Kleinnijenhuis, 2006).

However, not any set of related information functions as a frame: For contextual information to form a frame, it needs to provide a coherent interpretative backdrop for comprehension (Gamson & Modigliani, 1987; Matthes & Kohring, 2008). Coherence between individual pieces of information is not inherent to either piece, but must be supported by a web of relations that elucidate how one is connected to the other (Kintsch, 1998). The many links that connect single pieces of information form a semantic network defining how information is related (Collins & Loftus, 1975; Converse, 1964; Kintsch, 1998; B.T. Scheufele & Scheufele, 2010; Shah, Boyle, Schmierbach, Keum, & Armstrong, 2010; Tewksbury & Scheufele, 2009; van Atteveldt et al., 2006). The difference between information and meaning, hence, is integration. The same information, seen in a different context, means something different – possibly, something different entirely (Neuman et al., 1992; Shu, 2003).

In the following chapter, I will outline a schematic network theory of framing. The argument will be developed in three main steps: First, I will discuss the implications of a network conceptualization of meaning for the study of frames and framing (II.1 & II.2). Second, I will demonstrate the utility of this approach for bridging the gap between communicative and cognitive meaning (II.3). Chapter II.4 further develops the theory by specifying the (schematic) organization of cognitive belief structures that frame processing takes place within. Having thus specified the structures within which information processing takes place, I will finally model the processing of frames within this schematically structured network (II.5 & II.6). Finally, I will sketch some avenues for integrating the processing of individual frames back into an encompassing view of the creation of societal meaning (II.7). However, before I can discuss the construction of meaning from context-embedded information, it is necessary to get a clear conceptualization of the central notions of information, context, and meaning, respectively.

II.1. Context

Although many scholars have recognized the contingency of the meaning of information on the context it is provided in, there is remarkably little work on the nature
of context in information processing (Ingwersen, 1992). Only in the last decades, two developments have established the topic on the research agenda: On the one hand, the rise of the constructivist paradigm in the humanities and the social sciences has highlighted the dependency of meaning on the situation and the person trying to derive it (Bennett, 1993; Petty, Brinol, & DeMarree, 2007; Triandafyllidou & Fotiou, 1998; van Gorp, 2007). The phenomenon has been studied with different kinds of context in mind by the different disciplines: In cultural studies, anthropology and social psychology, meaning has been analyzed as embedded in cultural knowledge(s) and experience(s) (Donati, 1992; Moscovici, 1961; Schaap, Renekstorf, & Wester, 2005; Triandafyllidou & Fotiou, 1998; van Gorp, 2007). Psycholinguistic studies in discourse processing have focused on the use of textual information provided nearby in a text (van Dijk & Kintsch, 1983). In sociology, situation cues have been studied in their relation to the meaning derived from information. In linguistics, finally, the rise of computer-assisted text processing techniques has lead to a renewed emphasis on context-dependent disambiguation, and thereby on context-sensitive meaning. The second, related main development concerns the growth of digital information repositories (including the internet), and thereby the need for ever more sophisticated systems for information retrieval. Starting from computer and information science but quickly extending toward the modelling of human information processing in computational linguistics and artificial intelligence, structuring the context of information has become a key research agenda (van Atteveldt, 2008). In consequence, many possible contexts have been discovered, which can – roughly – be separated into literal ‘con-texts’ (i.e., textual information, intentionally communicated either in manifest form or in a form recordable into manifest data), non-textual communicated context (such as imagery, gestures and other symbolically decodeable information), other sensory input (non-symbolic perceptions of the environment), knowledge, emotional states, as well as current intentions (Dervin, 1997; Fiske & Kinder, 1981; Graesser, Bertus, & Magliano, 1995; Talja, Keso, & Pietiläinen, 1999; van Dijk & Kintsch, 1983). Simultaneously, highly sophisticated techniques have been proposed to capture textual contexts at least (van Atteveldt, 2008). For most other kinds of context, measures remain crude, often restricted to two or few manipulation-induced states or measures that capture the degree of presence of these dimensions (e.g., Kintsch & Franzke, 1995; LeBoeuf & Shafir, 2003; Maheswaran & Meyers-Levy, 1990). Also the present study will, for most part, focus on textual information. However, the advanced theory of communicative and cognitive context is, in principle, extendable to any other kind of information. Putting aside the difficulties in empirical measurement for a moment, however, the insufficient theoretical specification of context needs to be addressed first.

Following Dervin (1997), ‘context’ presumes a focus. There is nothing natural or intrinsic about information that distinguishes it from its context: Any focal information can become context as the focus shifts, and vice versa. Consequently, context can only be defined formally and dependent on the focal information as the set of information that is related to it. Furthermore, it is neither possible to determine the context of a particular piece of information in general, nor to delimit the range of possible contexts a piece of information can appear in. Context can be defined only with regard to a concrete

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2 This is also where the term ‘frame’, then referring to the ‘keyings’ defining a situation and hence providing the context for comprehension, has made its first major appearance (Goffman, 1974).
instance, possibly even to a concrete situation in which this instance is referred to, by a particular person (van Dijk, 2008; van Dijk & Kintsch, 1983; van Gorp & van der Goot, 2009). There is no way of ascertaining that some piece of information will be related to a particular, a priori known context: First, the perceiver may focus on different information, dividing text and context in a different way (Langacker, 1998). Second, also ‘manifest’ information contained in a message may be misread or processed selectively. Finally, both the perceiver’s knowledge and interest, and the properties of the processing situation add to the context that is available for comprehension (Just et al., 1996; van Dijk & Kintsch, 1983). Information will inevitably be processed differently in different situations and by different processors, bringing different knowledge and intentions to the task (Graesser et al., 1995). Information ‘has’ a certain context only in a particular instance.

If context is constituted by a perceiver processing information, it is also the perceiver’s perception of a connection, rather than any ‘objective’ link, which renders information related (Converse, 1964; Schaap, Renckstorf et al., 2005). Consequently, context implies both information about something else and information about how this is related – a set of related information, and a set of relations (Popkin, 1991). Moreover, information itself is dyadic, too: As Holyoak and Thagard (1995) aptly observed, one cannot believe that ‘X’, but only that ‘X relates to Y (in some specified way)’. The smallest unit of information is a proposition, including two concepts as well as a relation between these (Kintsch, 1998; Schaap, 2006). Consequently, the smallest possible instance of contextualized information is a triad of three concepts and at least two relations: One dyad represents the focal information, and the other the contextual information which, in this special case, is related to the former through the identity of one of the participating concepts. The smallest instance of coherently contextualized information is a triangle in which also the two formerly disconnected concepts are related: In this case, we do not merely have two pieces of information about one concept, but these two pieces relate to one another and hence allow interpreting one in light of the other (Kintsch, 1998). Out of the range of information linked to any particular concept, however, only a few related concepts are themselves related, too. While much contextual information is available, only certain sets of context are capable of forming a coherent backdrop for interpretation. The set of coherent contexts of a concept determines the range of meanings it can assume (Früh, 1994; Lowe, 2001; Veling & van der Weerd, 1999). A coherent set of contextual information in relation to which the focal information assumes a particular meaning is called a frame (Johnston, 1995).

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3 For most parts, frames (as well as schemata and attitudes) will be said to revolve around concepts, rather than issues. Issues are propositions or concepts that are discussed controversially in public (B. T. Scheufele, 2004a). However, not only publicly controversial issues can be framed (Fisher, 1997). Framing is ubiquitous and can apply to any subject matter under consideration (van Gorp, 2005, 2010).

4 Strictly speaking, a information-context-pair involving only two concepts is possible, too, if ‘X relates to Y in way a’ is contextualized by ‘X also relates to Y in way b’. However, this is a rare case and will be disregarded here.
II.2. Frames

The concept of frames has undergone a remarkable development over the last decades, partly due to a diversification of its possible meanings, and partly due to a shift of its main focus (D’Angelo, 2002). The original emphasis on presentational differences in otherwise identical contextual information, as presented in the psychological literature on prospect theory (Tversky & Kahneman, 1981), has become a side track in the study of framing effects. Under the label ‘equivalence framing’ it remains the focus of mostly psychological work interested in isolating the effects of specific, well-controlled variations (Druckman, 2001, 2004; Iyengar, 2010). In the social sciences, it has largely been pushed aside due to its lack of ecological realism: Most variations in the contexts of communicated information are not limited to the wording of otherwise identical claims (B.T. Scheufele, 2004a; Slothuus, 2008; Tewksbury & Scheufele, 2009; van Gorp, 2007).

The other root of framing research in sociological theory has simultaneously evolved in the opposite direction: While Goffman’s (1974) famous study considered frames to represent complex situation definitions marked by various means of symbolic communication, later studies have taken a much more restricted view on frames (van Gorp, 2007). Merging the psychological tradition’s focus on textual information and the sociological concern with the construction of meaning, most contemporary views of framing – notably, in communications, political science, and social psychology – focus variations in the semantic context of information (Tewksbury & Scheufele, 2009). Most studies into such ‘emphasis frames’ focus on the effects of communicated frames on attitudes and overall opinion. However, an increasing number of studies has begun to tackle the influence of frames on semantic interpretations, as well (Berinsky & Kinder, 2006; Shah et al., 2010; Shen, 2004). A related, small field has also approached the inverse process, namely, the construction of frames in order to convey specific meaning (B.T. Scheufele, 2006; Shoemaker & Reese, 1996; Tuchman, 1978). Research into the employ and effects of emphasis frames, however, is typically restricted to selected pairs or small sets of frames applied to one issue or concept (Druckman, 2001). A final line of research investigates what frames provided are applied to a wider range of related concepts in (usually journalistic) discourse. This approach has provided important insights into the variability of frames and begun to consider the combination of frames beyond immediate context (Conover & Feldman, 1984; de Vreese, Peter, & Semetko, 2001; Gamson, 1992; Medrano, 2003; van Gorp & van der Goot, 2009).

While the above traditions agree that a frame embeds information in specific contexts, they disagree as to where exactly ‘framing’ takes place: Most psychologically oriented approaches understand framing as something that a (textual) stimulus does to cognitive information processing. By contrast, sociological and discourse analytic views tend to refer to framing as the cognitively motivated communication of contextual information (Chong, 1996; B.T. Scheufele, 2004a, 2006; Triandafyllidou & Fotiou, 1998). At the same time, researchers within a cognitivist paradigm locate the key determinants of produced as well as received frames within a person’s belief system, whereas constructivist researchers emphasize the role of cultural knowledge. A third, critical strand focuses on the strategic power of elites in forming hegemonic interpretations, dominating recipients’ perceptions (D’Angelo, 2002). Each of these views usually implies the respective other process (intentional construction of stimuli and their cognitive effects) and intervening influences.
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(hegemonic meaning, cultural and personal knowledge) as background assumptions. However, the complementary and interrelated roles of the specified resources and processes is rarely acknowledged: Studies focusing on the respective aspects regularly confound different study objects under the common label (B.T. Scheufele, 2004a). This study aims to reconcile the different approaches to framing: First, it develops an integrated theory that allows conceptualizing the crafting of frames in communication and their effects on cognitive processing simultaneously. Second, it provides an encompassing view on the strategic, cultural and cognitive resources informing frame processing. Third, it aims to reconcile the controlled, but decontextualized approach of experimental framing studies with the rich, but descriptive research into the use of frames in discourse. Applying structurally equivalent, interrelated conceptualizations to both frames within discourse and knowledge, it strives to provide a more encompassing account of the role of frames for the social construction of meaning.

However, focusing on frames within the context of the larger information structures of discourse and knowledge, it is important to note that frames are not ‘natural’ entities: Neither discourse producers nor readers recognize frames as identifiable wholes. Frame producers – e.g., journalists, politicians – construct narratives and arguments, framing issues ‘on the go’ (Bennett, 1980; Berinsky & Kinder, 2006; van Dijk & Kintsch, 1983). Likewise, publics perceive, use and reproduce frames to relate discrete experiences to their more general understandings of the world (Berinsky & Kinder, 2006; Graber, 2001; Schaap, Renckstorf et al., 2005; Sotirovic, 2003; van Gorp, 2005). The label ‘frame’ is an analytic concept superimposed upon empirically discovered structures in discourse. Its utility is not self-evident. In the following, I will review the most common definitions of framing and point out in which respects the notion of a locally coherent context substructure might be suitable to enhance our understanding of meaning construction (Graesser et al., 1995; van Dijk & Kintsch, 1983).

Frame definitions

Most prominent definitions of frames cite at least two out of the following three defining criteria: First, frames involve selectively rendering some aspects of an issue salient. Other aspects are omitted, implying their lesser relevance for understanding the issue (Entman, 1993; Gamson & Modigliani, 1987; Matthes & Kohring, 2008; van Gorp, 2005). Second, frames give meaning by following some ‘central organizing idea’ (Gamson & Modigliani, 1987; van Gorp & van der Goot, 2009). Not any set of selected beliefs constitutes a frame: There needs to be some kind of semantic coherence that renders the set meaningful (Axelrod, 1973; Berinsky & Kinder, 2006; Noakes & Johnston, 2005). Third, and finally, frames perform argumentative functions: They define situations, establish causal chains, provide the evaluative standards against which propositions are evaluated, and chart the options for treatment and action lying ahead (Benford & Snow, 2000; Boudana, 2008; Entman, 1993; Gamson, 1996; Matthes & Kohring, 2008). While not all frames explicitly address all of these functions, frames always structure reality in ways that serve some purposes more than others (Berinsky & Kinder, 2006; Carragee & Roefs, 2004). To the degree that framing is strategic, the selection of considerations emphasized follows from the organizing idea an actor wishes to impose upon reality (Benford & Snow, 2000; Carragee & Roefs, 2004; Noakes & Johnston, 2005; Zhou & Moy, 2007). Inversely, to the degree that frames are formed to make sense of observed information,
the central organizing idea is constructed from the integration of related information (Sotirovic, 2003). Either way, most researchers agree that frames perform specific functions for argumentation and comprehension. Nevertheless, what exactly it means for a frame to select, instate coherence, and thereby fulfil a purpose is rarely discussed, neither in theoretical nor in empirical work on framing. In the following, I will discuss these points in turn, aiming to develop elements of a more precise conceptualization of frames.

Frames & selectivity

At first glance, stating that frames are selective is trivial: Context is necessarily complex, and it is impossible to consider all information that can be related to a focal piece of information (Popkin, 1993; Zaller & Feldman, 1992). Out of all information that could become context, what is actualized as context in a concrete cognitive or communicative act is necessarily selective. At second glance, however, focusing on selective context raises a number of useful questions that are easily overlooked otherwise: A first set of questions concerns the selection of information from the universe of available context: What distinguishes frame-associated information from excluded information? Are certain contexts more likely to be drawn upon than others, and if so, why? Second, one can consider the internal structure of selected information sets: Selective context can be coherent, raising the question which selections are cohesive, and why. A third set of questions concerns the dependency of selections on the wider context of information: How do specific purposes pursued with a frame affect selectivity? How do frames interact with contexts beyond the frame? Finally, one can wonder how past contexts selected for similar information prejudge which selections are likely to be found. Unfortunately, none of these questions has received much attention to date in the field of framing research. While several results from related fields can be extrapolated and applied to the case of frames, as will be discussed below, the research potential opened up by the selectivity dimension of framing is yet to be explored.

Focusing on the selectivity of context encourages research to consider not merely what context has been selected, but also what other context could have been selected – and thereby what constitutes the set of information that is selected from. Framing research therefore needs to remain aware both of the concrete instantiation of a frame and the cultural background, cognitive resources and communicative situation in which it is embedded (Axelrod, 1973; Reese, 2010; B.T. Scheufele & Scheufele, 2010; van Dijk & Kintsch, 1983; van Gorp, 2010; van Gorp & van der Goot, 2009). At the same time, this raises the question how recurrent patterns of selectivity can be explained. For instance, de Vreese, Peter, and Semetko (2001) have argued that some frames are generic, i.e., they apply across multiple possible instances (B.T. Scheufele, 2004a). This view presupposes a different, more objectified definition of frames than the instance-based perspective taken in this study. Within the present theoretical framework, ‘generic frames’ can be understood as common internal structures of frames defined by specific kinds of propositions: ‘Conflict frames’, for instance, necessarily require the inclusion of at least two opposing actors, claims or ideas, which are connected by some opposition relation; ‘episodic frames’ require information about the sequential order of events. Frames are structured in characteristic ways by certain kinds of propositions – notably, opposition relations, causal relations, and evaluative links (Boudana, 2008; Neuman et al., 1992).
Generic frame structures thus describe a particular regularity in the selection of information for frames. They occur within many frames, which remain issue-specific as well as culturally and situationally dependent, nevertheless.

**Frames & coherence**

The internal structure of frames is at the heart of the question what transforms a selected set of information into a coherent frame. Gamson and Modigliani’s (1987) famous notion of the ‘central organizing idea’ (COI) of a frame describes the need for a thematic macrostructure within a frame (van Dijk & Kintsch, 1983): Integrating selected information, frames provide “meaning to an unfolding strip of events, weaving a connection among them” (Gamson & Modigliani, 1987: 143) which can be formulated (Axelrod, 1973; Berinsky & Kinder, 2006; Neuman et al., 1992; van Gorp & van der Goot, 2009). However, this does not explain what exactly in a frame enables this integration. One possible answer draws upon the network conceptualization of meaning and requires that all information in a frame needs to be connected. If some information is not related to the rest, it is hard to imagine how it could be integrated into the same COI (van Dijk & Kintsch, 1983). Ideally, all information could be related to all other information within a frame. However, this is probably too strict a requirement: It is easy to imagine how, for instance, one concept within a frame could be qualified by some attribute which is unrelated to some of the other information within the frame. This attribute would probably not be essential to the frame – if it were, it would relate to the other components as well – but it might well fit under the umbrella of the COI. Between the minimal requirement of connectedness and the maximal possibility of completeness of all possible dyadic relations, many intermediate states are possible. However, the fewer direct relations between the concepts included in a frame are absent, more plausibly can one expect that all information contributes to the same coherent meaning (van Dijk & Kintsch, 1983).

Within the study of discourse processing, van Dijk and Kintsch (1983) have argued that thematic abstractions from a set of connected propositions are likely to derive from a subset of propositions that are more central to the meaning conveyed than others. Some propositions may present elaborations, qualifications, and other interesting contextual information: They extend the conveyed meaning, but their exclusion does not jeopardise overall coherence. By contrast, some propositions will be central such that if they were omitted, the whole set of propositions would be unintelligible, lose connectedness, or yield some radically different meaning (Moloney & Walker, 2002; Tsoukalas, 2006). Following this reasoning, we can view frames as sets of propositions which are organized into a centre-periphery structure: The central propositions support a macrostructure – the COI – whereas the others need to cohere with the central propositions but can be altered or omitted if required (Gamson, 1988; Kintsch, 1998; van Dijk & Kintsch, 1983). Frames, hence, are structured by a small, central set of propositions based on which the COI can be determined. If the core, and hence the macrostructure of a frame contains an opposition relation, a value reference, or a causal link, it can be called a conflict, morality, or consequences frame, respectively (Neuman et al., 1992). Still, it is uncertain whether a set of core propositions connected to all other information in a frame is sufficient to instate coherence. Ultimately, coherence can only be judged at the semantic level and requires a semantic theory. While selectivity focuses scientific attention on information
beyond the frame, coherence draws attention to the construction of meaning within it. In the context of the present study, hence, a frame can be defined as a locally coherent substructure of the semantic network of information.

**Context & purpose**

Among the three criteria that define frames, their inherent purpose lends itself best to the study of framing effects in society: Frames are employed to achieve particular purposes in comprehension and communication, and the question how successfully frames meet this task has dominated framing research over the last decades (Matthes & Kohring, 2008). However, from the point of view of a definition, purpose is the least central requirement, mainly because it follows from the two others: If frames select subsets of the range of possible contexts, assigning particular meaning and instating coherence, the meaning created inevitably serves some purposes better than others (Berinsky & Kinder, 2006; Noakes & Johnston, 2005). It follows that frames are purposefully chosen and can be considered with regard to the specific functions they achieve. However, it is necessary to distinguish between two kinds of purposes that frames can fulfill: If the meaning that is assigned to a piece of information is pre-defined, the purpose of a frame consists in conveying this meaning, selecting a set of contextual information ‘top down’ that supports this particular interpretation. This ‘strategic purpose’ is most commonly the case in communication frames, although frames may also be formed in cognition with the aim to support a pre-defined interpretation (Benford & Snow, 2000; Noakes & Johnston, 2005). If, by contrast, the meaning of a particular piece of information is undefined at the outset, the central organizing idea needs to be (re-)constructed ‘bottom up’ using the available information (Früh, 1994). In this case, the purpose pursued by the construction of a frame is more vaguely defined – e.g., as a need for evaluation, or a desire to understand the causes of a situation – and a frame is selected due to its capability to address this need while accounting plausibly for the observed information. This ‘sense making’ purpose is typically restricted to frames in cognition, although these are often invited by textual information. When people process communicated frames, they mostly do so by reconstructing the implied meaning based on the cues provided in a message. In the following, I will briefly review what is known about the functions of frames in top-down and bottom-up frame formation.

**Strategic purpose**

The strategic functions of frames have been treated most explicitly in the literature on social movement frames and frame building (Benford & Snow, 2000; Gamson, 1996; B.T. Scheufele, 2004a, 2006; Zhou & Moy, 2007). Frames sponsored by social movement organizations (SMOs) or political actors in general openly serve the purpose of defining situations in ways that rally support for particular claims (Bennett, 1980; Carragee &

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5 Typically, framed messages are ‘open’ in the sense that the same textual information allows multiple readings, which may be more or less appropriate, but equally viable. However, even if a message is ‘closed’ in that it allows only precisely one correct reading, it might still be read ‘wrongly’ or otherwise distorted (see II.6 and II.7, Eco, 1979; Luke, 1989). While the cues based on which frames can be (re)constructed are communicated, the implied meaning is not, and can therefore not inform frame construction. Thus, frames are formed top-down (strategically) in response to messages only if the reader imposes her own preconceived meaning without regard to provided cues.
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Roefs, 2004; Fisher, 1997; Gamson, 1988; Iyengar, 2010; Kuklinski & Hurley, 1996; Tewksbury & Scheufele, 2009; Triandafyllidou & Fotiou, 1998). This is less obviously so for media frames constructed by journalists: While these may pursue particular strategies with their framing practice, as well, most journalists at least in Western media exhibit a preference for frames that do not require them to take positions for or against a particular cause (Neuman et al., 1992): ‘Conflict frames’, for instance, move the contradiction between third actors’ purposes to the fore, enabling the journalist to balance arguments while remaining detached from the controversy. ‘Consequence frames’ achieve the same by subduing the question of responsibility or authorship, presenting reality as a stream of inevitable consequences. Both uses of frames are strategic, nevertheless: They construct the journalist as professional, objective and balanced mediator and shield her from the need to evaluate or take sides. The relative unobtrusiveness of this purpose compared to political framing strategies may explain why the strategic purpose of frames has often been neglected in media framing research (Carragee & Roefs, 2004).

Entman (1993) described the four most important functions that frames perform in discourse (see also Matthes & Kohring, 2008). First, frames define a situation, identifying the most pertinent dimensions that need to be addressed. This ‘diagnostic’ frame function is essential for a frame to form, whereas the other three functions may or may not be present. Second, frames may link to causes, actions and intentions of relevant actors, assigning responsibility for the present state of affairs. Such ‘causal interpretations’ are typically supported, third, by value references that suggest the normative grounds on which a situation should be judged (Benford & Snow, 2000; Bennett, 1980; Brewer & Gross, 2005; Matthes & Kohring, 2008). If a situation is characterized as lamentable or fortunate, blame or praise is attributed to the causes related to it (Sotirovic, 2003). While media actors tend to refrain from explicit evaluations unless they are societally consensual, evaluating issues lies at the core of political and advocacy framing (Neuman et al., 1992; Nisbet, Brossard, & Kroepsch, 2003; Petersen, Slothuus, & Togeby, forthcoming): Political actors strive to present the normative grounds on which their own policies should be evaluated. At the same time, they blame identified problems on their rivals’ failed policies, the intervention of vilified third actors, or just lamentable circumstances (Bennett, 1980; Kuklinski & Hurley, 1996). SMOs typically define situations as problematic, associating themselves with the suggested solutions and desired final states. Finally, frames can present a situation as inevitable or changeable, and define a need for action: SMOs in particular recruit their followers based on the belief that the current situation can be changed – supported by the evaluative judgment that it ought to be changed (Benford & Snow, 2000). Political actors also typically present the state of affairs as changeable. However, unlike SMO actors, they do not usually aim to mobilize participation beyond voting. Media actors usually do not wish to motivate action, and consequently do not emphasize the changeability of the situation. While political frames, hence, can be characterized as mobilization frames sustained by moral evaluations of a situation, media frames are usually non-mobilization frames sustained by the absence of evaluations (Gamson, 1992; Neuman et al., 1992).

Sense making

If frames are not strategically crafted to convey particular meaning, they are constructed to give meaning to a set of discrete pieces of information (Berinsky &
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Kinder, 2006; Pennington & Hastie, 1988). When people recognize that attended cues are related, they regularly wonder what is behind the link. They form implicit theories about connections, and construct explanations. In order to form a frame, it is necessary to formulate a COI which accounts for the observed information and helps inferring the specific nature of links (van Gorp & van der Goot, 2009). This process is does not differ fundamentally between attempts to account for discrete observations and the reconstruction of meaning from the cues embedded in a message.

However, frame construction may follow different specific purposes: Frames may be constructed out of a desire to comprehend, in which case people are likely to sift through various explanations and settle for the COI which accounts best for the data (Chong, 1996; Feldman & Conover, 1983; Neuman et al., 1992; Taber & Lodge, 2006). They may address the need to form an opinion or attitude, necessitating the generation of coherent relations between observed information and a normative standard, but little in the way of causal explanation; or they may be oriented toward informing behavior, focusing on possibilities for action linked by some rationale to a set of observed information. In each case, however, COIs are imposed upon the considered information and evaluated according to their capability to address the pursued purpose while accounting for available data (Pennington & Hastie, 1988). While the salience of causal, evaluative and action-oriented frame functions differs depending on the processing goal, the diagnostic function is integral to the construction of a COI: Without defining what exactly is explained, evaluated, or treated, integration cannot yield comprehension (Zhou & Moy, 2007).

Frame construction is thus constrained by the goal to perform particular functions, the limited availability of information to select from, and the need to craft semantic coherence. Frames, as they are conceptualized in this study, can be said to represent the smallest functional units of meaning (D.A. Scheufele & Tewksbury, 2007). Whenever information is integrated to yield meaning, frames need to be formed. Hence, the role of frames in the construction of meaning can be studied from at least two interrelated perspectives: At a micro level, one may analyze how beliefs are selected, how coherence is crafted, and what structures within frames enable these to perform their specific functions. At a macro level, the meanings contributed by frames can be analyzed with regard to their relations to other possible selections of information, their coherence beyond the individual frame, and their ability to address their intended functions. The above distinction between selectivity, coherence, and purpose thus opens up a range of research opportunities far beyond the meso level phenomena usually associated with the study of frames – notably, influences on opinion and patterns of association (van Atteveldt et al., 2006). In this dissertation, I will discuss several important implications of

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6 In the terminology of this thesis, opinion relates to attitude in analogy to the way frames relate to schemata (see below): An opinion refers to a concrete instantiation of an evaluative judgment formed, whereas an attitude refers to the cognitively stored structure of evaluative beliefs that the opinion is formed from (Ajzen & Fishbein, 1980).

7 While a concept’s meaning depends on the macrostructure fitted to it, the macrostructure simultaneously depends on the set of concepts supporting it (Früh, 1994). It is neither the COI, nor the beliefs underlying it alone, but the duality of both that instates meaning (see also Conover & Feldman, 1984, who make essentially the same argument about schemata; Schaap, Renkstorf et al., 2005; van Gorp & van der Goot, 2009).
the above conceptualization of frames, drawing in theoretical knowledge from the study of cognitive and social psychology, computational and discourse linguistics, and the social sciences. Deriving predictions not only for the meso level effects, but also the micro level structure and macro level alignment, I will examine the developed propositions empirically in the subsequent chapters. This study, hence, understands frames not as self-contained units, but as specific semantic structures built from discrete propositions, and embedded within a wider network of information.

II.3. Communication & cognition

Thus far, frames have been defined as a contextualized information structure neither located specifically in communicative messages nor in cognitive processing. However, frames need to be instantiated: They do not exist independently from communication and cognition (Oliver & Johnston, 2005; van Gorp & van der Goot, 2009). The construction of meaning – and hence the integration of information into coherent context – inevitably takes place within the human mind (Langacker, 1998; van Dijk & Kintsch, 1983). Simultaneously, while it is possible to acquire certain information by direct observation, the vast majority of information available for meaning construction is acquired from concrete acts of communication. There is, obviously, no direct equivalence between communicated and comprehended frames: When frames in communication are processed in cognition, selective attention and storage limits the acquisition of the provided context, while prior knowledge alters and enriches it (Eveland, 2001; Gamson, 1992; Greenwald, 1968; Kim & Rhee, 2009; Neuman et al., 1992; van Dijk & Kintsch, 1983). Inversely, when a cognitive frame is to be expressed in communication, strategic intentions, assumptions about common knowledge, and difficulties in the verbalization of thoughts estrange the produced message from the original cognitions (Berinsky & Kinder, 2006; Chong & Druckman, 2007c; Druckman, 2001). Nevertheless, the differences in the instantiations of communicative and cognitive frames do not imply that these are structurally different. The chief benefit of the above structural approach to frames is that it can be applied to both communicative and cognitive frames, allowing a direct juxtaposition. Sharpening conceptual boundaries – which have remained somewhat ambiguous due to their separate treatment in the literature – it becomes possible to trace connections between communication and cognition.

Communicating cognitive frames

When messages are crafted, cognitive frames are used to select cues that can be expected to lead perceivers to reconstruct the intended frames. What is communicated is not the frame itself, but a set of cues that direct people toward the intended meaning.
within pragmatic linguistics, conversation analytic approaches have focused on the distinction between explicit and implied meaning in communication. This research has identified significant parts of intended information which are unlikely to be expressly provided in a message. For instance, speakers tend to assume a lot of knowledge to be shared between themselves and their audiences. Such information is typically omitted and indexed instead to mark which sets of presumably available information should be used for comprehension (Grice, 1975; Hellsten, Dawson, & Leydesdorff, forthcoming; van Dijk, 2003). Moreover, easily inferable connections between propositions are not usually verbalized. Instead, conventional norms about cooperative communication behavior can be drawn upon to infer such links. For example, adjacent sentences such as ‘He lost the vote. People care more for economics than environment in times of crisis’ are assumed to be related, enabling inferences such as ‘he campaigned on an environmentalist platform’, and many more. Most messages leave it to the perceiver to reconstruct the relations and missing propositions needed to understand the information (Berinsky & Kinder, 2006; Grice, 1975; Hellsten et al., forthcoming; Schaap, Renckstorf et al., 2005; Shah et al., 2004; van Dijk & Kintsch, 1983; van Gorp, 2007).

Communicative messages are, hence, unlikely to express all information their authors mean to convey. This tendency is the more pronounced the more familiar an audience is with an issue matter: Only when communication is directed at laypeople – e.g., in educational communication – most details and relations are explicated (van Dijk, 2003). The more knowledgeable an audience can be assumed to be, the scarcer is the provided information. At the same time, it remains plausible to assume that concepts frequently raised within short succession are seen as related by the author(s) and understood as such by a perceiver. The omitted relations needed for comprehension are either based on general inference rules or on information acquired in earlier communication. Tracing public discourse over a period of time, also the implied information can thus be reliably reconstructed (Gamson, 1992; Hellsten et al., forthcoming).

Within communications, journalism researchers have investigated specifically how journalists select aspects of their perceived reality – i.e., their cognitive representations of the state of the world – to be represented in their articles. Two bodies of theory are of interest here. On the one hand, various typologies of news factors account for the selectivity patterns regarding which issues become represented at all. On the other hand, a small field called frame building has begun to investigate the contexts selected for their representation (Carragee & Roefs, 2004; B.T. Scheufele, 2006; Tewksbury & Scheufele, 2009). Both fields, however, agree that novel information tends to be related closely to familiar knowledge in news reporting. Although the listed news factors are not very consistent across studies, nearly all accounts contain precisely one factor (called ‘unexpectedness’, ‘novelty’, or ‘surprise’) dealing with unfamiliar information. By contrast, several factors relate to long standing, familiar issues and actors (e.g., ‘prominence’, ‘continuity’), or to relation types that help perceivers integrate new information (e.g., ‘conflict’, ‘damage’, ‘negativity’, Schulz, 1976). Information that is not connected to established issues or actors is unlikely to be selected for publication. For most part, news
update information on familiar objects or present novel objects in their relation to what is known already.

Similarly, B.T. Scheufele (2006) has found that the interpretations used by journalists to organize newsworthy information are strongly structured by frames already established in journalistic discourse. The same frames direct journalists’ attention in identifying newsworthy information and are reproduced in journalistic publications. While salient key events may lead to the adaptation of journalistic frames or even help establishing new ones, news frames are mostly relatively stable: Subsequent events are interpreted by referring to the same, at most sporadically adapted contexts that similar events have previously rendered familiar (B.T. Scheufele, 2006; van Gorp, 2007). Consequently, journalistic messages exhibit a limited range of frames which recur reliably. Both the selection and the contextualization of news, hence, draw heavily on audiences’ prior understandings, enabling and requiring people to retrieve their prior, related knowledge when processing journalistic messages.

The above patterns of reliance on perceivers’ prior understandings are, of course, not confined to journalistic message production. People’s tendency to categorize and interpret similar information in similar ways at different times is well documented, obliterating the need to construct new understandings for each successive situation (Nisbet et al., 2003; Zaller & Feldman, 1992). Understanding and presenting the novel in terms of the familiar reduces cognitive load. Moreover, if too many elements in a message require perceivers to make new connections, chances are high that they will fail or construct meanings different from the one intended (van Dijk & Kintsch, 1983). In order to communicate meaning, reliable and rich references to familiar knowledge are essential: Also novel frames must, to be communicatable, draw to a significant degree upon frames already learned by the perceiver (Chong, 1996; Donati, 1992; Eco, 1979; Luke, 1989; Pan & Kosicki, 1993; Sibley, Liu, & Kirkwood, 2006; Tewksbury & Scheufele, 2009; Wolfe et al., 1998). This is particularly so in public communication, where an author’s knowledge about the information available to her audience is very limited. The more disperse and uncertain the audience that communication is directed toward, the more are frames likely to recur and to develop only in very small steps.

Cognitive processing of communicated frames

When processing framed communication, people are thus provided with recurrent, but incomplete, indexical messages. These will be the more incomplete the more familiar an audience can be expected to be with an issue: Referred-to contexts are easily identified in memory to reconstruct the frame. Inversely, when little familiarity can be assumed, individuals draw heavily upon the provided messages: Communication frames need to spell out most contextual information (Bonham & Shapiro, 1976; Zhou & Moy, 2007). As they repeatedly process and store information introducing relevant contexts of an issue, people learn how concepts are related and develop their semantic knowledge network. As the range of stored relations increases, people become more and more able to retrieve coherent sets of context for comprehension without the help of many explicit references: Drawing upon the learned relations, they identify contexts also if these are
only alluded to (Donati, 1992).\(^9\) Potentially, they can retrieve these frames from memory entirely without help if sufficiently motivated (Nelson \textit{et al}., 1997).

Since communication frames need to relate to concepts already integrated into a person’s knowledge network, they necessarily intersect with frames stored in the comprehender’s mind (Bonham & Shapiro, 1976; Eveland, 2001; Rhee, 1997). Consequently, people can always extend their already stored frames to try and integrate new information. Likewise, they may enrich provided frames with related information they already possess. Elaborating provided information in the context of prior knowledge, they may discover further meaningful sets of context and construct new relations between new and prior information. Such elaborative, ‘active’ integration enables people to use their own frames and to amend or alter provided frames when comprehending information (Eveland, 2001; Früh, 1994; Gamson, 1988; Neuman \textit{et al}., 1992; Schaap, 2006; Sotirovic, 2003). There is no guarantee, however, that combinations of provided and stored information will form coherent frames (van Dijk & Kintsch, 1983). Also, active processing is effortful and needs to be motivated – either by a general motivation to understand, or by a specific processing goal which requires contextualizing the provided information differently from the way it is provided (Basinger & Lavine, 2005; Berinsky & Kinder, 2006; Feldman & Conover, 1983; Graesser \textit{et al}., 1995; Huang, 2000; Kosicki & McLeod, 1990; Sotirovic, 2003). Generally, it is easier for an individual to stick to the frames that information has been provided in (Berinsky & Kinder, 2006). Such isomorphic acquisition of context structures provided by communication can be called ‘passive’ integration. If people integrate information passively, they will typically use frames for comprehension that are close to those provided in communication. They reproduce meaning that has been tailored for them by others (Druckman, 2001; Nisbet \textit{et al}., 2003). If people integrate information actively, however, they can use frames flexibly and creatively to inform their personal goals and needs (Berinsky & Kinder, 2006; Chong & Druckman, 2007c). Their use of this information is much more independent (Sotirovic, 2003).

### Knowledge acquisition

The above conceptualization of the reception of information distinguishes between two levels of integration: On the one hand, people acquire beliefs from communication, forming new relations either toward unfamiliar concepts or between familiar ones. On the other hand, they also acquire a structural organization enabling them to identify coherent contexts, either following indexical cues, or actively searching for and constructing new frames (Just \textit{et al}., 1996). In order to gain a better understanding of these two processes, a closer look at the psychological literature on knowledge acquisition is in order.

#### Acquisition of beliefs

The basic unit of cognitively stored information is a belief. Beliefs – in analogy to propositions – necessarily assume a dyadic structure, constituted by a pair of concepts and connected by some relation (Collins & Loftus, 1975; Kintsch, 1998). Since people

\(^9\) For instance, Shah \textit{et al}.
(2010) demonstrated how the mere use of differently connoted terms could raise different semantic contexts in participants’ explanations.
can hold many beliefs involving the same concept, the belief structure stored in cognition – a person’s knowledge\textsuperscript{10} – can be represented as a cognitive network (Raaijmakers & Shiffrin, 1992). Based on a propositional network conceptualization of knowledge, belief acquisition has been modeled as the discovery of new nodes, and the establishment of new links between nodes in the network (Collins & Loftus, 1975; B.T. Scheufele, 2004a; Shah et al., 2004). Ideally, the process of belief acquisition is a relatively straightforward process.

Links can be specified, possessing a particular semantic quality (e.g., causal, temporal, identity), or unspecified, amounting to the belief that one ‘has to do with’ the other (Converse, 1964). Unspecified beliefs are acquired whenever a person concludes that a relation exists but remains unsure about the nature of this relation (Brewer, Graf, & Willnat, 2003). Simultaneously, links may possess varying strength, discriminating salient, highly accessible beliefs from less accessible ones (Price & Tewksbury, 1997; Read, Vanman, & Miller, 1997; Tourangeau & Rasinski, 1988).\textsuperscript{11} Among the factors determining belief strength, repetition and recency of use are the most prominent explanations in the psychological literature (Willnat, 1997). Other suggested determinants include the evaluative load and the relatedness of beliefs to a person’s self concepts (e.g., a belief that a policy is unjust should be more accessible than the less strongly evaluatively charged belief that it is inefficient. However, a person who defines herself as efficient may still retrieve the latter belief more easily, M. Lodge & Taber, 2000; Miller & Peterson, 2004; Price & Tewksbury, 1997). However, if one accepts the claim that values and self-concepts often matter for opinion formation and are hence frequently drawn upon, the latter two factors can be subsumed under frequency and recency: Evaluative load and self-concept relations represent structural properties of beliefs that lead to their frequent use and, thereby, heightened belief strength. Assuming furthermore that beliefs are the more likely to be used the more densely they relate to other beliefs, the strength of beliefs present in memory can be understood, primarily, as a function of their structural alignment within the cognitive network.

However, the question remains under which conditions a person creates a belief at all – that is, when a person perceives and stores a relation between concepts. Most immediately, first, this depends on the information a person attends to. The more diverse information is available to an individual, the less likely is she to take notice of all of it and to attend to each piece of information with equal care (B.T. Scheufele, 2004a). People regularly skip, overlook or misread information. Moreover, they are liable to miss inferences implied by an author, or fail to connect information due to lacking motivation or knowledge (Graber, 1988; Price & Tewksbury, 1997). Even if they neither miss nor

\textsuperscript{10} Unlike common language use, the term ‘knowledge’ in this study does not imply that a belief is true (Früh, 1994).

\textsuperscript{11} In the terminology of this study, belief strength, accessibility, and salience are three faces of the same coin: Strong beliefs, in the spreading activation model discussed below, are more easily activated, hence possessing high accessibility; as a consequence, these beliefs are salient in a person’s interpretation. Belief strength refers to the storage, accessibility to the retrieval, and salience to the interpretation of a belief. Each indicates an increased probability of a belief to feature prominently relative to other beliefs. In accordance with the terms’ use in the psychological, but not the framing literature, they refer to stored, relatively time-consistent properties of beliefs. The weight given to a belief in a specific instance upon processing will be referred to as ‘importance’ (Bizer & Krosnick, 2001; Miller & Peterson, 2004). Importance relates to salience as frame to schema, or opinion to attitude (see below).
misunderstand information, the elliptic and indexical nature of communication implies that a comprehender must form various inferences and use her cultural knowledge to derive meaning from a message (van Dijk & Kintsch, 1983). Therefore, second, people process information relying predominantly on their prior knowledge. This is particularly so with regard to those contexts suggested by frames, which are not usually spelled out but refer to beliefs already stored in knowledge. There, prior conceptualizations both affect which of the contextual propositions suggested in a message will be recognized and retrieved, and which further propositions can be inferred from these (Kuklinski et al., 1992). Even beliefs not at all present in provided information may be formed in response to processing a message (Brewer et al., 2003; Graesser et al., 1995; Popkin, 1991; Schaap, Renckstorf et al., 2005). As a consequence, the set of beliefs that can be acquired from a message is not identical to the set of propositions contained in it (Früh, 1994; Neuman et al., 1992; Schaap, Renckstorf et al., 2005; Scott, 2001).

Third, beliefs are rarely acquired without any kind of motivation or goal-directed reasoning. However, the form in which information is provided or stored in memory is often ill-suited to address an individual’s goals and interests. It needs to be transformed to fulfill its purpose. Consequently, motivations for information processing affect which information is most likely to be attended, perceived, elaborated, and acquired (Huang, 2000; Price & Tewksbury, 1997). Information may be selectively disregarded, abstracted or otherwise altered, and new inferences may be formed (Graber, 1988; Kintsch, 1998; M. Lodge & Taber, 2000). Such belief formation may occur both in response to communicated messages, or elaborate on already present knowledge alone. Either way, transformative acquisition of beliefs is likely to be the rule rather than the exception (Berinsky & Kinder, 2006; Früh, 1994; Graber, 1988; Haste, 1992; Just et al., 1996; Schaap, 2006; Sniderman, Glaser, & Griffin, 1990).

The immediate adaptation of provided propositions upon acquisition is not only inevitable given the overwhelming supply of incomplete, indexical information in social communication; it is also highly functional. Most obviously, transformation is simply a necessity borne out of capacity limitations in the human mind (Früh, 1994; Kintsch, 1998): The amount of information that people can simultaneously attend to is often insufficient to cope with complex social reality. By selecting, integrating and abstracting information, people can reduce the amount of information they need to keep in mind while retaining the information value supported by many more propositions than currently considered (Früh, 1994; Graber, 1988; D.A. Scheufele & Tewksbury, 2007; Zaller & Feldman, 1992). Seeking similarities and recurring patterns between situations, categorizing, inferring and generalizing allows people to build an understanding that reaches beyond the current situation. According to Iyengar, the ability to transform episodic recollections into thematically integrated, generalized beliefs is one of the fundamental requirements for political opinion formation (Früh, 1994; Graber, 1988; Iyengar, 1991, 2010; Just et al., 1996; Kosicki & McLeod, 1990; Neuman et al., 1992).

Acquisition of frame structures

The same influences that affect the acquisition of beliefs also matter for the appropriation of frames constructed from communication messages. On the one hand, the amount of information available for integration – either provided in a message, or retrieved from memory – determines the amount of active construction a person needs to
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engage in to craft a coherent frame. On the other hand, present motivations induce people to deviate from the suggested use of contextual information and stimulate the active integration of considered information. Frames are likely to be acquired in close resemblance to those contexts cued in communicated messages only to the degree that processing motivations support their accurate reconstruction, or at least do not suggest deviant purposes (Berinsky & Kinder, 2006; Donati, 1992; Feldman & Conover, 1983; Pan & Kosicki, 1993): While people motivated to comprehend a provided message may be open for the contexts that it suggests, people pursuing their own goals may disregard many cues and construct their own contexts instead. They may still draw upon provided messages, however, all information that does not contribute to the task is likely to be disregarded (Graber, 1988; Just et al., 1996; Kintsch, 1998). The resulting frame is hence likely to contain both considerations advanced in the message, and others retrieved from prior knowledge. The same is likely to happen if insufficient information is available to specify a set of contextual beliefs capable of forming a frame, and prior knowledge must be searched to achieve semantic coherence (Pennington & Hastie, 1988). Finally, also if large amounts of related prior knowledge compete with message-provided information, it is unlikely that the cues provided by a message will be followed entirely. Given sufficiently well-developed knowledge, people may even ignore the frame cued by a message entirely, recontextualizing provided information using their own beliefs.

It is important to note that beliefs are not integrated definitely into one particular frame which henceforth governs their context. While for some beliefs, individuals may be unable to construct more than one coherent frame, there will typically be multiple possibilities for selecting coherent context subsets from the related information (Carragee & Roefs, 2004; Chong & Druckman, 2007c; Shah et al., 2004; Zaller & Feldman, 1992). The frame that information is being presented in is merely one likely candidate out of the range of contexts available for processing. Other contexts applied to the same information at prior moments, possibly learned from other messages, are other candidates. Likewise, extensions of already familiar frames toward the new information may provide a variety of suitable contexts, and entirely new frames may be discovered by reasoning. Which contexts will ultimately be selected depends chiefly on the ease with which related information is identified, and the motivations brought to the task by the individual (Feldman & Conover, 1983; Huang, 2000).

As a consequence, people are the more likely to actively integrate beliefs and build frames that extend stored or cued frames the more specific processing goals inform integration (Neuman et al., 1992). Simultaneously, people are the less likely to construct new beliefs upon frame formation the more well-developed their knowledge already is (Valentino, Hutchings, & Williams, 2004). It is therefore possible to distinguish three basic situations: First, if specific motivations and competing knowledge are absent, frames may simply be taken over from processed communication. Provided and cued beliefs are added to memory, but not actively integrated. Second, if specific motivations and/or further knowledge are available, frames are crafted from a mixture of available information and newly acquired beliefs. Some new beliefs are added and simultaneously integrated with other contextual beliefs already stored in memory. Third, if strong motivations are available but no (or no useful) new information is provided, frames may result from re-combinations of familiar information. The integration of existing beliefs is enhanced, while new beliefs are inferred from present knowledge. In each of the three
possibilities, frame construction involves the acquisition and/or construction of new beliefs which render the selected set of beliefs coherent. Frame acquisition is inseparable from the addition of new connections within the cognitive network.

Cognitive storage of frames

It is not entirely clear whether people store frames in memory – e.g., as inventories of coherent sets of beliefs, or as ‘online’ central organizing ideas. However, both cognitive efficiency and modelling parsimony speak against such separate storage: If macrostructural information is stored, this effectively adds another layer of macropropositions to the semantic network, linking each to those beliefs that sustain it. Each added macroproposition contributes a multiplicity of new links to the network, potentially more than doubling the amount of data to be stored. Moreover, it is unclear how similar but not identical frames – including variations of the same frame – can be stored: Either, myriads of highly similar macropropositions need to be stored (choosing among which soon becomes problematic); or the macrolevel information needs to remain rather vague, requires constant adaptation and fails to guide the use of frames. Therefore, some researchers have attempted to account for the observed regularity with which people use similar frames without assuming that the frame itself needs to be stored. In order to convincingly substitute the aforementioned online storage models, such approaches need to achieve two things: First, they need to explicate how coherent contexts can be rapidly identified by ad hoc bottom-up construction. Second, they need to demonstrate that such constructions can reproduce similar frames across different situations (Pennington & Hastie, 1988).

One powerful such theory has been advanced by van Dijk and Kintsch (1983, Kintsch, 1998). According to their ‘Construction-Integration’ (CI) perspective, coherent contexts can be identified following a fast and dumb but flexible process of belief retrieval and coherence checking: Starting from some focal information, a wide and unfiltered set of related beliefs is retrieved. Subsequently, beliefs that do not cohere with other retrieved information are immediately disregarded again. As a consequence, only related beliefs which are themselves related are retrieved for contextualization. Coherence is achieved without need for macro-level information (see also Doise, Clemence, & Lorenzi-Cioldi, 1993; Kintsch, 1998; Moscovici, 1986).

Moreover, this CI-process tends to retrieve highly similar frames following similar cues, adapting retrieved contexts only locally to match task and situation. Whenever a frame is formed and the beliefs constituting it are stored in memory, all information affiliated with the frame is related to most other information within it. Consequently, when one of the frame-related beliefs is activated at a later point in time, the other frame-related beliefs are directly retrieved (Kintsch, 1998). Moreover, unlike other directly related beliefs, they are interrelated among themselves, such that the CI-process recognizes them as coherent subsets of the available context. Beliefs external to the frame are unlikely to cohere with many other retrieved beliefs, and are likely to be discarded. Only when multiple frames include the belief initiating retrieval, the CI-process will be initially undecided which of the contexts to keep.

When people have acquired various frames related to some information, multiple, possibly overlapping sets of coherent beliefs are available for retrieval (Conover & Feldman, 1984; Shah et al., 2004). As a consequence, frame construction is more flexible
as it can choose between various, more or less similar contexts. However, this complicates the identification of precisely one coherent context set for processing. Fortunately, the focal information is rarely the only information available to inform construction: Specific processing tasks as well as other provided cues can be drawn upon to discriminate which of the retrieved sets are most useful (Haste, 1992). Belief retrieval may start from multiple concepts at once, privileging contextual beliefs that relate to all of these. Alternatively, discovered context sets can be checked as to how well they fulfil a particular task. The more well-specified the cues and tasks that inform retrieval, the more restricted is the range of identifiable frames that match the requirements (Berinsky & Kinder, 2006; de Vreese & Semetko, 2004; Valkenburg, Semetko, & de Vreese, 1999). Consequently, whatever remains after the discarding stage represents a set of interrelated contextual beliefs that connect the focal information, the task and other considered cues (Kintsch, 1998; Price & Tewksbury, 1997).

The process of frame retrieval operates within a network of densely integrated beliefs, and identifies coherent subsets of beliefs only based on the density of connections between related concepts (Kintsch, 1998). Frames are not stored themselves – explaining the observation that people do not readily recognize frames as identifiable wholes – but reconstructed ad hoc from the pattern of stored beliefs. Aside of being comparatively storage-efficient, this process is also more flexible than static inventories or online COIs imposed upon similar, yet not entirely identical situations. Identifying suitable frames based on their ability to relate to a range of provided cues, the process ensures that similar, but situationally adapted frames are retrieved across situations (Berinsky & Kinder, 2006; Petty et al., 2007). Simultaneously, this approach explains how communicated frame packages can direct people to construct specific frames: Providing a specific selection of cues, communication frames render some of the frames retrieved by the CI-process more applicable than others, increasing their chance to be selected for processing (Iguarta & Cheng, 2009; Pan & Kosicki, 1993; Tewksbury & Scheufele, 2009; van Gorp, 2007). Rather than holistic units, frames can be understood as coherent belief patterns retrieved by a simple cognitive process connecting provided cues.

II.4. Schemata

If frames are identified bottom-up from the pattern of interrelated contextual beliefs, the organization of beliefs in a person’s mind determines the range of frames that can be found. Extant studies, predominantly in cognitive psychology, have ventured to determine the underlying principles that govern the organization of knowledge in mind. At the risk of oversimplification, this research shows that global, deductive rules for organization have not been empirically supported: Neither ideological (e.g., an alignment of political knowledge along a left-right cleavage) nor hierarchical semantic taxonomies (e.g., class membership hierarchies) have fared well as explanatory models for observed

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12 Researchers in psychology have tried to predict priming, as a test of connected storage in memory, from concept similarities in hierarchical semantic class membership graphs (Ferrand & New, 2003; Shelton & Martin, 1992). This approach assumes that concepts can be organized through precisely one such hierarchy, usually in analogy to biological classifications. However, many deviant classifications are easily constructed, using different criteria. Often, unique classification trees are hard to construct and involve many arbitrary
memory performance (Conover & Feldman, 1984; Converse, 1964; Graber, 1988; Haste, 1992; Kintsch, 1998). Episodic organization has been demonstrated for some information, but does clearly not apply to all knowledge. Among the structures argued for, associative memory, paired with limited semantic structure, seems to be the best supported model (Collins & Loftus, 1975; Kintsch, 1998; Raaijmakers & Shiffrin, 1992; van Atteveldt et al., 2006). According to this view, people store concepts as related whenever they perceive them to be associated – for instance, because they apply to the same situations, because they are seen as causally or sequentially connected, or because they share particular properties or category memberships (Converse, 1964; Graber, 1988; Pennington & Hastie, 1988; Schaap, Renckstorf et al., 2005; Spradley, 1979). In principle, all information within the network can be connected to any other information.

Consequently, the only way of establishing order in a network of principally equal components (concepts) and a variety of meaningful ties is based on local belief patterns (Graber, 1988; Graesser et al., 1995; Kuklinski et al., 1992). The prime such structure advanced in the literature is schematic organization: Schemata, as frames, are locally coherent belief structures within the semantic net (van Dijk & Kintsch, 1983). Both schemata and frames refer to locally coherent patterns of beliefs, allowing a highly isomorphic conceptualization. Although often used synonymously, however, schemata are different from frames in the terminology of this study: Schemata refer to belief structures stored in a person’s memory, whereas frames refer to the fleeting instantiations of retrieved belief sets which are fitted a COI (Benford & Snow, 2000; Fisher, 1997; Kuklinski et al., 1992; van Gorp, 2007; van Gorp & van der Goot, 2009). Although schemata regularly inform frame formation, frames need neither exhaust the information stored in a schema, nor are they confined to it. They may integrate beliefs raised from other schemata, or use schematic beliefs alongside communicated information. When the beliefs supporting formed frames are committed to memory, they are stored as schematic belief structures, informing, but not determining future frame construction (Kuklinski et al., 1992). Schemata can overlap, be extended, altered, and new beliefs can be integrated into existing schemata (Conover & Feldman, 1984; Petty et al., 2007; van Dijk & Kintsch, 1983). Simultaneously, unlike schemata, frames sustain specific COIs that render the set of beliefs meaningful. Meaning must be constructed ad hoc and cannot be committed to memory. When frames are formed from schematically stored beliefs, their COI is reconstructed, not retrieved. Schemata do not ‘have’ a COI, but COIs can be formed based on schemata (Ingwersen, 1992; Kintsch, 1998; Langacker, 1998; van Dijk & Kintsch, 1983).

This interpretation is at least partly at odds with the literature on schemata. There, schemata are typically referred to by labels that can be understood to represent their summarized meaning – i.e., their COI (Axelrod, 1973).13 At first glance, the distinction is purely theoretical: The only way in which we can access schemata is through reported beliefs, which have undergone cognitive processing and hence frame construction.

choices. Unless people were shown to organize the world exclusively using biological theorems or whatever other logic was selected, semantic categories provide poor grounds for prediction.

13 Matthes (2007) takes an intermediary position, suggesting that not COIs, but the derived judgment can be stored as an ‘online’ attitude. If such online judgments are formed, these are attached to the concept under consideration. As a consequence, concept evaluations can be rapidly retrieved without renewed construction, stabilizing judgment.
Whenever we conclude that a schema has been formed, this conclusion derives from expressed frames, which require COIs (Johnston, 1995). However, two considerations speak against the storage of COIs. First, while schematically stored information may be stored and reused across various situations, meaning is situation specific. It is neither clear how meaning could be stored, nor what one would gain if it were. Second, schemata are not sufficiently coherent to sustain unique COIs. This point relates to a fundamental, yet often overlooked uncertainty about the relative scale of frames and schemata: Frames have been argued to represent macrophenomena drawing upon multiple schemata, to correspond directly to schemata, or to operate within larger, more diverse schemata (B.T. Scheufele, 2004a, 2006). However, the larger either is seen to be, the more difficult is it to instate coherence and integrate all associated beliefs into a common COI. Defining frames as instantiations in mind, this study clearly delimits the scale of frames: Given the limitations of simultaneous attention, frames can hardly contain more than five to ten concepts, even if frame-associated beliefs are quickly integrated and abstracted to create space for further elaborations (Graesser et al., 1995; Kintsch, 1998). There is thus little use in defining schemata as even smaller units than frames. If schemata are treated as corresponding directly to frames, each situational adaptation of a belief structure constitutes a new schema, which overlaps almost fully with several others. By contrast, if schemata refer to larger structures within the cognitive network, their number reduces, while their internal heterogeneity increases. Different but overlapping frames could derive from the same schema, which renders this definition analytically more useful than the other one. Grouping related, but not necessarily fully coherent beliefs about a common object, such schematic structures group beliefs likely to feed into frame formation, while remaining flexible enough for situational adaptations. Where many coherent belief sets overlap, schemata develop a densely integrated core structure, around which a more loosely affiliated periphery specifies the various contexts in which they can be applied (Converse, 1964; Gamson, 1988; van Dijk & Kintsch, 1983).

Attitudes

Another point that supports the wider definition of schemata is their close relation to attitudes. Like schemata, attitudes include various, more or less well-integrated beliefs that relate to a focal concept (Bizer & Krosnick, 2001; Conover & Feldman, 1984; Kuklinski et al., 1992; Tewksbury & Scheufele, 2009; Tourangeau & Rasinski, 1988). Yet, there is no requirement that all beliefs underlying an attitude need to cohere with one another (Axelrod, 1976; Gamson, 1988; Himmelweit, Humphreys, Jaeger, & Katz, 1981; Lavine, 2001; Miller & Peterson, 2004; Zaller, 1992; Zaller & Feldman, 1992).

The main difference between schemata and attitudes is that attitudes imply valence (Conover & Feldman, 1984; Kuklinski et al., 1992; Kumlin, 2000). Seen from the vantage point of the semantic network, attitudes are schemata that define how a concept relates to good or bad, positive or negative. Within a schema, beliefs link a focal concept to evaluatively charged concepts – values and other normative standards, and possibly also

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14 Note that five concepts, if each is connected by precisely one belief to each other concept, constitute ten possible beliefs. Seven concepts constitute 21 beliefs, ten concepts 45 ones. If no more than seven to ten beliefs are retained at a time, even if some serial processing is permitted and not all beliefs are actually present, more than ten concepts seem to push the limit of what can be contained in the same instance (Früh, 1994; Kintsch, 1998).
other concepts with stored evaluation\(^{15}\) – allowing the transfer of valences (Ajzen & Fishbein, 2000; Brewer, 2001; Graber, 1988; Hobolt, 2007; Nelson, Wittmer, & Shortle, 2010; B.T. Scheufele, 2004a; Tourangeau & Rasinski, 1988). This transfer is informed by the semantic quality of the beliefs relating the target to the available evaluative concepts: A concept believed to contribute to an endorsed value will receive positive valence, whereas one that diminishes it is evaluated negatively (Ajzen & Fishbein, 1980; Brewer, 2001; Brewer & Gross, 2005; Conover & Feldman, 1984; Hobolt, 2007; Petersen et al., forthcoming; Shah, Domke, & Wackman, 2001). Each path that relates an object to evaluatively charged concepts allows the transfer of valence, and hence, the formation of a judgment (Ajzen & Fishbein, 2000). This is precisely the logic underlying heuristic reasoning: An object is evaluated by investigating how it relates to other concepts whose evaluation is known (Brewer et al., 2003).

To the degree that the beliefs underlying valence transfer are semantically coherent, they can be said to represent evaluatively charged frames (‘considerations’ in the terminology of this study, see also Conover & Feldman, 1984; Zaller, 1992). Within the same attitude, multiple such considerations can be formed, contributing their evaluative load for opinion formation. These evaluations will be consonant as far as frames within an attitude have been considered jointly, resolving dissonances and instating coherence between them (Bizer & Krosnick, 2001; de Liver, van der Pligt, & Wigboldus, 2007; Kumlin, 2000). Where attitudes contain considerations with conflicting valence, these typically belong to competing frames within the same schema (de Liver et al., 2007; Himmelweft et al., 1981; Sniderman & Theriault, 2004; Visser, Holbrook, & Krosnick, 2007). Reported opinions vary depending on which attitude-related frames are tapped (Lavine, 2001; Price & Tewksbury, 1997; Rucker, Petty, & Brinol, 2008; B.T. Scheufele, 2004a; Tourangeau & Rasinski, 1988). The more frames within a schema are integrated and overlap, the fewer considerations deliver dissonant valence. As a consequence, strong attitudes are based on well-integrated schematic belief structures (de Liver et al., 2007; Price & Tewksbury, 1997).\(^{16}\)

Social representations

In principle, the belief structure acquired by a person depends on uncounted single instances of information acquisition and integration. Since semantic coherence is not an objective property of a set of propositions, but derives from relations perceived by the individual, any kind of schematic order of acquired beliefs is possible (Converse, 1964; Früh, 1994; Ingwersen, 1992; Kintsch, 1998; Kosicki & McLeod, 1990; Kuhltau, 1999; Shu, 2003). Nevertheless, most people have been found to organize their belief systems in rather similar ways (Doise et al., 1993; Moscovici, 1961, 1986). This agreement is both a

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\(^{15}\) Valence can be transferred from any concept whose evaluation is stored, e.g., as online judgment (Matthes, 2007).

\(^{16}\) While reasoned judgment necessarily involves both the transfer of valence and the construction of semantically coherent frames, valence can also be retrieved and aggregated without regard to semantic coherence. According to Zaller (1992, Tourangeau & Rasinski, 1988; Zaller & Feldman, 1992), people may simply sample any set of evaluatively relevant beliefs within a schema and summarize the implied evaluative loadings. Unless people are interested in resolving conflicting retrieved valences, or wish to form an understanding to account for the resulting judgment, there is no need to construct evaluative frames (Pennington & Hastie, 1988; Zaller, 1992). However, even when retrieved beliefs are not integrated, the schematic structure of attitudes sustains a coherence bias in retrieval.
consequence of and a necessary requirement for social communication: If agreement on
the relatedness of concepts could not be assumed, any message would need to fully
specify all implied information to ensure that it is interpreted in similar ways by a
potential reader (Chong, 1996; Doise et al., 1993; Moscovici, 1986; Pan & Kosicki, 1993).
At the same time, the fact that many messages are received by large audiences (e.g., via
mass media, literature, or other means of cultural production) is responsible for the
acquisition of similar belief systems within a society (Benford & Snow, 2000; Converse,
1964; Donati, 1992; Gamson, 1992; Schaap, 2006). Acquiring similar knowledge through
socialization, and updating their knowledge in similar ways from public discourse, people
integrate similar information in similar ways and form similar, ‘social’ representations in
consequence (Brewer, 2001; Brewer & Gross, 2005; Gamson, 1992; Iyengar & Simon,
2000). Moscovici (1961) described the formation of ‘social representations’, emphasizing
the relative homogeneity of schematic belief structures within cultural groups. This
knowledge can henceforth be assumed in all further communication within the group,
establishing the backdrop for similar interpretations for all members. Cultural groups are
defined as sharing specific interpretations and sustained by the exchange and further
development of these interpretations by means of culture-specific communication and
media (Sibley et al., 2006; Spradley, 1979).
Social representations – those belief structures shared by the group – roughly
correspond to schemata in their structure. They allow for some disagreement over
associated frames as long as they are commonly known, but their cores are highly
consensual and strongly integrated (Converse, 1964; Doise et al., 1993; Moloney &
Walker, 2002; Sibley et al., 2006). Coherence within the representation is local: All
propositions within a social representation relate to its core, however, not all frames
sustained by a social representation need to be coherent with one another (Fisher, 1997;
Moloney & Walker, 2000). Putting this ideal conceptualization into perspective, it needs
to be noted that beliefs will rarely if ever be perfectly shared by all group members (B.T.
Scheufele & Scheufele, 2010). In practice, social representations have been defined based
on the set of beliefs held by a specified share of individuals within a group, or as those
propositions recurring regularly, without disputation, in a body of cultural texts (Donati,
1992). The difficulties in pinning down their precise content notwithstanding, it is agreed
that a large set of beliefs are shared widely across a society: Social representations sustain
a repertoire of frames that are easily comprehended by most members of a group or
society (Benford & Snow, 2000; Chong, 1996; Fisher, 1997; van Gorp, 2007).
Nevertheless, social representations remain but one of the resources available to
people when processing information (Neuman et al., 1992). Moreover, they do not
unambiguously suggest particular interpretations, but may offer multiple, often competing

17 There are three main differences between social representations and schemata: First, schemata are located
within a concrete mind, whereas social representations are imagined constructs located within a culture (see
also van Gorp, 2007; 2010 on the location of frames). Second, while in a schema, beliefs can be absent or
present, beliefs in a social representation are distinguished by the degree of consensus over them; where
consensus cannot be achieved, social representations remain incomplete. Third, unlike schemata, social
representations do not necessarily sustain ‘social attitudes’. Evaluations may still vary between people even if
the underlying beliefs are consensual (Doise et al., 1993).

18 However, coherence requirements tend to limit the presence of directly opposing frames within the same
representation (Chong, 1996; Edy & Meirick, 2007; Kumlin, 2000; van Gorp, 2007).

19 See also Gamson’s (1992) closely related, but theoretically less developed concept of ‘popular wisdom’.
frames (Carragee & Roefs, 2004; Chong & Druckman, 2007c; Conover & Feldman, 1984; Druckman, 2010; Gamson, 1992; Neuman et al., 1992; Shah et al., 2004). The significance of culturally shared knowledge lies in its (known) wide adherence throughout society, allowing speakers and audiences alike to estimate the respective other’s likely frames of reference: Authors refer to social representations to ensure that their messages can be understood, and audiences resort to cultural knowledge when reconstructing the meaning implied in a message (Axelrod, 1973; Sibley et al., 2006; Tewksbury & Scheufele, 2009; van Dijk & Kintsch, 1983; van Gorp, 2007). Through their frequent use, social representations are among a person’s most well-integrated schematic belief structures. They endow people with considerable flexibility and discretion in their application to considered information (Druckman, 2001; Gamson, 1992; Neuman et al., 1992; Rhee, 1997; van Gorp, 2007).

II.5. Framing processes

Having spelled out the cognitive and communicative environment in which frames operate, I can finally turn towards the concern that has been at the heart of framing research over the last decades: the study of framing effects. Piling evidence documents the capability of communicated frames to affect how people think about issues (Druckman, 2003). However, this effect is still much better described than explained. While various and competing models of the framing process have been advanced, empirical evidence has been unable to settle a number of questions vexing the field to date.

First, the cognitive mechanisms through which framing operates remain contested. Rising attention for mediation processes in framing has produced three competing explanations for the observed effects (de Vreese & Semetko, 2004; Matthes, 2007; Nelson et al., 1997; Price & Tewksbury, 1997; B.T. Scheufele, 2004a; Slothuus, 2008): ‘Accessibility’ models focus on automatic belief retrieval (Tourangeau & Rasinski, 1988); ‘applicability’-based approaches herald deliberate belief weighting (Nelson et al., 1997); and most recently, it has been argued that frames may affect belief content as well (de Vreese, 2004c; B.T. Scheufele, 2004a; Slothuus, 2008). Translated into the conceptual framework of this study, the three views focus (1) on the selection of relevant information, (2) the coherence between related information, and (3) the alteration or acquisition of beliefs in the course of frame processing, respectively. The theory introduced above, hence, allows considering all three suggested mechanisms simultaneously, facilitating both the theoretical integration and empirical assessment of the advanced explanations.

Second, and related to the debate on mechanisms, researchers disagree whether framing operates through conscious or subconscious cognition (Brewer & Gross, 2005; Druckman, 2001, 2004; Price & Tewksbury, 1997). While some results suggest that frames can be consciously resisted, others show that even experts may be unable to detect their own being framed (Chong & Druckman, 2007c; Druckman, 2004; Gamson, 1988; Nelson & Oxley, 1999; Popkin, 1991; Slothuus & de Vreese, forthcoming; Sniderman & Theriault, 2004; Willnat, 1997; Zaller, 1992). The issue lies at the core of the societal relevance of frames: If frames are irresistible, strategic communication hands considerable
power to elites, ultimately robbing democratic opinion formation of its fundament – the free will of independent citizens (Carragee & Roefs, 2004; Druckman, 2001; Nisbet et al., 2003). By contrast, if people choose to follow frames, framing has been argued to enhance democracy by endowing citizens with a wide repertoire of available interpretations (Brewer & Gross, 2005). The issue has remained unresolved to date mainly because the role of subjects’ knowledge – the base of possible resistance to frames – has been grossly underspecified in the scientific debate (Druckman, 2001; Greenwald, 1968; Willnat, 1997, however, see Berinsky & Kinder, 2006 and Rhee, 1997, for interesting models). Since this study conceptualizes frames within the context of the knowledge required for processing them, it is well-suited to address the debate on the resistability of frames in a more differentiated way.

A third important debate in framing research has focused on the realism of current theorizing and research with regard to the communication environment within which framing takes place. Similarly to the availability of additional knowledge challenging a provided frame, also the presence of other communicated frames and cues interferes with the framing process. In an attempt to model framing processes more realistically, Chong and Druckman (2007c) have conducted several studies testing the effects of frames under conditions of frame competition (see also Lecheler & de Vreese, 2010). Slothuus (2008) has investigated the effect of additional cues about the author of a frame, and several authors have discussed possible moderating effects of processing motivation (Chong & Druckman, 2007c; Druckman, 2003; Iguarta & Cheng, 2009; Matthes, 2007). All researchers have found that additional available information strongly reduces frames’ impact on opinion, indicating that framing may be much less powerful in reality than in a controlled experimental setting. However, to my knowledge, no study has considered more than one intervening influence, and only Lecheler and de Vreese (2010) have assessed also the effects on interpretation beside opinion change (Druckman, 2003). Again, the inclusive conceptualization of information feeding the framing process laid out above allows generating much more detailed predictions about both semantic and evaluative effects. In the following, I will address these three questions from the vantage point of the schematic network theory and derive expectations allowing an empirical test of the developed propositions.

Framing mechanisms

Accessibility: Belief retrieval

Regarding the mechanisms behind belief retrieval, most models advanced in the psychological literature are based on the ‘spreading activation’ metaphor introduced by Collins and Loftus (1975). In line with the conceptualization of this study, cognitive activation spread models understand memory as a network of concepts connected by beliefs. These beliefs possess differing accessibility – a predisposition to respond when connected nodes are activated (Ajzen & Fishbein, 1980; Cappella & Jamieson, 1997; Collins & Loftus, 1975; Fiske & Taylor, 1991; Higgins, 1996; Kintsch, 1998; Price & Tewksbury, 1997; B.T. Scheufele, 2004a; Zeelenberg, Pecher, Shiffrin, & Raaijmakers, 2004).

20 Some studies also apply a slightly different network format, where nodes represent whole beliefs. However, beliefs are necessarily dyadic and can hardly be adequately represented as nodes (Holyoak & Thagard, 1995). The conceptionalization also raises the question what, if not beliefs, the links are made of (Kintsch, 1998).
2003). From any activated belief, adjacent beliefs are retrieved until there are no more nodes left accessible enough to react. The knowledge thus activated forms the base for the construction of interpretations (Greenwald, 1968; Matthes, 2007). According to this view, frames bias the retrieval of knowledge by tapping different beliefs, increasing their accessibility and thus causing activation to spread in different directions. Framing effects are thus mediated by a priming of contextual beliefs, which selectively increase beliefs’ likelihood of being retrieved (Kim & Rhee, 2009; Petty et al., 2007; Price, Tewksbury, & Powers, 1997; Rhee, 1997; van Gorp, 2007; Zeelenberg et al., 2003).

This view, however, has soon been rejected as too simplistic. First, retrieved knowledge has been found to be more consistent than predicted by automatic activation spread theories. Related but currently irrelevant information is filtered out (Brewer et al., 2003; Kintsch, 1988, 1998). Instead, some authors advanced hybrid models, which combined automatic, accessibility-based activation with (usually sub-conscious) applicability judgment (Matthes, 2007; Price & Tewksbury, 1997; B.T. Scheufele, 2004a). Activated thoughts, in these models, were rapidly deactivated if they failed to reach a relevance threshold. What remained unclear, however, was how such filtering routines operate — how can the relevance of a belief be determined before it is actively considered? More importantly, relevance can only be assessed in relation to some criterion, which remains unspecified (Kuhltau, 1999; Šaracevic, 1996).

In view of the schematic network theory above, however, this problem is easily solved. If activation spreads within a schematic structure, coherent beliefs are more likely to be retrieved than incoherent ones: If spreading activation declines in strength while spreading, concepts that are related to the source of activation through multiple paths of related beliefs have a higher chance to receive sufficient activation to be retrieved (Read et al., 1997). If the amount of activation emanating from a concept is proportional to the sum of activation it receives, concepts receiving more activation through multiple (e.g., direct and indirect) relations to a source can also spread more activation to retrieve further beliefs. If several beliefs within a locally coherent context structure are activated, most remaining beliefs within this structure will be directly related to most of the activated nodes, rendering their retrieval very likely. Operating within a schematically integrated semantic network, hence, spreading activation carries an inherent bias to retrieve coherent beliefs. If activation also emanates not only from one focal concept, but also from frame-tapped contextual concepts, the same mechanism tends to retrieve beliefs that cohere with many of the activated sources (Berinsky & Kinder, 2006; Price et al., 1997).

Since the amount of retrieved information needs to remain closely restricted due to cognitive limitations, it follows that beliefs need to deactivate again if they do not achieve coherence (Kintsch, 1998; Read et al., 1997; Sanjose, Vidal-Abarca, & Padilla, 2006). This is precisely the function of the construction-integration (CI) process discussed at the end of chapter II.3: After retrieving a range of related beliefs, all information that does not contribute to achieving coherence must be eliminated (van Dijk & Kintsch, 1983). Again,

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21 Reflecting this ambiguity, applicability was included twice in Price and Tewksbury’s (1997) model: Initially, subconsciously determined applicability affected belief retrieval, reflecting, but not explaining the intelligent elimination of irrelevant beliefs. Later, those beliefs brought into active memory were scrutinized and weighted by a conscious applicability judgment. To mark the distinction, the authors named the conscious judgment ‘appropriateness’ as opposed to (subconscious) applicability filtering (see also Higgins, 1996).
the spreading activation mechanism, slightly amended, provides a simple explanation: Commonly, activation is assumed to spread only forward, to concepts not yet tapped. However, if activated concepts send activation along all beliefs they participate in, some activation also returns to the source that initially retrieved the concept. Beliefs receive ‘feedback activation’ proportional to the number of further beliefs they helped activating. Within densely interrelated context structures, strong feedback activation confirms the relevance of beliefs, whereas beliefs that retrieve weakly connected structures receive little feedback. If the activation level of a belief decreases quickly after initial activation, only beliefs that receive confirmative feedback remain above the threshold required for retrieval; others are deactivated again.\textsuperscript{22} The identification and retrieval of a limited set of coherent beliefs can be achieved by a simple, ‘mindless’ process operating on a schematically organized belief structure (Druckman, 2001; Tourangeau \& Rasinski, 1988).

\textit{Applicability: Belief weighting}

As a consequence, there is no principled distinction between the processes responsible for belief retrieval and the relevance judgment applied to a belief upon retrieval (Higgins, 1996; D.A. Scheufele \& Tewksbury, 2007).\textsuperscript{23} Beliefs receive the more activation the more they contribute to the coherence of the retrieved belief set, allowing an easy distinction between important and negligible information. This relates directly to the second process advanced with regard to framing: Nelson and co-authors have argued that framing works primarily through the weights attached to different considerations (de Liver \textit{et al.}, 2007; Druckman, 2003; Nelson \& Oxley, 1999; Nelson \textit{et al.}, 1997; Zaller, 1992).\textsuperscript{24} Depending on the cues provided in a message, different formable frames appear more or less applicable (Chong, 1996; Nelson \& Oxley, 1999; Price \& Tewksbury, 1997). Nelson \textit{et al.} therefore implicitly assume that multiple frames (considerations) are retrieved in response to the same communicated frame package, necessitating a more or less deliberate judgment which frames are most relevant to a situation (Baden, 2008; Sniderman \& Theriault, 2004). Thus far, the argument is well compatible with the spreading activation mechanism above, which may identify more than one coherent set of beliefs applicable for interpretation. However, not all frames will receive the same amount of activation, allowing a weighting of frames according to their perceived relevance. The same process that governs belief retrieval is also responsible for the crediting of differential importance to beliefs and coherent belief sets, based on their ability to integrate the set of tapped cues.

Although the weighting mechanism observed by Nelson \textit{et al.} can be accounted for within the spreading activation logic, belief retrieval and belief weighting remain conceptually different processes: First, weighting is dependent on retrieval. Only retrieved thoughts can be discounted or highlighted. To argue that framing works \textit{primarily} through

\textsuperscript{22} Such deactivation may also happen if a cue initially tapped by a frame fails to activate a connection to the rest of the activated concepts: While beliefs relating to multiple cues receive activation and confirmation from various sides, activation peters out quickly for isolated beliefs: Although the cue has been successfully tapped, the perceiver fails to see a connection with the rest, and disregards it again (Graber, 1988; Read \textit{et al.}, 1997).

\textsuperscript{23} This ties in with Matthes’ (2007) observation that imagining accessibility as detached from applicability would suggest, against evidence, that also highly accessible, irrelevant beliefs would be retrieved (Price \textit{et al.}, 1997).

\textsuperscript{24} The ‘considerations’ weighted in the studies conducted by Nelson \textit{et al.} (1999; 1997) clearly do not represent (dyadic) beliefs, but complex sets of integrated beliefs – ‘frames’ in the terminology of this study.
weighting is to claim that the set of retrieved beliefs is relatively stable – a claim disputed by the conceptualization advanced here (Chong & Druckman, 2007c; Druckman, 2001). To date, no study has checked whether those considerations rated as unimportant were actually retrieved prior to measurement – an omission that will be redressed below. Second, weighting can be gradual, such that beliefs can remain present in cognition but play different roles in attitude construction. The weighting mechanism is thus an important reinforcing bias that operates on top of the retrieval mechanism. Finally, weighting does not stop with the automatic process laid out above. While both the set of beliefs brought to attention and their respective weights inevitably influence the judgment cast, once beliefs are retrieved they can be subjected to conscious reasoning (Chong, 1996; Druckman, 2001; Gross, 2000; Nelson & Oxley, 1999; Nelson et al., 1997). People may deliberately adjust attributed belief importance and initiate further retrieval to gain additional information. The automatic retrieval and weighting mechanisms form the base for information processing, but they do not fully determine the information a person relies on for comprehension.

Belief content change

Once retrieved beliefs are consciously attended to, people may also update the content of held beliefs, or form new inferences based on the retrieved information. While communication effects on belief content constitute probably the longest standing research tradition in communications, it has rarely been considered in relation to framing (Chong & Druckman, 2007c). Only recently, Slothuus (2008) and de Vreese (2004c) have brought the possibility to attention that framing – which primarily affects the context of information (Nelson et al., 1997; van Gorp, 2007) – might alter belief content as well. Within the schematic network theory, two possible explanations are available: On the one hand, provided contextual information can simply update stored contextual information (classic persuasion effect). On the other hand, people may perceive gaps in the retrieved information, searching their memory to guess, fill in and store the missing bits. This is particularly likely to happen when weakly integrated knowledge structures are tapped or when contextual cues cause the joint retrieval of belief sets that had not been considered jointly before. People may construct new links or notice semantic discrepancies between the sets, revising selected beliefs to reinstate coherence (knowledge integration effect, Berinsky & Kinder, 2006; Conover & Feldman, 1984; Long & Lea, 2005; Tourangeau & Rasinski, 1988). In either case, people form beliefs they had not held before (Brewer,

25 Multiple studies have argued that Zaller’s expectancy value equation \("\text{Attitude} = \sum (\text{weight} \cdot \text{valence})\) offers two possible routes for the operation of framing effects: one affecting valences (belief content), and one affecting belief weights (importance, Chong & Druckman, 2007c; Druckman, 2001; Nelson et al., 1997). They therefore overlook the third option, namely, the possibility to alter the set of beliefs included in the summation.

26 Difficulties arise from the different approaches defining the fields of framing and persuasion research: While the former is mostly defined by its focus on information context and greedily covers any effect that frame variations may have, the latter defines itself based on the observed effect of communication upon judgment. Where information context structures affect opinion, both fields fight over the prerogative of interpretation, fiercely resisting attempts by the respective other to explain and thereby claim the respective effects. For this reason, persuasion researchers have endorsed Nelson et al.’s claim that framing affects belief weights, and hence not their evaluative loads. Thus erecting a sturdy fence between the disciplines, this competition artificially constrains and thus complicates the analysis of information context effects upon evaluative judgment and belief content (Lecheler, 2010).
However, this kind of framing effect is extremely difficult to predict: Even if one knows that a person holds inconsistent or no beliefs about selected contexts and the frame successfully brings these to attention, this does not necessarily trigger a revision of beliefs. The reliably recurrent effects of frames on people’s interpretations and opinion, hence, are unlikely to derive primarily from belief content change.

Frame resistance

The above discussion of mechanisms reveals that framed cognition necessarily involves both subconscious and conscious construction: Even if the process is conceptualized in other ways than the one proposed above, the only possibility to rule out subconscious influences is to assume that frame effects only affect cognition after all relevant knowledge has been retrieved. Information retrieval can be expected to be unaffected by frames only if the set of available information is both very limited (such that no selection among similarly relevant contexts is required) and very well-integrated (such that information is reliably retrieved exhaustively) (Nelson et al., 1997). While possible – e.g., for salient but uncontextualized stereotypes (Carley & Kaufer, 1993) – this situation is a rare exception. If a person’s contextual knowledge is too diverse to consider all related beliefs at once, frames almost inevitably affect the set of beliefs brought to attention: They operate before conscious thought can intervene (Druckman, 2001). Inversely, unless one assumes that the COI integrating beliefs is already determined upon retrieval, framing effects inevitably undergo conscious construction. As I have argued above, the storage of meaning is neither plausible nor useful. Meaning must be reconstructed consciously based on the retrieved beliefs (Langacker, 1998; van Dijk & Kintsch, 1983). As noted in the preceding subchapter, people may adjust weights, update beliefs, or detect and resolve inconsistencies among retrieved beliefs during conscious integration (Gross, 2000; Tourangeau & Rasinski, 1988; van Dijk, 1985). Obviously, people often forego their opportunity to scrutinize retrieved information (Basinger & Lavine, 2005; Chong & Druckman, 2007c; LeBoeuf & Shafir, 2003; Visser et al., 2007): While meaning construction remains conscious, people remain unaware that other COIs could be easily constructed, as well (Brewer & Gross, 2005; Druckman, 2001).

Whenever people are motivated to scrutinize the information brought to mind, automatic and conscious processes interact: People may wish to gain a more thorough understanding, re-initiating belief retrieval and sifting frames to decide which interpretation satisfies their needs best (Chong, 1996; Chong & Druckman, 2007c; Feldman & Conover, 1983; Gross, 2000; LeBoeuf & Shafir, 2003; Ottati & Wyer, 1990). Particularly when people notice inconsistencies within the retrieved information – e.g., contradictory claims, misalignment with processing goals, or other cues questioning the validity of retrieved information – they will typically be motivated to reason and access further information (Gross, 2000; Knowles & Linn, 2004; Ottati & Wyer, 1990; van Gorp, 2007). If sufficient additional information can be retrieved, such conscious efforts may totally overpower the frame’s initial retrieval effect (Carragee & Roefs, 2004; Price & Tewksbury, 1997). Still, while people may counterargue or disregard a frame, they are unlikely to resist it entirely.
Frames in a realistic information environment

What resources are available for resisting or consciously adapting retrieved frames depends on the wealth of other available information – from related knowledge, further communication messages, situation cues, or current processing goals (Shah et al., 2004; van Dijk & Kintsch, 1983). In most realistic communication situations, such information is plenty and provides both additional cues affecting the retrieval of information, and rich information to be accessed deliberately. In recognition of the artificiality of experimentally controlled stimuli, framing scholars have therefore begun to model the availability of cues and information competing with a provided frame. Offering different frames in close succession, Chong and Druckman (2007c) manipulated the schematic knowledge available when processing the second frame: Made aware of competing interpretations of the same issue, people were less prone to follow a single frame. In a related experiment, Slothuus attributed frames to political authors who were in line or in conflict with participants’ party identifications. His results show that people were much less likely to follow frames offered by unfavorably evaluated authors (Petersen et al., forthcoming; Slothuus, 2008, forthcoming). Likewise, also the manipulation of processing goals affects the readiness with which communication frames were followed. Notably, when processing goals motivated participants to seek out additional information beyond the provided frame, the frame’s impact was clearly diminished (Druckman & Bolsen, 2009; Lecheler, de Vreese, & Slothuus, 2009).

The impact of such additional cues, however, differs slightly depending on which processing stage they intervene in. Situational observations, salient cues (such as the author of a frame), or processing motivations provide additional sources that feed spreading activation into the retrieval process. As a consequence, chances that frame-provided cues are disregarded instead rise, as does the likelihood that beliefs unrelated to the frame survive the retrieval process (Graber, 1988; Price & Tewksbury, 1997). Inconsistencies between frame and other situational cues are likely to come to attention. The knowledge structure, the second main determinant of retrieval, may resonate more or less well with the provided frame (Iyengar & Simon, 2000; Noakes & Johnston, 2005; Tewksbury & Scheufele, 2009): Frames that refer to social representations are likely to meet knowledge fully capable of comprehending the frame, whereas frames referring to special knowledge may not (Gilens, 2001; McGraw & Pinney, 1990). At the same time, shared knowledge is likely to be well-elaborated, facilitating its adaptation to relate to other present cues or motivations. The availability of potentially more compelling alternatives diminishes a frame’s ability to control belief retrieval. The most important impact of well-integrated knowledge, however, lies in the conscious processing stage: When people are motivated to scrutinize information – e.g., because of perceived inconsistencies – well-integrated knowledge provides people with plenty of information to extend, alter, counterbalance or even counterargue the frame (Brewer & Gross, 2005; Chong & Druckman, 2007c; Druckman, 2001; Wegener, Petty, Smoak, & Fabrigar, 2004). In the presence of well-developed schematic knowledge and attitudes, hence, frames can direct information processing only if they are compelling enough to distract people from mismatches with their prior beliefs. Once discrepancies are noted, frame resistance is likely (Chong, 1996; Chong & Druckman, 2007c).
II.6. Framed information processing

Frame reception: Selecting the cues directing comprehension

Provided with the above specifications, we finally can conceptualize the cognitive processes triggered by the reception of a communicative frame as follows. As argued above, a communicative frame is not really a frame but a set of cues designed to retrieve a particular set of contextual beliefs, which constitutes the actual frame (Nelson et al., 1997; van Gorp, 2007). Upon perceiving a communicative message containing such a set of cues, the first question is whether the cues are capable of tapping corresponding beliefs in a person’s mind (Scott, 2001). Since communication frames in public discourse are typically closely oriented toward the predominant social representations, most recipients are likely to perceive the cues correctly (Rhee, 1997). Only occasionally will cues fail, retrieving something else or nothing at all. If the individual does not possess the knowledge referred to by the cues, but the required concepts are familiar, another possibility is that she simply acquires a new belief based on the presented information. This is likely to happen in the case of news frames, which regularly embed single new propositions within a set of references to familiar knowledge. As a consequence, such messages give rise to both a learning effect (acquisition of new beliefs or the updating of old ones) and a framing effect (embedding of information within selected context, Brewer, 2001; Slothuus, 2008).

Simultaneously with the message-embedded cues, a person perceives a wide range of other information such as situation cues or current intentions that motivate goal-oriented processing. However, due to limited attention, an individual does not attend to all available cues: Only a subset of message and situation cues reaches an attention threshold. If a message is highly salient, the embedded cues are likely to crowd out other cues such as prior processing goals. Inversely, in a highly distracting situation or when immersed in thoughts, a person may fail to perceive parts of a message (Graber, 1988; Kintsch, 1998; Price & Tewksbury, 1997; Visser et al., 2007).

Belief retrieval: Finding the beliefs that connect the set

Those cues attended to subsequently activate the corresponding concepts and beliefs in schematic cognition. From these starting points, activation spreads along established beliefs, the easier the more accessible these are. Due to the interrelated structure of beliefs in schematic cognition, densely connected subsets of beliefs receive much activation arriving along multiple paths, whereas weakly interrelated beliefs receive little (Willnat, 1997). Moreover, nodes related to many other activated nodes receive constant confirmation, strengthening the coherence bias in retrieval. Emanating from multiple tapped cues at once, spreading activation should quickly identify a maximally coherent set of beliefs that integrates as many of the tapped cues as possible (Berinsky & Kinder, 2006; Iguarta & Cheng, 2009; Price & Tewksbury, 1997; Shah et al., 2004; Zaller, 1992). If no set of beliefs is found that connects all cues, single cues may be disregarded as unrelated, or multiple coherent sets integrating some of the cues each may be activated (Graber, 1988). In the former case, retrieved meaning is coherent, but the perceiver may remain aware that a cue has not been accounted for (Fiske, Kinder, & Larter, 1983). She may therefore choose to retrieve further information to try and integrate it with the rest.
In the latter case, retrieved information is not fully coherent, requiring active processing to instate coherent meaning.

Communication frames are the more successful in retrieving intended belief sets the fewer cues beyond the frame interfere, and the more isomorphic a person’s belief system is to the one anticipated by the author (Shen, 2004). If available schematic knowledge does not contain the anticipated structures, retrieval will use other beliefs instead, and deviant readings of a communication frame result. By contrast, if the knowledge structure contains many additional beliefs, retrieval settles either on the most accessible set (if processing motivation is low), or the set that best matches also the additional cues (Basinger & Lavine, 2005; Berinsky & Kinder, 2006; Rhee, 1997; Shen, 2004). Only if spreading activation fails to find belief sets relating the cues to one another, frame processing fails entirely (Brewer et al., 2003; Nelson et al., 1997).

Integration: Determining the central organizing idea

The cognitive response to the presented cues constitutes the information base from which people construct their interpretation (Greenwald, 1968; Gross, 2000). There is, to date, no definitive way to model the construction of semantic coherence based on a set of interrelated beliefs. Typically, more than one macrostructure can be fitted to the set, depending also on the chosen focus (Ingwersen, 1992; Luke, 1989; van Dijk, 1985; van Dijk & Kintsch, 1983). However, for a coherent macrostructure to be found, inconsistencies in semantic relatedness as well as evaluative loads must be resolved first (Axelrod, 1973; Noakes & Johnston, 2005; Ottati & Wyer, 1990; van Dijk, 1985). Hence, a perceiver will need to construct connections where retrieved beliefs are yet unrelated. Mostly, direct relations can be inferred from the indirect relations between two concepts. If this is not possible, people may resume information retrieval to determine what relation appears plausible. If coherence cannot be instated, the information is perceived as ambiguous, and separate macrostructures are fitted to the coherent parts.

The other kind of coherence that needs to be instated is evaluative coherence. If the retrieved belief set indicates different evaluations, balance can be reinstated in three ways. First, if only single beliefs disagree with the majority of retrieved information, these can be discounted or dropped (Gamson, 1992; Hardyck, 1968; Kintsch, 1998; Price & Tewksbury, 1997). If discounting is not possible – because the discrepant beliefs are crucial to sustaining semantic coherence, or because too many beliefs are involved (Hardyck, 1968; Johnson, Smith-McLallen, Killeya, & Levin, 2004) – integration may be attempted by means of reinterpretation: Qualifying the relations between differently valenced beliefs, contrary evaluations of single aspects may be twisted to support a coherent evaluation (Brewer, 2001; Kintsch, 1998; Tourangeau & Rasinski, 1988). Only if a revision of the concept relations does not achieve evaluative balance, additional information is required for integration. People may resume retrieval to discover additional evidence regarding what position to take, or they seek information about the credibility of the frame (Wegener et al., 2004). If the incoherence remains unresolved, information is perceived as ambivalent, and separate macrostructures are fitted (Gamson, 1988; Kumlin, 2000; Lavine, 2001).

27 Based on a series of experiments, Hardyck (1968) has argued that, when discrepancies arise, people are more likely to discount countervalent messages than to disregard their prior attitudes (Peffley & Hurwitz, 2007).
Frame failure I: Affecting semantic interpretations

As a consequence, communication frames may fail to affect the semantic drift of constructed meaning in various ways (Kim & Rhee, 2009). First, the provided cues may fail to tap corresponding beliefs in cognition, either because they are crowded out by other cues (failure due to distraction), or because the targeted beliefs are unavailable (availability failure I, Price & Tewksbury, 1997; Sotirovic, 2003). Second, spreading activation may fail to connect the cues (availability failure II), or retrieve a different set of beliefs from those intended (failure due to deviant schematic knowledge, Berinsky & Kinder, 2006; Brewer et al., 2003; Graber, 1988; Sotirovic, 2003; van Gorp, 2007). Once a set of beliefs has been retrieved, people may perceive inconsistencies and attempt to resolve them. They may choose to discount beliefs retrieved by the frame (discounting failure I), or substantively alter them over revision (reinterpretation I). Likewise, if inconsistency resolution motivates the retrieval of additional information, this information may crowd out (discounting failure II), amend (reinterpretation II) or counterargue (failure due to counterarguing) the meaning summoned by the frame (Brewer & Gross, 2005; Gross, 2000; Johnson et al., 2004; Neuman et al., 1992; Price & Tewksbury, 1997; van Gorp, 2007; Wegener et al., 2004). Although the latter kinds of frame failure appear less obvious within the process, they are probably the most common kind observed: People understand the semantic implications of a communicated frame, but disregard, qualify or reject these due to their previous understanding of the issue. Particularly for issues that have been present in public debate for a while, unavailability failures are much less likely than failures due to an availability of too much additional, more convincing information.28

Frame failure II: Affecting evaluative judgments

As Brewer and Gross (2005) have demonstrated, even if people follow the semantic content of a communicated frame, it may still fail to influence opinion in the predicted way (Berinsky & Kinder, 2006; Brewer & Gross, 2005; Kim & Rhee, 2009).29 There are two major ways of accounting for this failure. On the one hand, a person may simply evaluate an issue differently because she adheres to different values and normative standards, or prioritizes them in a different way. Hence, the same beliefs deliver different evaluative implications: People agree on the meaning of an issue, but some like it whereas others dislike it (Gross & D'Ambrosio, 2004). A frame can reliably produce the same bias in opinion formation only to the degree that people’s schemata are formed and evaluated in similar ways.

On the other hand, in analogy to the mechanism for counteracting the semantic content of retrieved beliefs, people may become aware of evaluative discrepancies, trying to resolve them by discounting, reinterpreting, or retrieving additional information (Gamson, 1992; Gross, 2000; Hardyck, 1968; Johnson et al., 2004; van Gorp, 2007;

28 If one defines frame failure not as the frame’s inability to summon an interpretation close to the meaning intended by a frame, but as its inability to alter the meaning a person constructs compared to the one she would derive without the frame, there is another possibility for a frame to fail: If a frame refers exclusively to beliefs that are highly already salient within a person’s imagination, a person may fully follow the frame but end up interpreting the issue precisely the same way as without the frame.

29 Frames do not necessarily imply specific valence. However, many frames (‘considerations’, see above) explicitly carry evaluative suggestions, or are at least by their creators considered to point towards clear pro- or con-arguments.
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Wegener et al., 2004). Searching for additional evaluative information, people are likely to discover prior attitudes related to an issue, potentially overpowering the frame’s valence (Chong & Druckman, 2007c; Druckman, 2001; Lecheler et al., 2009; Matthes, 2007; Slothuus, forthcoming). ‘Inertial resistance’ (Zaller, 1992) follows: While the frame succeeds in adding some beliefs to the information base, their influence remains small compared to the rest. Opinion changes are imperceptible (see also Carragee & Roefs, 2004; Druckman, 2003; Gross, 2000; Knowles & Linn, 2004). This is the more likely the stronger adjacent attitudes are, simply because strong adjacent attitudes are sustained by well-integrated schematic knowledge: Such knowledge is not only easily found upon conscious retrieval, but it is likely to attract activation already upon automatic retrieval if related beliefs are tapped (Chong, 1996; Chong & Druckman, 2007c; Conover & Feldman, 1984; van Gorp, 2007).

Frame failure III: Backfiring evaluative judgments

A particularly interesting possibility is a countervalent response to a frame (e.g., Barker, 2005; Chong & Druckman, 2007c; Druckman, 2001; Johnson et al., 2004; Peffley & Hurwitz, 2007): While frame resistance only requires that frame-tapped information is relatively inconsequential compared to other information, backfiring frames imply that the communication frame alters information processing beyond reliance on prior knowledge and attitudes (Brewer & Gross, 2010; Knowles & Linn, 2004). There are three to four ways to account for surplus of countervalent beliefs: First, the beliefs retrieved by the frame may systematically carry different valence from the one anticipated by the communication frame: For someone who adheres to different normative standards, frames tapping these may have a ‘normal’ framing effect in an unanticipated direction (Gross & D’Ambrosio, 2004). Second, spreading activation may fail to follow those beliefs implied by the communication frame, but retrieve countervalent stored knowledge instead (Gross, 2000). However, in order to backfire beyond mere resort to prior attitudes, spreading activation needs to create new connections that reinforce countervalent evaluations. Third, the frame may succeed partly, but retrieve several countervalent beliefs, as well. A set of inconsistently valenced beliefs is brought to attention, motivating a conscious search for additional information. However, unlike the case of inertial resistance described above, the individual is motivated not merely to resolve the discrepancy, but to demonstrate that the communication frame is wrong. Such deliberate counterarguing is likely if the retrieved prior attitude is strong, but the frame cannot be easily disregarded (Zaller, 1992). The person therefore conducts a targeted search for information bolstering her prior attitude, reinforcing it by either relating further beliefs to it, or increasing the integration of its schematic base (e.g., Ajzen & Fishbein, 1980; Bizer & Petty, 2005; Chong, 1996; Gross, 2000; Johnson et al., 2004; Knowles & Linn, 2004; Taber & Lodge, 2006; Wegener et al., 2004). Consequently, a more extreme countervalent judgment than before is constructed.

The last possibility starts from a similar scenario, but takes a somewhat different explanatory approach. As I have argued above, inconsistent cognitive responses bring mismatches between frame and attitudes to attention (Brewer, 2001; Johnson et al., 2004; Rucker et al., 2008). According to Gross and D’Ambrosio (2004), a negative emotional response is raised, expressing dissatisfaction with the frame and motivating resistance (Druckman, 2001; Knowles & Linn, 2004): People dislike being exposed to information.
incompatible with their beliefs, and punish detected attempts to suggest a stance they do not support. To avoid detection of evaluative inconsistency, communication frames need to prevent countervailing information from being retrieved, or at least avoid retrieving too much of it to be discounted (Price et al., 1997). If attitude-inconsistent frames are followed and the link to prior attitudes is not detected, framing exerts a large influence on opinion. However, when schematic knowledge is sufficiently densely integrated, attitude-inconsistent frames are likely to be detected, to be emotionally sanctioned and consciously counterargued (Gross, 2000; Rucker et al., 2008).

II.7. Beyond the frame

Once a frame is processed, shaping interpretations and giving rise to any of the above conscious reasoning, frame processing does not stop. Over the course of considering an issue, people process many, diverse and often competing frames. Committing their belief structures to memory, they develop their ever richer schematic knowledge. Many local attempts at crafting coherence mold into a larger web of interrelated understandings and connected meaning (Conover & Feldman, 1984). As a consequence, people are not confined to rely on one frame alone when making sense of an issue, or casting their judgment about it (Nelson et al., 1997). They may consider various possible interpretations, or connect multiple frames into wider accounts. Whenever people combine multiple frames into a coherent understanding, the question arises how coherence can be instated among these. Curiously, the concern with coherence beyond individual frames has regularly been hinted at, but hardly ever addressed explicitly in the scientific literature (Axelrod, 1976; Conover & Feldman, 1984; Donati, 1992; Fisher, 1997; Gamson, 1988; Graesser et al., 1995; Kintsch, 1998; Neuman et al., 1992; Noakes & Johnston, 2005; van Dijk & Kintsch, 1983; van Gorp, 2007).

As one point of departure, Snow and Benford (1992) observed that social movements often adhere to characteristic, ideologically structured repertoires of frames marked by a highly selective use of concepts and relations. The same practice has been described for political parties (Merelman, 1969; Petersen et al., forthcoming; Triandafyllidou & Kosic, 2002). These structures, termed ‘ideologies’ or ‘master frames’, preselect which aspects of reality are seen to matter most for understanding issues (Fisher, 1997; Kumlin, 2000; Oliver & Johnston, 2005; Snow & Benford, 1992; van Gorp, 2007). Restricting the range of relevant considerations drawn upon to define a situation, ideologies ensure that frames cohere at the level of participating concepts and relation types (Benford & Snow, 2000; Mitsikopoulou, 2008). However, this kind of coherence is relatively shallow. Within the same master frame, different frames can still provide incoherent meaning, and support contrary positions (Conover & Feldman, 1984; Donati, 1992; Fisher, 1997; Haste, 1992; Oliver & Johnston, 2005; van Gorp, 2007).

Moving beyond such master frames, Gerhards and Rucht (1992) found that argumentative accounts possessed a center-periphery structure, held together by few core frames (see also Converse, 1964; Gamson, 1988; Gamson & Modigliani, 1987; Moloney
These central, organizing frames (COFs) define the functional dimensions of the argument and cast actors and issues into the most important narrative roles: They name heroes and villains, define the situation, set normative standards, and advocate action (Gerhards & Rucht, 1992; van Gorp, 2010). Since the central frames contain the main argument in a nutshell, they function by themselves and can be stored or presented in condensed form (Delicath & DeLuca, 2003; Noakes & Johnston, 2005). Around this central structure, other frames elaborate on the main argument, specifying further aspects while following the narrative roles and argumentative functions assigned (Bennett, 1980; Berinsky & Kinder, 2006; Donati, 1992; Nisbet et al., 2003; Pennington & Hastie, 1988; Rhee, 1997). Within the same account, frames utilize and elaborate upon definitions already established by other frames. The same can be said about the alignment of frames within narratives, which possess a sequential structure on top of the centrally defined set of actors and issues (Berinsky & Kinder, 2006; Donati, 1992; Luke, 1989; Nisbet et al., 2003; Pennington & Hastie, 1986; van Dijk & Kintsch, 1983; van Gorp, 2010). Both argumentative and narrative accounts are thus held together by one or few interconnected COFs which summarize what the story or argument is ‘about’ (Graber, 1988; Schaap, 2006; Tourangeau & Rasinski, 1988; van Dijk, 1985; van Dijk & Kintsch, 1983). Coherence is extended beyond the frame by means of shared references to some COFs which, in Gamson and Modigliani’s words, provide “meaning to an unfolding strip of events” (1987: 143). In close analogy to coherence within a frame, narrative coherence depends on the creation of dense connections between the COIs advanced by different frames – shared references to propositions defining which aspects of one frame the other one elaborates upon. As within frames, inconsistencies can be resolved by either discounting misaligned frames (which, for instance, violate assigned actor roles), by reinterpretation (for instance, the construction of a different COI or a shift in focus), or by resort to additional information (for instance, inconsistent behavior of actors can be resolved by attributing it to external forces, Pennington & Hastie, 1986, 1988). Just as concepts and propositions become meaningful only in the context of related information, individual frames support wider understanding due to their relations to other frames. They form interconnected structures in the vast web of information.

In summary, frames play an important role in people’s efforts to make sense of the world they live in. On a micro level, frames embed information within coherent context, rendering it meaningful. On a meso level, frames make stored as well as provided information useful for addressing specific processing tasks: They support opinion formation, the attribution of responsibility, and the identification of likely consequences and options for action. On a macro level, finally, frames integrate discrete situations into narrative accounts and allow the construction of understanding beyond the moment. If the above propositions are accurate, they should be reflected in a wealth of locally coherent, interrelated and overlapping structures of information both in discourse and people’s schematic knowledge. Moreover, the processes operating upon these described structures predict cognitive responses to communicated frames to draw upon

30 Both Snow and Benford (1992) and Gerhards and Rucht (1992) chose the same term, ‘master frames’, to describe substantively different phenomena. To avoid confusion, the latter will be called ‘central organizing’ frames here.
both cognitive and communicative information in characteristic ways. In the following, I will empirically scrutinize the proposed cognitive processes (chapter IV), information structures (chapter V & VI) and patterns of frame acquisition from public discourse (chapter VII). Since the acquisition of contextualized knowledge cannot be directly observed, however, I need to first consider the conditions allowing a rigorous empirical test. Based on such criteria spelled out in chapter III, I will subsequently select a suitable case.
III

Case Selection

Theoretical requirements

Knowledge acquisition, as laid out above, depends on all contextual information available in a given situation: It cannot be understood without simultaneously considering the processing individual’s background knowledge and processing motivation, as well as observable and communicated information. A fundamental unpredictability regarding precisely which bits out of the available information will be drawn upon further complicates matters.

Research to date has tackled the many intricacies of knowledge acquisition in different ways. One approach, heralded by the seminal studies of Lane (1962) and Graber (1988), has been most concerned with the transformations and meanings derived from information, and has opted for a qualitative approach. Their strength in looking beyond itemized, decontextualized knowledge is taken up by the network conceptualization advanced in this study.\(^{31}\) However, their inability to control confounding influences and thereby establish causal relations constitutes a severe limitation. A second approach seeks certainty in large numbers, assessing people’s acquired knowledge by means of survey interviewing. However, the possibilities for measuring knowledge in a survey are mostly restricted to factual, itemized knowledge (Garramone & Atkin, 1986; Gilens, 2001). Also, the validity of both self reports and knowledge quizzes has been questioned (Czesnik, 2003). Moreover, it usually remains unknown what information respondents had actually been exposed to (Slater, 2004). Only few recent and ambitious studies tackle this problem, combining the measurement of knowledge with both measures of media use and content analyses of media discourse. While this approach helps linking acquired knowledge to its sources – and hence will be pursued in the present study, as well – lacking control of confounding influences remains a major concern (Brewer & Gross, 2010). The third, predominantly psychologically oriented strand of research into belief acquisition has therefore opted to constrain the available information experimentally: In tightly controlled environments, sometimes even after pre-testing for prior knowledge, researchers manipulated processing motivations as well as the range of cues available (Druckman & Bolsen, 2009; Lecheler et al., 2009; Schuck & de Vreese, 2006; Slothuus, 2008). However, this approach is applicable only to test the acquisition of precisely defined, decontextualized information. It is not particularly well suited to investigate real life processes of knowledge acquisition, let alone long term learning processes (Brewer & Gross, 2010). In order to get a grip onto the highly complex, uncontrollable processes of

\(^{31}\) Researchers interested in structural knowledge have therefore exhibited a preference for knowledge measures that allow deriving relations between knowledge items – notably, open ended (e.g., Berinsky & Kinder, 2006; Culbertson & Stempel, 1986; de Vreese & Boomgaarden, 2006), concept-sorting (e.g., Berinsky & Kinder, 2006; Kitzinger, 1994) or graphical measures (e.g., Green, Muncer, Heffernan, & McManus, 2003).
meaning construction in real societal communication environments, a different strategy, or a combination of strategies is required (Kinder, 2007).

However, the basic requirements remain the same: In order to isolate the processes responsible for the acquisition and integration of beliefs, it is necessary to restrict or control as much of the available information as possible. In particular, four aspects need to be considered: First, belief acquisition is best studied with regard to topics where prior knowledge is low, limiting the range of possible inferences. At the same time, an entirely blank slate is not desirable: If no knowledge is available at all, people are likely to search for relatable information more or less at random, and hence, unpredictably. What is required is a topic about which limited, well-described knowledge is available. Second, in order to make sure that people actually use available information to create meaning – rather than ignoring things all together – some motivation to consider the issue matter is required. The more specific the motivation for learning is, the less will deviant personal interests interfere with the process, ensuring that people will use available information to achieve similar ends. These two first requirements imply that either the topic or the motive for learning – preferably both – need to be novel: If both had been available for a long time, it is unlikely that people never bothered to diversify their knowledge. The need for uniform, society-wide incentives for learning suggests that salient political issues are well-suited to the demands: Such issues call upon all democratic citizens to form an opinion. The novelty requirement, however, rules out all recurring or everlasting issues on the political agenda. Arguably the most clear-cut situation in which novel, salient issues motivate goal-directed opinion formation is a referendum campaign (de Vreese, 2006; Hobolt, 2005). Unlike elections, referenda revolve around only one, typically uncharted and complex but otherwise well-delimited issue. Moreover, they limit voters’ ability to rely on habitual voting behavior and party loyalties. As a consequence, citizens will usually approach referendum campaigns with an acute need for information (Aarts & van der Kolk, 2006; Hobolt, 2007; Neijens & van Praag, 2006).

The third aspect that needs to be controlled is the availability of situational cues that inform knowledge acquisition. Among other things, this relates to the distinction between obtrusive and unobtrusive issues (McCombs, 2004; Walgrave & van Aelst, 2006): Where direct observations enable people to form understandings and opinions based on experiential knowledge, their dependency on provided information is reduced (Gamson, 1992). At the same time, other familiar cues can be drawn upon to shortcut opinion formation on unfamiliar issues: To the degree that people can use heuristic inference strategies – e.g., following prominent speakers’ endorsements, or basing conclusions on familiar situations – these interfere with information processing (Iyengar, 1990; Lau & Redlawsk, 2001). Hence, a suitable case should pertain to a highly unobtrusive issue, which is introduced to people in an out-of-the-ordinary context, by relatively unfamiliar authors. One case which fulfills these requirements reasonably well is European politics: Even more than national politics, European policies are unobservable to citizens and accessible almost exclusively through the media (Peter, 2003). European politicians are mostly unfamiliar, and EU-related campaigns are regularly led by second- and third-row

32 Referenda are rarely called on policy issues where interest aggregation is already well-entrenched in routine political processes. Mostly, they deal with new challenges or fundamental changes in the order of a political system (de Vreese & Semetko, 2004).
national actors (de Vreese & Semetko, 2004). Among those referenda held on EU-related matters, the EU constitutional referenda stand out as polls on an EU policy innovation which has aroused considerable interest among some European peoples – notably, the French and the Dutch. Also, due to their long standing experience as EU member states, citizens in these countries can be expected to possess at least some, well-structured knowledge on the European Union (Medrano, 2003, see below; Scheuer, 2005). Due to the scarce and distinct EU coverage in the Dutch media – compared to the French media, which cover EU matters both more regularly and more in connection to domestic political issues (Kevin, 2003; Peter, 2003) – the knowledge formed by citizens over the years should be more restricted in the Netherlands. It is for this reason that this study focuses on the Dutch referendum.

However, there is one aspect left to control with regard to the study of information acquisition: Having severely restricted the usability of the other available cues due to the case selection, the communicated information available for processing advances to become the key determinant of acquirable knowledge. This source, obviously, can only be controlled experimentally (as it will be in chapter IV). However, it is possible to record the available information relatively exhaustively: Due to the EU constitution’s short life span and the dominance of media and political elites as information providers (Iyengar, 2010; Peter, 2003), most of the relevant public discourse can be easily identified. Even within the three years of its existence, public attention to the EU Constitution concentrated almost entirely on the brief, superficial but salient referendum campaign (Hobolt, 2009; Kleinnijenhuis, Takens, & van Atteveldt, 2005; Nijboer, 2005). The messages available for making sense of the EU constitution were both highly salient, widely available, and comparatively few (Hobolt, 2009). Consequently, the diversity of acquired understandings should be limited. Given a near-exhaustive account of the information available to Dutch voters, their interpretations can be contrasted against the proliferated explanations. Instead of controlling and manipulating the supply of information, this study thus exploits the properties of the natural situation (Brewer & Gross, 2010; Druckman, 2010). While the possibilities will by no means be exhausted by the present study, the case allows a – for real-life complexity – unusually well-controlled investigation of knowledge acquisition.

Embedding in related research

Aside of the suitability for investigating knowledge acquisition, the selected case also possesses a number of other useful properties that help linking it to research in related fields. With regard to classic framing research, first, many experimental studies have already utilized the context of EU politics (de Vreese, 2004b; de Vreese & Boomgarden, 2003; Lecheler et al., 2009; Petersen et al., forthcoming; Schuck & de Vreese, 2006). The subject allows varying contexts for information processing along multiple dimensions: As usually in politics, European issues are regularly presented in diverse thematic contexts similarly familiar to most people. Simultaneously, different evaluative stances toward political issues are common and respective frames easily constructed (Petersen et al.,

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33 Political leaders’ propensity to entangle themselves with European campaigns is low – even more so whenever EU topics are not merely relatively unexciting to the electorate, but also prone to failure (de Vreese, 2006; Hobolt, 2009).
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forthcoming). Beyond this, it is possible to vary the perceived relevance of issues, as well as the availability of background knowledge (Lecheler et al., 2009). The selected case thus lends itself well to experimentally testing the specific propositions laid out above (chapter IV).

From the perspective of message production, the combination of media coverage and campaign discourse allows exploring the diversity of the actors’ characteristic framing strategies (chapter V). The life span of the EU constitution included both phases characterized by sporadic, facts-oriented media coverage of EU-level decisions, and more continuous, conflict-oriented campaign coverage. At the same time, political parties used the campaign to argue for specific interpretations of the EU constitution (Carrubba & Timpone, 2005; Nisbet et al., 2003; Slothuus, forthcoming; Slothuus & de Vreese, forthcoming; Zhou & Moy, 2007). Emphasizing those aspects that best supported the party’s stance as well as its typical master frames, their frames should differ characteristically from those common within journalistic discourse (Moscovici, 1961; van Gorp, 2007). The selected case is thus also well suited to observe differences between episodic and integrated, neutral and evaluative, journalistic and political uses of frames.

Third, research in political attitude formation has recurrently considered the European case as well. This is particularly important since this work has inventorized people’s EU-related attitudes and belief systems (Scheuer, 2005). Most interestingly, the majority of schemata have been remarkably consistently turned up in studies of both people’s accounts and media reporting since the 1970es (Hewstone, 1986; Medrano, 2003). There is reason to conclude that, at least in the long standing EU member states, a stable schematic structure has formed to organize people’s EU-related beliefs. Among these, a set of generalized, mostly negative attitudes focus on the EU’s bureaucratic, undemocratic and top-down policy style and its commitment to neoliberal capitalism. Positive generalized attitudes portray the EU as area of economic prosperity and progress, an idealized humanistic-cosmopolitan polity, and a peace project steering clear from past wars and authoritarianisms. On a more specific level of knowledge, further attitudes discuss bureaucratic (over-)regulation and inefficiency, the democratic deficit, threats to sovereignty and identity, the prosperous common market, and the disappearance of borders. Less saliently recurring schemata refer to agricultural, security, defense and labor market policies. In view of the last decade, it is probably safe to add enlargement and the monetary union (EMU) to the list. Together, these schematic belief structures account for most themes people link to the EU (Hewstone, 1986; Medrano, 2003; Scheuer, 2005; Schönbach, 1983). People’s knowledge can be characterized as limited, relatively shallow, but well-organized and – crucially – well-charted.

Finally, European polls have been the object of much research into the formation of voting preferences. This research has mostly focused on heuristic reasoning – a mechanism relevant within the schematic network theory, as well (see also Iguarta & Cheng, 2009 on the relation between heuristics and framing). However, most heuristic

34 In an effort to determine an underlying structure beneath these themes, Scheuer (2005) found EU-attitudes to be organized into four dimensions: interest in the EU, attitudes towards integration, political unification, and the quality of democratic representation. Integration attitudes are strongly driven by perceptions of the common currency; the core dimensions of attitudes towards unification and democratic representation relate to citizens’ influence in EU politics, and European and national polities’ trustworthiness for safeguarding citizens’ interests, respectively.

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voting studies in the EU context primarily distinguished between heuristics based on EU-related attitudes and those deriving from domestic cues. This study, by contrast, allows a much more detailed treatment of cues used in the foundation of individual voting preferences. Results regarding the role of heuristic inferences in the formation of vote choices can be easily linked to existing findings from similar settings, assessing the importance of the specificities of the Dutch campaign.\textsuperscript{35} In sum, the case of the Dutch EU constitutional referendum facilitates both controlling the information environment available for people’s sense making and relating the findings to established fields in empirical research. It not only represents an unusually well-constrained case of information acquisition, but it can also be understood as a case of journalistic and political frame building, a context-rich setting for framing effects research, and a case of political opinion formation.

\textsuperscript{35} The most well-researched case, Denmark, is noted for its citizens’ rich prior knowledge on EU matters (Franklin, 2002; Svensson, 2002). The Spanish EU constitutional referendum has been characterized as similarly information-poor as the Dutch one, however, it was accompanied by a much more supportive public opinion climate and resulted in a Yes vote (Hobolt, 2009). The French referendum started from similarly poor knowledge and unclear cues as the Dutch case, but the debate quickly became much more politicized and controversial than in the Netherlands (Ivaldi, 2006; Milner, 2006). The Irish referenda – notably, the first ones on the Nice and Lisbon treaties – were marked by a campaign even less salient than the Dutch one (Garry, Marsh, & Sinnott, 2005; Hobolt, 2009).
IV

Framing Effects

Over the last decades, framing research has provided ample evidence documenting the profound effects frames can exert on the evaluation and interpretation of issues. However, the processes responsible for these effects remain grossly underspecified and contested in the academic debate. The above schematic network theory formulates a range of expectations regarding the cognitive processing of communication frames that can be tested experimentally. As a first step toward investigating the validity and utility of the sketched theory, hence, I will focus on the postulated mechanisms that can account for the widely familiar effects of frames.

IV.1. Expectations

According to the schematic network theory of framing effects, it is necessary to distinguish two times two aspects of a frame’s impact upon cognition. First, there is a distinction between subconscious processes driven by the selective retrieval of beliefs and conscious processes that may operate on top of the retrieved information base – if sufficiently motivated. Second, it is necessary to distinguish between the semantic effects raised by the frame, and the evaluative implications of the retrieved semantic information for opinion formation. Both distinctions include a sequential order: Subconscious processing precedes conscious construction (and possible reconsideration), and semantic effects precede evaluation. Since frame-influenced information processing, in most cases, involves both subconscious and conscious stages and induces both semantic and evaluative effects, they can be investigated within the same experimental setup.

Subconscious framing effects

Subconscious processes are primarily driven by activation spreading within the schematically structured knowledge network, as is illustrated in figure IV.1: Frame packages first cue people toward selecting particular beliefs for retrieval based on their interrelatedness and capability to connect the range of tapped cues (arrow 1). Based on this belief retrieval effect, however, also the initial values for belief weights as well as evaluative loads are determined: Weights are attributed based on the beliefs’ contribution to coherence among the retrieved beliefs, which is achieved by the feedback activation mechanism (arrow 2). As regards belief valences, evaluative implications derive from the links established by the retrieved beliefs between the judged object and other concepts with known valence (arrow 3). If people do not wish to construct a coherent macrostructure to justify their judgment, an un-reasoned opinion can be formed based on these retrieved, valenced and weighted beliefs without need for conscious intervention (arrow 4). Only if people strive to comprehend the reasoning justifying their judgment, also the semantic integration of retrieved beliefs is required, which is necessarily
conscious \( \text{(arrow 5, see below)} \); even then, the central organizing ideas (COI) that are likely to be constructed should be closely constrained by the automatically retrieved information in most cases – i.e., unless the individual is motivated to think deliberately about the issue \( \text{(arrow 6)} \).

Figure IV.1: *The framing process within a schematic belief system*

As a consequence, several testable propositions are raised by the theory. First, the range of beliefs raised by the frame should differ depending on the frame. This effect should be discernable from the belief weighting effect postulated by Nelson *et al.* (1997): When measuring the range of beliefs spontaneously associated after exposure to a frame, the range of beliefs should vary systematically with the frame. Among the beliefs retrieved, subsequently, belief weights should depend on the degree to which a specific belief contributes to coherence among the retrieved set.

**H1.1a:** If a frame is provided, predominantly frame-related beliefs are retrieved.

**H1.1b:** Beliefs are credited with the higher importance the more they cohere with other retrieved beliefs.

The above effects, however, should depend on the integration density of schematic knowledge. If knowledge is densely integrated, a frame’s capability of directing retrieval toward a particular set of considerations should be limited: Regardless of where activation commences, the well-organized schematic knowledge is likely to quickly direct it toward the core of the schema containing those aspects stored as most important for understanding. By contrast, in weakly integrated knowledge, the cues initiating retrieval exert a much more pronounced influence on which beliefs spreading activation is likely to reach.

**H1.2a:** In a weakly integrated knowledge environment, the frame’s effect on belief retrieval is strong.

**H1.2b:** In a strongly integrated knowledge environment, the frame’s effect on belief retrieval is weak.

The evaluative load of retrieved beliefs should be vested in the person’s knowledge. Frames should retrieve differently valences as a function of the retrieved semantic beliefs. Unless the communicated frame gives rise to a re-evaluation of beliefs – triggering belief
content change – frames should not change the valence of beliefs, but retrieve different beliefs with different pre-established valences. Their ability to do so should depend on the density of knowledge integration, again: First, since valence retrieval is a function of belief retrieval, and belief retrieval is affected by knowledge density, so are the raised evaluations. Second, in well-integrated knowledge, most beliefs have been considered together, and incoherence has been resolved (Axelrod, 1973). The more disconnected beliefs related to an object are, the more likely will different subsets carry different evaluative implications which can be targeted by communication frames (Brewer et al., 2003).

H1.3a: The valence of the same beliefs is not affected by a frame.

H1.3b: In a weakly integrated knowledge environment, different beliefs carry different valences.

H1.3c: In a strongly integrated knowledge environment, different beliefs carry similar valences.

H1.3d: Differences in the valence of beliefs retrieved by a frame derive from semantically different beliefs.

Conscious frame processing

Framing effects, however, are not limited to the subconscious retrieval of information from knowledge. Whenever information is integrated to form a coherent COI – i.e., a cognitive frame is constructed – conscious processing is inevitable. While the information base of integration may still largely delimit the range of frames likely to be formed, the meaning derived from the set of retrieved beliefs is not fully determined. More importantly, when people are motivated to actively consider the information brought to attention, they may deliberately alter the information base available: They may discount retrieved beliefs, create new links where inconsistencies are detected, and retrieve additional information from memory. Discounting occurs if isolated discrepant beliefs are retrieved. Conscious dismissal hence mainly continues in the same vein as the subconscious assignment of low weights to beliefs that do not contribute to coherence. Inference formation, a form of belief content change, is difficult to predict. However, those cases in which additional knowledge is retrieved allow a number of reasonably clear-cut predictions. The strongest motivation to retrieve additional information is provided when an individual perceives a bias in a frame that disagrees with strongly held predispositions (Huge & Glynn, 2010). It is important to note, however, that strongly held predispositions need not necessarily refer to extreme attitudes: A person may also be deeply convinced that an issue is ambivalent. In this case, frames suggesting clearly univalent judgments (by referring to information consensually considered to be unambiguously positive, or negative, respectively) should be perceived as unduly biased. If a bias is perceived, the individual should be motivated to resolve the imbalance, either by discounting or attempting to counterargue the frame. Particularly the latter involves the deliberate retrieval of additional information that supports the opposite conclusion.36

36 Contrary to the more intuitive option to confront people with extreme attitudes with counterattitudinal frames, this strategy has at least two important advantages: First, if people hold extreme attitudes, they are more likely to simply disregard the counterattitudinal frame, which fails to relate to their beliefs or is perceived as hostile and non-credible (Druckman, 2004; Wegener et al., 2004). If people know that an issue has both pros and cons, any clearly valenced frame should find some resonance and hence be difficult to
A bias is likely to be detected whenever a person’s attitudes (and schemata underlying these) are sufficiently densely integrated such that a frame is unlikely to retrieve a univalent set of beliefs. A frame that leaves individuals unaware of other, countervalent attitudes gives rise to a strong, equivalent framing effect. If only few countervalent beliefs are retrieved, they may or may not be discounted, depending on motivation. However, if countervalent beliefs are too many or too salient to be discounted, the frame’s bias – or, to be precise, the evaluative difference between the cognitive responses raised by the frame and the considerations retrieved from prior attitudes – is detected (see also Gross & D’Ambrosio, 2004; Slothuus, forthcoming). Given sufficient motivation, further information is accessed, and the frame is counterargued – possibly overcompensating the bias and hence raising a countervalent framing effect.

H2.1a: In an ambivalent knowledge environment, frames pointing at univalent contexts motivate conscious countervalent belief retrieval (resistance or countervalent effect).

H2.1b: In a univalent knowledge environment, frames pointing at univalent contexts do not motivate conscious countervalent belief retrieval (equivalent effect).

Depending on the strength of knowledge integration, this pattern may differ, however: The predicted countervalent response requires densely integrated attitudes, and may break down if knowledge is sparse. In this case, countervalent information may not be found upon conscious retrieval, or the presence of countervalent beliefs may not be brought to attention in the first place. The more well-integrated available knowledge, the stronger is the countervalent effect (Slothuus & de Vreese, forthcoming; Taber & Lodge, 2006; Wegener et al., 2004). As noted above, the density of knowledge integration matters also in the absence of countervalent effects: If integration is dense, the frame is less able to selectively retrieve specific beliefs than in a relatively sparse knowledge environment (Brewer & Gross, 2005; Lechler et al., 2009; Zaller, 1992). The equivalent framing effect should be the stronger the less well-integrated available knowledge is. Knowledge integration always plays against the frame, weakening equivalent and strengthening countervalent responses.

H2.2a: In a strongly integrated knowledge environment, countervalent belief retrieval is more pronounced than in a weakly integrated knowledge environment.

H2.2b: In a strongly integrated knowledge environment, equivalent belief retrieval is less pronounced than in a weakly integrated knowledge environment.

Finally, also Gross and D’Ambrosio’s (2004) notion of a negative emotional response being raised if a frame bias is perceived can be tested. If people believe that an issue is fundamentally ambivalent, the valence raised in response to balanced frames should, ceteris paribus, be more positive than the valence raised in response to both positive and negative frames.

discount: It must be counterbalanced. Second, if both salient pros and cons of an issue are enshrined in social representations, it is possible to predict that any strong bias will raise suspicion: Even if people have more or less positive attitudes, they know that an entirely univalent view misrepresents the issue. Hence, this strategy saves the trouble of pre-testing people’s attitudes (and thereby priming these) or measuring them post-hoc (and hence confounding the opinion formed under the influence of the frame with the baseline attitude).
H2.3: In an ambivalent knowledge environment, frames referring to ambivalent considerations raise more positively valenced beliefs than frames referring to univalent considerations.

Opinion formation as an indirect function of a frame

As a consequence, the effect of a frame on opinion formation is contingent upon both automatic cognitive responses and deliberate information processing, as well as the available knowledge environment. Systematic covariation between frame and judgment can be expected only to the degree that knowledge is (1) semantically diverse, (2) weakly integrated, (3) evaluatively diverse, and (4) the frame successfully exploits the evaluative difference between semantically different contexts – (5) without being detected. So called ‘pro’- or ‘con’-frames are merely cue sets that have been found to reliably direct most people to retrieve more positively or negatively valenced beliefs than those contexts they normally consider: The specified valence does not derive primarily from the frame, but from people’s schematic knowledge, where the cues raise beliefs which happen to be mostly uniquely evaluated. Unless the knowledge environment in which the frame operates is specified, however, there is no straightforward way to predict the resulting judgment based on the frame alone. The transmission process of frame effects should be highly nonlinear, showing systematic associations only between immediately successive stages, as illustrated above in figure IV.1: Belief valences and weights depend on belief retrieval within schematic knowledge. The frame alone should be insufficient to predict them – particularly when conscious reconsideration intervenes. Opinion formation depends on belief valences and weights, but it cannot be predicted from the semantic content of beliefs alone.

H3a: The influence of a frame on belief weight and valence is transmitted by belief sampling.

H3b: The influence of belief sampling on reported opinion is transmitted by belief weights and valences.

H3c: The influence of a frame on reported opinion is transmitted by belief sampling, weights and valences.

IV.2. Operationalization

In order to assess the impact of knowledge integration, I constructed communication frames cueing comparable contexts relating to two objects differently embedded in personal everyday experience: The first object, the European common currency, is a fact of daily life for all (Dutch) participants. Following heated and lingering debates about its economic and social effects, most Dutch citizens can be assumed to possess a wide range of well-integrated beliefs (Baden & de Vreese, 2008; de Vreese et al., 2001; Kleinnijenhuis et al., 2005; van Gorp, 2007). The other object, EU enlargement, is a far more distant experience for most Dutch. It has been strongly publicized, such that diverse knowledge

37 The (knowledge-)moderated mediation process can be modelled only to the degree that plausible assumptions allow predicting which schematic beliefs will be retrieved by which cues, and what evaluative loads are thus raised. Implicitly, this is effectively what most studies on the effects of frames do: They use cues which can be plausibly, due to intuitive knowledge of available social representations, expected to raise specific semantic contexts and evaluative beliefs to attention.
can be assumed (Kleinnijenhuis et al., 2005; Schuck & de Vreese, 2006), but the density of knowledge integration should be far lower.

Within the experiment, the manipulation of knowledge ambivalence required for the second set of hypotheses was achieved via the frame manipulation. Relating to both objects, communication frames were created that cued either an economy- or an identity-related semantic context for interpretation. Due to the salience of both aspects in the public debates on both enlargement and EMU, participants could be assumed to be generally familiar with each of the used frames (Gamson & Modigliani, 1987).

Regarding the manipulation of knowledge univalence, arguably, economic knowledge is fundamentally ambivalent: Things always come at a price in economics. People are used to trading off different considerations, thinking about economics in terms of gains and losses (de Vreese, 2010). By contrast, identity-related knowledge is not very ambivalent: Raising, for instance, one’s patriotic sentiments to attention does not necessarily also retrieve negative thoughts about one’s nation, and vice versa. Somewhat oversimplifying, people mostly either identify with some group, or they do not. Hence, the economy frame is taken to refer to ambivalent knowledge, whereas the identity frame is expected to raise mostly univalent information. Economic knowledge about the euro is assumed to be well-integrated and ambivalent, whereas beliefs about the euro from an identity perspective should be strong as well, but either positive or negative. Likewise, identity-related considerations about EU enlargement should be positive or negative in a weakly integrated knowledge environment, while economic beliefs should be ambivalent and weakly integrated.

**Measurement**

Since the measured processes are not directly accessible, their measurement requires people to verbalize their thoughts. They need to focus their attention, potentially altering the cognitive state they are supposed to reveal. This is particularly troublesome in the measurement of beliefs activation, ruling out the use of closed questions (Brewer & Gross, 2005). Response latency measures, commonly used in cognitive psychology (Kintsch, 1998; B.T. Scheufele, 2004a; Zeelenberg et al., 2003), suffer from serious validity concerns when applied to more complex communication (however, see Nelson & Willey, 2001) and require that the range of relevant beliefs is known beforehand. The latter is also true for concept-sorting tasks such as those used by Berinsky and Kinder (2006). Likewise, measuring weights by asking participants to rate the importance of listed considerations misses all relevant consideration not included in the list (Nelson & Oxley, 1999). Also, such lists inevitably introduce people to considerations they had not entertained until they were asked. If people then discount absent considerations, this is erroneously recorded as variation in belief weighting, rather than a retrieval failure. For a valid assessment of the proposed theory, measures need to distinguish between the different processes.

For this reason, this study relied on a free association task following exposure to the frame in order to assess the range of retrieved beliefs (Ajzen & Fishbein, 2000; Brewer & Gross, 2005; de Vreese, 2004a; Price et al., 1997; Rhee, 1997; Shah et al., 2001; Zaller & Feldman, 1992). These beliefs, already activated, could subsequently be rated for importance by each participant without confusing the involved processes. However, the gained validity comes at a cost: By asking participants to consider, verbalize and rate their
spontaneous associations after receiving the frame, the procedure leads people to consider their knowledge more deeply than usual. Zaller (1992) has shown that such ‘stop-and-think’ probes make people more aware of their own stored beliefs, counteracting the framing effect. Fortunately, the dampening should not matter too much for the assessment of the cognitive processes: While the experiment should be biased towards increased consistency with retrieved prior attitudes, in principle the processes should be identical. The used frames’ ability to produce significant framing effects has been established in a prior manipulation check (N=112, p<0.001).

IV.3. Method

Setup

This study uses an experimental design embedded in an online survey. A total of 980 registered members of the ASCoR online panel were contacted by email. Another 393 contacts were added by encouraging participants to invite friends and acquaintances to participate in the study. Out of all contacted persons, 357 participants (Mean age: 23.3, 71% female) completed the entire procedure, resulting in an AAPOR RR1 of 0.26. However, since there is little reason to surmise that the explored cognitive mechanisms might operate in fundamentally different ways across people, sampling was not a prime concern. The experimental stimulus manipulated the density of schematic knowledge by means of varying the issue under consideration (the euro vs. EU enlargement). The manipulation of knowledge ambivalence was achieved through the variation of the semantic context cued. Finally, also the evaluative drift of the frame was manipulated within each context. Seven framing conditions (economy-positive, economy-negative, identity-positive, identity-negative, two mixed conditions, and control) were created within each of the two issue conditions. All variations between the conditions were confirmed by the prior manipulation check (all manipulations significant at .001 level). The difference between higher and lower attitude strength was ascertained again in the main experiment, asking how close and how familiar participants were with the selected issues (p<0.001).

Framing manipulation

The frame material was designed to resemble a newspaper article. All framing conditions avoided presenting relevant new information, applying only familiar arguments to either issue. The articles treated distant and unfamiliar countries (Estonia planning to join the Eurozone, Croatia planning to accede to the European Union) and provided only unhelpful (e.g., names of Estonian/Croatian politicians) or common-knowledge information (e.g., the country is small). Thus, the likelihood of framing effects via belief content change was minimized. Both the manipulation of semantic and evaluative cues were achieved by changing the headline and a paragraph within the text (Rhee, 1997). In the economy conditions, implications for trade and industry were highlighted, whereas the identity conditions referred to hopes and fears about national identity and a European society. For the positive conditions, economic actors or popular movements were cited endorsing the EU- or Eurozone accession, and rejecting it for the negative conditions. The frame paragraph consisted of a factual claim about the political or economic situation
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and prospects, and quoted a related speaker commenting on the accession plans, using pro- or con-arguments generally familiar in the debate. The mixed conditions combined the abridged framing devices of the pure conditions, referring either simultaneously to economic gains and identity threats, or to positive identification and economic losses. The other parts of the article were identical. The two issue conditions were largely identical as well, exchanging few words only to alter the content. The stimulus material is reprinted in annex IX.1.

Procedure

All participants were randomly assigned to the experimental conditions. After a few demographic questions, participants read the stimulus text. The control groups (one for each issue) started right away without reading an article before. Subsequently, participants were asked to think of the euro, respectively enlargement, in general. This served to invalidate direct use of the little remaining information contained in the texts, retaining only the frame to guide associations. Every respondent was asked to produce at least five, up to ten different associations (M=6.53, SD=1.91), which could consist of up to 20 characters. The task description stressed that this should be done quickly, without deep thinking. On the following page, people were presented with a ten point scale (1=dislike very much, 10=like very much) to rate their own opinion about the euro (M=7.46, SD=1.94) or enlargement (M=6.44, SD=2.29), respectively. Next, they filled in another three to six associations (M=3.76, SD=1.78) thinking of reasons for their opinion (for similar measures of cognitive responses and ambivalence, see Greenwald, 1968; Miller & Peterson, 2004). All together, 3033 entered associations were included in the analysis. Aside of these, a number of control variables (political interest, need for cognition, European identity, and involvement with the issue) were recorded. Expecting large influences of prior knowledge and attitudes upon cognitive responses to frames, it appeared sensible to check explicitly whether randomization succeeded in leveling out differences between conditions.

Coding

For further treatment, all associations were coded with respect to their topic and valence (see also de Vreese & Boomgarden, 2003; Price et al., 1997). Thematic coding occurred in two steps: First, synonyms, circumscriptions and uses of the same word stems were collapsed. Second, all comments were grouped into nine thematic domains, drawing upon the schematic structure of people’s EU-related beliefs sketched by Baden and de Vreese (2008, see also chapter VI): Definitional information (defining aspects of the euro (e.g., ‘money’) or enlargement (e.g., ‘Eastern Europe’)); Economy (all economy-related thoughts unless coded under Trade or Mobility); Trade (international economic

38 Political interest: ‘Generally speaking, how interested are you in politics?’ (6 point scale, M=4.33, SD=1.13), Need for cognition: measured as average score on a ten item four point shortened battery adapted from Cacioppo, Petty, Feinstein, and Jarvis (1996) (M=3.12, SD=0.38); European identity: ‘Would you consider yourself...? (Dutch only, Dutch and European, European and Dutch, European only)’ (M=1.95, SD=0.71); Involvement with the issue: measured by summed scores on 5 point scales for: ‘Are you personally interested in the following aspects of European integration?’; ‘How much do you feel you know about these aspects of European integration?‘; ‘What would you say how close these aspects of European integration are to your personal experience?’ (EU Enlargement/The Euro) (M=10.88, SD=2.43)
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and financial relations), Mobility (personal ease of movement in Europe in a private, education, or work context), Identity (feelings of belonging, social community, cultural richness and threats), European Union (EU integration, institutions, actors, symbols and legislation), Democracy (EU level democracy and democratic deficit, will of the people), Politics (domestic politics, policy issues, actors, and national power), and Values (evaluations, feelings, norms, and ideals). The topics coded within each domain are listed in annex IX.2.

The valence of comments was determined at the level of collapsed stems and circumscriptions. In a first step, the connotation of the comment’s topic was coded: On a scale from 1 (very negative) to 7 (very positive), topics could be negative (2; e.g., ‘poverty’), neutral (4; e.g., ‘money’) or positive (6, e.g., ‘welfare’; see annex IX.2). In a second step, explicit qualifications of these topics were considered: For already valenced topics with added emphasis (e.g., ‘more poverty’, ‘better human rights protection’) the scale endpoints were coded. If a negative topic was negated (e.g., ‘against poverty’), the comment was coded as mildly positive (5), and vice versa (e.g., ‘less welfare’ would be coded 3, Beukeboom, Finkenauer, & Wigboldus, 2009). Neutral topics could become positive (6) or negative (2) by explicit qualification (e.g., ‘practical money’, ‘ugly money’).

Except for the negations which were underrepresented, valence was approximately normally distributed along this scale.

Analysis

To address the first and last blocks of hypotheses, the topic, weight and valence of associations were analyzed within a two-level framework, treating associations as nested within individuals’ responses. For these calculations, the mixed conditions were excluded from analysis, partly to better focus on semantic differences, and partly in order to not forestall convergence of the mathematical estimation procedures. Hence, these estimations were based on only 1963 associations provided by 186 participants. The exclusion did not affect the descriptive sample statistics. Three kinds of estimations were computed. First, the effect of the experimental conditions on association-level variables was calculated by multilevel modeling: A multinomial logistic regression predicted associations’ probabilities to belong to a particular domain (arrow 1 in figure IV.1), and linear regressions assessed whether valences and weights were systematically affected. Intercepts were allowed to vary between individuals, accommodating idiosyncratic preoccupations with different themes. Effects on valences and weights were expected, if present, to be topically dependent, requiring separate estimation for each domain. Second, valences and weights were predicted from the sampling of a person’s retrieved beliefs across domains, allowing idiosyncratic variation in the intercepts again. One regression estimated retrieved valences from the range of occurring topics (arrow 2). Another predicted belief weights from a) the share of an individual’s beliefs from the same domain and b) the belief valence’s distance from the person’s average retrieved valence (arrow 3). Finally, opinion was predicted by linear regression, including both participant level antecedents (frames, controls) and the moderating influences of importance and valence on the level of individual beliefs (arrow 4).39 To assess the

39 Multilevel designs are not feasible because the dependent variable varies at the participant level and would be perfectly predicted by any random component.
transmission hypotheses, several reduced models were run as well. All estimations were conducted separately and jointly for both issue conditions.

Investigating the hypotheses in the second block, a series of ANOVA- and ANCOVA-designs was utilized. In particular, I first estimated the impact of the experimental factors on association valence as main effects only, to see whether there were any relevant main effects. Next, a full factorial model was tested to estimate the hypothesized contingency of valence framing effects on attitude strength and integration. In addition, the individual effects (Cohen’s $d$) of all possible combinations for changing one of the three factors were calculated from the means table. However, since the influence of individual predispositions on association valence should be very strong, I opted to not rely solely on randomized assignment to conditions for control. For this reason, the above ANOVA was re-estimated as ANCOVA, controlling for the four covariates expected to capture most of the influence of idiosyncrasy. The means table was re-estimated, holding covariates constant. Effect sizes were corrected for the influence of the covariates, using Cortina and Nouri’s (2000) recommended procedures. Finally, also the predictions derived from the overall mediation process were tested, estimating two more ANCOVAs: The first predicted measured opinion from the three experimental factors and the four covariates alone; the second re-estimated their influence controlling for association valence.

IV.4. Results

Subconscious framing effects

In order to relate the results to those reported by Nelson et al. (1997), Slothuus (2008) and others, I will report them in the format of a mediation process. This allows me to highlight the different direct influences before turning toward the overall transmission process postulated in the schematic network theory. All significant influences in both issue conditions are summarized in figures IV.2 and IV.3. Line thickness reflects significance levels; coefficients represent betas or, for the prediction of topic domains, change factors in predicted probabilities. As a point of reference, each domain’s predicted probability in the control condition is given below the domain labels. The predicted probabilities if either frame is present are calculated as follows:

$$pp_{domain,frame} = (1 + \text{change factor}_{domain,frame}) \cdot pp_{domain,control}$$

Belief activation & weighting

As expected, the two conditions show quite different impacts of frames on belief sampling. In the enlargement condition, framing effects reach significance for the majority of domains. Any frame reduces attention for definitional information and retrieves additional considerations pertaining to the economy, trade and identity. Contrary to the expectations from $H1.1a$, both frames raise people’s awareness of economy- and

---

40 Note that this mediation process is moderated by the available schematic knowledge (Baron & Kenny, 1986): While influences are transmitted systematically, they are not transmitted in a uniform way across all involved schemata. A frame’s influence on valences and weights is moderated by their schematic affiliation. Beliefs’ influence on opinion is moderated by their valence and beliefs (Chong & Druckman, 2007c).
Notes: Significance levels: *** p < .001; ** p < .01; * p < .05.

\(^a\) Predicting opinion, one of the domain dummies carries redundant information. Therefore, topic = ‘definition’ is omitted as reference category, and cannot show effects.

\(^b\) Predicted probability in control condition, all other variables kept at mean

\(^c\) Predicted probability change if frame is present (reference category: control)
Figure IV.3: Associations about EU enlargement.

Notes: Significance levels: *** p < .001; ** p < .01; * p < .05.

a Predicting opinion, one of the domain dummies carries redundant information. Therefore, topic = ‘definition’ is omitted as reference category, and cannot show effects.
b Predicted probability in control condition, all other variables kept at mean

c Predicted probability change if frame is present (reference category: control)
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identity-related beliefs. Both domains are too strongly integrated to be retrieved separately; added concern for one also deepens consideration of the other. However, the frames broaden the range of thoughts contextually related to the frame: The economic frame raises additional thoughts about personal economic consequences (mobility domain), a theme not directly tapped by the frame, but closely related to it. The identity frame increases attention for EU level political cooperation and democratic representation, at the cost of domestically oriented considerations. It thus extends the frame, adding democratic representation to EU-level social and cultural identity. H1.1a holds only partly and must be refined. In line with H1.2a and H1.2b, the influence of the frame is large only in the enlargement condition, representing weakly integrated knowledge. In case of the euro, competing against people’s well-entrenched understandings, only the identity frame retrieves additional beliefs (from the values domain). Aside of this, in both issue conditions, either frame’s presence moves people’s attention away from definition-related thoughts. This effect is not significant for the identity frame in the euro condition, but there is no significant difference between frames. Variability of responses is large, swallowing most deviations.

In line with H1.1b, belief weights are poorly predicted directly by frames: Merely two out of eighteen possible effects in figures IV.2 and IV.3 are significant, just around chance level. Instead, belief weights were predicted from the sampling of a person’s total retrieved beliefs. The results are presented in table IV.1. Both semantic and evaluative coherence contribute about equally to the prediction of belief importance. Furthermore, the combined model shows that these are not two aspects of the same, but actually two independent weighting criteria.

Belief valence

In line with H1.3a, valences within the same domain are unaffected by the frame: The results in figures IV.2 and IV.3 show only two (out of 18, just above chance level) systematic effects on belief valences: Thoughts on domestic politics are more positive if an identity frame is applied to the euro, and enlargement is less favorably defined if framed in terms of economy. Systematic valence differences, instead, are found between the domains, and between individuals, of course. As expected by H1.3b and H1.3c, a factorial ANOVA (not shown) shows that, once idiosyncratic factors are accounted for, valence differs significantly between domains only in the enlargement condition. Still, the sampling of beliefs predicts the average valence of a person’s beliefs on the euro better on EU enlargement, as is shown in table IV.2: Valence depends on the beliefs sampled, and not on the frame. As for the euro, valence is the more positive the more people consider the effects of the common currency on traveling and personal economic opportunities. If the general economy is more in focus, evaluations are less favorable. As for enlargement, evaluations become more positive whenever domains other than definitional information (the reference category), the EU and its democratic state are tapped. The implications of EU enlargement are mainly charged positively, its political-institutional side is seen more negatively. H1.3d is supported.
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Table IV.1: Prediction of belief importance from semantic & evaluative coherence among retrieved beliefs

<table>
<thead>
<tr>
<th></th>
<th>model 1: similar schema</th>
<th>model 2: similar valence</th>
<th>model 3: both effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>frames</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>economy</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>identity</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>other predictors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>issue (enlargement)</td>
<td>0.168 ***</td>
<td>0.154 ***</td>
<td>0.169 ***</td>
</tr>
<tr>
<td>share of beliefs</td>
<td>0.090 ***</td>
<td></td>
<td>0.097 ***</td>
</tr>
<tr>
<td>from same domain</td>
<td></td>
<td>0.090 ***</td>
<td>0.098 ***</td>
</tr>
<tr>
<td>distance from average valence</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pseudo-$R^2$  
0.204 0.208 0.214

reduced model: random intercept only

Pseudo-$R^2$  0.199

N / groups  
1963 / 186 1963 / 186 1963 / 186

Note: *** p<0.001

Conscious frame processing

Turning toward the deliberate manipulations of frame-retrieved considerations, the first striking, yet not unexpected finding is that the most positive response is raised by conditions that were not positively framed: Mean association valences are significantly more positive than in the control condition for the negative economic framing conditions (discussed below) as well as the mixed conditions. The main effect of the mixed condition is the only one that is consistently significant, both compared to the control group and to the grand mean. $H2.3$ receives considerable support.

By contrast, the main effects of positive and negative valence as well as economic and identity framing are not nearly as clearly cut. An ANOVA testing only the three manipulated factors’ main effects shows that none explains much variance. Both the framing and valence manipulations remain non-significant, and the issue manipulation is weak. A closer investigation of mean association valences across conditions reveals that there is a strong interaction effect between framing and valence, which is fully in line with $H2.1a$ and $H2.1b$: Within the identity conditions, more positive framing is associated with more positive cognitive responses ($Cohen’s d=0.121, p<0.1$). Within the economy conditions, however, there is a significant countervalent effect ($Cohen’s d=0.268, p<0.001$). A comparison across issues shows that the interaction is strongly present in both issue conditions, but it is differently pronounced: For EU Enlargement, both effects are significant, the equivalent framing effect in the identity condition ($d=0.242, p<0.01$)
Table IV.2: Prediction of belief valence from the topical range of sampled beliefs

<table>
<thead>
<tr>
<th>condition</th>
<th>2-level model: beliefs within participants</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>euro</td>
<td>enlargement</td>
<td></td>
</tr>
<tr>
<td>frames</td>
<td></td>
<td>beta</td>
<td>beta</td>
</tr>
<tr>
<td>economy</td>
<td>n.s.</td>
<td>n.s.</td>
<td></td>
</tr>
<tr>
<td>identity</td>
<td>n.s.</td>
<td>n.s.</td>
<td></td>
</tr>
<tr>
<td>domains*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>economy</td>
<td>-0.186 **</td>
<td>0.214 **</td>
<td></td>
</tr>
<tr>
<td>trade</td>
<td>n.s.</td>
<td>0.170 **</td>
<td></td>
</tr>
<tr>
<td>mobility</td>
<td>0.590 ***</td>
<td>0.270 ***</td>
<td></td>
</tr>
<tr>
<td>identity</td>
<td>n.s.</td>
<td>0.209 **</td>
<td></td>
</tr>
<tr>
<td>eur. union</td>
<td>n.s.</td>
<td>n.s.</td>
<td></td>
</tr>
<tr>
<td>democracy</td>
<td>n.s.</td>
<td>-0.119 *</td>
<td></td>
</tr>
<tr>
<td>politics</td>
<td>n.s.</td>
<td>0.263 ***</td>
<td></td>
</tr>
<tr>
<td>values</td>
<td>0.273 ***</td>
<td>0.428 ***</td>
<td></td>
</tr>
<tr>
<td>pseudo-R²</td>
<td>0.325</td>
<td>0.313</td>
<td></td>
</tr>
</tbody>
</table>

reduced model: without frames

| pseudo-R²          | 0.325                                     | 0.313  |        |

reduced model: without domains

| pseudo-R²          | n.s.                                      | n.s.   |        |

reduced model: random intercept only

| pseudo-R²          | 0.131                                     | 0.238  |        |
| N / groups         | 1010 / 101                                | 953 / 83 |        |

Notes: *** p<0.001; ** p<0.01; * p<0.05
* reference category: definitional information

being somewhat larger than the countervalent effect in the economy condition (d=0.189, p<0.1). For the euro, the countervalent effect is large and significant (d=0.356, p<0.001) in the economy condition, while there is no significant effect in the identity condition. As expected in H2.2a and H2.2b, stronger attitudes boosted the countervalent effect and dampened the equivalent one. The interaction effect of valence and framing is by far the strongest factor in the full factorial ANOVA, as shown in table IV.3: Depending on whether an economic or identity context is tapped, the effects of positive and negative frame valence on association valence differ dramatically. R squareds remain low, reflecting the large variance introduced by idiosyncratic predispositions.

In order to control for undesirable influences of not perfectly random distributions of these highly influential idiosyncratic factors, the model was re-estimated as an ANCOVA, controlling for the relevant covariates. The ANCOVA – shown in annex IX.3 – reveals only minor changes: The explanatory power of the issue condition main factor moves towards the issue-valence-interaction, which advances to be the second strongest factor.
behind the frame-valence interaction. The valence condition main effect gains significance, but remains weak. The covariates extract about twice as much variance as the experimental manipulation, reflecting the importance of idiosyncratic predispositions. Analyzing the effect sizes between the re-estimated means holding the covariates constant, the same pattern as before reappears. Some effects are slightly smaller, but almost all effects remain significant. No significant or even near-significant effect changes in direction. Only the equivalent effect in the identity framing condition loses significance. Thus, also after controlling for the covariates, the hypotheses remain accurate descriptions of the patterns found in the data. Across both issues, the negative economy framed condition yields the most positive responses, followed by the positive identity framed condition. On enlargement, the negative identity frame raises the strongest negative response, whereas the positive economic frame does the same in case of the euro. All means and effects are shown in table IV.4.

Table IV.3: ANOVA predicting mean association valence from experimental conditions, full factorial

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>102.245</td>
<td>11</td>
<td>9.295</td>
<td>4.377</td>
<td>0.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>49933.798</td>
<td>1</td>
<td>49933.798</td>
<td>23516.131</td>
<td>0.000</td>
</tr>
<tr>
<td>Main Factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>framing condition</td>
<td>1.451</td>
<td>1</td>
<td>1.451</td>
<td>0.683</td>
<td>0.408</td>
</tr>
<tr>
<td>valence condition</td>
<td>4.696</td>
<td>1</td>
<td>4.696</td>
<td>2.212</td>
<td>0.137</td>
</tr>
<tr>
<td>issue condition</td>
<td>8.916</td>
<td>1</td>
<td>8.916</td>
<td>4.199</td>
<td>0.041</td>
</tr>
<tr>
<td>Interaction Factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>framing · valence</td>
<td>28.002</td>
<td>1</td>
<td>28.002</td>
<td>13.187</td>
<td>0.000</td>
</tr>
<tr>
<td>valence · issue</td>
<td>12.291</td>
<td>1</td>
<td>12.291</td>
<td>5.788</td>
<td>0.016</td>
</tr>
<tr>
<td>framing · issue</td>
<td>9.444</td>
<td>1</td>
<td>9.444</td>
<td>4.448</td>
<td>0.035</td>
</tr>
<tr>
<td>framing · valence · issue</td>
<td>0.582</td>
<td>1</td>
<td>0.582</td>
<td>0.274</td>
<td>0.601</td>
</tr>
<tr>
<td>Error</td>
<td>6414.746</td>
<td>3021</td>
<td>2.123</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>62306.000</td>
<td>3033</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>6516.991</td>
<td>3032</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *R Squared = 0.016 (Adjusted R Squared = 0.012)
### Table IV.4: Mean association valence and differences between conditions

<table>
<thead>
<tr>
<th></th>
<th>issue condition: euro</th>
<th>issue condition: enlargement</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>positive</td>
<td>Cohen's d</td>
<td>negative</td>
</tr>
<tr>
<td></td>
<td>SE(M)</td>
<td>0.115</td>
<td>0.275</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.442 ***</td>
<td>1.451</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>156</td>
<td>231</td>
</tr>
<tr>
<td>Cohen's d</td>
<td>↓</td>
<td>0.177</td>
<td>↓</td>
</tr>
<tr>
<td></td>
<td>SE(M)</td>
<td>0.105</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.449</td>
<td>1.452</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>190</td>
<td>187</td>
</tr>
<tr>
<td></td>
<td>SE(M)</td>
<td>0.078</td>
<td>0.170</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.451 **</td>
<td>1.467</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>346</td>
<td>418</td>
</tr>
<tr>
<td></td>
<td>SE(M)</td>
<td>0.092</td>
<td>0.063</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.442</td>
<td>1.466</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>246</td>
<td>541</td>
</tr>
</tbody>
</table>

Notes: Shaded means differ significantly from the control group mean. Significance levels: */ p < .1; ** p < .05; *** p < .01
Covariates kept constant at their means: eu identity = 1.95, issue involvement = 10.88, political interest = 4.33, need for cognition = 3.12.
From framing effects to opinion change

Turning toward the transmission process leading up to opinion formation, the prediction was that each stage is predicted well only by the immediately preceding stage: Frame conditions affect belief retrieval, belief retrieval affects weights and valences, and these finally determine reported opinion. The consistently non-significant direct contributions of the framing conditions shown tables IV.1 to IV.3 offer support for $H_{3a}$: Belief valences and weights depend on the constellation of sampled beliefs, and only indirectly, in no uniform way, on the provided frame.

Predicting opinion, the full model shown on the right hand side of figures IV.2 and IV.3 includes frames, sampled beliefs, valences, weights and controls. The set of retrieved beliefs shows no direct effects. They are only indirectly relevant, supporting $H_{3b}$: If beliefs from a particular domain are activated, the attached evaluative loads and importance ratings contribute the bulk to the prediction of reported opinion. Unsurprisingly, positive valences as well as increased weights for positively evaluated domains (such as the mobility domain in case of the euro) boost supportive opinions. Taken alone, valences account for 5% (euro) and 14.5% (enlargement) of variance in reported opinion on top of the shares explained by the controls (14.5% for the euro and 8.2% for enlargement). The influence of belief weights is clearly smaller with 1.9% and 4.7%, respectively. In line with $H_{3c}$, the direct influence of the framing condition is secondary as well, but rather stable: Incremental R squareds shrink only from 7.1% and 2.3% to 6.6% and 1.5%, respectively, if the other predictors are added. Only one effect – the economic frame boosting support for EU enlargement – loses significance. The full process model explains 30.9% (enlargement) and 30.1% (euro) of variance in opinion.

The ANCOVA presented in table IV.5 includes also the mixed conditions excluded from the test of semantic effects. Corroborating the above findings, the main effects of the frame and valence conditions alone explain less than a percent of the variation in opinion. The frame manipulations are non-significant, only the issue factor is relevant on its own ($\eta^2=0.072$, $p<0.001$). In the full factorial model, the overall explanatory power doubles: the frame-valence-interaction ($\eta^2=0.021$, $p<0.001$) as well as the frame-issue-interaction ($\eta^2=0.026$, $p<0.001$) are significant, while the influence of the issue alone drops to an eta-squared of 0.048 ($p<0.001$). The direct unmediated effect of the experimental conditions on opinion explains about 14.1% of variance.

When association valence is controlled for, the direct influence of the experimental factors is clearly reduced. Taken as sole predictor, association valence explains 9.8% of variance in reported opinion. Predicting opinion from experimental condition, association valence and the four covariates, the ANCOVA shows that the explanatory power of association valence is more than double as large ($\eta^2=0.079$, $p<0.001$) as the contribution of the second strongest predictor, the issue condition ($\eta^2=0.035$, $p<0.001$). Obviously, association valence captures the cognitive effect of the framing conditions imperfectly, leaving some explanatory power to the three experimental factors (the full factorial model contributes $\eta^2=0.091$). Thus, the total explanatory power of the experimental conditions
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drops by about a third. All taken together, about a quarter of variation in opinion is accounted for, the bulk of which is credited to the immediately preceding stage, namely, association valence.

Table IV.5: ANCOVA predicting opinion from association valence and experimental conditions

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>3719.121</td>
<td>16</td>
<td>232.445</td>
<td>66.781</td>
<td>0.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>717.041</td>
<td>1</td>
<td>717.041</td>
<td>206.004</td>
<td>0.000</td>
</tr>
<tr>
<td>Covariates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>association valence</td>
<td>897.125</td>
<td>1</td>
<td>897.125</td>
<td>257.741</td>
<td>0.000</td>
</tr>
<tr>
<td>eu identity</td>
<td>170.364</td>
<td>1</td>
<td>170.364</td>
<td>48.945</td>
<td>0.000</td>
</tr>
<tr>
<td>issue involvement</td>
<td>201.289</td>
<td>1</td>
<td>201.289</td>
<td>57.830</td>
<td>0.000</td>
</tr>
<tr>
<td>political interest</td>
<td>17.745</td>
<td>1</td>
<td>17.745</td>
<td>5.098</td>
<td>0.024</td>
</tr>
<tr>
<td>need for cognition</td>
<td>92.381</td>
<td>1</td>
<td>92.381</td>
<td>26.541</td>
<td>0.000</td>
</tr>
<tr>
<td>Main Factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>framing condition</td>
<td>0.218</td>
<td>1</td>
<td>0.218</td>
<td>0.063</td>
<td>0.802</td>
</tr>
<tr>
<td>valence condition</td>
<td>60.838</td>
<td>1</td>
<td>60.838</td>
<td>17.479</td>
<td>0.000</td>
</tr>
<tr>
<td>issue condition</td>
<td>375.687</td>
<td>1</td>
<td>375.687</td>
<td>107.934</td>
<td>0.000</td>
</tr>
<tr>
<td>Interaction Factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>framing · valence</td>
<td>171.825</td>
<td>1</td>
<td>171.825</td>
<td>49.365</td>
<td>0.000</td>
</tr>
<tr>
<td>valence · issue</td>
<td>313.838</td>
<td>1</td>
<td>313.838</td>
<td>90.164</td>
<td>0.000</td>
</tr>
<tr>
<td>framing · issue</td>
<td>0.022</td>
<td>1</td>
<td>0.022</td>
<td>0.006</td>
<td>0.937</td>
</tr>
<tr>
<td>framing · valence · issue</td>
<td>62.828</td>
<td>1</td>
<td>62.828</td>
<td>18.050</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Error                         | 10497.863      | 3016| 3.481       |        |       |
Total                          | 162736.000     | 3033|            |        |       |
Corrected Total                | 14216.984      | 3032|            |        |       |

Note: a R Squared = 0.262 (Adjusted R Squared = 0.258)
IV.5. Discussion

The above findings present strong evidence in favour of a framing effect which can be separated into a semantic and an evaluative stage: Frames primarily affect the semantic information retrieved. The notorious capability of frames to shift opinion is mostly a consequence of the semantic effect, and hence only an indirect effect of the frame (Brewer, 2001; Kim & Rhee, 2009; Rhee, 1997). Both effects, however, are strongly dependent on the schematic and attitude structure of the framed person’s mind.

With regard to the semantic effect, the above experiment has supported the propositions made by the schematic network theory regarding the retrieval of beliefs: First of all, different frames retrieve different beliefs. The information base of framed cognition is anything but stable. Second, the cognitive response raised by the frames showed both frame-independent considerations – belief sets retrieved from prior knowledge under any circumstance – and frame-susceptible considerations. As theorized, the cues presented by the stimulus interact with engraved knowledge, directing activation in specific directions but not determining retrieval all the way. Most notably, communication frames did not only retrieve beliefs from the very domains they targeted – which were always retrieved – but from adjacent, thematically closely related domains. This unanticipated finding further bolsters the schematic network theory: As the frame channels additional activation toward an already highly accessible schematic structure, more activation spills over toward overlapping and adjacent schemata (Price et al., 1997). The observation hence not merely reflects the semantic bias in belief retrieval, but also the spread of activation toward other schemata according to semantic relatedness (Kintsch, 1998). Belief sampling, contrary to Zaller (1992), is decidedly non-random: It reflects stored relevance judgments engraved into schematic knowledge (Berinsky & Kinder, 2006; Rhee, 1997).

With regard to the evaluative effect, it has been shown that the valence of cognitive responses cannot be explained by the frame alone. Valences were rooted in the pre-established evaluations of retrieved knowledge, and hardly at all changed by the frame. Frames that succeeded in tapping schemata carrying the anticipated valence induced the expected equivalent effect on opinion. However, in accordance with theoretical expectations, several tested framing conditions failed to deliver their evaluative bias: First, in the presence of strong, well-rehearsed attitudes, frames largely failed to shift belief retrieval, and consequently, to affect opinion, as well (Brewer & Gross, 2005; Gross, 2000; Tourangeau & Rasinski, 1988). Second, some frames raised semantically different considerations, but these considerations carried valence no different from unframed judgments. Finally, some frames that suggested univalent considerations were perceived as unduly one-sided by participants and retrieved a countervalent cognitive response: Reported opinion was shifted away from the stance suggested by the frame.

In the perspective taken by the schematic network theory, these results underscore several important distinctions that have often been overlooked in the framing literature: Most notably, the evaluative effect of frames is dependent on, but not fully determined by the semantic effect: While an evaluative effect without a change in the underlying
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information base is difficult to imagine, profound semantic changes may make no difference at all for reported opinion, or even imply a countervalent judgment (Chong & Druckman, 2007a; Gross, 2000). In order to understand the effects of communication frames on opinion, we first need to understand the frames’ effects on semantic belief retrieval.

The evaluative loads summoned by a frame derive from those evaluations stored in an individual’s prior attitude structure, the communicated frame (if a message induces people to re-evaluate prior beliefs, triggering belief content change), as well as appraisals of the current situation (Ortony, Clore, & Collins, 1988; Roseman, 1991). The frame is merely one, and rarely the most important source of evaluative loads. The insignificance of frame-provided evaluations in the above experiment is illustrated by the near absence of frame influences onto the evaluation of specific domains. If the frame dominated the attribution of valence to the same beliefs, domains would hardly be evaluated identically across all conditions.

The importance of situation appraisals has been underlined by the disproportionally positive response to the mixed framing conditions. According to Rucker and colleagues (2008), people evaluate messages more positively when they gain the impression that the author’s has strived to give fair consideration to both pros and cons about an issue. While their experiment impressively supports this prediction, I am not convinced that the explanation holds also in political communication: People may actually welcome a certain bias, and resent efforts – for instance, by journalists – to balance opposing arguments against one another. The schematic network theory provides a different, more flexible explanation based on a perceived mismatch between frame and cognitive response (see also Huge & Glynn, 2010; Johnson et al., 2004; Wegener et al., 2004). In line with Gross and D’Ambrosio’s (2004) argument, frame-resonant cognitive responses raise a positive affective response, coloring retrieved information in a brighter light. Unlike the explanation advanced by Rucker et al, this view does not preclude that people may appraise balanced statements in one, and pointed ones in another context – depending on the structure of their retrieved attitudes.

Among the sources of evaluative beliefs, prior attitudes are clearly the most influential one – reflected in the large variability of domain evaluations across participants. People can easily follow the semantic drift of a message but totally disagree with the judgment it advances (Sapiro & Soss, 1999). The range of sampled beliefs across domains predicted opinion only after the valence attributed to these by each individual was taken into account. Frame effects on opinion can only be understood against the backdrop of the attitude structure they target in people’s minds. This is most clearly so when people actively consider the information brought to attention by the frame and revisit their knowledge to amend the automatically retrieved set of beliefs. Not only the semantic and

---

41 This requires that a frame changes the evaluation of the same retrieved cognitions (belief content change, Slothuus, 2008) without reference to any new or otherwise unconsidered information. Contrary to intuition, equivalence framing effects (i.e., framing effects raised by different presentations of precisely the same information) do not meet this requirement: The expression ‘200 lives will be saved’, for instance, raises quite different associated beliefs than ‘400 people will die’ (out of 600 infected with the infamous Asian flu, Tversky & Kahneman, 1981). Even though the communicated information is equivalent, also equivalence framing rests on the retrieval of different associated beliefs.

42 This finding has become known as the ‘hostile media effect’ (Huge & Glynn, 2010).
evaluative information that can be activated upon retrieval depends on the structure of engraved knowledge, but also what further knowledge can be found when sought. Gross frame biases went undetected, delivering their evaluative loads, when knowledge was insufficiently well-integrated to bring countervalent attitudes to attention. Where dense and well-integrated knowledge competed with the frame over the direction of belief retrieval, biases were detected and either resisted or actively counteracted. In line with the schematic network theory, dense knowledge integration always operates against the frame, facilitating resistance and fuelling attempts to counteract the frame (Nelson et al., 1997). However, this must not be confused with the amount of knowledge available (Druckman, 2001, 2004; Lecheler et al., 2009; Shah et al., 2010; Willnat, 1997): Limited, but well-organized knowledge structures – such as ideological convictions or salient online attitudes – may easily resist frames (Chong, 1996; Matthes, 2007). The prototypical frame victim holds a wide range of rich and differentiated, only locally connected, differently valenced attitudes without subscribing to any of them in particular (Tewksbury & Scheufele, 2009) – journalists, but also academics are likely examples. The more knowledge is available, the more demanding becomes the task to integrate all relevant beliefs such that frames cannot easily direct activation away from them.

Limitations

This study is subject to several limitations. First, the measurement of retrieved beliefs interrupts the cognitive process underlying the framing effect (Zaller, 1992), inducing several predictable, but undesirable changes in people’s response behavior (Raaijmakers & Shiffrin, 1981; Zaller & Feldman, 1992). Belief retrieval should be more exhaustive and attitude-consistent than normally expected, dampening the effect of framing (Fiske et al., 1983; Tourangeau & Rasinski, 1988; Zaller & Feldman, 1992). The broad variety of associations, including trivial and obscure ones, assures me that respondents did indeed associate spontaneously (Schaap, 2006). Nevertheless, verbalization and, in particular, typing into an online form inevitably filters out some, potentially systematically different considerations. However, there is no way of recording belief retrieval that fully avoids this problem. Thus, in my view, the above procedure presents a defensible compromise.

Second, the selected operationalization of densely and sparsely integrated knowledge, ambivalent and univalent political attitudes is not unproblematic, either. While well-grounded in psychological theory and the literature on EU attitudes and crudely corroborated by measuring issue familiarity in the manipulation check, the named properties of participants’ knowledge have been assumed, not ascertained (Graber, 1988). Moreover, assumptions about peoples’ belief structures are necessarily stochastic, and apply to individual participants in different degrees, if at all. Given the relatively weak institutionalization of European political discourse in the Dutch public, the assumption that attitudes are formed in largely similar ways may be heroic – even though the results presented in chapter VI below lend considerable credibility to this claim. Although I judged this to be too invasive and feared priming respondents, controlling directly for attitude strengths, integrations, and valences would be desirable (Kuklinski et al., 1992; Price & Tewksbury, 1997; Tourangeau & Rasinski, 1988).

A third limitation presented by the experimental setup lay in the confounding of evaluatively balanced with semantically mixed framing conditions. As a consequence, it is not possible to decide whether the positive response derived from the frames’ evaluative
balance (as theorized, Gross & D'Ambrosio, 2004; Rucker et al., 2008), their semantic multifacetedness, or both. Fortunately, this omission can be easily redressed in future research.

In summary

In summary, the above study has lent considerable support to the schematic network theory of framing, supporting in particular three of its central propositions: First, it corroborates the view that frame effects are primarily semantic effects, and only indirectly affect evaluative judgment. In line with the predictions of cognitive appraisal theory, evaluations are based on retrieved beliefs, and only indirectly on the frame – if at all (Ortony et al., 1988). Second, it demonstrates the ability of the schematically structured, accessibility-based spread of activation to account for the retrieval of semantically related associations also beyond those beliefs explicitly referred to. The effect of the frame is neither confined to the priming of directly tapped beliefs, nor restricted to a mere alteration of belief weights among a stable set of considerations (Rhee, 1997; Shen, 2004). Relating back to the first point, different evaluations of a differently framed object rest not on a change in the same beliefs' evaluative loads, but on the retrieval of different beliefs: When using different frames for evaluation, people evaluate different properties or aspects of the same object, without necessarily changing or contradicting prior judgments. Third, the above experiment underlines the centrality of the interaction between communicative stimulus and the cognitive environment, namely, the prior schematic knowledge structure. Since communication frames primarily refer to beliefs already present in a person's mind, the belief structure (facilitating or hindering the retrieval of related beliefs) and attached evaluations (retrieved alongside the beliefs) immediately affect the result of frame processing (Cohen & Kjeldsen, 1987; Tourangeau & Rasinski, 1988). Even if people closely follow frames presented to them in communication, their prior knowledge and attitudes inevitably informs, and transforms, the meaning and judgment they derive from the communicated messages.
V

Frames in Communication

The second set of propositions advanced by the schematic network theory concerns the structure of information in communication. Public discourse offers a wide variety of internally diverse frames, aligned more or less coherently within wider narratives, which feed into the cognitive process investigated above. The structural properties of proliferated frames available for people forming an understanding about the EU constitution will thus be scrutinized below.

The study of frames in communication has mostly been regarded from two opposing points of view. On the one hand, scholars in linguistics, journalism studies and other fields concerned with message production have investigated discourse texts as a means to access the cognitive structures responsible for their production. Frames in discourse, hence, have been considered to reflect cognitive biases and selectivity patterns which were the primary concern of investigation (instrumental analysis, e.g., B.T. Scheufele, 2006). On the other hand, discourse frames have been considered within the study of communication effects as the material based on which message recipients form their opinions (representational analysis, e.g., Semetko & Valkenburg, 2000). In view of the schematic network theory sketched above, however, these two perspectives merge: Both the selectivity and focus exerted by message producers, and the re-contextualization and integration achieved by message recipients derive from objectified knowledge – social representations – shared by speaker and recipient (Luke, 1989). Simultaneously, the common interpretative background shared by discourse producers and readers alike derives from the very set of publicly communicated messages received and interpreted by both at some prior time. As a consequence the biases and patterns made available to mass audiences via public discourse are the same patterns responsible for context references thinkable to all members of a group, and hence communicatable among them (Dewey, 1927; Feldman & Conover, 1983).

V.1. Expectations

Public message producers ground their narratives in widely shared schematic belief structures ensuring that their arguments are comprehensible and relevant to all recipients (Gamson, 1992; Kim & Rhee, 2009; Price et al., 1997; Sibley et al., 2006; van Dijk & Kintsch, 1983). The closer arguments cohere with frames already familiar to recipients, the easier can they be comprehended and accepted as credible (Noakes & Johnston, 2005; Tewksbury & Scheufele, 2009).

43 For knowledge to form part of the social representations backdrop against which communication messages are crafted, it must be known to each participant in an act of communication that most others will possess the same knowledge. As a consequence, only publicly communicated frames can become parts of social representations (Moscovici, 1986).
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H1: All actors’ accounts involve a range of diagnostic beliefs which are societally shared.

However, in line with the distinctions set out above, there are different strategies for crafting messages that fulfil these requirements.

Political framing strategies

On the one hand, speakers who wish to convey strategic, persuasive accounts of an issue – notably, political parties, movements and advocacy organizations – typically construct their frames around clear normative claims and treatment recommendations (de Vreese, 2006; Slothuus, forthcoming; Slothuus & de Vreese, forthcoming; Sniderman, 2000; Zhou & Moy, 2007). At the same time, they should be highly concerned about the coherence and integrative capability of their accounts: Since theirs compete against other, strategically crafted explanations, accounts that are incapable of integrating important data are liable to be rejected, and others’ more persuasive accounts may be accepted instead (Druckman, 2010). Simultaneously, they need to link their explanations to their specific identity as public actor, building support from their ability to account persuasively for observed information (Benford & Snow, 2000; Petersen et al., forthcoming). At least those actors well-established in public life can typically draw upon familiar master frames ‘owned’ by these actors. These ‘para-ideologies’ help define which kinds of aspects need to be considered for a relevant account while simultaneously signalling the identity of the respective actor (Benford & Snow, 2000; Brewer & Gross, 2010; Mitsikopoulou, 2008).

Most political parties and movements are discursive arenas themselves, constantly developing frames within the common master frame to cover new events (Triandafyllidou & Kosic, 2002).

H2a: Political actors’ discourses are semantically coherent.

H2b: Political actors’ frames are structured around a central frame that defines the narrative structure.

H2c: In political actors’ narratives, the central frame monopolizes normative and treatment references, while other frames mostly elaborate on the causal connections and situation definition.

H2d: Political actors’ accounts are ideologically structured: Different actors’ accounts organize things in systematically different ways.

Journalistic frame construction

On the other hand, speakers who do not wish to (be seen to) provide persuasive accounts – e.g., professional journalists – avoid unambiguous evaluations or treatment recommendations. Contrasting varying interpretations (conflict news framing), or presenting their own interpretations in factual terms (consequences news framing), they do not typically bother to instate coherence beyond the event(s) under discussion (Tewksbury & Scheufele, 2009). The credibility of their accounts depends less on their overarching capability to integrate diverse information, but on the appearance of balance, neutrality and objectivity. While also journalistic authors ground their accounts in familiar knowledge, their reference to prior frames should be much more eclectic and rarely follow overt ideological preselections of concerns. Coherence should mostly remain local (Tewksbury, Jones, Peske, Raymond, & Vig, 2000).
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H3a: Journalistic media’s discourses are not semantically coherent beyond the local context raised by frames.

H3b: Journalistic media’s frames do not refer to a common narrative.

H3c: Journalistic media’s frames are regularly structured by factual claims or an opposition of claims, while unbalanced evaluations and treatment recommendations are rare.

H3d: Journalistic media’s accounts are structured by the course of events, not ideological preselections. Different journalists’ accounts organize things in systematically similar ways.

V.2. Operationalization

Although the measurement of frames within discourse is well-established within the social sciences, the present study departs from the conventions of the field in at least two respects. First, in a comparative analysis of highly diverse discourse bodies, the ex ante definition of a set of well delimited frames for coding is impossible. Since there is not a priori reason why only specific frames are expected to occur, an inductive approach that pays equal respect to each of the investigated repertoires is mandatory (van Gorp, 2010). However, approaching each discourse with a separate, inductively created inventory of frames jeopardizes any possibility of rigorous comparative analysis (Tewksbury & Scheufele, 2009). For this reason, second, this study measures frames not as holistic entities, but as a systematic collocation of elements. Similar approaches have recently been introduced into the scientific debate – for instance, Matthes & Kohring (2008) defined frames as regular combinations of functional elements. However, their strategy merely devolves the problem to a lower level: Either the definitions of functional elements need to remain rather vague, or one ends up with an endless list of functions yielding highly discourse-specific frame definitions. In line with the conceptualization used in the schematic network theory laid out above, therefore, this study retreats to the level of propositions within discourse (Baden & de Vreese, 2008; Boudana, 2008; Kim & Rhee, 2009). Unfortunately, propositional coding – as it will be used in the study presented in chapter VI – quickly becomes forbiddingly laborious (B.T. Scheufele, 2004a). Therefore, van Atteveldt et al. (2006) have suggested a technique that relies on computer-codeable concept associations in a text. In their view, if propositions systematically co-occur to form frames, so must those concepts defining them. Based on the coded propositions, it is possible to compare the composition and alignment of frames even if different frames emerge from different discourses (van Atteveldt, 2008).

This approach also allows for overlapping frames with fuzzy boundaries, offering an alternative route to address the notorious difficulty in delimiting frames (Reese, 2010): Instead of searching for self-contained wholes that may sometimes not be wholly present – a strategy that both practically and logically poses more problems than it solves – it looks for patterns of concept associations (Donati, 1992; Matthes & Kohring, 2008; van

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44 Another advantage of the concept level coding of frames is that the referred-to frame can still be recognized if it is only mentioned incompletely, or merely alluded to in a text. To the degree that even single propositions unambiguously indicate a particular frame, the set of other concepts associated with them in other instances allows determining the referred-to context.
The semantic network approach to framing thus circumvents the necessity to know ex ante what elements or frames need to be coded and leaves the emergence of structure entirely to the patterns of language use (Baden & de Vreese, 2008; Johnston, 1995). Frames can be represented as areas of heightened density in a semantic network, while weaker associations may extend beyond the frame and overlap with related frames. The same analytic techniques can be used to trace shifts within the composition and differences in the external alignment of frames. The main challenge facing this approach is to demonstrate semantic coherence in systematic collocations of concepts (Matthes & Kohring, 2008; van Atteveldt, 2008). While manual approaches relying on higher level units – COIs – can check coherence in the coding process, the semantic network representation operates on a level where coherence needs to emerge, and cannot be controlled by the process (van Gorp, 2005). To the degree that systematic collocations of concepts in discourse texts allow forming semantically coherent COIs, however, this approach may liberate framing analyses from their notorious contingency on the researcher’s definition of elements and frames (Matthes & Kohring, 2008).

While the pattern of concept associations alone thus does not constitute the frame yet, it provides several necessary prerequisites for the formation of frames. Narrative coherence, for instance, requires that the same actors and objects recur across contexts. At the same time, the issues central to a narrative need to be located also at the centre of those frames constituting it. As a consequence, coherent sets of frames need to share a limited set of concepts, which participate in the cores of multiple frames. By contrast, non-narrative arrays of frames – such as episodic news frames – do not necessarily cast the same issues and actors as central to different news stories. While many concepts are likely to recur – due to the known biases of news reporting on familiar actors, settings, issues and frames – their roles within frames will differ. Hence, coherence between frames requires a systematic overlap between frames’ core elements, whereas non-coherent frames appear as potentially dense but indiscriminate pattern of overlaps. Moreover, if a central organizing frame is present that organizes coherent frames into an overall narrative, most overlaps between frame cores should occur toward this central frame, whereas overlaps among peripheral frames’ cores should be rare (Gamson & Modigliani, 1987; Gerhards & Rucht, 1992). As a consequence, Hypotheses a and b can be refined:

H2a: In political actors’ discourses, frames overlap predominantly with regard to their core concepts.

H2b: Political actors’ frames’ core concepts overlap predominantly with the core concepts of a COF.

H3a: In journalistic media’s discourses, any concepts within frames overlap regularly, but unsystematically.

H3b: Journalistic media’s discourses do not show a COF that organizes other frames.

The above expectations were tested based on the public discourse on the EU constitution and the referendum over it in the Netherlands. However, the data collected in this study serve a double purpose within the context of this dissertation: While they allow addressing the above hypotheses, they also serve to capture the range of frames communicated to voters in the Dutch referendum as a backdrop for the study of information acquisition in chapters VI and VII. Therefore, public discourse had to be
recorded as exhaustively as possible. While all findings were checked across all recorded discourses, the findings will be presented below using a few selected cases only. Where findings differ relevantly across discourses beyond the presented cases, this will be noted.

V.3. Method

Sample & data preparation

In order to capture the Dutch public discourse on the EU constitution as exhaustively as possible, I opted to include not only newspaper sources but also transcripts of selected television formats, as well as campaign publications (both print, speech and online) issued by the Dutch parties and other major campaign actors. The subsamples were constructed as follows:

Newspaper sample

For the collection of newspaper articles, the sample included both highbrow (Volkskrant, NRC Handelsblad, Trouw) and popular/tabloid newspapers (Algemeen Dagblad, De Telegraaf), two regional outlets (Dagblad van het Noorden, Brabants Dagblad), as well as the largest of the free newspapers in the Netherlands (Metro). For each of the former seven, a Lexis Nexis search was conducted for all synonyms of ‘EU Constitution’, as well as references to a referendum in conjunction with either the terms ‘European’/‘EU’ or a synonym of ‘Constitution’. For the free newspaper ‘Metro’, which is not available through Lexis Nexis, the same search phrases were applied manually, going through the full text archive back to the oldest available issue, which dates from December 2004. The total time range was set to include all articles published from the first presentation of the document drafted by the EU Constitutional Convention (at the EU Council meeting on 19-20 June 2003 in Thessaloniki, Greece) until the last day of data collection of the focus groups (chapter VI).

The sample was further subdivided into seven phases, which were identified in two steps: First, the frequency of publications in the newspaper sample was analyzed, determining when media coverage had been high. Subsequently, four events driving media attention were identified and phases constructed around them. The remaining periods characterized by scarce coverage constituted the other three phases. In the first phase (01.06.-31.10.03), publication activity was low (0.36 articles per day and outlet), and most articles concern the initial presentation of the draft EU constitution. Attention rose in the second phase (01.11.-31.12.03) due to a conflict over power balances and the preamble of the Constitution, notably involving the Polish and Spanish governments (0.70 articles). Thereafter the draft went back into negotiations and press attention ebbed (0.32 articles) for a whole year (phase III: 01.01.-31.12.04). Early in 2005, discussions over a possible referendum over the constitution commenced in the Netherlands and publication activity resumed (0.67 articles) on a steady level for three months (phase IV: 01.01.-31.03.05). Only then, first signs of a referendum campaign were seen, leading to a strong and fast build-up of press attention (phase V: 01.04.-01.06.05; 4.09 articles per day and outlet) and culminating at the referendum day on 1 June 2005. A brief postcampaign phase followed (phase VI: 02.06.-31.07.05) when mainly the referendum outcome and its
implications were discussed. Attention declined gradually but in the end steeply from a high starting level, averaging at 2.19 articles per day and outlet. Thereafter, the topic virtually vanished again from the news until 12 May 2006, when another renegotiation and name change of the project was argued for, and the data collection for this project terminated (phase VII: 01.08.05-12.05.06; 0.36 articles per day and outlet). All taken together, 5334 articles were collected over a period of 1078 days, from eight press outlets, across the described seven phases.

Television sample

The same degree of exhaustiveness was not feasible for the treatment of television data. Instead, particular formats were selected based on their opinion leader status. The selected formats included the two most widely received news shows – NOS Journaal (public service) and RTL4 Nieuws (commercial) – as well as the most important political talk- and discussion-shows – NOVA/Den Haag Vandaag (public, daily), Buiten­hof (public, weekly), and Barend & van Dorp (commercial, daily). Only broadcasts screened during the main campaign phase (phase V, see above), which mentioned the EU constitution or the referendum, were included. In most other phases, TV attention to the issue was sporadic, yielding less than five relevant broadcasts per phase and outlet. Representing TV-discourse on the EU Constitution based on such anecdotal coverage did not appear credible.

Based on the campaign phase, the final sample contained transcripts of 81 broadcasts, about half of which were news broadcasts.

Campaign sample

For the composition of the campaign publications subsample, availability of documents was a major concern. Acknowledging that capturing the entirety of claims issued by campaigning parties and other actors would be impossible, I opted for a broad sampling strategy resting on three major sources: First, all materials hosted on the parties’ (CDA, VVD, D66, PVDA, GroenLinks, SP, LPF, CU, SGP, Groep Wilders) and major non-party campaign actors’ (Government, EU, Comité Grondwet Nee) referendum-dedicated homepages was accessed. If more than 50 documents were available per party, I selected those linked within three clicks from the starting page, and added further documents retrieved by searches for ‘EU Constitution’ within the website from the top until 50 were complete. Unfortunately, the Christian democratic and liberal parties (CDA & VVD) had already deleted their campaign websites at the time of data collection, leaving only a handful of documents available online. Second, all documents referring to the EU Constitutional referendum were retrieved from the DNPP, the Dutch archive for the political parties, which collects everything published on paper by the major Dutch parties. This yielded between five and ten documents per party. Finally, I included all direct statements by Dutch politicians published within the journalistic media’s coverage of the constitutional referendum (de Vreese, 2006): Direct quotes, statements and commentaries authored by Dutch politicians were identified within all included newspapers and television broadcasts. These passages were thus considered twice in the analysis: On the one hand, they are treated as part of the media’s discourse, owing to the

45 An attempt to include another private station, SBS6, failed because no more than three editions of the station’s prime news format (Hart van Nederland) mentioned the EU constitution at all.
46 Documentatiecentrum Nederlandse Politieke Partijen at the University of Groningen, the Netherlands
fact that they had been selected by the respective journalists for publication, and could be read/viewed by their audiences. On the other hand, they are treated as part of a political party’s discourse, owing to the identity and strategic contribution of the author. In this subsample, the major government parties, CDA and VVD were somewhat overrepresented. When interpreting the data, it should be kept in mind that these discourses are reconstructed to a larger degree from statements published in (selective) journalistic media (van Gorp, 2005). The total sample composition is shown in annex IX.4.

Data preparation & modeling considerations

For the automated analysis, visual information was described using keywords, unless it was redundant with the text. Subsequently, the text structure was recognized and a number of tags were added to the text (van Atteveldt, 2008), marking syntactic breaks (interpunctuation and paragraph breaks), headlines and subheadings (in television broadcasts: inserts or anchor’s opening sentences announcing a new item), bullet point lists as well as direct quotes. These tags were needed to model the text’s context structure: When reading a text, individuals draw upon information provided elsewhere in the text, which is not necessarily limited to information provided in close succession. Also higher level macrostructures are required to build an understanding of the text’s meaning (Esser & D’Angelo, 2003; Graesser et al., 1995; Kim & Rhee, 2009; van Dijk, 1985, 2008). Decoding the text’s (macro-)syntactic structure is thus necessary for modelling which terms are likely to be related.

For most parts, the probability of two concepts being related is dependent on their distance in the text (Tapiero, van den Broek, & Quintana, 2002; van Dijk, 1985). Thus, I opted against more common, unit based approaches, which record co-occurrences of concepts within a sentence, paragraph, or whole article (Donati, 1992; Pan & Kosicki, 1993). In my view, such approaches are implausible: Sentence- or paragraph-bound approaches assume that contextual relevance does not span unit boundaries – an assumption led ad absurdum by anaphora, which serve to extend semantic contexts across syntactic boundaries (Johnston, 1995; van Dijk, 2008; van Dijk & Kintsch, 1983). Article-based approaches, by contrast, assume that the internal structure of the text does not matter at all, and treat all raised concepts as related – which is implausible particularly for longer texts. Furthermore, all unit-based measures react strongly to writing style: The length of a text, paragraph or sentence length determines the number of associates a focal concept co-occurs with, and thus of the density of any derived relatedness matrix. In taking a distance based approach, I reflect Kintsch and van Dijk’s (1983) argument that most meaning construction in discourse processing is local. Concepts co-occurring in close succession are likely to be related, whereas distant concepts are usually not required for comprehension.

Within the local context of a focal concept, syntactic breaks structure comprehension (Hellsten et al., forthcoming): Concepts within the same paragraph, sentence or clause are more likely to be contextually relevant than those outside. However, these syntactic breaks are ‘soft boundaries’ that can be transgressed (Kintsch, 1998). Implementing this logic, I used a word distance based co-occurrence algorithm, which considers which
concepts occur within 30 words’ distance of a focal concept. In order to reflect the bias introduced by syntactic breaks, the algorithm applied penalties whenever a clause, sentence or paragraph border is transgressed (i.e., periods, commas etc. count as multiple ‘words’ in the distance algorithm). Thereby, co-occurring concepts can be separated by relatively many ‘real’ words if they occur in the same sentence, but each intervening syntactic break diminishes the distance allowed for co-occurrence. Since I could find no theoretical points of reference as to how much of a penalty the different structural breaks should introduce, I used an ordinal approach: I distinguished minor (commas, semicolons, colons), medium (periods, exclamation and question marks) and major breaks (line breaks) and tested the coding algorithm using different sets of evenly spaced penalty values. The model finally implemented was chosen for its parsimony and the most plausible results, and uses penalties of one, three and five words respectively. Note that, since paragraph breaks are usually preceded by a period, paragraph breaks effectively reduce the distance permitted for co-occurrences by eight words. Given the frequency of commas, periods and paragraph breaks, the algorithm’s 30 words’ distance translates into about 20 ‘real’ words, or even less in dense journalistic writing.

However, not all discourse processing is local. Global thematic information, as well as a text’s ‘regional’ macrostructure also inform comprehension (Graesser et al., 1995; Kim & Rhee, 2009; van Dijk, 1985, 2008). Words in the headline are part of a text’s global thematic macrostructure and are therefore relevant context for all propositions within an article. Subheadings further specify which aspects of this global theme are discussed in the subsequent paragraphs. They thus amend and differentiate the global context model for all subsequent propositions until the next subheading introduces another focus shift (Johnston, 1995; Kintsch, 1998). Bullet point lists enumerate specific aspects of claims that have been introduced before. Usually, the sentence preceding a bullet point list informs the reader about what the following points are examples of, or evidence for. Thus, the sentence preceding a bullet point list is included as relevant context for each point in the list. Lastly, the author of a direct quote is part of the relevant context for the whole following turn or statement. In the sketched model, the context relevant to comprehending a concept’s meaning thus comprises the text’s global (headlines) and ‘regional’ macrostructures (subheadings, bullet point rationales and the author of a statement, if applicable), as well as the local context determined by proximity (Esser & D’Angelo, 2003; Hellsten et al., forthcoming; Kintsch, 1998; van Dijk, 2008).

**Coding**

Coding proceeded in three main steps: First, concepts were identified within the texts using a long list of coding rules constructed as follows: A set of key words was created based on a) a subsample of texts that were coded inductively, b) those categories developed by Baden and de Vreese (2008) to capture focus group discussions about the EU constitutional referendum (see chapter VI), c) the code book used by Takens (2006) for her analysis of press coverage about the same, and d) word frequency lists from the

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47 The distance is relatively arbitrary and mainly affects the type I/type II error rate. The large window size aims to include all relevant concepts in a concept’s surrounding, at the cost of including also irrelevant concepts which will be filtered out later (see below). It uniformly affects the density of all constructed networks and is neutral towards their structure.
newspaper subsample. Expressions were grouped as equivalent if they were used interchangeably, or in the same semantic function (e.g., different examples of Dutch liberties were coded jointly unless their relevance was differentiated, Baden & de Vreese, 2008). Synonyms and circumscriptions were added and disambiguated utilizing a thesaurus and, in difficult disambiguations, an analysis of concordances in the sample texts.48

Each concept was coded searching for occurrences of one or several keywords in combination with a number of disambiguation criteria specifying which other expressions must or must not be found within a defined distance of the focal word (van Atteveldt, 2008). For instance, ‘positive (subjective evaluation)’ was coded if the focal word ‘good’ (‘goed’) was found within 5 words distance of the word stem ‘to find’ (‘vind*’ or ‘vond*’), nearby (distance: 10 words) a self-reference (‘ik’) and not immediately pre- or succeeded (distance: 2 words) by a negation (‘niet’, ‘geen’). In total, 1205 concepts were coded using 3267 keyword-disambiguation-combinations.

Those concepts recognized in macrostructure-relevant parts of the texts were extracted and stored as attributes of those parts of text they referred to. For each word recognized as a concept, every attribute-stored concept constituted a co-occurrence relation between the focal concept and the respective element of the macrostructure. Finally, co-occurrence was determined for all concepts within the local text structure using the described word distance based algorithm. As a result, each article can be represented by a vector listing each concept’s occurrence frequency, and a symmetric matrix containing the frequencies of co-occurrences between any pair of concepts (Diesner, 2004; Hellsten et al., forthcoming; van Atteveldt, 2008). The entire coding procedure was implemented within the software environment of the ‘Amsterdam Content Analysis Toolkit (AmCAT)’ (van Atteveldt, 2008).

**Transformation & analysis**

For analysis, the derived article matrices had to be aggregated and transformed. Articles were grouped by source and, where applicable, by phase, and the frequencies of occurrences and co-occurrences were added. However, these frequency based matrices do not yet allow a direct analysis: First, co-occurrence frequencies are heavily dependent on the occurrence frequencies of the involved concepts. Frequency matrices are dominated by relatively few concepts that occur very often in language use – e.g., pronouns (self-references, ‘we’, etc., Steyvers & Tenenbaum, 2005). However, the information value of concepts is inversely related to their frequency: The most interesting concepts occur relatively infrequently (Lowe, 2001).

Second, the coding procedure opted to include relatively many nearby concepts in an attempt to capture most related concepts. Thereby, it inevitably recorded a sizeable share of spurious co-occurrences. Thus, in order to distinguish co-occurrences that (are likely to) follow from the semantics of the text from those random entries, I compared the observed co-occurrence frequencies to those expected if there was no systematic relation between concepts (Griffiths & Steyvers, 2002).49 The expected frequency of co-

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48 The entire code tree is available upon request. The disambiguation rules can be obtained from the author, as well, but remain subject to restrictions in use.

49 The expected frequency can be calculated assuming a random distribution of all recorded occurrences of a given pair of concepts over the texts, and considering the probability of both occurring within the same
occurrences between a pair of concepts is binomially distributed and depends on the concepts’ occurrence frequencies as well as the summed frequency of all concepts in a corpus. Determining the observed co-occurrence frequencies’ z scores on this expected distribution, one obtains a measure of the certainty that a co-occurrence is systematic. For analysis, I eliminated all links that failed to reach significance at a .001 level (two tailed).

The last remaining problem concerns statistical power. While the normalization procedure is robust for frequent concepts, some concepts occurred very infrequently in some matrices. Following the binomial logic above, their expected co-occurrence frequencies were well below one, and any coincidental co-occurrence would register as statistically significant. In order to avoid mistaking single co-occurrences of rare concepts for important associations, I eliminated all concepts with less than five occurrences. Deleting also those concepts showing no significant links with any other concepts, I obtained a set of binarized, reduced and much sparser matrices retaining around 200-300 concepts and 2000-5000 systematic, probably meaningful links (Hellsten et al., forthcoming). A few networks which, after these reductions, contained less than 25 concepts (the coverage of the newspaper Metro from phases III, IV, VII as well as the party discourses of SGP and LPF) were excluded from further analysis.

Within the reduced networks, I identified regions of heightened interconnection density by searching for cliques (complete subgraphs: subsets of the network for which each concept is linked to all other concepts. Only cliques of a size of four or above were considered, Wasserman & Faust, 1994). Weighting links by the number of cliques they participate in, I obtained a network that reflects the density of local clustering. Tie strength can be interpreted as the participating concepts’ number of common associates which are themselves linked, as well. A hierarchical cluster analysis was subsequently applied to determine cohesive subsets of concepts regularly co-occurring in common contexts (Kim & Rhee, 2009). Both the clique search and the hierarchical clustering algorithms are implemented in the software package UCInet 6.0 (Borgatti, Everett, & Freeman, 2002). The graphical representations presented in this paper are obtained using the Kamada-Kawai algorithm, which interprets the presence or value of a link as proximity measure and optimizes stress in a two-dimensional projection (Hellsten et al., forthcoming). The visualization algorithm is available within the software package Pajek (de Nooy, Batagelj, & Mrvar, 2005).

V.4. Results

Coherence

Based on the described clustering algorithm, between 2 (D66) and 13 (CDA) cohesive structures of a size of four or above were identified in the parties’ discourse networks. In journalistic discourse, clustering ranged from 3 (RTL Nieuws) to 14 (Barend & van window, or within another’s macrostructure context, respectively. Unfortunately, this formula is forbiddingly complex. The approach I take conditions on the observed density of co-occurrences in a matrix (which is arbitrary and neutral towards structure) and assesses whether the observed distribution of links deviates from a random distribution. In the simulations run, differences between the results obtained by the different approaches were negligible.
Dorp) cohesive structures on television and 2 (Algemeen Dagblad, phases II, IV & V, and Brabants Dagblad phase II) to 24 (NRC Handelsblad, phase V) in the newspaper discourses; The descriptive properties of the considered networks are shown in Figure V.1.

Figure V.1: Descriptive properties of analyzed discourse networks

Notes: Numbers in labels indicate phases (I-VII); Acronyms are resolved in annex IX.14
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Each structure groups concepts that are semantically coherent and readily interpretable, lending credibility to the validity of detected structures. Clusters with more than six concepts typically contain a recognizable core which can be interpreted as the ‘central organizing idea’ of the frame, and is surrounded by concepts with decreasing association strength. For instance, figure V.2 shows the four largest cohesive structures identified within the green party’s (GroenLinks) discourse. At the centre of each cluster, areas of increased interconnection density are clearly visible. In each discourse except for the television broadcasts, there are one or two clusters that are larger and are internally differentiated by up to two local cores representing distinct aspects within the frame. In the first shown cluster, the bottom four concepts (‘superstate’, ‘competences’, ‘national constitutions’ and ‘false’) were more similar to one another than to the rest of the frame; the same is true for the pair ‘liberalization’ and ‘equality’, as well as the five concepts at the bottom right of the second cluster (‘constitutional rules’, ‘summary’, ‘EU legislation’ (=‘rules’), ‘EU countries’ and ‘community of European states’ (=‘union’). Annex IX.6 lists the frames’ central organizing ideas and subdivisions, as well as the concepts constituting the frames (presented in the order established by the hierarchical cluster decomposition).

Figure V.2: Composition of the four largest cohesive structures in the campaign discourse of GroenLinks.

Note: Line strengths represent local interconnection density.

50 Due to space restrictions, graphical representations are presented only for the discourse of GroenLinks, where representations were most accessible visually. All other representations are available upon request.
Although the clustering procedure assigns each concept to precisely one cluster, frames regularly share concepts. This is expressed by strong links emanating from one cluster targeting selected concepts included in another one. Link strength reflects the number of interconnected concepts that regularly co-occur in the context of both concepts in the dyad: Strong links can be interpreted as cluster membership extended beyond the maximally cohesive structure. The grey links in figures V.3 and V.4 connect pairs of concepts located in different clusters that share membership in multiple clusters. While a multitude of weak links exist between frames’ peripheral elements (not shown), most strong ties between frames in the political discourse network connect core components, corroborating $H_{2a}$: Coherence is instated by reference to other frames’ COIs. By contrast, the range of concepts participating in more than one cluster in the journalistic discourse networks is much more diverse: In line with $H_{3a}$, news media do not systematically craft coherence between the various frames applied to reported information.

The two largest clusters take in a central position in either kind of discourse. However, both the internal structure and external alignment of these core clusters differs between journalistic and political discourse: In political discourse (exemplified by the discourse of GroenLinks shown in figure V.3), the central clusters contain the party’s core arguments, which – by means of coherence links to other frames – structures the whole narrative: In line with $H_{2b}$, the majority of concepts shared by multiple frames links peripheral frames to definitions advanced by the COF. However, not all clusters primarily link to the central clusters. The bottom left cluster in figure V.3, for instance, is only weakly directly related to the COFs, and coheres more directly with the adjacent blue cluster. Across all political discourses, only about a third of smaller clusters shows direct strong ties with the central frames. Another half is strongly connected to other smaller clusters, while a few structures are tied in only by weak links. While on the whole, coherence is established by frame overlaps around a discursive core, several frames cohere only indirectly with the core. While most frames indirectly support and cohere with the central frames’ functional dimensions, the alignment is not necessarily direct. $H_{2b}$ must be refined.

While also in journalistic discourse (exemplified in the discourse of NOS Journaal shown in figure V.4) many links between frames target the central clusters, these links do not instate coherence between frames: They do not regularly involve either frame’s cores. Moreover, there are some entirely disconnected clusters that are not even related by weak links to the remaining network. These clusters group commonly co-occurring concepts which do not appear regularly in any other context. Looking at the semantic content of inter-cluster links, peripheral frames do not regularly pick up and elaborate upon claims defined in the core clusters. Rather, most links spanning clusters simply indicate that the same object is considered in two different, but otherwise largely disconnected contexts. $H_{3b}$ is supported.
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Figure V.3: Overlap patterns between cohesive structures in the campaign discourse of GroenLinks.

Note: Grey lines link concept pairs from different structures with five or more common associates.
Figure V.4: **Overlap patterns between cohesive structures in the campaign coverage of NOS Journaal.**

Note: Grey lines link concept pairs from different structures with five or more common associates.
In line with \( H2c \), the parties’ respective voting recommendations belong to the central clusters in almost all of the political discourses, along with most evaluative statements supporting their stance. Only in the SP’s discourse, voting No plays a peripheral role: While the central clusters raise negative evaluations and connotations (‘contra arguments’, ‘threat’, ‘war’, ‘discontent’, ‘problem’), they do not expressly draw the link to voting No. This is in line with the SP’s campaign slogan, ‘Weet waar je ja tegen zegt’ (Know what you say yes to): Sketching a negative scenario of alleged implications of the EU Constitution, the party left the (obvious) conclusion about vote choice to the voters’ reasoning. Similarly, vote choice is never a core component of the COF within the other parties’ discourses, either. The recommended vote choice is presented as a direct consequence, but not as an integral component of the main argument.

By contrast, and in accordance with \( H3c \), clusters in journalistic discourse hardly ever features unique evaluations or vote recommendations. Either stance reliably co-occurs with the opposite stance or evaluation. With increasing proximity to the time of the referendum, the tendency for both vote recommendations and explicit evaluations to occur within the central clusters increases. For instance, the core of the central frame in the NRC Handelsblad’s campaign coverage shown in figure V.5 contains the concept pairs ‘pro’-‘contra’, ‘vote Yes’-‘vote No’ and ‘Yes camp’-‘No camp’. The clusters typically do not contain any kind of coherent argument for either side, but mostly loosely connected inventories of arguments advanced by both camps. Clusters, and certainly the central ones, cannot be described as coherent arguments. Unlike the political narratives, where the cores were held together by semantically and evaluatively coherent claims, clusters in journalistic discourse are constituted mostly by semantically and evaluatively diverse claims held together by common objects. Almost every journalistic discourse network contains also some clusters that merely group salient political actors or countries. Only smaller clusters take argumentative form. When they do, they often indicate a specific author to whom this argument is credited. The complete list of frames is reprinted in annex IX.6.

In order to assess the degree of agreement across discourses, I determined the range of concept associations that were contained within maximally different networks, as well as the subset of associations contained within the networks’ cohesive clusters. I selected four parties with radically different ideological standpoints, belonging to different campaign camps: While the rightwing-liberal party VVD (part of the government coalition at the time) and the alternative green party GroenLinks (in the opposition at the time) supported the EU constitution, the Christian conservative ChristenUnie and the socialist SP (both opposition parties at the time) rejected it. Among the news media, I selected one public service TV news show (NOS Journaal), a commercial channel political talk show (Barend & van Dorp), and the broadsheet newspaper NRC Handelsblad. In addition, I also checked for agreement over time, including the NRC Handelsblad coverage both from phases I (Introduction) and V (Campaign).
As figure V.6 shows, agreement is generally low, even considering the maximally different networks chosen: Around 90% of all significant concept associations were unique to either of the respective four networks. Hardly any associations (less than 1%) occurred in all networks. Comparing the agreement on associations between political and journalistic discourse in general (all lines), contrary to the expected higher similarity between journalistic accounts ($H2d$ and $H3d$), there are no striking differences. However, in line with the same hypotheses, the agreement in political discourse more than halves if the organization of accounts (clusters only) is considered; for journalistic discourse, it is nearly unchanged. Political parties agree on several propositions but organize them into different contexts, whereas journalistic claims tend to occur in similar contexts.
Figure V.6: Agreement on concept associations within political and journalistic discourse.

Figure V.7: Patterns of agreement on concept associations within political and journalistic discourses.

Note: Bubble sizes indicate the number of connections unique to one or common to multiple discourse networks’ clusters.
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Figure V.8: Clusters pertaining to the EU Constitution in the discourses of VVD, GroenLinks, ChristenUnie & SP

Note: VVD – yellow, GroenLinks – green, ChristenUnie – blue, SP – red; Colored vertices represent concepts associated with the EU constitution only by either of the parties; Grey vertices represent concepts used by multiple parties, vertex size representing the number of parties.
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Figure V.9: Clusters pertaining to the EU Constitution in the coverage of NOS Journaal, Barend & van Dorp, and NRC Handelsblad (phases I & V)

Note: NRC Handelsblad (phase I) – rose, NRC Handelsblad (phase V) – violet, NOS Journaal – orange, Barend & van Dorp – green; Colored vertices represent concepts associated with the EU constitution only by either of the outlets; Grey vertices represent concepts used by multiple parties, vertex size representing the number of outlets.
Considering also the specific patterns of agreement across discourses, which are shown in figures V.7 to V.9, expectations are further corroborated. Within political discourse, there is generally little agreement. Ideological idiosyncrasies dominate, as is reflected in the semantic content of the respective accounts:

The liberal party interprets the Constitution’s bearings on the workings of Europe and the preservation of Dutch identity (yellow cluster in figure V.8), aided by another core frame explaining how the new competence order achieves these aims; peripheral frames exemplify policy cooperation (combating crime, regulating immigration, safeguarding free trade) and define Dutch identity (human rights, liberal legislation). The other Yes camp party, GroenLinks, refutes common misunderstandings about the EU Constitution (green cluster) and contrasts these with a positive frame regarding economic integration and social welfare. Peripheral frames blame the No camp for false claims and elaborate on the welfare theme (social rights, health and education, energy waste). A few more party-typical frames do not derive from the central frames (democracy, transparency, peace, rejection of Iraq war). The ChristenUnie’s discourse revolves around a narrative core which discusses losses in influence and identity, including a cultural-religious aspect that is taken up by the peripheral frames (blue cluster). The second core frame, sketching an eruption of discontent in the French referendum seems to have little implications for further frame selection. The SP’s discourse, finally, is structured around an antagonism between a militarized EU superstate (red cluster) and a democratic, decentralized national order. Aligned around this opposition, peripheral frames refer to big countries’ preferences as well as national diversities. While closely relating to the respective parties’ typical master frames, the EUC is embedded primarily within highly divergent interpretations, agreeing merely on its implications for decision making (grey and white vertices in figure V.8). However, while VVD integrated both party-specific and object-oriented considerations into its discursive core, the concerns stand somewhat apart in the other parties’ discourses, and almost separated in the green party’s narrative (see annex IX.6). Another commonality lies in the recurring concern with observations from the campaign – e.g., others’ claims in the greens’ discourse, or references to the French referendum; however, which observations they referred to differed considerably between parties.

In journalistic discourse, by contrast, agreement is considerably higher, as can be seen in figure V.7. Only the talk show discourses are clearly different from the other news sources. Among the news media, limited agreement exists over time (e.g., within the NRC Handelsblad coverage) as well as between different outlets’ coverage of the same phase. The higher degree of agreement is reflected also in a rather similar semantic organization of the detected clusters, as illustrated in figure V.9: The news media’s discourses reliably feature one (TV news) to two (print) large clusters at the core which summarizes the various campaign actors’ pro- and con-arguments about the EU constitution (rose, violet and orange clusters in figure V.9). Aside of this, the central clusters usually refer to the different interests of other EU member states (violet cluster), and the French referendum campaign, as well (orange cluster). By contrast, such ‘summary’ clusters were absent in the investigated talk show discourses. Most smaller clusters concern either specific arguments associated with specific campaign actors, or features about specific events or policies at the European level (see annex IX.6): The NRC Handelsblad (phase 1), for instance,
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saliently reports on EU immigration policies, enlargement, intergovernmental coordination, as well as threats to welfare and employment. In phase V, the topics that constitute clusters of their own concern the (upcoming) French and (planned) UK referenda, the war on terror, and Euro-induced price rises. In the broadsheets, these topic-focused clusters were reliably larger and more central than those arguments attributed to specific actors. By contrast, on TV news, and most saliently so in the talk shows, actor-associated arguments were much more prominent, while neutral, issue-focused frames were rare. NOS Journaal associates the debates on the Turkish EU accession and the continuation of Dutch liberal legislation on drugs with the SP-leader Marinissen. Fears of diminished Dutch influence in Europe are related to the right-wing populist Wilders, Euro-induced price rises to the VVD, and welfare concerns to the social democrat party PvdA. In the talk show Barend & van Dorp (Be&vD), the ChristenUnie leader Rouvoet could present his concerns about EU bureaucracy and the Greens unfolded their argument concerning the redistribution of competences in Europe. Topics not clearly associated with particular guests and speakers included a concern for Dutch culture (both on NOS and Be&vD), as well as cross-border crime and the expensive euro (Be&vD only). Hence, to the degree that media outlets allowed political actors to speak themselves, their discourses contain rather decontextualized shards of the aforementioned party political discourses. With higher ambitions regarding journalistic professionalism and neutrality, these shards become fewer and integrate into ‘feature’-like clusters that introduce the arguments organized by topic rather than by author. At least in news media, many highly reduced issue-specific clusters flock together, forming the central clusters. These mostly derive from campaign observations and summarize the range of available arguments. The expected distinction between narrative, argumentative party discourses and decontextualized, event- and issue-focused media coverage, juxtaposing third actors’ pro- and con-arguments, is corroborated not only on a formal, but also on the substantive level.

V.5. Discussion

Substantively, the above findings tie in well with the existing knowledge on the Dutch referendum campaign (Aarts & van der Kolk, 2006; de Vreese, 2006; Harmsen, 2007; Schuck & de Vreese, 2008; Takens, 2006). The main finding unanticipated by the literature concerns the rather large space within parties’ discourse taken in by reactions to the campaign situation – noting, of course, that the represented semantic nets do not measure the frequency of mentioning, but the density of association in common contexts. Aside of that, it is remarkable how little similarities between the discourses were found. Even though I looked at maximally different networks, 90% propositions unique to either network raise questions regarding the postulated common ground of publicly communicable information (Dewey, 1927; Moscovici, 1986; Neuman et al., 1992). However, and in line with the expectations, the similar organization of propositions in journalistic discourse hints at the presence of some commonality in interpretations (Peter, 2003; B.T. Scheufele, 2006). Amid the considerable heterogeneity of propositions, a limited, stable core provides structure to the socially shared interpretations, forming the common information base for social representations. Political actors referred to these
common bases, but deviated deliberately from the organization provided by media discourse to weave their specific accounts and arguments (Bennett, 1980; Sapiro & Soss, 1999).

The above findings offer considerable support to the expectations regarding the context structures (frames) applied in political and journalistic discourse. They point at a marked difference between news framing strategies on the one, and political framing strategies on the other hand: News frames are not only episodic – i.e., focused on single events and issues; Also over a long period of news discourse, the sum of episodic frames does not form anything resembling a coherent narrative (Iyengar, 1991, 2010). Issues on the media agenda recur in relatively stable contexts, which are not elaborated toward other, related news frames (Brewer & Gross, 2010; Neuman et al., 1992; B.T. Scheufele, 2006). News frames allow a quick overview over the range of offered arguments, however, they do not elucidate how these arguments are connected or might fit into a coherent picture (Nelson et al., 1997). By contrast, political framing strategies show a pronounced narrative structure, recurrently returning to central claims and assumptions to develop and elaborate integrated accounts (Bennett, 1980; Donati, 1992; Edelman, 1971). Consequently, political and journalistic actors resort to fundamentally different frames: Journalists juxtapose opposing arguments (conflict frame), provide features on policies and their implications (consequences frame) and regularly provide little more than the author of a reported argument as the frame context (de Vreese, 2005; Tewksbury & Scheufele, 2009). By contrast, political actors rarely used conflict (e.g., GroenLinks juxtaposing others’ allegedly false claims with their own explanations) and did not use author framing at all. Consequences frames occurred, but unlike journalistic frames, these were never neutral, but clearly evaluatively connoted and often linked to explicit treatment recommendations in the narrative core (Benford & Snow, 2000; Edy & Metrick, 2007; Entman, 1993). Political discourses mostly revolved around frames similar to Gamson’s (1988) and Snow and Benford’s (1992) collective action frames, built around a moral evaluation of specific situations (morality frame) and treatment recommendations (Moloney & Walker, 2002; Sibley et al., 2006). These COFs are elaborated upon by non-neutral consequences frames as well as further instances of related situations and causes that were linked to the same evaluative drift defined by the core. Frames do not stand disconnected, but they relate to one another, and support the interpretation advanced by the campaign discourse’s central frames (Gerhards & Rucht, 1992). Unlike journalistic discourse, political narratives hence support not merely the construction of coherent accounts, but also the formation of evaluative judgments (Popkin, 1991).

Taken together, political and news discourses provide the ingredients required for the formation of social representations: While media representations provide the common ground for objectified knowledge, political accounts refer to these established schematic structures and link the disconnected frames into coherent understandings. Social representations support different interpretations, as long as they refer to shared knowledge about core facts as well as widely recognized beliefs about how these facts are related to one another (Moloney & Walker, 2002; Moscovici, 1961). The core clusters in news discourse provide a map of the viable interpretations, establishing familiarity with various available accounts. Parties’ narratives start from the representation’s core, but their specific elaborations extend well beyond it.
The detected structure amounts not merely to a rather fuzzy centre-periphery structure of socially proliferated knowledge (Reese, 2010). It also necessitates the detected centre-periphery structure within single frames and schemata: If news discourse mostly summarizes and juxtaposes diverse politically advanced arguments, these arguments need to be built from elements that remain comprehensible when boiled down to their central organizing ideas. The pattern of densely interconnected COIs detected within political narratives ensures that even after decontextualization, the central argumentation lines remain intelligible, or can be reconstructed at least from the episodic journalistic reports. Supporting Gamson and Modigliani’s (1987) COI-based definition of frames, frames can be characterized as context structures with a recognizable core structure (which integrates the frame) surrounded by a fuzzy set of less densely affiliated beliefs. The widespread implicit view of frames as well-delimited and holistic semantic structures is inappropriate for investigating framing practice in discourse (Matthes & Kohring, 2004; van Atteveldt et al., 2006). Frame analytic techniques need to take into account the possibility of overlaps and unclear boundaries of frames (Matthes & Kohring, 2008; Reese, 2010). The introduced methodology inductively distils frames as fuzzy, emergent structures from a semantic network representation of discourse. It has proven capable of detecting semantically coherent structures that fulfil the theoretical requirements for frames and schemata – the knowledge structures formed from and responsible for the formation of frames. Unlike holistic content-analytic approaches, the advanced technique allows investigating subtle differences as well as the degrees and areas of agreement between frames in discourses. Particularly in order to detect narrative coherence within and common knowledge across various representations, investigating concept associations and shared contexts provides new, valuable avenues for framing research.

Limitations

Contrary to frequently voiced fears regarding the use of semantic network analysis and automatic clustering procedures (e.g., B.T. Scheufele & Scheufele, 2010), the strong face validity of detected structures bolsters my confidence in the validity of measurement (van Atteveldt, 2008). However, semantic coherence of frames was assessed from the networks, without referring to the original documents. Interpreting co-occurrence based networks always bears the risk of mistaking artefactual collocations for semantic relations. Relatedly, the correspondence of derived patterns with parties’ master frames is not grounded in an investigation of the parties’ usual discourse. The matches thus hinge upon their plausibility, and require substantiation where doubts remain. Finally, the Dutch EU referendum campaign has been selected as a conveniently clear-cut setup for investigation. Findings cannot claim to apply to strategic political framing in other political settings and circumstances (notably, election campaigns). While there may be good reasons to expect similar narrative structures, this remains to be tested.

In summary

In summary, the above study has extended and corroborated theoretical expectations of the schematic network theory in four major respects. First, it has demonstrated that the internal structures of frames and schemata can be described as a set of interrelated concept associations grouped around a few central propositions (Gamson & Modigliani, 1987; van Atteveldt et al., 2006). Frames can hence be identified based on their formal
belief structure, underlining the validity of the construct as well as its utility in organizing belief systems and discourse texts. Second, the above study has shown that frames are not independent, holistic units, but fuzzy, densely interrelated and partly overlapping structures within discourse. Frames cohere with one another by means of common reference to shared propositions and COIs. They are instrumental to achieving narrative coherence within discourse, relating otherwise disconnected ideas to the central argumentation line (Gerhards & Rucht, 1992). Third, the above study has shown that frames perform quite different functions, and take different forms, in journalistic and political (or, more generally, persuasive) accounts. Common news frames – thus far a core concern in the study of framing (de Vreese, 2005) – cannot be validly transferred to the study of political narrative. Nevertheless, finally, both journalistic and political discourse feed into socially shared knowledge: Media coverage provides a range of shared, objectified knowledge references to which should be(come) comprehensible to most people in a society (Moscovici, 1961; Neuman et al., 1992). Simultaneously, political discourse refers to these social ‘facts’ to provide causal explanations, evaluations, and offer coherent interpretations accounting for the acquired knowledge. Both the proliferation of factual knowledge and the narratives accounting for these are essential prerequisites for the formation of social representations.
Frames in Cognition

The third set of propositions advanced by the schematic network theory concerns the organization of information in mind (chapter II.4): When communicated frames are processed, they should be stored and integrated with prior knowledge, forming an increasingly complex, well-structured schematic network. The derived expectations regarding both the structure of knowledge and its use for the construction of coherent understandings will be scrutinized below.

When people acquire knowledge from the variety of messages available in public discourse, they simultaneously achieve three things: First, they acquire information. However, not all knowledge acquired over the course of following public discourse – more or less inattentively – is actually integrated, and therefore, made useful and meaningful. While such knowledge may be correctly produced if tested for, it should remain inconsequential for the construction of understandings (Gilens, 2001). Thus, second, people also acquire and extend schematic knowledge structures that organize the acquired information. Integrating new beliefs into their existing knowledge, they partly follow publicly proliferated frames, while simultaneously bringing other resources and interpretations to bear, as well (Graber, 1988; Neuman et al., 1992). As a consequence, some popular frames should be widely taken over, while other knowledge is more idiosyncratically organized. When using their knowledge, the acquired schematic structure informs what interpretations people can form, and hence, what uses they can put their knowledge to. Third, as a consequence of schema creation, attitudes are formed by transferring valence, along the acquired beliefs, toward those objects that have been considered (Brewer, 2001). Since the acquisition of knowledge, in the chosen setting, is directly related to the formation of voting decisions in the Dutch EU constitutional referendum, the key object toward which attitudes are formed is the draft constitution. However, the acquired knowledge is likely to shape attitudes toward different, closely related objects, as well, and influence the evaluation of already familiar concepts.

However, people do not stop at acquiring knowledge from public discourse: They use their knowledge to form a wider understanding and thereby instate, as the fourth achievement, a certain degree of semantic and evaluative coherence among their related schemata and attitudes (Neuman et al., 1992). Since voting decisions typically rest on a variety of considerations, they should lead voters to connect multiple schemata and attitudes believed to relate to the decision, bolstering opinion formation. In line with the schematic network theory, a narrative structure should be developed to integrate people’s knowledge far beyond their specific attitudes toward the EU constitution itself. This narrative should relate the issue under consideration to believed causes and goals, relevant actors as well as related values (Just et al., 1996; Neuman et al., 1992).51

51 As noted above, judgments can be formed also without semantic integration, as non-reasoned judgments based on the raw set of belief retrieved (Zaller, 1992). Such judgments, however, are mostly formed ad hoc. Opinions formed over a longer period in time are, by necessity, reasoned: Only if integrations are formed, the
VI.1. Expectations

Semantic contents

As a consequence, it is possible to look at the belief systems people acquired over the duration of the public debate on the EU constitution from a range of different perspectives: When assessing range of beliefs acquired, the most important question is not which beliefs have been acquired, but which have been integrated and hence made useful for the construction of meaning. The assessment of belief acquisition is inseparable from the schematic organization of beliefs. Verbalized frames constructed from schematic knowledge can serve as a proxy for a person’s schematic belief system – or at least that part of it which has been found useful: People should only use frames in their accounts that contribute to their understanding. Acquired but non-integrated beliefs as well as frames found uninformative should not be verbalized. At most, they will be acknowledged when verbalized by others. The first questions that can be raised with regard to the structures of people’s acquired understandings thus concern (1) what knowledge has been commonly acquired at all, and (2) which parts of this are consensually considered important across participants. This common ground of accounts can be expected to refer mostly to those frames consonantly advanced in public discourse (Gamson, 1992, see chapter V), as well as older, social representation embedded schematic knowledge about the EU (Gamson’s (1992) popular wisdom; Hewstone, 1986; see chapter III). At the same time, idiosyncratic frames remain an important resource in sense making: To the degree that a person relates the EU constitution to her own idiosyncratic interests, values and concerns, this person’s specific knowledge is likely to enrich the constructed understanding (Graber, 1989; Tourangeau & Rasinski, 1988).

RQ1.1: Which schematic knowledge structures have been commonly acquired?

RQ1.2: Which schematic knowledge structures are consensually regarded as relevant by most participants?

H1: People agree mostly on schemata pertaining to issues structured by social representations.

RQ1.3: How important is idiosyncratic schematic knowledge for people’s constructions?

Evaluated content

As regards the acquired attitude structure, the selected setting should have induced people to mostly form attitudes with the goal to derive a coherent judgment of the EU constitution. Over the lengthy period available for attitude formation, most salient attitudes should be sufficiently well-rehearsed to instate evaluative coherence: While different people may still disagree what ideas they endorse or reject, the same person’s frames referring to the same object should carry similar valence (de Liver et al., 2007). To the degree that frames used by persons are based on proliferated social representations, however, also links to normative standards should be relatively consensual (Himmelweft et al., 1981). Hence, where people disagree on the evaluation of the same object, the outcome of prior reasoning processes can be stored and made available for subsequent reasoning (Matthes, 2007).
disagreement should mostly rest in different frames: Rather than evaluating the very same propositions differently, they should embed the same object in somewhat different contexts, rendering different normative considerations applicable for judgment. Genuine disagreement is expected mostly outside of the socially shared realm of knowledge.

H2.1: Schematic structures informed by social representations are consistently evaluated by most people.

H2.2: Differences in evaluations of the same object derive from their embedding within different contexts.

Narrative integration

As a consequence, the overall vote choice formed by people should depend on (1) which attitudes are seen as relevant to the task, and (2) how these are seen as related. When integrating diverse attitudes toward a coherent judgment, people should form narrative accounts that explain how and why the objects under consideration provide relevant grounds for evaluation. Using frames to craft semantic coherence across multiple schemata, they should map each attitude’s valence onto the decision depending on how they see their objects to be related (Brewer, 2001): Someone who dislikes the Dutch government and associates it with the referendum should transfer negative valence; someone who thinks the EU might counterbalance the government’s policies, by contrast, might take the same attitude as a reason for voting yes. Consequently, there are three possibilities for accounts to justify different vote choices: First, people may disagree about the desirability of something, relying their attitudes in similar ways, but with contrasting results (different preferences). However, deriving their information from consonant media coverage and consensual social representations, their evaluations should mostly be consensual, too (see above). Differences in substantive preferences should be rare. Second, if people agree on an evaluation, it still may appear in both camps’ narratives in qualitatively different roles (different interpretations). Being informed by diverse political accounts (chapter V), people are bound to perceive different connections between issues. Their interpretations should vary systematically. Third, if people agree on both an object’s relation to the EU constitution and its evaluation, it should be discounted either in Yes- or No-voters’ accounts (different priorities). However, this mechanism is less powerful than reinterpretation, turning an opposing argument into a supporting one, rather than just neutralizing it. It should occur only where reinterpretation fails.

H3.1: Differences in participants’ accounts mostly derive from different interpretations.

H3.2: Differences in participants’ accounts derive from different priorities where reinterpretation fails.

H3.3: Yes- and No-voters’ accounts draw upon similar schematic information (social representations) but integrate them in characteristically different ways around a narrative core (COF).
VI.2. Approach

Different techniques have been employed in empirical social research for recording people’s knowledge and belief structures. Measuring recognition speed is a highly sensitive measure for testing the acquisition of single propositions, however, it is inapplicable for testing complex knowledge (e.g., de Liver et al., 2007): It is neither feasible to collate an exhaustive list of relevant propositions, nor to administer such a test if the list existed. Moreover, all closed strategies provide information to the individual and are hence likely to prime and thereby alter the very belief structures they are supposed to measure (Brewer & Gross, 2005; Southwell, 2005). Among the open ended strategies, four main techniques are available. First, thought-listing techniques are good at recording salient associations (Druckman, 2010; J. Lodge, Tripp, & Harte, 2000; Price et al., 1997; Schaap, 2006). They can be used to determine which out of a range of held beliefs are most accessible. However, they do not exhaust available knowledge very well. Second, several authors have asked participants to produce written accounts of their understandings (e.g., Bonito, 2004; Kim & Rhee, 2009; Rhee, 1997; B.T. Scheufele, 2004b). While well-suited to record narrative structures in knowledge, this technique enables individuals to screen carefully what they put in writing. Half-developed and vague considerations, as well as considerations unrelated to the main narrative are unlikely to be recorded. By contrast, in qualitative interviews – the third technique – it is easy to prompt also for secondary explanations (Mishler, 1986). However, people are still likely to preferably reveal rational, well-elaborated accounts to the perceived authority of an academic interviewer – a tendency reinforced by the social desirability of reasoned rather than intuitive or heuristic vote choices (Hobolt, 2007; Popkin, 1991). Another problem is that many held beliefs will be omitted in accounts given to a believed expert, as these are assumed to be familiar to the other (Grice, 1975). For these reasons, I opted for the fourth technique, namely the focus group interview (Merton, Fiske, & Kendall, 1956). In the given case, the common experience of voting in the EU referendum constituted the focus for the group discussion. Explaining themselves to other laypeople, participants were led to spell out also seemingly trivial or obvious beliefs (Merton et al., 1956; Mishler, 1986). The presence of both Yes- and No-voters ensured that also most evaluations would require explicit justification. The diversity of cues exchanged over the course of group interviews promised to exhaust a wide range of knowledge held by participants. The moderator was instructed to encourage people to also contribute incomplete thoughts and intuitions, and stressed that no contribution would be judged as right or wrong. Aside of these desirable properties in fostering the verbalization of beliefs, the focus group setup also allows directly assessing the degree to which beliefs and frames were consensual among participants (Lunt & Livingstone, 1996; Mishler, 1986).

VI.3. Method

Sample & data collection

To record the diversity of citizens’ understandings of the EU Constitutions, four focus groups with six persons each were conducted in May 2006 at the premises of
Every group comprised three Yes- and three No-voters. Groups were kept heterogeneous with respect to gender, political interest, and media use habits. Age and socio-economic status varied between groups (students, senior citizens, blue- and white-collar workers) but were kept homogeneous within groups to facilitate discussion (Kitzinger, 1994; Lunt & Livingstone, 1996; Morrison, 1998). Participants were told the discussion would be about media use, so they were not primed about the investigated issue matter. All interviews lasted about 90 minutes. The interviews were conducted by a professional moderator, and observed by the researcher. The design of the questions was inspired by sense making methodology as introduced by Dervin (1991/2001), and combined with techniques from mainstream focus group interviewing: They started with a free association task designed to record the most salient, decontextualized thoughts associated with the EU Constitution in the participants’ minds. Subsequently, the participants were asked to explain to a hypothetical novice what the referendum had been all about; this question served to instigate a very general sketch of the schemata immediately related to the subject matter (Shah et al., 2010). Over the course of the interviews, questions became increasingly focused and pre-structured: Participants recalled alleged motivations for and consequences of the treaty (to check for schematic beliefs underlying possible heuristics concerning suspected goals and expected impacts); Subjects were asked to explain their own vote choice and to account for the No vote chosen by the majority of voters (to determine the relative persuasiveness of entertained considerations). Finally, subjects were asked to speculate about the impact of the referendum’s failure (to check what expectations were connected to the impact of voting No), and to describe their hopes regarding the further trajectory of the constitutional process (to add any evaluative or normative dimensions not yet tapped, Höijer, 1990; Kitzinger, 1994; Lunt & Livingstone, 1996; Neuman et al., 1992). Throughout the discussion, voicing disagreement and confusion was explicitly encouraged and probed for, and special care was taken not to let specific views or groups dominate the discussion. The complete moderators’ guidelines can be found in annex IX.8.

Coding of concepts & relations

All interviews were transcribed, taking into account all verbal interactions. Nonverbal communication was ignored for the present study. Actual statements were stripped from all filler utterances (e.g., ‘you know’, ‘I mean’, ‘actually’, etc.), redundancies, and

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52 The delayed setup was chosen to allow for campaign priming effects to subside. It tries to reconstruct voters’ full information bases addressing the vote choice they faced, including implicit assumptions, contingencies and incoherences usually not accessible from top-of-the-head responses. Interview questions were designed to tap a broad range of considerations in the first stages before funnelling in to further probe the acquired understandings (Dervin, 1991/2001; Finney, 1981). While participants may have forgotten several details since the referendum, the persistent, permanently stored core of acquired understandings should be validly recorded (Burnett, 1991; Nisbett & Wilson, 1977).

53 Party affiliations were not recorded separately: I did not want to prime party heuristics to those adhering to different considerations. Participants were expected to refer to party cues during the discussion when they found them relevant, which about half of them did.

54 Nonverbal communication is mostly non-propositional. Since the mapping approach relies on propositional networks, non-propositional data cannot be treated adequately here.
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expressions not made relevant\textsuperscript{55} to the subject matter, following Grice (1975) and Kintsch (1998). Statements containing indirect speech and irony were rephrased to capture the semantic meaning of the participant’s statement. Holyoak and Thagard’s (1995) studies were used to identify and treat statements that used figurative and other paraphrasing speech. Anaphora were resolved where the referent was identifiable and explicitly mentioned (Kintsch, 1998; Schaap, Konig, Renckstorf, & Wester, 2005).\textsuperscript{56}

Within the transcripts, raised concepts were coded using a codebook created inductively (van Gorp, 2010): Concepts could be concrete entities (actors, objects, etc.), qualities and attributes (characteristics, goals, etc.) or abstract ideas (e.g., values, principles). All potentially codeable concepts were collected and brought together into defined concept codes by grouping descriptions that were used interchangeably (for instance, ‘behind closed doors’ was coded jointly with ‘back room politics’, ‘intransparency in decision making’, and complaints about the inaccessibility of EU political bodies, Spradley, 1979). If it was not entirely clear whether participants saw concepts as equivalent, separate codes were created. By the same token, the same word could be coded differently if participants used it in distinct ways, depending on the semantic focus (Kintsch, 1998, for instance, ‘constitution’ referred to different concepts).\textsuperscript{57} Also word groups were considered as one concept if they could not be separated without affecting the semantic content of either component (Spradley, 1979). For instance, ‘big countries’ could refer to a type of collective actor, while in other instances countries were merely qualified as ‘big’. Concepts were disregarded for coding if they occurred less than three times and could not be merged with another concept code. Otherwise, all occurring, meaningful concepts were coded in all participants’ statements. To ensure coding reliability, approximately 10% of the data were coded by two coders, and disagreements were analyzed to improve the concept definitions. Thereafter, one coder processed the remaining text. All together, 3068 instances of 236 concepts were coded. The coding guidelines and codebook are reprinted in annex IX.9 and IX.10.

For mapping in a propositional network,\textsuperscript{58} the text was subsequently parsed into propositions of the format \{concept\}–relation–\{concept\},\textsuperscript{59} following a procedure introduced by van Dijk and Kintsch (1983, see also Kintsch, 1998; Schaap, 2006). Propositions were coded at the level of dyads, discriminating between 14 generic relationship types synthesized from the work of Spradley (1979) and Schaap, Rencksdorf,

\footnotesize
\begin{itemize}
    \item \textsuperscript{55} Statements were regarded as relevant if they were explicitly (but not necessarily elaborately) related to the discussed subject matter, or raised in direct response to the moderator’s questions (Grice, 1975; Mishler, 1986).
    \item \textsuperscript{56} These mostly concerned references to preceding thoughts. When referred-to actors were unspecified, this was coded accordingly (e.g., ‘we’, ‘they’). Irresolvable references other than actors are rare as such sentences would be incomprehensible.
    \item \textsuperscript{57} a) the draft EU constitution, b) a constitution for the EU, c) a kind of legal document, d) an (unspecified) actual national constitution, or e) a specified one. For details refer to the codebook reprinted in annex IX.10.
    \item \textsuperscript{58} Specifically, this network type involves named, directed links and treats concepts, not propositions as nodes (for reviews see Kintsch, 1998; Raaijmakers & Shiffrin, 1992). Propositions are represented as dyads of linked concepts, or longer paths across the net. Links can be associative or dissociative (Read \textit{et al.}, 1997).
    \item \textsuperscript{59} All complex statements can be split into such dyadic micropropositions (Kintsch, 1998); e.g., ‘The constitution is a bad compromise’ can be notated as [Constitution]—is a—[Compromise] and [Compromise]—quality—[bad]. Concepts raised without explicit relation to other coded concepts were ignored.
\end{itemize}

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Wester (2005, see also Collins & Loftus, 1975; Shah et al., 2010). Most of these types are directed relations, indicating that there is a semantically defined order or hierarchy among the concepts (e.g., ‘the constitution has four parts’ makes sense whereas ‘four parts have the constitution’ does not; ‘discontent caused the outcome’ is different from ‘the outcome caused discontent’). Some other types are mutual, indicating that both participating concepts affect each other (e.g., ‘opposition between national identities and an EU superstate’ implies that either is detrimental to the respective other). A final kind is undirected or lacks definition (e.g., ‘currencies are associated with national identities’).

Hierarchical relations (e.g., ‘The Netherlands are an EU member state’), as well as modifiers (quality, time, location) are treated as directed relations. For instance, the sentence ‘I voted no because of the euro, everything has become more expensive’ contains four codeable propositions: [Self]–action→[Vote No]; [Euro]–cause→[Vote No]; [Reality]–quality→[More Expensive], and, by conversational implicature, [More Expensive]–associated→[Euro] (Grice, 1975). Finally, most relationship types can occur as either associative or dissociative relations, which was distinguished in coding (Collins & Loftus, 1975; Read et al., 1997): For instance, in the sentence ‘I had worries about our identity’ ([Self]–(possess)→[Worries]–(object)→[Identity]), either associative relationship can become dissociative by negation: ‘I was not worried about our identity’ ([Self]–(not possess)→[Worries]–(object)→[Identity]), or ‘My worries were not about our identity’ ([Self]–(possess)→[Worries]–(not object)→[Identity]). The coding of concepts and propositions was implemented using the qualitative data analysis software package NVivo 7.

Analysis

Based on the discussion questions and assigned codes, all statements concerning individual voting decisions and explanations of the referendum outcome were identified. A total of 849 relevant propositions were retrieved. Representing each proposition in the discussion as a link between the participating concepts, the belief systems verbalized by the participants can be sketched as a complex network. This highly formalized representation of the data hence considers all contexts linked to a concept simultaneously, disregarding their sequential order. Concept pairs could simultaneously be connected by qualitatively different links (e.g., the concept pair ‘EU Constitution’ and ‘Cooperation’ could be related by a two causal, five goal-, and three possibility-links). To reduce complexity, I identified concepts that were structurally equivalent (i.e., related to the same third concepts in the same ways, Wasserman & Faust, 1994) and collapsed them if they expressed semantically similar or interchangeable beliefs (Spradley, 1979). For instance, the information-quality codes ‘little’ and ‘bad’ were collapsed, while the code ‘false’ remained separate, because the discussion discriminated confusing from misleading information.

60 action, causality, conduciveness, desire/goal, possibility/capability; see also (Shah et al., 2010)
61 opposition, comparison
62 object relation, category relation, possession/attribute relation
63 codes retrieved: Vote Yes, Vote No, Result, and the question sections referring to personal vote choice and the decision to vote No by the majority of Dutch voters. For the thematic map of beliefs related to the euro (see below), also all statements containing the code ‘euro’ were retrieved.
Depending on the focus of the analysis, this overall map could be ‘sliced’, representing only contributions from one of the focus groups, or by Yes- or No-voters only. Likewise, thematic submaps could be constructed by considering only propositions from statements relating to a specified concept. For the below analysis, accounts of people’s own vote choice were distinguished from their explanations of the overall referendum outcome. For an in-depth analysis, another thematic map was constructed based on all statements that contained the concept ‘euro’. This focal concept was chosen due to its remarkably multifaceted contexts in people’s argumentations. Within each map, thematic clusters were identified based on interconnection density. I defined clusters as ‘2-clans’ (concept sets where most concepts are directly linked to one another, while single links may be absent as long as no concept is farther than two steps from all others, Wasserman & Faust, 1994). Concepts that were not part of a cluster were subsequently assigned to the cluster they were most strongly linked to. All clusters were labeled to express the semantic content of the included propositions. Avoiding biases stemming from the analyst’s preconceptions or unsystematic attention, this analytic strategy leaves the emergence of patterns to the rule-bound mapping procedure.

The clusters served to analyze the schematic base of voters’ reasoning. Comparisons between different slices of the overall map allowed drawing conclusions about differences in people’s ways of organizing their beliefs into schematic structures. Likewise, comparisons between thematic submaps enabled an assessment of how integration patterns changed depending on the focus of discussion. Looking beyond the thematic submaps again, the patterns in which participants drew connections between the identified clusters could be organized into larger narratives. Analyzing the interplay of schemata within these narratives, I addressed the third block of hypotheses posited above.

In order to assess the remaining research questions, the degree of consensus among participants on the schematic belief structures was assessed by counting how many participants referred to a cluster. Clusters were considered shared if they were referred to by more than two thirds of participants from each group; partly shared clusters were defined as those referred to by at least a third of all participants, from at least three groups. Finally, the role of idiosyncratic knowledge was examined by tracing mapped contributions back to their individual authors. Each participant’s contributions were analyzed looking for recurring themes and patterns. For this, I compared the thematic ranges of participants’ contributions to all drawn semantic networks. This comparison was further extended to the 20 most frequently coded concepts in a participant’s contributions throughout the whole interview. These coded concepts were collapsed and clustered by grouping interrelated concepts according to the same procedure as in mapping. Concepts repeatedly related to one another by the same participant were organized into idiosyncratic clusters.
VI.4. Results

Semantic knowledge

Acquired beliefs & schematic structure.

Mapping the provided considerations, a well-structured network emerges. Disconnected beliefs are rare in individuals’ contributions, and entirely absent when the co-constructed networks of the group interactions are considered. Areas of dense interconnectedness tend to group thematically related propositions. Within clusters, the predominant relations expressed by beliefs are actions, qualities, and object-relations. Between clusters, unspecified associations prevail, followed by relationships typical for specific clusters (e.g., one cluster discussing people’s feelings shows many inbound causality and outbound object-relations). Causality was most frequently expressed towards vote choices, as well as within certain clusters (e.g., one cluster grouping beliefs about the Euro). Connections between clusters are usually of the same kind, implying similar meanings. Clusters thus can be interpreted as schematic structures, “subsets of [a] network that can function as wholes” (van Dijk & Kintsch, 1983: 47).

Thematically, the schemata revolve around a number of salient objects connected to the EU constitutional referendum, although they operate on somewhat different levels of abstraction. Most cited schemata refer to rather specific aspects of the EU integration process – e.g., bureaucracy, democracy, progress, or enlargement. At least two schemata, by contrast, concern EU integration at large: They group beliefs about the possible end point of integration – an EU superstate – and a range of intuitions and feelings toward the EU integration process, respectively. Two clusters – discussing the euro as well as national identity and influence – lie in between: They refer to specific issues while their implications are generalized toward the EU as a whole. Two more clusters group beliefs about domestic governmental and party actors. Aside these thematically structured schemata, two more clusters discuss the importance of the decision at hand, focusing on the Constitution’s necessity and feasibility. Finally, three closely interrelated clusters group a broad range of considerations about the quality of provided information and decision certainty. Notably, only a minority of schemata concerns (claimed) implications of the European Constitution. The most salient issues discussed pertain to experiential observations during the referendum campaign. The structure of schematic beliefs recorded is shown in figure VI.1.
Clusters differ widely with respect to their internal complexity – the number of contained beliefs – and their integration with the rest of the discussion. For example, the two most densely integrated clusters discuss the behavior of the Dutch government and the quality of provided information, respectively. However, while the government cluster contains a wide range of different considerations, including references to specific actions, suspected motives, and detailed normative benchmarks, the information cluster almost exclusively contains qualifications of information offers. At the same time, some other clusters are internally complex, but largely unrelated to anything else except vote choice (e.g., the power cluster).

**Social representations**

With regard to the degree of agreement among participants on the schematic structure of accounts (RQ1.1-1.3), three areas can be distinguished. Four schemata are used by nearly every participant’s accounts (RQ1.2): These refer to the Dutch government, the European common currency, the information made available during the referendum campaign, and the quality of the understandings people had been able to gain in consequence. The information campaign was mostly criticized for being devoid of arguments, biased, controversial, inaccurate, scarce, too late, or plainly ‘bad’. Consequently, participants also expressed their dissatisfaction with their own understandings of the EU constitution, discussing their uncertainty, but also admitting that their own information searches had been limited. The third schema shared by nearly all participants characterizes the government as arrogant and criticizes its superficial treatment of the whole EU Constitution issue and referendum campaign. The euro, lastly, was predominantly characterized as undesirable, responsible for price rises and a threat to national identities. Although people acknowledged there was also a positive side to the euro, these considerations are part of a different schema (‘simplify’) which refers to various amenities caused by European integration. Albeit acknowledged by all participants, not everyone actually raised beliefs from this schema in their accounts. The
same is true for the majority of other schemata, which will not be introduced individually here. The complete list of occurring frames and clusters can be found in annex IX.11. Together with the shared four clusters, representing the core, these ‘partly shared’ schemata form the social representation structure developed around the EU constitution: Their contained beliefs were clearly familiar to all participants, even if they may have disagreed with some or regarded them as irrelevant (RQ1.1). The data thus offer partial confirmation for H1: While most long standing EU-stereotypes are included in these commonly acknowledged schematic structures, participants did not agree on their relevance for their accounts.

Idiosyncratic framing

Proceeding to RQ1.3, the widespread agreement notwithstanding, people’s accounts were not at all determined by the social representations formed. Drawing predominantly upon commonly shared sets of beliefs, participants still enriched these with their own idiosyncratic knowledge – mostly, by instantiating or adding emphasis by reference to personal concerns. More importantly still, they regularly grouped beliefs into frames in idiosyncratic ways. Most participants recurrently referred to a limited range of frames. On average, three (one to four) recurring themes were identified for each participant, accounting for more than half of a person’s coded contributions. Accounts of participants with higher interest were somewhat more complex (involving more clusters), and better integrated (fewer unaccounted-for statements) than those of disinterested participants. While some individual themes overlapped with the shared schemata introduced above – e.g., Martijn’s (senior, Yes voter) concern with the euro and EU economic power – others deviated clearly from the shared understanding. For instance, one participant (Willemijn, white collar, No-voter) recurrently discussed the roles of states in the EU. Another participant (Henk, blue collar, No-voter) consistently referred to migration, connecting this theme to cheap laborers, crime, and open borders. The breadth of idiosyncratic themes varied from simple buzzwords reliably provided in almost any context (e.g., ‘security’; Emma, student, No-voter) to elaborate themes with multiple connections also to other clusters (e.g., Sjoerd, white collar, Yes-voter, connected the EU Draft Constitution to expected improvements in European democracy, the current status quo as well as people’s influence). The same participant’s idiosyncratic themes often represented detached or even contrary considerations. For instance, Lies (blue collar, Yes-voter) focused repeatedly on national identities threatened by European integration, while also stressing the benefits of enhanced cooperation. Where participants referred to information outside the shared realm, they usually legitimized these contributions by references to specific expertise or anecdotes. Such special knowledge often served to rebut others’ arguments and to contest the commonly agreed-upon interpretations. This strategy was markedly more prevalent amongst Yes-voters.

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64 55% (25-100%) of a person’s statements contained at least one concept from idiosyncratic clusters; 39% (20-58%) of all codes were covered. In two cases, only one cluster could be identified, covering 20/26% of codes, 33/40% of statements, respectively. In the other cases, clusters covered on average 13% of codes, 19% of statements.

65 All names changed. First letters indicate groups: A-F: student group, G-L: blue collar group, M-S: senior citizens’ group, T-Z: white collar group
Evaluative reasoning

Attitudes

The most salient, shared part of the network is heavily dominated by negative attitudes. One positively valenced cluster – ‘progress’ – qualifies as internally complex and well-integrated, but is located outside the shared realm. Among both actor endorsements, general(ized) attitudes and also information quality, non-negative evaluations play peripheral roles at best. For specific issue attitudes the picture is inverted, negative issue attitudes are of minor importance. Relevance was consensually unclear to most participants, and the information state was clearly unsatisfactory.

All of the detected schematic structures carry strong valence. In line with H2.1, only very few schema are evaluated in different ways by different participants. Moreover, as expected by H2.2, in those cases where schema valence was contested, people still evaluated the same propositions in similar ways. Evaluative disagreements derived from differently valenced frames, stressing different aspects of the same schema while discounting others. Different frames within the same schema rested mostly on consensual beliefs. Participants diverged merely with regard to which beliefs were considered most pertinent. For instance, most participants acknowledged that ‘open borders’ related both to traveling, living, and working abroad, as well as to security, international crime and migration. However, depending on which of these frames they considered more pertinent, they arrived at contrary evaluations. The closest people came to evaluating the same belief in different ways was the conviction that the constitution would lead toward a more unified, possibly federal European state (‘union’ cluster in figure VI.1). However, evaluative disagreement again derived from the frames applied to the same belief: While some people focused on prospects of peace and intercultural understanding, others focused on harmonization and the loss of national identities. A third group saw unification as inevitable due to market pressures, and assumed a neutral stance. Neither of the groups, however, contested the validity of the others’ frames. In most schemata, however, the occurring frames pointed toward the same evaluation, supporting strong and consensually univalent attitudes.

Evaluative coherence & semantic framing

The differences in people’s use of attitudes lay not in their evaluations, but in the way they saw these as related to one another. Most controversy in the discussions focused not on propositions within, but the links between the clusters. Negative attitudes could contribute strong positive valence to the reasoning process, and vice versa – e.g., people’s rejection of bureaucratic overregulation was regularly cited as a reason to support the EU constitution, which was seen as a measure to crop EU bureaucracy. Consistent with H3.1, different implications raised by the same attitudes were achieved by means of selecting frames within the schema that semantically supported the intended use of the information: For instance, information tended to be qualified as ‘bad’ or ‘unclear’ when the schema was used to justify discontent or reproaches against the government. In relation to one’s own uncertainty in judging the referendum proposal, the predominant description was ‘contradictory’; and in conjecture with active information searches, it was qualified as ‘false’ and ‘misleading’, typically followed by a statement that the campaign should therefore be disregarded. Still, consensus remained that the quality of campaign
information was low and unsatisfactory. In other cases, attitudes were referred to but discounted by some participants – e.g., the euro was argued to be unrelated to the referendum proposal. As expected by $H3.2$, since the constitution could hardly be reinterpreted as opposed to the euro, the consensually negative attitude toward it had to be discounted. In several cases, even strong (mostly negative) attitudes were disregarded in this manner. Again, both inclusion and exclusion of the euro as a valid cue was achieved by means of framing: Participants legitimized attitudes toward the euro as useful cues by framing the currency as a symbol of a common policy style in EU politics: Pushed through by irresponsible elites, they saw it as part of a larger strategy to supplant national identities with some faceless, neoliberal market, threatening both the social and economic existence of common people. With regard to this frame, the euro could easily find its place in a narrative about the constitution – another imposed, transnational, risky policy. By contrast, other participants delegitimized the euro as a cue by framing it as a long-standing fact of everyday life entirely unrelated to the referendum. Even when accounting for others’ vote choices, Yes- and No-voters framed the euro in subtly, but consequentially different ways: As figure VI.2 shows, both camps agree that the euro caused discontent among the Dutch electorate, hence contributing to the failure of the referendum. However, in the view of the No-voters, this discontent is rooted in price rises and, notably, the government’s denial that such price rises had occurred. They thus not only legitimized the discontent, but also implied that punishing the government was a sensible strategy. By contrast, for Yes-voters, the euro directly caused discontent, without further reason. This enabled them to still account for the majority’s rejection of the referendum proposal, while simultaneously retaining the ability to discount the euro as invalid cue when explaining their own vote choices.

Figure VI.2: Yes- and No-voters’ references to the euro when accounting for the referendum outcome.
Narrative integration

Using frames to construct semantically coherent relations between the various beliefs drawn upon for opinion formation, participants combined various considerations into a narrative structure. Almost without exception, accounts started from a confession of ignorance, explained by the bad information campaign. This lack of information motivated and legitimized the heuristic use of other schematic information – most notably, attitudes toward the government and the euro. However, in line with H3.3, the way in which these were linked to the EU constitution differed between Yes- and No-voters. The latter predominantly blamed the bad campaign on the government, which was also seen as responsible for the constitutional referendum. Conclusions to vote No derived either directly from a determination to reject something one does not understand, the inference that the absence of compelling pro-arguments meant there was little positive about the treaty, or from a conviction that everything the government touched was faulty. In addition, No voters likened the constitution to the euro, understood both as products of the same irresponsible, arrogant and nivellating EU integration process, and concluded that the treaty had to be rejected. Likewise, negative feelings about EU integration and other general attitudes were linked in to bolster the narrative. Valence was transferred in a rather straightforward fashion: The constitution was associated (by authorship or similarity, respectively) with the negatively evaluated government and the euro, and valence was attributed accordingly.

For Yes-voters, who partly relied on the same negatively valenced attitudes, integration was somewhat more complex. In their accounts, the government was responsible for the bad information, too, but otherwise detached from the issue under consideration. Discontent with government was consensual, but peripheral. Even those trusting some political figures’ endorsements underscored that they voted Yes in spite of the government. Instead, Yes-voters took the lack of reliable information as a reason to disregard the many voiced doubts, and focused instead on the little knowledge they were certain of. In consequence, Yes-voters relied mostly on specific information about the draft treaty itself: They referred to specific provisions or goals attributed to the treaty, making use of the predominantly positively valenced attitudes toward specific issues. Their narratives advanced a rather narrow definition of the issue to be voted on, evaluating only the treaty and those implications on which dependable information was available. They disregarded wide analogies with the euro or EU integration at large as inapplicable. Aside of transferring the positive valence attached to several specific issues associated with the treaty, Yes voters also utilized several available negative attitudes for their accounts: While some salient, countervalent attitudes were discounted as irrelevant for their narratives, they regularly derived positive evaluations by portraying the draft treaty as opposed to negatively evaluated aspects of EU integration. Notably, they expected that the treaty would reduce the democratic deficit and curb bureaucracy. Hence, they re-interpreted cues in light of the semantic quality of the links to the referendum proposal. They could accept claims about an irresponsible, undeserving European policy style, yet still argue in favor of the constitution by framing it not as an expression of, but a possible cure for this situation. Negative experiences from the euro introduction could thus, in one view, demonstrate the need to halt EU integration, and simultaneously present a not less urgent need, in another view, to support a treaty that
might improve matters. As expected by H3.1-3.3 participants agreed largely on the desirability of ends, but disagreed how the constitution related to these.

The narrative structure of the accounts advanced by either Yes- or No-voters determined to a large degree the role that different attitudes could play. Forming clearly distinct ideas of what exactly was to be decided, the different COFs structuring Yes- and No-voters’ accounts determined how otherwise consensual concerns were seen as related. The frames applied to relate the available cues to one another made most of the difference between the camps. This task of narrative construction was considerably easier to manage for No- than for the Yes-voters, who had to achieve evaluative coherence despite the dominance of shared negative attitudes. However, also No-voters struggled to achieve narrative coherence in their accounts, instead of simply adding up or averaging available belief valences. Both Yes- and No-voters did not merely aggregate attitude valences when forming their opinions, but they established semantically coherent narratives justifying their choices.

VI.5. Discussion

The results show that, despite their confessed low knowledge and interest, most participants constructed rather complex and systematic understandings of the European draft constitution. Without judging the adequacy of their reasoning (Fossum & Trenz, 2006; Hobolt, 2007), it is clear that judgments were neither random, nor unfounded. Instead, participants based their accounts on a wide range of schematic knowledge. Semantic content

A large part of the schemata drawn upon closely mirrors those outlined by previous studies of people’s European belief systems (see chapter III, Hewstone, 1986; Medrano, 2003; Scheuer, 2005). However, while these long-standing, rather intangible Euro-stereotypes were widely referred to in most participants’ accounts, they were not central to the discussions. The central considerations mainly dealt with rather tangible and directly self-related information such as uncertainty, discontent with the euro, or ‘European experiences’ (Bruter, 2004). People pursued an ‘integrated resource strategy’ (Gamson, 1992), combining experiential knowledge, media-proliferated situation observations and arguments, and long standing popular wisdom. However, people were highly selective in their use of these resources, emphasizing different observations, interpretations and information backgrounds (Lang & Lang, 1990).

Yes-voters relied on a combination of prior knowledge and concrete information about the constitution received from media discourse. They referred mostly to socially shared beliefs and regularly advanced balanced arguments and trade-offs between considerations discussed in public discourse (Gamson, 1992; Schuck & de Vreese, 2008). No voters, by contrast, were more selective and often focused on themes peripheral in media discourse (chapter V). Aside of this, they relied heavily on personal experiences and intuitions, as well as specific observations about the referendum campaign (see also de Vreese & Semetko, 2004).

Regardless of the different selections drawn upon, however, most participants acknowledged their familiarity with a much wider range of considerations. By far most
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raised themes qualify as common knowledge. Idiosyncratic knowledge made no major independent contribution to the accounts, but mostly served to determine which out of the commonly available schemata were most important. Controversy derived almost entirely from selectively highlighting different aspects of a theme: Participants controversially framed uncontroversial ‘facts’ (Nelson et al., 1997). They introduced frames sustaining their deviant reading even while acknowledging other frames currently present in the debate. Mostly, participants tolerated different frames, but discounted these as less important than their own interpretations. This resonates with the view that framing affects the weight given to different considerations in casting a decision, rather than the content of these considerations (Brewer & Gross, 2005; Nelson & Oxley, 1999). While the few, highly selectively retrieved beliefs in immediate-posttest framing effects research neither require nor allow much weight variation (see chapter IV), the weight variation assumes a central role in the construction of reasoned accounts: Over the duration of a referendum campaign, the range of contexts considered by an individual forming a vote choice is necessarily large – much larger and much more diverse than can be accommodated in one coherent account (Graber, 1988; Zaller & Feldman, 1992). Being principally familiar with various available frames, people consciously disregard those considered invalid or otherwise unimportant. The role of non-retrieval, reducing the amount of available information to a manageable, relatively coherent set, is taken over by the discounting of raised beliefs that do not match the person’s formed understanding. However, unlike in ad-hoc belief retrieval, people discounted not so much single beliefs, but entire frames and schemata.66 Having already considered the meanings provided by the respective contexts, they rejected entire substructures of their knowledge as irrelevant to the task. The schematic knowledge formed upon belief acquisition differentiated schema structures which, in the words of van Dijk and Kintsch (1983: 47) ‘function as wholes’, and could hence be discounted as wholes.

**Evalulative content**

Beyond the schematic structure of beliefs, the recorded clusters also showed the properties expected from schema-based attitudes. Like the semantic content, also the evaluative load of most attitudes was consensual (Kumlin, 2000; M. Lodge & Taber, 2000). Where different evaluations persisted within the same schematic structure, the differences could be traced to different frames (considerations) applicable to the common object. Participants referring to schemata containing differently charged considerations almost exclusively covered either positive or negative frames. Disagreement due to genuinely different preferences about the very same set of propositions did not occur (Aarts & van der Kolk, 2005). As a consequence, the valence of people’s attitudes toward the range of relevant objects was rather inconsequential for their vote choices. People agreed far more on the evaluations of raised beliefs than on the quality of their relatedness to the referendum proposal.

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66 Technically, also those ‘considerations’ whose relative importance was affected in the experiments conducted by Nelson and co-authors are better described as frames than as beliefs in the terminology of this study: They concerned entirely different kinds of context, composed of and alluding to a variety of propositions. Thus, this argument does not necessarily contradict the findings reported by Nelson et al. (1997).
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Rather, participants differed with regard to the interpretations built from the advanced considerations. People deliberately reframed consensual, consensually evaluated attitudes to derive completely different evaluative implications. For instance, while all participants agreed that the present state of EU bureaucracy was lamentable, Yes voters used this negative attitude as a positive cue. Evaluative inferences hence made detailed use of the semantic knowledge about the quality and pertinence of a cue’s relation to the target. People did not simply transfer valences in a linear fashion, but they interpreted transferred cues in light of the meaning they implied (Brewer, 2001; de Vreese & Semetko, 2004; Franklin, 2002): They qualitative transformed the evaluative load attached to a cue while transferring it to a target (Gross & D’Ambrosio, 2004; Shah et al., 2004). If no compelling relation between cue and target was identified, people discounted also strong attitudes as irrelevant to the task, rejecting the heuristic inference as invalid. This enabled people to use their (predominantly negative) general attitudes towards EU politics and still conclude that the constitution posed an opportunity for improvement. Speaking with Nelson and Oxley, “this is framing par excellence: to concede to your opponents’ factual claims, but to assert that, under the proper framing, those facts aren’t important” (1999: 1058). What conclusions people drew from their attitudes depended crucially on how the referendum proposal was framed (de Vreese & Semetko, 2004; Sapiro & Soss, 1999; Siune, Svensson, & Tonsgaard, 1994).

Narrative integration

Weaving together those schematic beliefs and attitude-based evaluations they considered relevant, participants used frames to instate coherence among the raised considerations. They referred to other arguments made before, putting new contributions into perspective (Just et al., 1996; Neuman et al., 1992). Although most accounts were predominantly based on consensual, consensually evaluated schematic beliefs, participants selectively used frames to form diverse, but coherent arguments. These were organized by a narrative core (COF) which defined the choice situation facing the voters in the referendum (Peterson, 2004): No voters perceived the situation as characterized by unreliable information, resorting to their general knowledge about the EU integration process to evaluate the draft constitution. The treaty was seen as a more or less typical case of EU policy making, legitimizing the transfer of knowledge and experiences from other cases (de Vreese, 2006; Hobolt, 2007; Neijens & van Praag, 2006). Yes voters, by contrast, differentiated between false and misleading information on the one hand, and some rare bits of concrete, reliable information on the other. They relied mostly on specific information about the constitutional treaty, referring to their general EU knowledge not as a template, but as a backdrop against which the ambitions of the treaty needed to be understood. Both camps’ COFs hence drew upon highly similar information within the core of the formed social representations. However, due to the different functions assigned to available knowledge by these central frames, the same information was used in radically different ways. No voters could mostly transfer evaluative loads in a linear fashion from other familiar aspects of EU politics toward the judged treaty. Yes voters, however, first consulted their understandings about how the treaty would affect these aspects, often concluding that the treaty aimed at curbing familiar ills in EU politics.
Generally, the narratives crafted by Yes voters were somewhat more differentiated than No voters’ accounts. While the latter mostly cited negative experiences, intuitions, and knowledge about lamentable states, Yes voters portrayed their own vote choice more as a weighted decision. However, those arguments favoring a No vote advanced by Yes voters tended to represent connections easily ‘unmasked’ as invalid or unconvincing. They even suggest reasons hardly named by No voters themselves, attributing superficially plausible, but ultimately misled considerations to their vote choices. In the narratives about voting No presented by Yes voters, the majority of their countrymen and women had voted No out of understandable, but misplaced resentment against past EU policies (notably, the euro) and the current government. In either case, the situation definitions determined in the narrative core constrained the uses other schematic knowledge could be used to, and informed the framing strategies needed to connect the relevant pieces (Shu, 2003). The resulting accounts were well-integrated, semantically and evaluatively coherent. Selecting strategically out of a wide range of available shared knowledge, people used frames to construct connections between the different pieces of evidence. By the same means, they discounted or reframed those considerations that did not support their conclusion. Participants went to some lengths to explain how cues made sense together (Pennington & Hastie, 1986, 1988). They neither simply followed the set of strongest attitudes that came to mind, nor did they mindlessly aggregate all cues encountered over the course of the campaign. In line with the predictions made by the schematic network theory, they selected frames resonating with their idiosyncratic concerns, predispositions and knowledge, and constructed their personal narratives in consequence. Deliberately selecting, framing and integrating available information, they arrived at highly reasonable, well-founded accounts.

Limitations

This study obviously suffers from several limitations. First, while literature recommends adding focus groups until contributions become redundant, the observed sample fell short of this requirement (Morrison, 1998). Also, more confidence could be gained from comparing sense making in different information environments: Juxtaposing, for instance, the French referendum campaign characterized by higher politicization and different social representations (Milner, 2006), the robustness of heuristic strategies detected in the Dutch case could be scrutinized. Also, without measuring belief systems at different time points during people’s opinion forming process one cannot say which considerations were decisive for opinion formation. People might try out various accounts before settling for one. The approach taken by the above study measures what understanding remained after a long period of opinion formation, and some further period of forgetting. The claims it makes about the origin and genesis of understandings rest on the theoretical conjectures sketched in the schematic network theory above. The highly systematic analytic strategy effectively addresses the danger of exaggerating anecdotal findings, which haunts other accounts of individuals’ acquired knowledge (Höijer, 1990). The fact that most observations are in line with expectations hence considerably bolsters the advanced theory. Nevertheless, most theoretical knowledge the acquisition of complex knowledge in messy information environments is thin, recent (and, consequently, not tested in sufficient detail), and hence prone to error.
In summary

In summary, the above study underlines five main findings that relate to the theoretical expectations formulated above: First, despite the limited agreement detected among the coverage of various media (chapter V), the range of information acquired by the focus group participants is highly similar. Moreover, even the evaluation of most considerations is consensual within the formed social representations. Second, despite this high similarity of available information, the accounts constructed by participants were highly dissimilar. Participants demonstrated considerable discretion in the selection and integration of relevant information. They were, as Gamson predicted for users of integrated resource strategies, “constrained by omissions from the media discourse, but relatively immune to differences in the relative prominence of visible frames.” (1992: 180, see also Edy & Meirick, 2007). Third, the differences in vote decisions can be traced to the different narratives constructed from the mostly consensual, consensually evaluated information. Voters did not show markedly different evaluations, but mostly differed in the priorities they attached to various considerations, and connections they saw between these. In line with Aarts and van der Kolk’s (2005) conclusion, the referendum was decided not over different preferences, but over different interpretations. Fourth, and consequently, the transfer of evaluative loads toward the judgment task did not so much depend on which attitudes were considered, but how these were related to the decision. It seems therefore necessary to pay much more attention in opinion formation research to the believed relations underlying the transfer of valence from a cue to the target. Neither an assumed reliance on single, dominant cues, nor a (weighted) aggregation of evaluative loads across cues adequately represents the opinion formation process documented above. Finally, the narrative integration of complex accounts, integrating idiosyncratic, publicly communicated, and traded knowledge speaks against common notions of an uninformed, immature and disengaged electorate. Despite scarce and unreliable information as well as limited motivation to consider the issue systematically, all participants managed to form reasoned accounts justifying their vote choice. While the resources available to voters may be limited, their creativity and ingenuity should not be underestimated.
Frame Acquisition

When forming their personal understandings, people draw upon those frames offered to them by public discourse. The close interaction between communicated frames and those schematic knowledge structures used for and formed upon processing has been demonstrated in chapter IV. Chapter V has documented the wide variety of frames provided by political actors and journalistic media. I have argued that news sources in particular perform a crucial role in establishing common knowledge, while political accounts provide possible narrative integrations to make sense of these commonly known facts. At the same time, chapter VI has found that people relied widely on common belief structures, but used diverse framing strategies to weave these beliefs together. What remains to be done is to put the pieces together: In this chapter, I will investigate to what degree, and in which contexts, which sources’ frames have shaped people’s understandings of the EU constitution.

While comparison of provided and acquired knowledge structures cannot provide a definite test of this causal connection, several considerations support the inference (Brewer & Gross, 2010). In order to establish causality, two phenomena must be (1) statistically and (2) logically associated, while (3) the inverse direction of causation, as well as (4) all other possible causes must be ruled out. The below comparison is suitable to detect statistical association. While logically it is unlikely that voters have been directly exposed to all frames included in the below analysis, the implied causation does not necessarily presume direct exposure. Saliently published interpretations are regularly picked up by other sources, reiterated and spread by word of mouth and social communication (Brewer & Gross, 2010; de Vreese & Boomgarden, 2006). Such informal exchange of picked up interpretations is particularly common within political campaigns (Morgan, 2009; Southwell & Yzer, 2009). The captured frames represent those interpretations advanced recurrently in widely visible media and campaigns, and hence likely to be further proliferated throughout society. The observed independent variable – public discourse – has been nearly exhaustively captured from the EU Constitution’s first public appearance till beyond its demise, up to the day when the measurement of acquired understandings concluded. Regarding confounding causes, I have argued in chapter III that the present case considerably constrains the range of resources available to inform people’s interpretations. Prior knowledge on EU politics is limited and well charted (Hewstone, 1986; Medrano, 2003; Scheuer, 2005), and no knowledge can have been formed about the EU Constitution before it existed. European politics cannot be directly experienced (Peter, 2003) and also other motivations than forming a vote choice can be largely excluded given people’s limited concern with European matters (Thomassen, 2006). Public sentiments should hardly be able to develop without the influence of public discourse. It is grossly implausible that public opinion drove media coverage and political debates. There are, arguably, several possibilities for feedback – media responding to publicly acquired beliefs, or allowing citizens to speak in their coverage. However, due to
journalistic selection, such occurrences represent the communicative intent of the journalist rather than the voice of the people, and serve as information source for others once published (Hagen, 1992). While the linearity of the assumed transmission oversimplifies matters, it is clearly the predominant direction of information transfer. Where marked similarities exist between proliferated and acquired frames, the most plausible explanation is that frame acquisition has occurred.

VII.1. Expectations

Public discourse provides the prime source of schematic knowledge that people acquire to make sense of the European constitution. What remains unclear, however, is how much which sources inform people’s accounts, and on which issues. Regarding the strength of influences, two influences speak in favour of a heavy dependency on publicly communicated frames: On the one hand, the range of other available sources for opinion formation has been restricted by the choice of the case (Tewksbury & Scheufele, 2009). On the other hand, people’s limited motivation to think deeply about issues of only indirect personal relevance suggests that compelling accounts should be readily taken over where possible. At the same time, several influences limit the dominance of publicly proliferated frames in people’s accounts. First, people’s selective and unsystematic attention and retention of provided information severely reduces the range of frames committed to memory. Second, as argued in chapter II.3, frames are regularly transformed and elaborated upon reception (see also chapter IV.5). Proliferated information merges with prior knowledge and current cognitive states into constructions which bear only limited resemblance to the communicated frame. Third, despite all limitations imposed by the case selection, people remain capable of applying their prior knowledge and experiences to the issue matter. The strength of influences should therefore depend (negatively) on people’s motivation and knowledge, as well as (positively) their attention to public discourse. All three factors are associated with high political interest.

H1.1: Due to their diminished exposure and inattention to public discourse, politically disinterested people acquire less schematic knowledge from it than politically more interested people.

H1.2: Due to their superior ability to transform knowledge upon acquisition, politically highly interested people derive knowledge from public discourse in a less isomorphic way than politically less interested people.

Concerning differential influences on different issues, a first expectation holds that consonant media coverage should be more able to influence people’s interpretations than diverse frames proliferated in public. Where agreement across media sources is high, similar interpretations can be expected also within participants’ accounts (Peter, 2003;

67 This property of the frame acquisition process also limits the possibilities for detecting transformed frames by comparing structurally equivalent networks: Unless it is known how exactly a frame will be transformed, only a comprehensive reading of provided and acquired frames can determine which belief structures support frames similar or otherwise related to a source. Nevertheless, semantically similar frames necessarily overlap in some affiliated beliefs even after transformation. While transformations will show up as unexplained variance in the analysis, at least some correspondence needs to be present and allows a detection of influences.
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B.T. Scheufele & Scheufele, 2010; Slothuus & de Vreese, forthcoming; Walgrave & van Aelst, 2006). This case needs to be distinguished from the possibility that long standing social representations structure both media reporting and people’s beliefs: Where consonance is high on issues enshrined in prior cultural knowledge, a causal influence of public discourse during the observed period cannot be inferred. Frames about the euro, the democratic deficit, the single market, bureaucratic inefficiency and costs, and other Euro-stereotypes (chapter III) should be consonant due to prior common knowledge. Marked similarities between communicated and acquired frames can be expected also with regard to novel concepts such as the EU constitution, even if consonance is low: Also if the meaning of new issues is contested in public, provided frames remain people’s prime source for understanding the issue. Inversely, people’s interpretations should be largely independent from media frames regarding information that can be directly experienced (Gamson, 1992).

H2.1a: People are most likely to acquire frames from public discourse when the offered frames are consonant.

H2.1b: Consonant framing in public discourse mostly refers to long-standing social representations.

H2.2: People rely strongly on public discourse for frames regarding novel issues.

H2.3: People do not strongly rely on public discourse for frames regarding obtrusive issues.

To the degree that people are offered various and diverse interpretations over the duration of public debate, people should be able to selectively pick and recombine compelling frames (Druckman, 2004). Chapter V showed that political authors provide coherent but diverse narratives, whereas media frames were more consonant, but hardly integrated. As a consequence, reliance on different media outlets should be easily reconciled, whereas frames adopted from political sources should collide with other sources’ frames (Edelman, 1993; Nelson et al., 2010; Tewksbury et al., 2000). Accounts should tend to take over frames on related issues from the same party’s discourse, increasing coherence. The similarity of people’s knowledge to political discourse should be dominated by few selected sources, taking into account also voters’ agreement with the author’s stance toward the referendum proposal (Slothuus, forthcoming; Slothuus & de Vreese, forthcoming). In line with the findings from chapter VI, Yes voters’ accounts drew heavily on specific information related to the EU Constitution, while No voters relied on their long standing EU stereotypes as well as personal intuition. Their different preoccupations should be reflected in the detected similarities.

H3.1: Yes voters’ frames about the constitution and its implications are taken over from public discourse.

H3.2: No voters’ frames about the constitution and its implications are not taken over from public discourse.

H3.3: People acquire frames from political sources in a selective, consistent manner on related issues.

H3.4: People acquire frames predominantly from political sources that support their vote choice.

Regarding the relative influence of sources, the literature continues to disagree whether television or print media are more important for learning from the media
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(Culbertson & Stempel, 1986; Eveland, 2001; Graber, 2001; Neuman et al., 1992; Robinson & Levy, 1986). Likewise, contradicting predictions can be derived for the relative influences of (opinion leading) broadsheet and (popular, closer to the people) regional and tabloid newspapers (Graber, Lang, & Zhao, 2003; Newton, 1999; van Dijk, 1985). The scarcity of tabloid coverage on the EU constitution speaks against a pronounced influence, however, it remain possible that those few frames published there have been widely adopted.

RQ1: Which kind of media is most influential for acquired accounts?

A final distinction concerns at what time people acquire the schematic knowledge structuring their interpretations. Since the provision of information was spread out over a long period, including phases of scarce coverage, three main factors should determine when people’s interpretations were formed: First, low durability of storage in memory may lead people to rely on recently acquired information, while lasting storage enables a profound influence of early interpretations on later knowledge integration (Tewksbury et al., 2000; Tourangeau & Rasinski, 1988). The schematic network theory, which holds that detailed knowledge on the relatedness of beliefs is stored within the schematic structure, supports the latter view: Early exposure to information should be consequential. Second, scarce coverage – e.g., in phases I (when the treaty was formally introduced), III (covering the renegotiation of voting mechanisms), and VII (after the constitution had been declared dead) – may fail to register and initiate a construction of schematic knowledge (Ferejohn, 1990). To the degree that high salience is needed for the acquisition of knowledge from public discourse, the campaign phase (V) and – to a lesser degree – phases VI (debating the reasons and consequences of the outcome) and II (marked by intergovernmental conflicts over the power balance and the preamble of the constitution) should prove most influential. Third, people’s motivation for knowledge formation should be strong and rising as the referendum approaches and low thereafter (Huckfeldt & Sprague, 1990; Schönbach, 1983). Information provided during the campaign phase should dominate most accounts. However, if knowledge has been acquired early on – either in phase I, or the more salient second phase – it should structure subsequent interpretations acquired at a later point in time. Despite the relative salience of the postcampaign phase, major influences from the last two phases are not expected: On the one hand, little motivation remained after the referendum to further consider the issue – also because the outcome led to the public burial of the project. On the other hand, acquired knowledge should be sufficiently well developed by then such that further additions and alterations are difficult to achieve.

H4.1 (prestructuring): People structure their knowledge early on during the public debate (phases I & II).

H4.2 (insensitivity): People do not acquire knowledge from scarce coverage (phases I, III, & VII).

H4.3 (motivation): People acquire most knowledge briefly before the referendum (phases IV & V).

H4.4 (saturation): People do not acquire much knowledge after their opinion is formed (phases VI & VII).

In order to assess the above expectations, a comparative strategy is needed that takes into account both the global degree of similarity between sources and over time, as well
as the local commonalities among specific concepts’ context structures between sources. With regard to those expectations concerning the consonance of public discourse, it furthermore makes sense to first assess the similarities within public discourse before turning toward the analysis of frame acquisition. In the following, I will set out a comparative methodology that is capable of meeting these requirements.

VII.2. Approach

A crucial necessity for the development of a rigorous comparison between provided and acquired knowledge is that both are measured in ways that are directly comparable. With regard to the networks compared in this chapter, equivalence must be established between the sets and definitions of coded concepts, as well as the definitions of relations coded between these. Hence, before the comparison can proceed, it is necessary to bridge the gap between the different approaches to measurement chosen in chapters V and VI (Tewksbury & Scheufele, 2009).

Regarding the coding of concepts, equivalence needs to be established at the semantic, not the lexical level: Unlike journalistic actors, laypeople routinely refer to concepts by means of circumscriptions, incomplete or incorrect terminology, or figurative expressions (Kitzinger, 1994). Across public discourse and private accounts, different lexical indicators are used to refer to the same concepts. Since the range of lexical expressions used in informal ad hoc accounts can hardly be predicted, the focus groups have been analyzed inductively, determining the range of concepts referred to by means of manual, comprehensive code development (chapter VI.3). Subsequently, the analysis of public discourse has utilized the same concept definitions derived from the focus group discussions. Operationalizing the same concepts with a view toward the different language use in public discourse, the code system applied in chapter V.3 has been developed based on the same definitions, although not necessarily the same indicators as the focus group analysis. Reflecting the needs of the deductive approach taken for the analysis of public discourse, also related, meaningful concepts that failed to occur throughout the focus group discussions had to be taken into account. The range of coded concepts has been expanded considerably.

However, since these concepts were added precisely because they did not occur in the group discussions, their addition makes no difference to the equivalence of coding systems: Were the expanded concept list applied to the discussion transcripts, all codes newly created for the analysis of public discourse would show zero incidences. Both sets of coded concepts can be considered equivalent (see also van Gorp, 2010).

With respect to the coding of relations, the recording of semantic relations in chapter VI provided considerably more detail than the co-occurrences detected in chapter V. In order to achieve equivalence of coded relations, hence, the distinctions between semantic relation qualities, associations and dissociations need to be discarded. What remains to be shown is that significant co-occurrences in public discourse pick up on the same association structures within accounts as the explicit references coded in the group discussions. The main reason why co-occurrence had not been adopted as a measure for the focus group discussions lies in the disorderly structure of laypeople’s ad hoc accounts:
People both regularly interrupt ongoing trains of thought and refer back to ideas mentioned earlier (Kitzinger, 1994). The conclusion that nearby propositions are related whereas distant ones are not is not necessarily valid. By contrast, it mostly holds in public, (semi)professional discourse: Public speakers considerably craft their messages to form thematically well-contained units, arranging propositions such that related claims appear in adjacent locations. Concepts that regularly co-occur within one another’s context can reasonably be expected to be semantically related (van Dijk, 1985). While connections between concepts had to be coded manually in the discussion transcripts, the automatic, distance based coding procedure should validly record the same semantic relations in public discourse. The associations recorded in chapters V and VI can be considered equivalent (van Atteveldt, 2008).

Having established the equivalence of networks, a detailed comparison can be conducted at different levels of abstraction: At the network level, it can be measured how influential media learning is for people’s knowledge in general. At the level of a concept’s context structures (ego-networks, see below), the acquisition of semantic contexts (frames) from communicated messages can be assessed (Schaap, Renckstorf et al., 2005). At level of individual dyads, finally, one could also investigate which specific propositions have been acquired. This last option, however, will not be exploited in the present study: On the one hand, the acquisition of individual beliefs matters for people’s understandings only to the degree that these are integrated into coherent, meaningful frames. On the other hand, given the size of the present data set, the estimation of more than five million parameters is neither statistically feasible nor substantially informative.

### VII.3. Method

**Data reduction & recoding**

In order to compare the networks, I first restricted the range of concepts considered to those linked to some other concept in at least five of the included networks. Next, I recoded the 28 kinds of links coded in the focus group networks (14 qualitative forms available as positive or negated each) into simple associations: Also salient explicit dissociative links should register as systematic co-occurrences. In addition to the total network including all focus groups’ contributions, I also created the sliced networks representing individual focus group discussions (FG1: students’ group; FG2: blue collar workers’ group; FG3: senior citizens’ group; FG4: white collar workers’ group), Yes- and No voters’ contributions, and those contributions made by participants with high, medium, and low political interest, respectively. In total, 82 networks including 353 considered concepts entered the comparative analysis: Beside one total and nine sliced networks from the focus groups, these included eight newspapers over seven (Metro: five) phases, five television outlets as well as 13 (7 Yes- & 6 No-camp) political discourses.

**Analysis**

The comparative analysis comprised both a descriptive (assessing the degree and pattern of consonance across networks) and an inferential part (predicting acquired
knowledge structures based on the available information). Both parts involved an analysis of global similarities between networks, as well as an analysis on the level of local context structures. For the inferential analysis, the networks were distinguished into 72 independent networks (representing media and political discourse) and ten networks representing the various subsets of contributions to the focus group discussions.

Descriptive analysis

In order to determine the degree of consonance in interpretations – both over time and across outlets – first, the global similarity between networks was measured as the correlations estimated by the ‘Quadratic Assignment Procedure’ (QAP). This procedure was developed specifically for the comparative analysis of network data, wherein statistical assumptions about the independence of observations are violated. Instead of a normal distribution, it obtains a sample distribution of parameter estimates by randomly permuting the order of columns and corresponding rows in one of the compared matrices (Krackhardt, 1988, 1992; Simpson, 2003).

Second, the similarity of local contexts associated with each considered concept was assessed. For this, I considered each concept’s ego-networks (i.e., the star shaped subgraphs induced by all links containing a focal concept, constituting the range of directly related contextual concepts), throughout all sources. Two indices were created: One ‘Commonality Count’ Index (CC) counted, for each concept, the intersection of links present in a pair of non-identical networks (theoretical range: 0-352; actual range: 0-90, M=0.529, SD=2.181). The other measure is a Jaccard Index (J) that assesses the degree of commonality between two considered link sets. It is defined as the relative size of the intersection over the union of links in a pair of (ego-)networks (range: 0-1, M=0.018, SD=0.054, Leydesdorff, 2008; Snijders, van de Bunt, & Steglich, 2010; Wasserman & Faust, 1994). However, the Jaccard index is indifferent to the size of compared ego-networks and assigns high values to very small (dyadic or triadic) stable patterns. Large ego-nets, by contrast, are unlikely to be fully stable, and will receive medium sized values even if many links are unchanged. The commonality count, by contrast, is liable to assign high values to large context structures even if they are relatively unstable. As a consequence, either index can be drawn upon to address the other’s weakness. Taken together, they give a good measure of the amount and degree of similarity in the focal concept’s contexts. From each index, a 3-dimensional matrix of 353 (concepts’ contexts) · 82 · 82 (networks, diagonal entries disregarded) was constructed. Within this matrix, I focused on those 82 · 82 slices pertaining to two concepts already discussed in some depth in chapters V and VI – the EU Constitution as well as the common currency. The analysis proceeded analogously to the above global similarity measures.

Predictive analysis

Due to computational strain, the prediction of acquired knowledge structures was restricted to three dependent networks: Aside of the total network comprising all contributions from all focus groups, I considered those slices representing the contributions of Yes- and No voters only.

On a global level, the predictive power of the 72 independent networks was assessed using an extension of the QAP mentioned above. This MRQAP (Multiple Regression
QAP) essentially performs a multiple regression but uses the permutation-based sample distribution instead of the normal distribution (assuming independence of observations) for the standard errors (Dekker, Krackhardt, & Snijders, 2007). Since each matrix contains 62,128 unique data points, the large number of independent networks does not present a problem for statistical power. Both QAP and MRQAP are implemented in the software package UCInet (Borgatti et al., 2002).

At the level of frames, a parametric predictive test is not feasible: Adjacent concepts’ contexts overlap and hence violate independence assumptions in a way not yet considered by network analytic or statistical research. However, a manual, uncontrolled analysis is possible. Within the similarity index matrices, those slices pertaining to the total, Yes- and No voters’ focus group contributions contain all other networks’ local similarities relative to the considered dependent networks. Based on these $353 \cdot 72$ sized slices, I assessed the pattern of index values, identifying those sources most similar to specific frames used by the focus group participants. Based on the above four analytic steps, it is possible to analyze the patterns of consonance and dissimilarity between sources, such that the formulated hypotheses can be addressed.

VII.4. Results

Descriptive analysis

*Global similarity*

The detected correlation structure displayed in figure VII.1 mostly ties in with existing knowledge about the structure of similarity within public discourse: Most notably, first, the networks representing focus group discussions (right component) are clearly distinct from all other networks, and highly similar to one another. The latter, obviously, is partly an artifact: Some slices contain the same statements, and even the mutually exclusive slices (Yes- vs. No voters; high, medium, and low political interest) derived from the same actual interactions and are thus not independent. However, also the fully independent slices (representing the different focus groups) are more similar to one another than to any media or political discourse network (correlations at least double as large). Similarities between focus group contributions and media discourse are markedly diminished for politically disinterested participants and slightly reduced also for highly interested ones. Findings thus support both the effect of reduced exposure to public discourse and of transformative acquisition expected in *H1.1* and *H1.2*.

Assessing consonance within journalistic discourse, second, similarity is either synchronous across different media (covering similar news in similar ways), or diachronic within the same outlet (representing editorial lines, etc). Consonance is highest within the campaign phase, where most news media are assigned to the same cluster by the clustering procedure (*violet cluster in the left component*). Coverage in the immediately pre- and succeeding phases shows some similarities to the campaign coverage, but there is more differentiation between journalistic media: Different clusters differentiate broadsheet from regional newspapers (*pink vs. white cluster in phase IV, light blue vs. dark blue in phase*).

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68 353 · 353 minus the diagonal, and divided by two due to the symmetry of the matrix.
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While the popular newspapers show inconsistent alignments, if any. Television news is distinct from other news, but the public and private news shows are clustered together (light orange). Diachronically, the highest consistency over time is detected among the coverage of the broadsheet newspapers, notably, NRC Handelsblad.

Third, political discourse is dissimilar from journalistic discourse, and also internally fragmented, corroborating findings from chapter V: No two parties are clustered together or adjoined by correlations exceeding 0.1. The only cluster within political discourse combines the EU’s official campaign publications and the discourse of the Anti-Constitution NGO platform Comité Grondwet Nee – presumably due to both discourse’s preoccupation with citing specific provisions (yellow cluster). Aside of this, the free newspaper Metro clusters with the government’s discourse in phase V, but with the opposition party SGP in phase VII (green & dark red). The ChristenUnie was apparently able to present its frames well in its leader’s appearance on the talk show NOVA, reflected in a strong correlation (dark orange). Other than these, political discourses remained outside any clusters.

Local similarity

With regard to the local contexts of the euro and the EU constitution, the first observation is that the two constructed indices yield highly similar results. The Jaccard index is hardly affected by small, highly consistent substructures. The count index can hence be disregarded as largely redundant. As a second finding, similarities are markedly higher concerning the EU constitution than the euro. Structurally, however, the detected patterns shown in figures VII.2-3 do not deviate much from the one described above. Again, the focus group discussion networks are similar to one another but hardly anything else. Party discourses are relatively dissimilar from one another and most other networks, although some similarities exist (red & green nodes in the upper left corner of figure VII.2, various locations in figure VII.3). Among the public discourse networks, similarity is highest among the newspapers during the campaign phase (light red), and generally among the broadsheet papers. On the EU constitution at least, the TV news outlets resembled the similarity structure of the regional and – less so – quality newspapers. Coverage in phase VI (pink) and, less so, phase I (blue) is highly similar to this cluster, too, whereas it is less similar in other phases. The quality newspapers provided frames of the EU constitution similar to those proliferated throughout the campaign already in phase IV. By contrast, frames of the euro still differ largely during phase IV. The coverage of phases II, III and VII is peripheral in either case.

During the campaign phase, several news outlets transported party-specific frames of the EU Constitution, reflected in high similarity: Notably, the three broadsheet papers as well as the regional Brabants Dagblad related to multiple party frames. By contrast, with regard to the euro, the television outlets (light orange) reliably showed specific links to some political party’s frame: The coverage of NOS Journaal resembles the CDA frame; RTL Nieuws frames the euro in similar ways to GroenLinks; on NOVA, the ChristenUnie’s interpretation received privileged consideration, and Barend & van Dorp echoed the PvdA’s frame. No outlet related to more than one interpretation of the euro. While on the EU constitution, news outlets synthesized various provided frames, they advanced disparate views about the euro.
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Figure VII.1: Global similarity structure of networks

Note: Lines denote correlation strengths (only values of 0.2 or above shown); Colors indicate cluster membership; Acronyms are resolved in annex IX.14
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Figure VII.2: Similarity of frames of the EU Constitution

Note: Lines denote association strengths measured as the Jaccard Index between the focal concept's ego-networks (only values of 0.3 or above shown); Colors indicate media type and phase; Acronyms are resolved in annex IX.14
Figure VII.3: *Similarity of frames of the euro*

Note: Lines denote association strengths measured as the Jaccard Index between the focal concept’s ego-networks (only values of 0.2 or above shown); Colors indicate media type and phase; Acronyms are resolved in annex IX.14
Inferential analysis

Local similarity

Shifting the focus towards frames acquired by focus group participants, the comparison with publicly provided frames reveals a range of relatively consensual context patterns: The frames applied to Dutch identity, financial contributions to the EU, relations toward the United States, and price rises were similar across a wide variety of sources across all phases. Merely the concern with price rises became consensual only in phase V. As expected in H2.1a, consonant framing in discourse is reflected also in people’s knowledge. However, and in line with H2.1b, most issues on which consonance occurred represent long standing concerns embedded in social representations. Novel issues were not framed consonantly. A causal influence of consonant coverage, as implied in H2.1a, cannot be inferred. Moreover, the consensually framed issues mostly did not play central roles in the accounts of voters (chapter VI).

Rather, frames used for those concepts structuring voters’ accounts drew upon specific sources. Both Yes- and No voters’ criticism of the provided information (and their own knowledge states) resembles coverage in NRC Handelsblad and NOS Journaal. A third important source appears to be Trouw, whose coverage resembled people’s interpretation of contradictory information. These observations contradict the expectation that the influence of discourse should be low regarding obtrusive objects (H2.3). Considering focus group participants’ framing of the euro, the sources most similar to both Yes- and No voters’ accounts were the coverage of Dagblad van het Noorden (phase V), the public service news (NOS Journaal) and the talk show NOVA. Among the Yes voters, also the green party’s frame (which considered the euro an invalid reason for voting, see chapter V) was successful (GroenLinks). The quality broadsheets as well as prior and later phases play hardly a role at all. Participants’ frames about the government, the last central theme, did not markedly resemble any of the source frames.

Following the argument developed in chapter VI, Yes- and No voters’ contrasting frames of the Constitution (as the central concern, or a mere symptom of a more general issue) are reflected in the sources informing them. Among Yes voters, the most successful sponsor was the government, followed by four about equally successful parties – VVD, GroenLinks, ChristenUnie and SP. Alongside these party-sponsored frames, several closely related issue frames were taken over, as well: Yes voters framed political cooperation and the concern with human and fundamental rights protection in line with the government’s interpretation. Also, the EU-skeptics’ (Comité Grondwet Nee, LPF) concerns with the democratic deficit surfaced in Yes voters’ accounts, to be subsequently reframed (as laid out in chapter VI). However, influences are not particularly strong. H2.2, which expected pronounced influences for novel issues, is generally supported, but the amount of influence remains limited. At the same time, in line with H3.1, this influence is markedly more pronounced among Yes- than No voters – whose frames of the constitution and its implications did not resemble any sponsor’s frame. Instead, No voters took over the SP’s frame that questioned the feasibility of the project as well as the ChristenUnie’s worry about the power of small EU countries. As expected in H3.2, No voters’ accounts showed similarity to the publicly proliferated frames mostly with regard to long standing social representations. They were markedly less influenced by discourse
than Yes voters, reinforcing the conclusions about resource strategies from chapter VI. The figures in annex IX.12 show all similarities with the dependent networks’ context structures above a Jaccard index value of 0.15.

Global similarity

The MRQAP regressions generally corroborate the above findings. The estimated beta coefficients presented in table VII.1 appear small compared to other regression analyses; however, it should be kept in mind that each network contains $353 \cdot 352$ valid entries, such that even a perfect prediction of 124 links corresponds to an increment of only 0.001 in the R squared. A beta of 0.5 would require that either the value of 62,128 links is perfectly correlated between two networks, or that a correlation of on average 0.5 exists across all 124,256 links. Such high degrees of global similarity are implausible and unexpected. The relative size of coefficients as well as their significance can be interpreted in analogy to common regression analyses.

With regard to RQ1, the MRQAP regression shows, first of all, that the largest influences are found among the television broadcasts, followed by broadsheet media and some parties. The prime public news channel, NOS Journaal, proves to be the most influential source. Among Yes voters, the GroenLinks discourse predicts voters’ considerations best. Aside of this, official government publications as well as the other oppositional Yes camp party, PvdA, show significant influences. Curiously, the discourses of the government coalition parties (CDA, VVD and D66) fail to reach significance in any of the regressions. Instead, Yes voters took over arguments from two of the No camp groupings, notably, the Socialist party and the NGO platform Comité Grondwet Nee. No voters, by contrast, are influenced by ChristenUnie and the Yes camp party PvdA. In contrast to Yes voters, No voters are even significantly less likely to make connections if these have been advanced by the government. Only partly in line with H3.3, source reliance was limited to few selected political accounts, however, clusters of related issues taken over from the same narratives could not be found. Either way, source reliance is clearly not confined to those parties supporting the same vote choice, contradicting H3.4. The amount of dependency on newspaper discourse does not differ much between Yes- and No voters, with the exception of phase VI. However, No voters’ reliance on TV and campaign discourse is markedly smaller than for Yes voters.

Regarding the temporal structure of detected influences, three phases can be characterized as influential for knowledge formation: Most beliefs by far have been taken over from campaign discourse and coverage, reflected by the wide range of significant, positive influences. In line with the expected early schema formation (H4.1), but contrary to the insensitivity hypothesis (H4.2), the broadsheet media successfully provided some knowledge already in phases I and II. The regional newspaper Brabants Dagblad and the popular Telegraaf published claims in phase I that have been taken up by No voters, at least. By contrast, phases III and IV were largely irrelevant for people’s knowledge: Few influences are significant, and most out of these show negative signs, indicating that the claims advanced in these phases were systematically absent in voters’ accounts. This result, however, cannot support the insensitivity hypothesis, because people’s ability to acquire knowledge from scarce coverage has been already demonstrated in phase I. It also partly conflicts with the motivation hypothesis (H4.3), or at least suggests that people’s motivation to form an opinion was still low during the precampaign. The coverage in
Phase VI shows a few positive influences on No voters’ accounts, who apparently updated their understandings once the result was known, whereas Yes voters did not. Phase VII was again mostly irrelevant. The latter findings are in line with the saturation and motivation hypotheses (H4.3-4.4). Overall, the knowledge presented by focus group participants is predicted, in order of declining predictive power, by television and newspaper coverage during phase V, political campaign discourse, and phase I-II newspaper coverage. Early formed schemata, motivation and saturation after the formation of opinions during the campaign all contribute to accounting for the observed data. Insensitivity, by contrast, does not appear to present a major obstacle for knowledge acquisition.

Table VII.1: MRQAP regression predicting focus group discussions from public discourse

<table>
<thead>
<tr>
<th>Dependent network:</th>
<th>total discussions</th>
<th>Yes voters only</th>
<th>No voters only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>beta</td>
<td>Sig.</td>
<td>beta</td>
</tr>
<tr>
<td>Phase I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brabants Dagblad</td>
<td>0.011</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Dagblad van het Noorden</td>
<td>-0.009</td>
<td>0.00</td>
<td>-0.010</td>
</tr>
<tr>
<td>NRC Handelsblad</td>
<td>0.010</td>
<td>0.02</td>
<td>0.010</td>
</tr>
<tr>
<td>Telegraaf</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trouw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algemeen Dagblad</td>
<td>-0.012</td>
<td>0.00</td>
<td>-0.011</td>
</tr>
<tr>
<td>Dagblad van het Noorden</td>
<td>-0.006</td>
<td>0.04</td>
<td>-0.012</td>
</tr>
<tr>
<td>NRC Handelsblad</td>
<td></td>
<td></td>
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<tr>
<td>Telegraaf</td>
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</tr>
<tr>
<td>Trouw</td>
<td></td>
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<td></td>
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<tr>
<td>Volkskrant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase III</td>
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<td></td>
<td></td>
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<tr>
<td>Dagblad van het Noorden</td>
<td>0.008</td>
<td>0.03</td>
<td></td>
</tr>
<tr>
<td>Metro</td>
<td>-0.003</td>
<td>0.01</td>
<td>-0.002</td>
</tr>
<tr>
<td>Telegraaf</td>
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Notes: Only entries significant at .05 level shown, bold entries are significant at .01 level; Predictor networks without significant entries are omitted; Positive significant entries are shaded.
VII.5. Discussion

The above results lend further credibility to the propositions of the schematic network theory. Although the overall degree of similarity between information sources and acquired accounts is low, the observed patterns tie in nicely with the derived expectations. Generally, limited similarity was expected due to selective exposure and the transformative acquisition of frames (Ferejohn, 1990; Sniderman et al., 1990): Voters neither perceive all frames that are offered to them, nor do they leave them unchanged when they integrate them into schematic knowledge. Both influences are large and corroborated by the diminished similarity values among politically highly and hardly interested participants. At the same time, knowledge acquisition was recorded even from scant coverage (Ferejohn, 1990): Despite the severe limitations posed by selective attention and transformative acquisition, some information was still successfully picked up by individuals. Learning was local and confined to few issues per source, but there is little doubt that frames have been acquired from public discourse (Graber, 1988; Neuman et al., 1992). Both the absolute and relative sizes of similarity parameters are clearly in line with expectations.

With regard to those frames that have been successfully acquired, three main findings can be identified. First, the temporal development of knowledge acquisition closely follows the propositions derived from the schematic network theory: Schematic structures were formed early on and influenced subsequent belief integration, maintaining their core belief structures all through the lengthy learning process (Feldman & Conover, 1983). In line with the predicted influence of processing motivation, rich knowledge was acquired briefly before the referendum, whereas hardly any further learning took place after the project had been declared dead (Chew, 1992). Combining the influence of schematic structure and goal-directed learning, also the diminished learning during phases II to IV can be explained: Building upon the schematic knowledge acquired in phase I, people should have sought to relate subsequent information to this schematic organization (Feldman & Conover, 1983; Fiske et al., 1983; Shen, 2004). However, While coverage in phase I had focused on the treaty's provisions and their role in European unification, coverage in the subsequent phases did not tie in well with this structure: Neither the quarrels and renegotiations of phases II and III, nor the debate over the calling of a referendum in the Netherlands should have provided much information easily integrated with the initially formed core structure. If knowledge has been acquired in phases II to IV, it should mostly be stored separately from the treaty- and EU-integration schemata formed in phase I. Only in phase V, contents relating to these belief structures reappeared in public discourse, facilitating the integration of considerable amounts of new information. Drawing upon their initial interpretations and campaign-refined schemata of the EU constitution, knowledge acquired during the other phases should have been found inapplicable and disregarded in people’s given accounts.

69 Furthermore, the chosen measures relying on link presence generally record considerable instability even for minor changes. For instance, a direct association that is replaced by an indirect relation causes three links to change state.

70 While one cannot conclude that no knowledge has been acquired, information provided in phases II to IV did not saliently inform people's interpretations of the EU constitution.
Simultaneously, the information drawn upon for people’s understandings shows every sign of motivated, schematically structured, incremental belief integration.

The second main finding concerns the range of sources drawn upon by participants: As expected, participants based their accounts on a variety of sources, patching together their own narratives instead of taking over accounts offered by others. While Yes- and No-voters relied on a similar selection of media proliferated frames, their use of political sources varied systematically. However, contrary to expectations, the range of sources was not confined to those supporting the same evaluative tendency (Slothuus & de Vreese, forthcoming). The observed dominance of television coverage for crafting common knowledge across participants supports the audiovisual camp in the scientific controversy over the relative influences in learning from the media (Graber, 2001; Robinson & Levy, 1986). However, both television news and broadsheet newspapers were widely influential in contributing to people’s understandings. By contrast, the role of regional newspapers was limited, and tabloids hardly affected people’s accounts – probably also due to the neglect of EU topics in their coverage. Considering the importance of interpersonal communication for spreading interpretations during the campaign, the preeminence of reputable media giving prominence to their EU coverage is hardly surprising (Lenart, 1994; Peter, Semetko, & de Vreese, 2003). Given these quality media’s ambitions to balance their coverage and provide dependable facts, also their wide adherence across both Yes- and No-voters ties in well with the media’s role for social knowledge formation suggested in chapter V.

By contrast, and in line with expectations, the use of politically sponsored frames was much more selective: In line with findings from chapter V, political narratives provided diverse and competing frames which were not easily reconciled within the same account (Edelman, 1993; Nelson et al., 2010). Nevertheless, people combined claims from various narratives, albeit highly selectively so. No party was successful getting their frames across on more than a handful of concepts, but within each camp, characteristic sets of frames were taken over from selected party narratives. In line with findings from chapter VI, participants routinely referred to arguments advanced within opposing parties’ interpretations, reframing them to further support their own accounts. These data hence support neither a reliance on evaluatively coherent frames, nor a heuristic selection of sources, which should be reflected in a systematically dismissal of arguments advanced by the opposing camp (Granberg, 1993; Slothuus & de Vreese, forthcoming). Instead, the selections of frames acquired from political narratives seems to follow from semantic coherence requirements (Gamson, 1988; Pennington & Hastie, 1986): For instance, voters concerned with improved decision making and democratic control readily integrated critiques of the EU democratic deficit, arguing subsequently how the constitution might redress the lamented ills (chapter VI). Regarding the selectivity of frame acquisition, the predominantly semantic, schematically structured integration of information assumed in chapter II provides a suitable explanation. The evaluative drift implied by the acquired frames is not taken over, underlining the dominance of semantic over evaluative integration. Frames structured people’s interpretations, but not necessarily their judgments (Brewer, 2001; Kim & Rhee, 2009; Rhee, 1997).

As a third main finding, voters’ reliance on public discourse differs markedly depending on the novelty of issues concerned. For long standing issues, similarities
between voters’ accounts and available sources are high: They are sustained by common social representations informing voters and journalists alike (Moscovici, 1961). Almost all common EU Stereotypes appear among the concepts showing marked similarities (e.g., bureaucracy, costs, conflicting interests, open borders, democratic deficit, as well as concerns with identity, Hewstone, 1986; Medrano, 2003; Scheuer, 2005); only the euro was framed controversially (chapter VI). By contrast, novel issues as well as current observations were framed less consistently in public discourse, leading people to select those accounts that appeared most persuasive. Both frames concerning the EU constitution and its implications and interpretations of current events were taken over from sources selected largely consensually across participants. These issues included, contrary to expectations, also events that could be directly observed by participants – notably, the confusing and dissatisfying information campaign (chapter VI). Relying on an integrated resource strategy (Gamson, 1992), people verified their own observations through public discourse and grounded media proliferated frames in their own experience, arriving at highly robust, consensual interpretations. Thus doubly ascertained, the acquired understandings served as dependable starting points for the construction of people’s narratives (chapter VI). Despite heterogeneous coverage and the considerable complexity of the issue, people successfully identified compelling frames in public discourse, forming consensual schematic knowledge about novel concerns. Seeking semantic coherence within the wide variety of offered interpretations, they selected, transformed and elaborated upon frames from diverse sources and integrated these into their own accounts. Incrementally building their schematic understanding, relying on reputable media for their knowledge of facts and drawing upon diverse political narratives for integration, people formed their own, widely informed but strategically structured, coherent interpretations.

Limitations

The limitations of this comparative analysis are few but grave. First, the assumption of causal relatedness hinges upon a range of theoretical conjectures which are incapable of filling the void of lacking control (Brewer & Gross, 2010; Slater, 2004). While the arguments supporting the drawn conclusions have been spelled out at the outset of this chapter, several alternative routes of causal explanations remain. Media and politicians may have systematically picked up sentiments in public opinion that developed independently, or reinforced such sentiments by publicizing them. Journalists and voters may have come up with similar frames independently from one another – which is plausible particularly where long standing stereotypes are involved. Also, people’s interpretations may derive from occasional references or even single persuasive articles forming frames too unique to register in this analysis. Theoretically, participants may have derived their knowledge from a phone call to their MEP or a conversation with their aunt from Italy. The above analysis has strived to capture the most probable path of causation, but it does anything but exhaust the range of plausible explanations.

The second important limitation concerns the likely non-linear nature of knowledge acquisition: People do not copy and paste propositions from public discourse into their memory, but they abstract, infer, transform, truncate, and otherwise alter propositions as they go along. As a consequence, the share of variance that can be explained by the search for directly corresponding belief structures is miniscule. While I have argued above
that also small detected similarities warrant the conclusion that frame acquisition has taken place, the reverse does not hold: The absence of isomorphically corresponding propositions does not indicate that schematic knowledge is unaffected by a source. That being said, it also needs to be noted that the above comparison delivers highly plausible results. Both the global and local similarity measures reliably distinguished between different kinds of sources, different phases, and different kinds of issues within sources in a consistent way. These regularities lend credibility to the claim that the detected patterns represent real relations within the data. However flawed and limited, the results of this comparative analysis appear to validly represent certain patterns underlying the acquisition of knowledge from public discourse.

In summary

In summary, the above comparative analysis has extended the findings presented in the preceding chapters by two important nuances. Regarding people’s acquired understandings, there appears to be a substantial degree of independence from publicly proliferated interpretations: First, the above results are incompatible with the idea that people mostly copy and paste information from received messages into their knowledge. Albeit one cannot say how far transformative integration remains constrained by the resources and omissions presented in discourse (Gamson, 1992), knowledge acquisition evidently involves considering and substantially altering information content (Graber, 1988; Sniderman et al., 1990; Sotirovic, 2003). Moreover, second, it also involves selecting plausible frames from a variety of perceived accounts. A sponsor successfully advocating one frame may still lose out to others’ explanation on other related issues if other frames tie in better with the narrative constructed by an individual. Single sources appear unable to dominate the observed long term process of knowledge acquisition. Third, and in line with the theoretical literature, the degree of people’s independence from public discourse depends on the consonance of interpretations (Chong & Druckman, 2007c; Druckman, 2004).

The other important contribution concerns the role of differently structured accounts within public discourse. The influence of journalistic, episodically structured discourse (chapter V) did not differ much between Yes- and No voters. Frames were taken over and combined from diverse news coverage, most reliably from broadsheet and television media. By contrast, politically sponsored frames were adopted much more selectively, appropriating only frames that fit into coherent narratives (chapter VI). These findings give further support that journalistic and political frame repertoires may serve complementary functions in public discourse: While media discourse supports the formation of common belief structures concerning the issues under public discussion, political accounts not only fuel controversy, but also narrative integration. Both episodic media discourse and political narratives perform essential functions to enable political opinion formation.
(Re-)framing framing

As every research program, also framing research selects some salient aspects out of the complex universe of relevant phenomena and makes these its main concern. Seen from the knoll where the framing researchers mounted their easel, the world is composed of uncounted issues liable to change in meaning when embedded within different context. Copying fascinating context structures and their effects onto their canvasses, however, framing researchers have often remained remarkably unconcerned about those views offered from the surrounding hills and valleys. For once, they rarely descend to investigate the intricate details of frames up close. While a handful of still life pictures have revealed functional as well as propositional microstructures within the frame, most pictures use a large brush and often show frames as mere ominous blots of paint. The common perception that frames must and can be defined as a whole has rarely been questioned (Matthes & Kohring, 2008; van Gorp, 2010). Also the landscape view from the surrounding mountains has not appealed much to framing researchers to date. Frames, for most parts, are pictured in groups of two or few, and even when many frames are captured within the same artwork, each tends to be portrayed as an individual (however, see Medrano, 2003). The pattern by which frames are interrelated has evaded the gaze of researchers.

As a third omission, the pictures drawn mostly represent one frozen state in the life of the frame – normally, the moment when it is communicated. Only sometimes, traces of their origin are iconically represented, and a rare collection of images depicts the frame crafters at their work (B.T. Scheufele, 2006). What happens to the frame after it has been marvelled at by some passerby and how the frame might affect her further life is hardly reflected. Depicted framing effects are usually limited to the immediate, sometimes cognitive, mostly evaluative response to the frame (Lecheler & de Vreese, 2010). Neither the knowledge structures processing the frame, nor the ones derived from possible frame acquisition are part of the picture: At most, they appear as blurred background conditions in front of which the frame is more or less well perceptible (Chong & Druckman, 2007c). Focused on representing the perceived ‘main’ interaction – between frame and immediate cognitive response – accurately on the canvas, the context surrounding both frame and response is swallowed by thick shades outlining the scene.

Finally, throughout all concern with picturing frames and framing effects, framing researchers have taken a rather documentary approach: They capture on canvas the world as it presents itself to them, true to detail and careful to avoid commentary or criticism (Carragee & Roefs, 2004). This is particularly curious since frames have elsewhere both been depicted as ready tools in the hands of the powerful, and creative devices for the individual formation of reasoned interpretations (Druckman, 2001, 2003; Gamson, 1996). If frames are as ubiquitous and – at least potentially – powerful as they appear to be, the normative question which master’s bidding frames do cannot legitimately be avoided
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(D’Angelo, 2002). It is necessary to lift the easel from the familiar knoll, take a stroll around, and start picturing the whole scene.

This dissertation has attempted to break out of the rich, but tight frame of current framing research. Bringing the internal structure and external alignment of frames, their use within and contribution to human reasoning into focus, the above four chapters have provided insightful empirical data. This data can certainly be only the beginning of targeted research exploring those theoretical perspectives opened up by the schematic network theory. In the following discussion, I will attempt to bring those various concerns raised throughout this dissertation back together, suggesting four new angles from which to picture the lives of frames.

VIII.1. Frames & framing

The first dimension explored in the above studies concerns the structure of information underlying the processing of frames. Three important distinctions have been advanced above: First, I have distinguished between the belief structure underlying a frame and the semantic macrostructure – the COI – that renders the set meaningful. Second, I have distinguished between the semantic interpretation raised by frames and the evaluative implication deriving from these interpretations. Third, I have proposed a distinction between instantiated frames and the more enduring, closely related but not identical structures embedded in messages and stored in memory. Based on these three distinctions, I have provided an integrated theory of the framing process that links instantiated frames to both cognitive and communicative information structures. The theory reconciles automatic belief retrieval and conscious integration, semantic interpretation and evaluative judgment, which are understood as different stages within the same cognitive process. Let me discuss these propositions in turn.

The notion that frames might be wholes whose meaning is fixed and communicatable derives, mostly, from the observation that they function as wholes. Not individual propositions or cues lead people to alter interpretations and opinions, but frame components unfold their meaning only when taken together (B.T. Scheufele, 2003, 2004a; van Gorp, 2007). However, for the set of ingredients to mold into a coherent frame, a conscious act of integration is required. While the belief structure to be integrated provides ample information that helps constructing the frame, it does not already ‘contain’ the COI: Although beliefs are the more likely to become part of the macrostructure the more they contribute to coherence within the set, the same beliefs still support different possible COIs (van Dijk & Kintsch, 1983). At the same time, knowing the set of retrieved beliefs, the range of constructable frames is closely delimited already. This observation is essential to the approach introduced above: While meaning is latent, subjective and situational, those propositions informing it can be verbalized,

71 When researchers code textual representations according to their central organizing ideas, strictly speaking, what they code is their own cognitive models making sense of the observed textual cues. Since integration occurs upon processing, texts do not ‘have’ meaning, but they are assigned meaning by their readers (albeit in often similar, consistent ways, Graber, 1988). These meanings, however, are informed both by the text and the reader’s knowledge and motivations, only part of which is, only approximately, socially shared. There is, as van Gorp (2010) wisely concluded, no way to get subjectivity entirely out of the coding of frames.
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replicated, communicated, stored, and – crucially for research – coded. This dependency of constructed frames on the information entering construction has also been observed by van Gorp (2010), Matthes and Kohring (2008), Boudana (2008), van Atteveldt (2006) and others, and may thus provide an avenue for a much more reliable, researcher independent study of frames.

The beliefs entering the frame not only constrain the range of derivable semantic interpretations, they also form the base for evaluative judgment (Rhee, 1997). In line with the propositions advanced by cognitive appraisal theory, beliefs entail evaluative implications which inform opinion once a belief is retrieved (Brewer & Gross, 2005; Ortony et al., 1988). In consequence, in order to form a judgment, a person needs to form an interpretation first. This interpretation need not be coherent (i.e., no frame has to be formed, Zaller, 1992), but whenever a person constructs a reasoned judgment, semantic coherence must be achieved before a judgment derives (Pennington & Hastie, 1986, 1988). It follows that the evaluative effect that is most saliently connected with the study of framing is only indirectly related to the frame (Rhee, 1997). Frames retrieve (semantic) beliefs, among which coherence is instated. Only the resulting set of coherent beliefs informs judgment. As a consequence, the beliefs raised by communicated cues may not figure saliently in the set of beliefs that remains after semantic integration. Even if they do, there is no guarantee that people evaluate these beliefs the same way that a message suggested (Neuman et al., 1992). The distinction thus points to two important contingencies in the study of frames: First, it emphasizes the role of cognitive responses to frames, which may be triggered by communication frames, but are not necessarily derived from these (Graber, 1988). Second, and relatedly, it underlines the importance of the personal schematic knowledge and attitude structure within which a frame is processed (see below). Unless the receiver’s issue-relevant knowledge and attitude structure can be predicted reasonably well – due to specific measurement or reliance on culturally shared beliefs and values – the evaluative effects of frames can hardly be anticipated. While certainly the most well-known effect of frames, they are neither their most direct, nor the most reliable one.72 Since acquired semantic relations are usually stored in memory while formed opinions are not, they may not even be the most socially relevant effect.73

72 The high reliability with which framing researchers have reproduced opinion change under the influence of frames may be an artefact of the rather specific frames used in most experimental studies: These frames typically refer to semantic contexts highly consistently evaluated due to cultural values or simple utilitarianism (e.g., free speech, public security, economic gains and endangered health, Druckman, 2003; Tewksbury et al., 2000). Such cases are characterized by a near perfect covariation of semantic and evaluative content. For frames referring to inconsistently evaluated semantic contexts, semantic interpretations raised by the frame should fail to predict their evaluative implications. However, although uniquely evaluated frames are only one specific variety of frames, their prevalent use in political communication research makes a lot of sense: Political actors advance their ideas by relating them to values and ideas that are widely endorsed in society (Edelman, 1971). Also, only consistently evaluated frames may potentially affect public opinion in a systematic way. Still, it is important to note that ‘pro-’ and ‘con-frames’ – more precisely, frames that can be expected to refer to predominantly positively or negatively valenced beliefs – are only one occurring phenotype of frames.

73 Of course, online judgments may be formed and stored as evaluative properties of the respective concepts, such that the evaluative framing effect persists (Matthes, 2007). It is unclear, however, how common such formation is.
The contingency of framing effects on available knowledge leads me to the third important distinction, namely, the transformation of information upon frame construction. When information is processed, few cues retrieve a much larger range of familiar beliefs from memory, which then form the frame. The ‘frame’ as it is represented by the received cues (e.g., in a message) is likely to be highly incomplete – the more so the more reliably its author expects the cues to retrieve the targeted knowledge among the recipients (Donati, 1992; van Dijk, 2003). The frame package thus deviates from the formed frame at least in terms of completeness, and may deviate also more profoundly if other influences interfere with construction (Neuman et al., 1992). At the same time, while some beliefs may be newly acquired or inferred from perceived cues, most of the information required to form the frame is raised from memory (Greenwald, 1968). After a frame’s belief structure is committed to memory, all information required to reconstruct the frame is available within schematic knowledge. Beside these, however, memory holds also many other beliefs that were not retrieved. Without precise knowledge about both attended cues and the stored and discovered connections between concepts, it is impossible to predict which out of the belief structures available in memory will actually be used in frame construction. This point is most impressively underlined by the unexpected finding in chapter IV that cues targeting one schematic structure also retrieved beliefs from adjacent, not explicitly referenced schemata. Both message ‘frames’ and schematic memory contain a wealth of useable propositions and beliefs, however, which of these come to mind when forming a frame is fully determined by neither (Greenwald, 1968).

The schematic network theory introduced in chapter II provides an explanation for how the different states of ‘frames’ are related to one another. In this approach, message ‘frames’ primarily figure as packages of cues, which help identifying coherent belief sets within the vast reservoir of information available in memory. The theory is thus primarily located within the ‘accessibility’ based tradition of framing process models (Price & Tewksbury, 1997; Tewksbury & Scheufele, 2009). However, it proposes two important amendments to the existing theory.

First, it extends the network metaphor underlying old accessibility models, arguing that such networks are schematically structured (Axelrod, 1973). The very alignment of information within memory already contains detailed information about the relevance and coherence of beliefs related to particular concepts. Activation spreading through a schematically structured network, hence, does not retrieve random, disconnected sets of related beliefs: With just a slight amendment in the imagined spreading process, the mindless, subconscious process is capable of reliably achieving high coherence among retrieved beliefs (Druckman, 2001; Tourangeau & Rasinski, 1988). The information automatically retrieved from memory already reflects belief applicability, which is stored in the structure of the belief network. Nelson et al.’s (1997) accusation that accessibility models are incapable of explaining the smart filtering of irrelevant, related information can be countered.

Second, the above theory proposes that only retrieved information can be used to consciously further process the activated beliefs. This proposition has two main implications: First, since all information that is not activated cannot inform interpretations, and belief retrieval is highly selective, people do not usually access much of their knowledge when forming an opinion (Zaller, 1992). While people generally
possess much more information that could be used to scrutinize and contextualize a formed frame, people need to be motivated to retrieve this additional information before it can be used (Brewer, 2001). However, if a frame is constructed from entirely coherent beliefs, people have little reason to distrust their retrieved memory, and will not usually access additional information. Only when made aware of possible discrepancies – due to mismatching beliefs raised to attention – they can be reasonably expected to reconsider the retrieved information. Thus, the key question for investigating people’s possible resistance to frames is what conditions raise the probability of discrepant beliefs being activated upon belief retrieval. Second, if the range of information available for conscious processing is confined to those beliefs raised to attention, biases in belief retrieval are generally reinforced upon conscious consideration – both with regard to further retrieval, belief weighting, and the construction of new beliefs: The same contexts tapped initially are likely to be found again if retrieval is resumed deliberately, raising new contexts only where these are easily found from the already active belief structure. Beliefs central during belief retrieval will appear as most important again when their relevance is judged. Conscious appropriateness judgments may be theoretically distinct from subconscious applicability, however, without any additional available information, they are unlikely to deviate from it (Price & Tewksbury, 1997). Finally, also belief content change can occur only within the set of retrieved beliefs, inferring new connections from adjacent beliefs, or updating single relations (Slothuus, 2008). Both belief weighting and belief content change are constrained by the set of retrieved beliefs: If beliefs have not been added to the set considered, either by automatic or subsequent deliberate retrieval, they can play no role in the formation of interpretations or opinions.

The above theory hence integrates the three main processes discussed in framing theory into one unified theory (Chong & Druckman, 2007c; Price & Tewksbury, 1997). Framing is understood as an interactive process, which rests on the ability of perceived cues to manipulate the use of information that is – for most parts – already present in an individual's knowledge (Rhee, 1997; van Gorp, 2007). Assuming that knowledge can be represented as a schematically structured belief network, a small set of simple activation and processing rules suffices to account for phenomena as diverse as equivalent, countervalent, and indifferent responses to framing. Conceptualizing frames as composite, consciously integrated, predominantly semantic phenomena, the above perspective thus hopes to contribute to the development of a more consistent, and more precise theory of framing processes and frames.

VIII.2. Knowledge & information

The second dimension explored in the above studies concerns the structure of information that enters into, and derives from the formation of frames. Understanding frames as hybrid constructions feeding on various information sources, the question arises how these sources influence those frames that can be formed. According to the introduced perspective, information can be divided into cues and propositions/beliefs: The role of cues lies in their ability to suggest which concepts should be considered, thus creating sources of activation for belief retrieval (Tewksbury & Scheufele, 2009; van Gorp, 2007). Beliefs describe those relations between concepts available to a person,
which may transmit spreading activation to further concepts (B.T. Scheufele & Scheufele, 2010). Propositions differ from beliefs only in the sense that these are not (yet) stored in memory, but must be acquired to participate in belief retrieval. Propositions in a message that are not acquired remain irrelevant for the formation of frames. The same proposition, however, may serve both as template for a belief, and as a cue: by virtue of being perceived in a particular situation, the concepts raised by the belief are marked as relevant and contribute to belief retrieval from memory. Basically, any kind of stimulus can serve as a cue: Each concept contained in a message, raised by sensory input, tapped by current processing motivation, or still active in mind due to prior use may guide processing. Among the tapped sources initiating the spread of activation, a communicated message may be responsible for many or fewer cues, but it is unlikely to be the only provider. This availability of additional cues is potentially highly consequential for the interpretation formed based on a message: Since messages are often not provided in a format that resonates with a person’s current trains of thought, intentions or perceptions of the situation, other cues may direct activation along paths unanticipated by an author.

Conceptualizing the potential influence of distracting cues, however, the difficulty remains that the precise selection of cues that a person attends to can hardly be predicted (Price & Tewksbury, 1997). Therefore, this study has opted to restrain the availability of additional cues for frame processing as far as possible within a real communication situation: Obtrusiveness was low, the availability of endorsement heuristics crude, and motivation should have been mostly constrained to the desire to form voting decisions (chapter III). Simultaneously, due to limited prior knowledge, also the availability of beliefs for retrieval has been constrained. Despite the considerable gain in realism, the investigated case thus still represents a rather exceptional situation. However, it is possible to derive expectations regarding how frame processing and acquisition should differ if the above restrictions are loosened:

First, when people process information following diverse processing motivations, the similarity between derived interpretations should be reduced (Huang, 2000). Already in the present study, those motivated to understand the ambitions and provisions of the EU constitution derived systematically different interpretations than those who did not care to understand the treaty (chapter VI). Without prejudging causal relatedness, this distinction coincided with the divide between Yes- and No voters. Motivated reasoning oriented to support a predefined vote choice may already have added to diversity (Druckman & Bolsen, 2009). Deviant motivations direct selective attention and retrieval, belief transformation and integration and can thus be expected to profoundly influence constructed frames. Second, the availability of direct observational information should provide individuals with both discourse-independent knowledge and directly perceptible cues guiding retrieval. When interpreting policy issues closely related to their daily lives, people should be able to contrast provided frames with experiential knowledge, easily rejecting publicly advanced interpretations (Gamson, 1992). Moreover, due to the possibility to acquire knowledge from personal experience, their schematic knowledge may differ considerably, limiting the predictability of how communicated cues will be processed. That being said, however, chapter VII showed that people relied strongly on media interpretations of the referendum campaign despite the availability of direct observations (Gamson, 1992; Graber, 1988; Neuman et al., 1992). Hence, it is unclear
how much obtrusiveness shields people from reliance on discourse frames. At least when they wish to, people should be capable of forming independent understandings of obtrusive issues without relying on media, which was not an option regarding the EU Constitution.

Even if deviant information cannot be obtained by direct observation, communicated propositions may endow people with available knowledge in quite different ways. At one end of the continuum, publicly advanced interpretations may be highly consonant – a tendency pronounced in journalistic coverage (Walgrave & van Aelst, 2006; Zaller, 1992). Such information is highly influential for three reasons: First, people are exposed frequently to highly similar frames, and bound to acquire at least some of the implied propositions (Peter, 2003). Second, unless other information sources are available, only few competing interpretations are advanced (Druckman, 2004). Thus, whenever considering the respective issue, the same frames are likely to be resorted to and rehearsed. Third, and as a direct consequence of the former two, people are likely to discover — and can reasonably expect — that everyone else possesses similar schematic representations of the issue (Moscovici, 1961). They thus can refer to this common knowledge in their communication, and attribute the same knowledge to an author whose frames they try to reconstruct. The more homogenously publicly proliferated frames contextualize information, the more are these able to influence people’s interpretations (Walgrave & van Aelst, 2006; Zaller, 1992). At the other end of the continuum, interpretations may be highly diverse – a tendency associated with political accounts in the present study (Brewer & Gross, 2005; Sapiro & Soss, 1999). In this case, it is unclear which frames a person has been exposed to, and even less clear which she will adopt: Being provided with diverse accounts, frames are unlikely to regularly resonate with already familiar knowledge, leading to misperceptions and the rejection of frames perceived as inconsistent with present knowledge. At the same time, people exposed to competing frames on the same issue are enabled them to discretionarily choose those that resonate best with their convictions (Druckman, 2004; Tourangeau & Rasinski, 1988). People are bound to disagree on which frames they consider most compelling, forming highly idiosyncratic schematic representations. If various interpretations are saliently publicized, internally diverse social representations may derive where various frames and accounts are recognized, but not necessarily endorsed by most people (Moloney & Walker, 2002). Given lower publicity, frames may fail to form social representations, leading to diverse understandings communicatable only to a limited extent between people (Dewey, 1927). In the present case, the Dutch referendum campaign featured both consonant media coverage and limited, salient diversity among political interpretations (Aarts & van der Kolk, 2005; Kleinnijenhuis et al., 2005). Considering electoral or referendum campaigns, most other cases should differ only in degrees from the investigated case: Political accounts may be more or less diverse and more or less salient, but it is hard to imagine a campaign without diverse interpretations publicized widely – at least in pluralist democratic societies. Likewise, journalistic media should normally try to cover various sides of a policy or election and provide some factual background, anchoring interpretations in some common points of reference. Only in public spheres with highly partisan media, this common ground in public discourse may be absent entirely, resulting in interpretations non-communicatable between the
competing camps. Still, also differing degrees of consonant and divergent framing may lead to radically different results in opinion formation.

Regardless of whether common information is recently acquired or vested in long standing public wisdom, the availability of similarly structured schematic knowledge heavily influences the formation of frames (Rhee, 1997). Unlike experiential knowledge, social representations can be systematically targeted by communication cues (Moscovici, 1986). The structure of common knowledge thus not only prejudges to a large degree what constructions people are likely to make, but also, which kinds of frames they are likely to be confronted with in public discourse. In the present study, the structure of people’s EU-related knowledge could be characterized as relatively sparse, dominated by a few long standing stereotypes (Medrano, 2003). Many other starting conditions are imaginable: If knowledge is entirely absent, people need to rely more on publicly proliferated accounts, acquiring many new beliefs from these. At the same time, provided frames should regularly fail to connect, leaving the recipients unaffected (Graber, 1988; Hewstone, 1986; Wolfe et al., 1998). Attempts (e.g., by political accounts) to integrate knowledge grasp at nothing, whereas consonant frames may locally succeed in establishing new knowledge. If, by contrast, knowledge is well developed and dense, provided frames have little trouble raising resonant belief structures. However, they would also find people well equipped to counter the offered accounts (Neuman et al., 1992; Wolfe et al., 1998). In such a case, specific frames should succeed only when they are highly plausible. Most offered accounts will be crowded out by better-confirmed prior knowledge. Media frames should hardly be able to create new shared beliefs. However, the capability of political narratives to integrate available knowledge into powerfully persuasive accounts may still shape the public’s perceptions. This is particularly likely to happen when social representations contain dilemmatic or otherwise incoherent interpretations – e.g., when multiple, diverse narratives are saliently communicated in public (Moloney & Walker, 2002).

In nearly all imaginable cases, the range of both cues and belief structures for frame construction should by far exceed the amount of information that can be actively considered. Even though it is possible to determine the general implications of additional information for people’s reliance on provided frames, the concrete selection of cues and beliefs drawn upon remains fundamentally unpredictable. Unless it is known which out of a range of available cues a person attends to, all knowledge related to an issue is potentially within reach for frame formation. Experimental studies have mostly circumvented this problem by constraining the range of available cues, and manipulating people’s motivation for processing (Kinder, 2007; Lecheler et al., 2009). Consequently, they have rarely considered the role of additional information, mostly focusing on the role of prior attitudes and values. This approach, however, misrepresents the amazing complexity of cues and information available to people in real-life situations (Chong & Druckman, 2007a; Druckman, 2004; Kinder, 2007). To my knowledge, no study has yet provided an explicit theory of their potential influence, certainly none that includes as wide a range of information as this study. While this dissertation has begun to theorize this gap and test some predictions, much remains to be done to fully understand the importance of the cues and cognitive resources feeding the framing process. The evidence provided throughout this study clearly mandates that limited attention and rich,
idiosyncratic knowledge should not be ignored as external disturbances, but included as integral elements in the study of framing.

**VIII.3. Integration & construction**

The third dimension explored in the above studies concerns the construction of coherent accounts beyond individual frames. This dissertation has focused on three salient aspects of this construction: First, I have addressed need to instate evaluative coherence between different considerations within the same account. Second, I have examined people’s strategies for achieving semantic coherence, and sketched the properties of accounts that meet this requirement. Third, I have assessed the origin of such constructions: Do people mostly take over sponsored narratives, do they patch together elements of reasoning from various sources, or do they construct their own interpretations mostly from scratch? Given people’s ability to account coherently for their decisions despite highly inconsistent knowledge, frames might provide a key concept which helps analyzing and understanding the integration of information.

The achievement of evaluative coherence has already been subject to some theorizing in the study of communication. Three main views have been advanced in the literature: The first, simplest possibility is that people select one or few considerations which point in the same direction, and disregard all other evaluative information. This view, which is popular particularly in the heuristic voting literature, assumes that people are unmotivated to consider much information and construct coherent accounts (Franklin, Marsh, & Wlezien, 1994; Hobolt, 2007; Kuklinski & Quirk, 2000). However, the derived expectation that people mostly resort to few disconnected considerations when accounting for their choices does not tie in with the observations made in this study. The second explanation rests on Zaller’s (1992) expectancy value equation and assumes that people determine the (possibly weighted) average of retrieved valences. Again, semantic integration is not expected, while people may trade off differently valenced considerations against one another (Nelson et al., 1997). While this view accurately describes the observed tendency to discount selected considerations, it fails to account for two striking observations: First, contrary valence was not always discounted, but sometimes reinterpreted in light of the quality of the connection between concepts. Second, people did not merely trade off different considerations against one another, but semantically linked these together into coherent accounts. The close link between semantic and evaluative integration is precisely the strength of the third advanced approach: According to Pennington and Hastie (1988), people consider the qualitative links between different considerations and try to determine how these are related (Holyoak & Thagard, 1995; Kintsch, 1998; van Dijk & Kintsch, 1983). Based on the established semantic relation, subsequently, evaluative loads are transformed: Negative evaluations of an object seen in opposition to another consideration may well contribute to a positive evaluation (Brewer, 2001). Discrepancies are resolved by means of reframing and resorting to additional information (Nelson et al., 1997). Where no semantic link can be constructed, evaluative loads may be disregarded entirely. Unlike the other two views, this last approach explains how people could justify support for the EU constitution by pointing at negative aspects of European politics. Dissociating the constitution from the problem and associating it
with the solution, evaluations were inverted. The construction of coherent judgment, hence, did not require coherently valenced considerations. It did require, however, the construction of semantic coherence between considered frames (Pennington & Hastie, 1986).

As for the semantic integration of frames, theoretical knowledge to date is scant, if available at all. While a few authors have recognized a link between narrative macrostructures and frames as possible components of narratives, little has been said about the quality of this connection (Nisbet et al., 2003). Despite the good empirical support accrued throughout this study, the propositions advanced in chapter II.7 remain exploratory. However, it seems reasonable to draw at least two main conclusions regarding the integration of frames into coherent accounts: First, the recurring reference to a limited set of concepts provides a necessary prerequisite for coherence. However, if different frames merely place these concepts in varying contexts, as is often the case in news discourse, this does not yet achieve coherence. Political narratives, by contrast, were found to not only refer to the same concepts recurrently, but also locate these concepts within the cores of raised frames (Gerhards & Rucht, 1992). While further study is necessary to corroborate this interpretation, it seems that frames that cohere with one another share parts of their core propositions. The second finding that may provide an explanation for the narrative coherence of frames is the presence of central frames which organize the account, defining roles, core problems and evaluations. Such COFs could be imagined in close analogy to the COIs integrating frames (Gamson & Modigliani, 1987). They resonate with the observation that complex narratives can be summarized in a small number of propositions, while determining the range of elaborations that can be linked in by other frames (Gerhards & Rucht, 1992). COFs define narrative roles, the situation to be dealt with, and the evaluative standards by which actors and actions alike can be judged (Benford & Snow, 2000; Bennett, 1980). Just as COIs integrate various beliefs into coherent, meaningful interpretations of an object, COFs integrate various frames and considerations into a coherent account of a possibly complex series of events. The presence of such integrating core frames may simultaneously explain why frames have been so difficult to locate in social communication and cognition: If highly similar structures exist on different levels of abstraction, it is hardly surprising that researchers looking at one phenomenon have been drawing upon findings derived from the other one without necessarily noticing (B.T. Scheufele, 2004a). However, the two phenomena should not be confused.74

However, in analogy to frames again, people do not seem to take over their narratives unchanged from public discourse (Gamson, 1992). Acquiring and reconstructing frames advanced in various accounts, the explanations collected in chapter VI are no coherent reiterations of some political actors’ persuasive accounts, but patched together from various sources. People did not even restrict their use of frames to those promoted by parties agreeing with their respective vote choice. Still, they achieved narrative coherence. Thus, at least in the present case, people took the most demanding route for opinion

74 COIs can be distinguished from COFs based on three criteria: First, while COIs organize dyadic beliefs about an object, COFs integrate complex frames revolving around a variety of objects. Consequently, COIs do not define multiple actor roles or competing considerations. Second, COIs allow the construction of various narratives around them, whereas COFs more or less determine the general direction of the account. Finally, COFs are simply much more complex and cannot be reduced to one to few propositions.
formation: Not only did they transform those frames encountered in public discourse to suit their own interests and preoccupations; they also created idiosyncratic selections of frames reflecting those issues they personally regarded most informative with regard to the referendum (Druckman, 2004; Tourangeau & Rasinski, 1988). In doing so, people created new narratives informed and constrained, but by no means determined by public discourse (Gamson, 1992). Grounding their judgments in the narrative structure crafted, they routinely disregarded the evaluative implications suggested by others, reframing information to match their personal accounts (Nelson et al., 1997). While people may have adopted persuasive arguments advanced by single sources, they evidently determined the COFs organizing their accounts themselves.

VIII.4. Competence & judgment

In line with the above, a great deal of active reasoning must have been invested into people’s achieved understandings. This activity includes at least four important stages: First, when acquiring proliferated frames, new information is integrated actively into schematic knowledge: Linking in also beliefs not directly targeted by a frame but recognized as related upon retrieval, people created the preconditions for a flexible, discretionary use of acquired frames (Gamson, 1996; Sotirovic, 2003). Second, when accounting for things, people actively select suitable frames. Their selections show neither pronounced biases toward consistently evaluated, nor semantically similar, nor jointly acquired (i.e., provided by the same sponsor) frames. The remaining explanation, which matches the data well, is that their selections are guided by perceived relevance and narrative coherence (Druckman, 2004; Pennington & Hastie, 1988). Third, people regularly alter the evaluative implications of frames. Adjusting retrieved belief structures to match their overall accounts, several arguments considered in favour of the constitution by their sponsors ended up supporting contrary accounts, and vice versa. Likewise, people neutralized evaluative implications by contesting suggested relations, thus instating evaluative coherence based on diversely valenced considerations (Druckman, 2001; Nelson et al., 1997; Tourangeau & Rasinski, 1988). Finally, the accounts crafted by participants were not only locally coherent, but could mostly be summarized by some COF: Although not necessarily presented in a linear order, they possessed clear signs of narrative structure (Nisbet et al., 2003; Rhee, 1997). Although their arguments relied widely on interpretative resources adopted from public discourse, there is little reason to believe that they were anything else than deliberate, personal constructions reflecting idiosyncratic preoccupations and preferences (Just et al., 1996).

This conclusion stands somewhat opposed to the common finding that frames exert profound and reliable influences on people’s interpretations and judgments. The recently discovered but pressing concern with the limits of framing derives from the impression that frames present powerful manipulative devices in the hands of public communicators (Druckman, 2001, 2003). The many studies showing frames’ consistent ability to dominate opinion formation cannot be swept away by pointing at difficulties publishing unsuccessful framing studies alone. The question remains how the documented pervasive influences can be reconciled with the relative independence observed in the present study. Four main sources of independence can be identified. First, the proliferation of
highly diverse, partly contradictory frames produced precisely the situation described by Druckman (2004): Rendering multiple, competing frames accessible in memory, spreading activation easily disregards strong frames if even more compelling ones can be readily identified. Choosing between similarly coherent contexts, people are enabled to select those frames that also relate to an individual’s values, current motivations, or other attended cues (Just et al., 1996; Tourangeau & Rasinski, 1988). Second, relatedly, the long period allowed for opinion formation enabled people to incrementally acquire rich schematic knowledge (Chong & Druckman, 2007b; Feldman & Conover, 1983; Just et al., 1996). Following and memorizing many different frames over the course of the campaign, they learned which interpretations resonated better or worse with their views, and strengthened those belief structures repeatedly drawn upon. The present study expressly measured residual interpretations after a period of near-absent information in public discourse, leading people to rely on well-rehearsed rather than recently primed belief structures. While shortly after exposure to relevant frames, people might have reported views closely following provided information, the beliefs retaining accessibility long after the last active use should represent those that were stored as most relevant over repeated uses (Burnett, 1991; Nisbett & Wilson, 1977). Third, people’s motivation to arrive at consistent, unique vote choices should have led them to challenge and consider acquired frames in light of their related knowledge and evaluative stance (Slothuus & de Vreese, forthcoming). Enabled by the ready availability of competing and deviant frames, people should have actively scrutinized frames already upon acquisition. Rejecting counterattitudinal interpretations at this early stage, people should have been relatively resistant to blunt attempts to present the vote choice in ways they did not support (Gross & D’Ambrosio, 2004). Finally, also the availability of prior schematic knowledge should have contributed to people’s ability to transform frames. Relating provided cues to their long standing European stereotypes and general political knowledge, provided cues may have retrieved well-established attitudes alongside the new information (Tourangeau & Rasinski, 1988). Alternatively, due to the scarcity of EU-related knowledge, frames may have never been fully understood way intended by their authors. While not fully under the control of the processor, also the misinterpretation of frames reflects prior concerns and experiences stored in an individual’s memory. Together with frame competition, available time and directed motivation, also people’s pre- and misconceptions increase their independence from provided accounts.

Based on the results of the above study, hence, there appears to be reason for optimism regarding the sometimes suspected manipulative power of frames in political discourse. While frames clearly possess the capability to affect people’s opinions, this influence is both contingent upon the availability of well-integrated knowledge, weakened by the proliferation of competing frames, and subject to scrutiny – particularly when ample time is allowed form opinion formation (Graber, 1988; Just et al., 1996; Neuman et al., 1992). These limiting factors, however, have received insufficient consideration in the present literature on framing, which has mostly relied on single, one sided frames and immediate post test measures (Druckman, 2004; Kinder, 2007). While frame competition has finally become a concern in the field, showing strongly diminished framing effects (Chong & Druckman, 2007c), the time consistency of effects has been addressed in less than a handful of studies (Lecheler & de Vreese, 2010). Motivations remain a black spot in framing research, and prior knowledge, while long since recognized, remains grossly
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underspecified (Druckman & Bolsen, 2009; Lecheler et al., 2009; Rhee, 1997; van Gorp, 2007). Concluding from such patchy evidence that voters regularly abandon their own preferences if properly framed, supplanting the free will of citizens and debasing democracy, seem exaggerated, to say the least (Brewer & Gross, 2005; Chong & Druckman, 2007a; Shen, 2004; Slothuus, 2008). True to the somewhat more encompassing view presented in this study, frames can be interpreted as a resource that suggests specific aspects of an object for consideration. While people regularly follow this suggestion when encountered, it is neither given that they will agree with the suggested judgment, nor will they necessarily agree that the suggested aspect is truly informative for opinion formation. Being exposed to many such suggestions, people are enabled to select those aspects they personally regard as most relevant. While the intention behind many frames voiced in public remains persuasive and possibly manipulative, their effect on public opinion formation may well be liberating and enlightening. This effect is, of course, contingent upon a sufficient variability of provided frames, sufficient motivation to consider information actively, and the availability of sufficient schematic knowledge about the framed concepts. However, in the context of the Dutch EU Constitutional referendum, the proliferated frames enabled people to explore, develop and construct their own, personal interpretations and judgments (Gamson, 1992; Just et al., 1996; Neuman et al., 1992). The accounts provided by voters speak of a badly informed, yet highly reasonable electorate, using the knowledge it holds to achieve the best vote choice possible.

VIII.5. Methodological remarks

Before concluding this dissertation, two final remarks are in order regarding the methodological advances proposed throughout the above studies. In line with the theoretical ambition to provide a more precise, consistent grip onto the elusive concept of frames, also the methodological implementation has aimed to measure information as precisely as possible, on a low level of abstraction. Both in the experiment of chapter IV and the subsequent content analytic studies of chapters V and VI, existing measures have been adapted to achieve the highest possible degree of intersubjectivity – a concern that has been particularly vexing in the study of frames (de Vreese, 2005; Matthes & Kohring, 2008; van Gorp, 2010). Measures have been defined to code associations and propositions, as far as possible, without resort to background knowledge or interpretative inference (van Atteveldt, 2008). Building upon this micro level data, subsequent analytic treatments have relied on carefully chosen, rule bound operations. Provided with the same codebook, following the same aggregation rules, other researchers would report

75 Another mislead conclusion based in an imprecise conceptualization of framing effects holds that frames present a violation of rationality According to Druckman (2001, 2004), evaluating the very same information in inconsistent ways violates the requirement of preference invariability (Bütler & Maréchal, 2007; Popkin, 1991). However, in view of the above conceptualization, people do not evaluate the very same information – they evaluate the same object, but in relation to different contexts. Different judgments may result from applying consistent preferences and evaluation rules to different sets of activated beliefs. Frames, thus, merely indicate that people may possess differentiated attitudes and are not usually aware each and every aspect of their attitude structure.
precisely the same results from Dutch discourse as in chapter V. Someone applying the same aggregation algorithms to the focus group data should obtain those graphs displayed in annex IX.13, which echo precisely those core structures described in chapter IV. Despite this systematic removal of subjective judgment from the analysis, the results presented at a much higher level of abstraction than the original codes give little reason to doubt the validity of measurement (B.T. Scheufele & Scheufele, 2010). The main point of contention, then, remains the choice of coding instructions and aggregation rules. Applying analytic strategies closely grounded in the advanced theoretical framework, I have opted for choices somewhat beyond the current mainstream in framing research (Reese, 2007; Schaap, 2006). The price paid for the attempted truth to theory is reflected in the lengthy method sections throughout this study. Drawing upon recent innovations particularly in semantic network analysis, several procedures applied in this study have not previously been tested on data of comparable scale and structure. Both statistical theory and social scientific experience are thin concerning some computations which have only just become practically feasible (van Atteveldt, 2008). Other procedures simply have not yet been considered from the perspective taken above. It is hence possible that, after the publication of this study, questions will be discovered that remain unanswered above. I have tried, to my best abilities, to consider and reflect the available knowledge regarding the applied procedures. Whatever flaws remain lie beyond the information that was available to me while conducting these studies.

My second remark concerns the network conceptualization developed above. While network analysis – and particularly its application to semantic data – is a rather young and still emerging field in the study of social communication, I believe it is well suited to address some concerns that have been haunting framing research in the past (Brewer & Gross, 2010; D'Angelo, 2002; Entman, 1993; Tewksbury & Scheufele, 2009). There are at least four main advantages of the approach: First, networks represent data in a formal way, indicating logical relations between components. They are neutral with regard to the measurement strategies employed to determine which relations exist, and therefore allow treating qualitatively and quantitatively derived data within the same analytic framework. Beyond facilitating the use of mixed method designs (Brewer & Gross, 2010), they thus also allow assessing the equivalence of different measurement strategies: If different measures are designed to pick up the same structures within data, they should result in identical networks. The correspondence between the results in chapter IV and the alternative display shown in annex IX.13 presents precisely such a validation of the data. Second, network analysis allows an investigation at multiple levels of abstraction at once, without a need to transform data: Individual links, different, possibly overlapping subgraphs and the network as a whole all can be subjected to a variety of analytic tools (Faust, 2006; Wasserman & Faust, 1994). This may be particularly useful when analyzing compound concepts which, as frames, possess both a micro- and a macro-structure. Third, network analysis is necessarily an analysis of context. Given the recent shift in attention from content to context in communication (Esser & D'Angelo, 2003; D.A. Scheufele, 1999), networks provide a data model which treats contexts without the need to artificially unitize complex data into separate content-context-sets. The model is particularly well-suited to the analysis of structures with unclear delimitation, such as the fuzzy, overlapping sets of beliefs underlying coherent frames. While the present study has
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confined itself to networks containing only one type of nodes – concepts – multiple kinds of contexts can be modeled as networks: For instance, concepts can be related to texts, authors, or measurement times in addition to one another (de Nooy et al., 2005). Finally, networks provide a conceptual metaphor which facilitates integrating theoretical approaches from various disciplines. Semantic network approaches have been utilized, above all, in cognitive and social psychology, computational and psycho-linguistics as well as computer and information science. They are empirically well supported in various applications to the study of information, context, and meaning (Carley & Kaufer, 1993; Collins & Loftus, 1975; Doise et al., 1993; Raaijmakers & Shiffrin, 1992; van Atteveldt, 2008; van Dijk & Kintsch, 1983). Even many approaches not formulated in terms of networks can be easily adapted to the conceptual metaphor. Beyond the capability of integrating data, the approach thus may also be conducive to a better integration of theory across disciplines. As the mathematical development of semantic network analysis proceeds and computers as well as software grow to meet the need of this computationally demanding, but highly informative approach, semantic network analysis may provide a highly promising tool in the study of communications.

VIII.6. Conclusion

Locating the picture of frames within the larger image of the construction of social meaning, the above study has unrolled the canvas tucked in underneath the tight frame of framing research. Sketching the context within which frames need to be understood, several new perspectives have become visible onto the portrait of frames: Within the frame, the fine brush strokes of intricate, centripetal belief structures appear under the magnifying glass, supporting integrative meaning. Pencilled lines run across and behind the frame, drawing relations to other information and frames. Most crucially, knowledgeable, motivated actors have entered the canvas, interacting with the available frames and transforming them as they do. In place of the imposing frames protruding from a whitewashed wall, a colourful variety of interwoven information structures appear all across a rich wall painting, reaching deep into the portrait: Frames remain but one resource supplying their interpretations to the scene. In consequence, frames appear no longer as mighty manipulators with untarnished capabilities and potentials, but as anxious advocates enmeshed within a messy struggle for meaning. Their now merely loosely superimposed picture frames raise a range of curious questions: How is it, for instance, that some selections of information appear as a frame, whereas others do not? How can it be explained that brush strokes deriving from all kinds of disparate sources suddenly form a coherent scene when seen through the frame? Why do people prefer specific frames, why do they care to reconstruct those they are offered, and what do they use those frames they formed for? Large white patches remain on the canvas, and also the present study has merely begun to sketch the scenes surrounding the frame. Further research has yet to add detail and contour to the picture, correcting where the above conjectures prove inaccurate.

Beyond reminding researchers of the intricacies of real life, however, the picture reminds us why we are studying frames in the first place: Frames are not merely curious contexts that affect how we see the image they surround, but they are also the stuff that
persuasive narratives and complex understandings are made of. Seen within this wider context, studying frames amounts to investigating how people make sense of the world that surrounds them. Frames may be far more than the borders surrounding and supporting more important things, but they still derive their relevance from the information they frame and the uses they enable. Framing researchers are well-advised to descend from their knoll and start picturing frames in their natural environments: They should depict the messy reality of frames quarrelling and competing, coalescing and blending into constructions determined in full by none of the sources involved; they should paint how frames are truncated and extended, abstracted and specified, twisted and transformed by reasoning individuals putting available information to their own uses. The picture suggested here shows an untidy scene composed of weak and dependent, but sociable and manifold frames. None of the frames depicted in this scene is likely to shift anyone’s opinion in large amounts. However, together and in collaboration with many other frames stored and constructed within a person’s mind, they make a much more profound, durable difference to people’s understandings: Together, they define the meaning of the world.
Annex

IX.

IX.1. Stimulus material ‘Frame Effects’

Frame conditions:

- [1][2] Economy
- [3][4] Identity
- [5][6] Mixed

Valence conditions:

- [1][3] Positive
- [2][4] Negative
- [5][6] Ambivalent

Issue condition: Euro

1. Business hails plans for Estonian accession to Euro-zone
2. Estonian industry against accession to Euro-zone
3. Estonians hail plans to join Euro-zone earlier than planned
4. Estonians against giving up their currency for the Euro
5. Estonia intends to join Euro-zone earlier than expected

Tallinn (cba). Seven year after its creation, Estonia might become the 13th EU country to adopt the euro as its national currency. Prime Minister Andrus Ansip announced yesterday that the government considers joining the Euro-zone earlier than planned: “In the current situation, we believe that to tie Estonia closer into the European economic sphere, the next logical step is to adopt the common currency. We are definitely ready for it.” With [3][4][5][6] only 1.3 Million people [5][6] and [1][2][5][6] a GDP of € 19.8 bln., Estonia would become one of the smallest countries within the currency space.

1. Its close trade relations with other EU members, first of all Finland, lead experts to expect an additional boost from joining early. Particularly the Estonian Chamber of Commerce and the Association of Small and Medium Enterprises (EVEA) are enthusiastic: “Estonia’s capacities for export are anything but exhausted”, said EVEA president Riivo Sinijärv.

2. Estonia’s industry, however, remains sceptical. For them, joining the common currency first of all means higher competition pressure. Numerous jobs, mainly in production, are at stake. “If we don’t protect our domestic producers, many enterprises will have to close down”, warns Tarmo Kriis of the Estonian Employers Confederation (ETTK).

3. Marking the last step of Estonia’s long journey from its soviet past back into the European family, public support for the euro is high. Indrek Trenfeldt, journalist at the Estonian Television, summarized that feeling: “Paying with the same coin as all Europeans is like the physical proof that we are no longer the poor Easterners— we are first class Europeans.”

4. Estonia’s situation as post-communist country, however, also raises opposition to the government plans. Two out of three Estonians oppose giving up the Estonian Crown after only 16 years of independence. “We are such a small country, we must hold on to those things that make us Estonian,” said opposition leader Edgar Savisaar.

5. Its close trade relations with other EU members, first of all Finland, lead experts to expect an additional boost from joining early. However, two out of three Estonians oppose giving up the Estonian...
Crown. “We will have to convince them that adopting the euro does not take away our Estonian identity, but can generate real economic benefits,” said Finance minister Ivari Padar.

[6] Marking the last step of Estonia’s long journey from its soviet past back into the European family, public support for the euro is high. However, according to Estonia’s industry, numerous jobs are at stake, due to increased competition pressure. “The euro will accelerate several economic changes, which are necessary if we want to become a truly European Estonia” said Finance minister Ivari Padar.

Although the final decisions are still pending, the current government holds sufficient majorities to get approval from the parliament. Green light from the EU Commission is expected before March.

**Issue condition: Enlargement**

[1] Business hails plans for Croatian accession to EU
[2] Croatian industry against earlier accession to EU
[3] Croatians hail plans to join European Union in 2009
[5][6] Croatia aims at joining EU earlier than expected

Zagreb (cba). Five years after the big bang enlargement of 2004, Croatia might become the 28th country to join the European Union. Prime minister Ivo Sanader announced yesterday that the government is pushing towards accession one year earlier than planned: “In the current situation, we believe the time has come to tie Croatia closer to the European Union, to become a full member. We are definitely ready for it.” With only 4.5 Million people [5][6] and a GDP of € 50.5 bln., Croatia would become one of the smallest countries in the EU.

[1] Its close economic relations with other EU members, first of all Austria, lead experts to expect an additional boost from joining early. Particularly the Croatian Chamber of Commerce and the Association of Small and Medium Enterprises (HUP) are enthusiastic: “Croatia’s capacities for export are anything but exhausted”, said HUP Chairman Alen Zepec.

[2] Croatia’s industry, however, remains sceptical. For them, joining the European Union first of all means higher competition pressure. Numerous jobs, mainly in production, are at stake. “If we don’t protect our domestic producers, many enterprises will have to close down”, warns Emil Tedeschi of the Croatian Employers Association.

[3] Marking the end of Croatia’s long journey from its war-torn Yugoslav past back into the European family, public support for accession is high. Zeljko Korpar, journalist at the Croatian Television, summarized that feeling: “Joining the European Union is like the physical proof that we are no longer the poor Balkans– we are first class Europeans.”

[4] Croatia’s situation as a former Yugoslav republic, however, also raises opposition to the government plans. Two out of three Croatians oppose giving up full sovereignty after only 18 years of independence. “Not long ago we have been fighting to gain our independence. We must hold on to those things that make us Croatian,” said opposition leader Ivica Racan.

[5] Its close economic relations with other EU members, first of all Austria, lead experts to expect an additional boost from joining early. However, two out of three Croatians oppose giving up full sovereignty. “We will have to convince them that joining the EU does not take away our Croatian identity, but can generate real economic benefits,” said Foreign minister Kolinda Grabar-Kitarović.

[6] Marking the end of Croatia’s long journey from its war-torn Yugoslav past back into the European family, public support for EU accession is high. However, according to Croatia’s industry, numerous jobs are at stake, due to increased competition pressure. “The accession will accelerate several
economic changes, which are necessary if we want to become a truly European Croatia,” said Foreign minister Kolinda Grabar-Kitarović.

Although the final decisions are still pending, the current government holds sufficient majorities to get approval from the parliament. Green light from the EU Commission is expected before March.

[Stimulus material translated from original Dutch by the author]
IX.2. Coding Guidelines ‘Frame Effects’

Topic Coding & Domain Composition

Topics are created by grouping uses of the same word stems as well as synonyms and paraphrasing expressions. Topics are grouped into domains according to the procedure described in chapter IV.3. Symbols +/○/– denote positive, neutral and negative base valence, respectively.

**Definitional Information (Enlargement) [Coded ‘European Union’ in Euro Conditions]**

- Accession Countries ○ Croatia ○ Poland ○
- Balkans ○ Enlargement ○
- Big ○ Central Eastern Europe ○

**Definitional Information (Euro) [Coded ‘Economy’ in Enlargement Conditions]**

- Cent Coins ○ Euro ○ Money ○
- Conversion ○ Eurozone ○ National Coins ○
- ECB ○ Gold ○ One Money ○

**Economy**

- Agriculture ○ Expensive – Salary ○
- Cheap + Finance ○ Shopping ○
- Competition ○ Inflation – Strong Currency +
- Currency Exchange ○ Purchasing Power ○ Taxes ○
- Economy ○ Rich + Value of Money ○

**Trade**

- Against Dollar ○ EMU Transition Phase ○ Single Market ○
- Costs in Int. Economy – Exchange Rate ○ Subsidies ○
- Dollar ○ Non-Euro Countries ○ Trade ○
- Economic Power + Simplified Trade + Trade Block +

**Mobility / Personal Economy**

- Borders ○ Polish Labourers – Travel ○
- Cheap Labour – Simplification + Work ○
- Job Loss – Simplified Travelling + Work Abroad ○
- Open Borders + Social Protection ○

**Identity / Culture**

- Community ○ EU Identity ○ Nationalism –
- Cosmopolitanism ○ Globalization ○ Surrender –
- Cultural Enrichment ○ Identity ○ Surrender Identity –
- Culture ○ Immigration ○ Together +
- Diversity ○ Integration Foreigners ○ Uniformity –
- English Language ○ Islam –
### European Union

| Brussels | ○ | EU Institutions | ○ | Limits of Enlargement | ○ |
| Bureaucracy | – | EU Integration | ○ | Referendum | ○ |
| Constitution | ○ | EU Politicians | ○ | Treaties | ○ |
| Criteria | ○ | EU Symbols | ○ | Turkey | ○ |
| Deepening | ○ | Europe | ○ |
| EU Countries | ○ | Europeans | ○ |

### Democracy / Evaluations of EU Politics

| Corruption | – | Profiteers | – | Top Down Policy | – |
| Democracy | + | Rich Countries | ○ | Transparency | + |
| Internationalism | ○ | Speed of Integration | ○ |
| Long Time | ○ | Too Big | – |

### Power / Domestic Politics / The Netherlands

| Cooperation | + | Government | ○ | Power Block | + |
| Crime | – | Guilder | ○ | Power Block vs. Others | ○ |
| Decision Making | ○ | Legislation | ○ | Queen Beatrix | ○ |
| Defense | ○ | Minister Zalm | ○ | Security | ○ |
| Dispute/Disagreement | ○ | Netherlands | ○ | Sovereignty | ○ |
| Dutch Politicians | ○ | Politics | ○ | Surrender Power | – |
| Environment | ○ | Poverty | – | Veto | ○ |
| Foreign Power Blocks | ○ | Power | ○ |

### Values / Evaluations

| Bad | – | Good | + | Peace | + |
| Bad For Us | – | Good For Us | + | Progress | + |
| Change | ○ | Help Others | + | Public Concern | – |
| Complex | ○ | Human Rights | + | Regrets | – |
| Difficulties | ○ | Imperialism | – | Stability | + |
| Discontent | – | Important | + | Unclear | ○ |
| Disinterest | – | Impossible | – | Unity | + |
| Equality | + | Inequality | – | Worries | – |
| Freedom | + | Liberalism | ○ |
| Getting Used To It | ○ | Openness | + |
Valence Coding

Valence is assigned to an association based on the denotative/connotative valence of the topic itself (base valence) and explicit modifications wherever present. The base valence is determined on the topic level (see below).

<table>
<thead>
<tr>
<th>Base Valence</th>
<th>Modification</th>
<th>Valence Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>– negative</td>
<td>× – negative</td>
<td>→ 1 very negative</td>
</tr>
<tr>
<td>– negative</td>
<td>× ○ neutral/none</td>
<td>→ 2 negative</td>
</tr>
<tr>
<td>○ neutral</td>
<td>× – negative</td>
<td>→ 2 negative</td>
</tr>
<tr>
<td>+ positive</td>
<td>× – negative</td>
<td>→ 3 not positive</td>
</tr>
<tr>
<td>○ neutral</td>
<td>× ○ neutral/none</td>
<td>→ 4 neutral</td>
</tr>
<tr>
<td>– negative</td>
<td>× + positive</td>
<td>→ 5 not negative</td>
</tr>
<tr>
<td>○ neutral</td>
<td>× + positive</td>
<td>→ 6 positive</td>
</tr>
<tr>
<td>+ positive</td>
<td>× ○ neutral/none</td>
<td>→ 6 positive</td>
</tr>
<tr>
<td>+ positive</td>
<td>× + positive</td>
<td>→ 7 very positive</td>
</tr>
</tbody>
</table>
### IX.3. Re-estimated ANCOVA ‘Frame Effects’

Table IX.3.1: ANCOVA predicting mean association valence from experimental conditions, with covariates

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model a</td>
<td>267.536</td>
<td>15</td>
<td>17.836</td>
<td>8.610</td>
<td>0.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>648.240</td>
<td>1</td>
<td>648.240</td>
<td>312.946</td>
<td>0.000</td>
</tr>
<tr>
<td>Covariates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eu identity</td>
<td>136.077</td>
<td>1</td>
<td>136.077</td>
<td>65.693</td>
<td>0.000</td>
</tr>
<tr>
<td>issue involvement</td>
<td>12.901</td>
<td>1</td>
<td>12.901</td>
<td>6.228</td>
<td>0.013</td>
</tr>
<tr>
<td>political interest</td>
<td>5.430</td>
<td>1</td>
<td>5.430</td>
<td>2.621</td>
<td>0.106</td>
</tr>
<tr>
<td>need for cognition</td>
<td>16.046</td>
<td>1</td>
<td>16.046</td>
<td>7.746</td>
<td>0.005</td>
</tr>
<tr>
<td>Main Factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>framing condition</td>
<td>2.654</td>
<td>1</td>
<td>2.654</td>
<td>1.281</td>
<td>0.258</td>
</tr>
<tr>
<td>valence condition</td>
<td>8.273</td>
<td>1</td>
<td>8.273</td>
<td>3.994</td>
<td>0.046</td>
</tr>
<tr>
<td>issue condition</td>
<td>1.623</td>
<td>1</td>
<td>1.623</td>
<td>0.784</td>
<td>0.376</td>
</tr>
<tr>
<td>Interaction Factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>framing · valence</td>
<td>17.288</td>
<td>1</td>
<td>17.288</td>
<td>8.346</td>
<td>0.004</td>
</tr>
<tr>
<td>valence · issue</td>
<td>12.956</td>
<td>1</td>
<td>12.956</td>
<td>6.255</td>
<td>0.012</td>
</tr>
<tr>
<td>framing · issue</td>
<td>2.961</td>
<td>1</td>
<td>2.961</td>
<td>1.429</td>
<td>0.232</td>
</tr>
<tr>
<td>framing · valence · issue</td>
<td>1.951</td>
<td>1</td>
<td>1.951</td>
<td>0.942</td>
<td>0.332</td>
</tr>
<tr>
<td>Error</td>
<td>6249.455</td>
<td>3017</td>
<td>2.071</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>62306.000</td>
<td>3033</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>6516.991</td>
<td>3032</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: a R Squared = .041 (Adjusted R Squared = .036)
IX.4. Sample composition ‘Frames in Communication’

The media sample has been composed by searching the Lexis Nexis database (respectively, the full text archive of Metro) for the joint occurrence of ‘EU’ or ‘Europese’/‘Europees’ with either of the search terms ‘Grondwet’, ‘Constitutie’, ‘Konstitutie’, or ‘Referendum’, or the occurrence of the term ‘Grondwetsreferendum’.

### Television Subsample

<table>
<thead>
<tr>
<th>News</th>
<th>phase V Campaign</th>
</tr>
</thead>
<tbody>
<tr>
<td>from till</td>
<td>01.04.2005 1.06.2005</td>
</tr>
<tr>
<td>public</td>
<td>NOS Journaal broadcasts 22</td>
</tr>
<tr>
<td>private</td>
<td>RTL4 Nieuws broadcasts 22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Talk Sh.</th>
<th>phase V Campaign</th>
</tr>
</thead>
<tbody>
<tr>
<td>from till</td>
<td>01.04.2005 1.06.2005</td>
</tr>
<tr>
<td>public</td>
<td>NOVA / Den Haag vandaag broadcasts 23</td>
</tr>
<tr>
<td></td>
<td>Buitenhof broadcasts 10</td>
</tr>
<tr>
<td>private</td>
<td>Barend &amp; van Dorp broadcasts 4</td>
</tr>
<tr>
<td>Total</td>
<td>broadcasts 81</td>
</tr>
</tbody>
</table>

### Political Campaign Subsample

<table>
<thead>
<tr>
<th>Institutions</th>
<th>phase IV &amp; V (Pre-)Campaign</th>
</tr>
</thead>
<tbody>
<tr>
<td>from till</td>
<td>01.01.2005 1.06.2005</td>
</tr>
<tr>
<td>European Union Government</td>
<td>documents 1</td>
</tr>
<tr>
<td>CDA</td>
<td>documents 2</td>
</tr>
<tr>
<td>VVD</td>
<td>documents 50</td>
</tr>
<tr>
<td>D66</td>
<td>documents 5</td>
</tr>
<tr>
<td>PvdA</td>
<td>documents 45</td>
</tr>
<tr>
<td>GroenLinks</td>
<td>documents 53</td>
</tr>
<tr>
<td>Yes Camp</td>
<td>documents 2</td>
</tr>
<tr>
<td>Parties</td>
<td>documents</td>
</tr>
<tr>
<td>NGO</td>
<td>Comité Grondwet Nee documents 24</td>
</tr>
<tr>
<td>SP</td>
<td>documents 41</td>
</tr>
<tr>
<td>ChristenUnie</td>
<td>documents 28</td>
</tr>
<tr>
<td>SGP</td>
<td>documents 1</td>
</tr>
<tr>
<td>LPF</td>
<td>documents 3</td>
</tr>
<tr>
<td>Groep Wilders</td>
<td>documents 4</td>
</tr>
<tr>
<td>No Camp</td>
<td>documents 281</td>
</tr>
<tr>
<td>Parties</td>
<td>documents</td>
</tr>
</tbody>
</table>
## Print Subsample

<table>
<thead>
<tr>
<th></th>
<th>phase I</th>
<th>phase II</th>
<th>phase III</th>
<th>phase IV</th>
<th>phase V</th>
<th>phase VI</th>
<th>phase VII</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Introduction</td>
<td>Conflict</td>
<td>Negotiation</td>
<td>Precampaign</td>
<td>Campaign</td>
<td>Postcampaign</td>
<td>Control</td>
<td></td>
</tr>
<tr>
<td>from</td>
<td>01.06.2003</td>
<td>01.11.2003</td>
<td>01.01.2004</td>
<td>01.01.2005</td>
<td>01.04.2005</td>
<td>02.06.2005</td>
<td>01.08.2005</td>
<td></td>
</tr>
<tr>
<td>days</td>
<td>153</td>
<td>61</td>
<td>366</td>
<td>90</td>
<td>62</td>
<td>60</td>
<td>286</td>
<td>1078</td>
</tr>
</tbody>
</table>

### Broadsheets

<table>
<thead>
<tr>
<th></th>
<th>articles</th>
<th>articles/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>De Volkskrant</td>
<td>66</td>
<td>0.43</td>
</tr>
<tr>
<td>NRC Handelsblad</td>
<td>128</td>
<td>0.84</td>
</tr>
<tr>
<td>Trouw</td>
<td>74</td>
<td>0.48</td>
</tr>
</tbody>
</table>

### Popular

<table>
<thead>
<tr>
<th></th>
<th>articles</th>
<th>articles/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algemeen Dagblad</td>
<td>28</td>
<td>0.18</td>
</tr>
<tr>
<td>De Telegraaf</td>
<td>36</td>
<td>0.24</td>
</tr>
</tbody>
</table>

### Fre

<table>
<thead>
<tr>
<th></th>
<th>articles</th>
<th>articles/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>2</td>
<td>0.01</td>
</tr>
<tr>
<td>Brabants Dagblad</td>
<td>24</td>
<td>0.16</td>
</tr>
<tr>
<td>Dagblad van het Noorden</td>
<td>26</td>
<td>0.17</td>
</tr>
</tbody>
</table>

### Regional

<table>
<thead>
<tr>
<th></th>
<th>articles</th>
<th>articles/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>382</td>
<td>2.50</td>
</tr>
</tbody>
</table>

Total articles from 01.06.2003 till 12.05.2006:

- Broadsheets: 1031
- Popular: 772
- Fre: 444
- Regional: 5334

Total: 5334 articles/day
IX.5. Coding guidelines ‘Frames in Communication’

The total coding process rests on four lists of coding instructions: The main concept code list, a list identifying a wide range of speakers within the texts, and two auxiliary code lists. The first of these auxiliary lists (‘TAGS’) identifies a number of tags saved alongside the coded articles, broadcast transcripts and documents that provide meta-information about the respective texts. There are nine kinds of meta-data stored: Each article is identified by an unique ID Number, its Source and Date. Beyond that, many texts possess specific headlines, subheadings, datelines, bylines, and highlighted lead. The main text is introduced following the tag ‘body’. The second list (‘SOURCES’) serves to identify which of the specific sources within the total sample a text belongs to. It contains the identifications of the $8 \cdot 7 = 56$ outlet-phase-combinations used in the newspaper subsample, as well as the 18 campaign and television sources.

The speaker list (‘AUTHORS’) contains 684 public actors, including both individual people and institutional actors: Among the individuals, all members of the Dutch bicameral parliament, all Dutch EU Parliamentarians and the members of the government cabinets are identified; moreover, prominent international political leaders (the heads of state, of government, and the foreign ministers in all EU and G8 states), all members of the EU Commission, as well as the heads of the United Nations and NATO are listed. Beside these, also the respective political bodies (parties, parliamentary groups, parliaments, international organizations) were coded. Finally, the Dutch opposition and coalition, as well as the considered states were included as collective actors, as well. The main code list, finally, contains all coded concepts that were derived as laid out in chapter V.3. The code list also includes the entire author code list. All authors and concepts were identified by a range of search terms disambiguated by the presence or absence of further search terms within a specified distance of 2, 5, 10, 20, or 30 words. The entire lists can be obtained from the author, but remain subject to restrictions in reproduction and use.

Sample text to be coded

| NUMBER:     | 531007 |
| SOURCE:     | Regering |
| DATE:       | 1 March, 2005 |
| BODY:       | AYAAN HIRSI ALI (VVD) xxquote 'Een ja tegen de grondwet is nee tegen vrouwenhandel xxcomma nee tegen terrorisme xxcomma nee tegen armoede xxdot Daarom stem ik ja voor de grondwet xxdot' xxbreak NL EU xxbreak GRONDWETEU xxdotNL xxbreak Ayaan Hirsi Ali zegd 'ja' tegen de Europese Grondwet xxdot Wat doet u xxquestion xxbreak xxbreak |

| NUMBER:     | 531008 |
| SOURCE:     | Regering |

...
Step 1: Coding document properties from header

List in use: TAGS, SOURCES

- Each article begins with the tag NUMBER:, followed by three spaces and a unique article id number. There are a number of other tags that may occur. Tag values always stand between the colon and three spaces on the left (:) and a line break on the right. The list of tags is concluded by the BODY: tag which introduces the article content. Everything between BODY: and the next NUMBER: tag or the document end is content of the article.
- *search for "[TAG]: xxbreak"*

<table>
<thead>
<tr>
<th>Tag</th>
<th>Status</th>
<th>format</th>
<th>conclude by</th>
<th>save as</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER:</td>
<td>required</td>
<td>#######</td>
<td>line break</td>
<td>it is</td>
</tr>
<tr>
<td>SOURCE:</td>
<td>required</td>
<td>outlet or party in clear name</td>
<td>line break</td>
<td>identify according to source list</td>
</tr>
<tr>
<td>DATE:</td>
<td>NP,TV required</td>
<td>Month ### OR ######</td>
<td>line break</td>
<td>transform into unified format</td>
</tr>
<tr>
<td>NP optional</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEADLINE:</td>
<td>optional</td>
<td>string</td>
<td>line break</td>
<td>it is</td>
</tr>
<tr>
<td>SUBHEAD:</td>
<td>optional</td>
<td>string</td>
<td>line break</td>
<td>it is</td>
</tr>
<tr>
<td>DATELINE:</td>
<td>NP optional</td>
<td>string</td>
<td>line break</td>
<td>it is</td>
</tr>
<tr>
<td>BYLINE:</td>
<td>NP optional</td>
<td>string</td>
<td>line break</td>
<td>it is</td>
</tr>
<tr>
<td>HIGHLIGHT:</td>
<td>NP optional</td>
<td>string</td>
<td>line break</td>
<td>it is</td>
</tr>
<tr>
<td>BODY:</td>
<td>required</td>
<td>nonstop text without line breaks</td>
<td>line break 'NUMBER: OR end.'</td>
<td>do not process yet</td>
</tr>
</tbody>
</table>

NP: Newspaper Subsample; TV: Television Subsample; PC: Political Campaign Subsample

---

**Data file**

<table>
<thead>
<tr>
<th>tag</th>
<th>value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER:</td>
<td>531007</td>
</tr>
<tr>
<td>SOURCE:</td>
<td>GOVT</td>
</tr>
<tr>
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<td>01.03.05</td>
</tr>
<tr>
<td>SUBHEAD:</td>
<td>.</td>
</tr>
<tr>
<td>DATELINE:</td>
<td>.</td>
</tr>
<tr>
<td>BYLINE:</td>
<td>.</td>
</tr>
<tr>
<td>HIGHLIGHT:</td>
<td>.</td>
</tr>
<tr>
<td>BODY:</td>
<td>AYAAN HIRSI ALI (VVD) xxquote ‘Een ja […] xxquestion xxbreak xxbreak</td>
</tr>
</tbody>
</table>

179
Step 2: Coding quoted authors

list in use: AUTHORS

- search for "\texttt{xxbreak * xxquote * xxbreak}"
- Within the article texts, search for strings between xxbreak (or a real line break such as the one introducing the BODY) and the subsequent xxbreak which contain xxquote; the part of the string between the first xxbreak (or real line break at the beginning of the BODY) and xxquote contains the author of a statement; this author should be identified using the authors list. If multiple authors apply (e.g., the person and the party), the author on the lowest level of the hierarchy should be selected (i.e., the person). If no author can be found, the author "OTHER" applied. Subsequently, this author should be saved as another property (AUTHOR:) of the string between xxquote and the second xxbreak. Once this has happened, everything between the first xxbreak (or real line break) and the xxquote, including the xxquote, should be deleted.

<table>
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<td>1000000009</td>
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</table>

Step 3: Concept recognition

list in use: CONCEPTS

- Run concept list over article and identify all concepts. The context unit is shifting (relative distance as disambiguation measures) but delimited by article boundaries (the first word considered is the one following the BODY:<line break>, and the last one is the one preceding NUMBER: or the document end). Coding unit is the word.
- Run concept list also over the contents of the HEADLINE:, DATELINE:, BYLINE:, SUBHEAD: and HIGHLIGHT: tags, using the tag content and the following additional text as context units:
  - HEADLINE: SUBHEAD, HIGHLIGHT, first 30 words of the text
  - DATELINE: HEADLINE, SUBHEAD, HIGHLIGHT, first 30 words of the text
  - BYLINE: none
  - SUBHEAD: HEADLINE, HIGHLIGHT, first 30 words of the text
  - HIGHLIGHT: HEADLINE, SUBHEAD, first 30 words of the text
- Within the HEADLINE:, DATELINE:, BYLINE:, SUBHEAD: and HIGHLIGHT: tags, save only the list of recognized concepts.
COMMUNICATION, CONTEXTUALIZATION, & COGNITION

### Data file

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</tbody>
</table>

### Step 4: Coding subheadings

- *search for "xxsubhead * xxbreak"*
  - Within the article texts, search for strings beginning with xxsubhead through the next xxbreak. Create a new property (SUBHEAD2) with value equal to the list of concepts recognized between xxsubhead and xxbreak. Apply this property to all text following the string until the next following xxsubhead, or the article end.

### Data file

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<thead>
<tr>
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<th>word</th>
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</table>

### Step 5: Coding bullet point lists

- *search for "xxbullet * xxbreak"*
  - Mark string between xxbullet and xxbreak; check if xxbreak is followed by another xxbullet, and if so, repeat until xxbreak is not followed by another xxbullet any more.
  - Find last string "xxbreak * xxbreak" preceding the "xxbullet * xxbreak" strings, and copy list of concepts coded therein into a new property (BULLET) that is assigned to each "xxbullet * xxbreak" string.
  - Insert 30 filler words "xxx" before and after the whole list of "xxbullet * xxbreak" strings.
Repeat for next occurrence of "xxbullet * xxbreak" in the article until no more are found.

<table>
<thead>
<tr>
<th>word ID</th>
<th>word</th>
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<th>CONCEPT</th>
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</table>

Step 6: Cleanup

- Whenever a recognized concept is followed by the same recognized concept again without some other concept recognized between the two occurrences, treat the whole string from the first to the second occurrence as one word.
- The same applies if a concept coded word is preceded or succeeded, with nothing coded in between, by a word coded with multiple concepts one of which is the single coded concept; in that case, treat the string as one word and apply the codes applied to the multiply coded word.
- The same applies also if two multiply coded words succeed each other, with nothing coded in between, and the coded concepts are identical or one set of coded concepts is included in the other set.
- If two multiply coded words succeed each other which share one or more concepts, but each contain idiosyncratic concept codes as well, do not collapse anything.
Step 7: Simple co-occurrences

- For each concept, code as co-occurrence every instance in which another concept occurs within a distance of # words of each occurrence of the concept in the text (i.e., 100001 xxx xxx xxx 100002 xxx xxx xxx 100001 would be coded as two co-occurrences between 100001 and 100002). Eliminate again all auto-co-occurrences.

Step 8: Enhanced context co-occurrence

- For each concept within the text, code as co-occurring all concepts listed in the BULLET: and SUBHEAD2: properties, and all concepts identified within the HEADLINE:, DATELINE:, BYLINE:, SUBHEAD: and HIGHLIGHT: tags; eliminate all auto-co-occurrences.

Step 9: Author-content-link

- Code as co-occurring for each concept occurrence the source identified on article level as well as the author identified, if applicable, as quoted in step 2.

Step 10: Summarize and save

- Summarize all co-occurrences on article base such that each article is represented by its ID, a number of article level properties (the tags coded in step 1), and a co-occurrence matrix.
| NUMBER | SOURCE | DATE    | ... | # | # | # | # | # | # | # | # | # | # | # | # | # |
|--------|--------|---------|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 531002 | GOVT  | 01.03.05| ... | 0 | 2 | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
|        |        |         |     | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
|        |        |         |     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|        |        |         |     | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 |
|        |        |         |     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|        |        |         |     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|        |        |         |     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 |
|        |        |         |     | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
|        |        |         |     | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
|        |        |         |     | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
|        |        |         |     | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
|        |        |         |     | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|        |        |         |     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|        |        |         |     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|        |        |         |     | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 5 | 0 | 0 | 0 | 0 | 0 |
|        |        |         |     | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
IX.6. Frame list ‘Frames in Communication’

<table>
<thead>
<tr>
<th>Identities in Strong Liberal Europe</th>
<th>Distribution of Competences in Europe</th>
<th>Resolve Disagreements &amp; Combat Crime</th>
<th>European Free Trade</th>
<th>Relevance of EU Policy Fields</th>
<th>Enlargement Spreads Human Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Treaties</td>
<td>Institutional Setup: competences, democratic, decisions, EU Parliament, EU Council, participation in EU policies, EU, Nice Treaty</td>
<td>chance, conflict, justice &amp; interior, crime, reality, cooperation, police, development, threat</td>
<td>autonomy, EU Commission trade, open, social state, Stability Pact, EU Commissioner</td>
<td>immigration, asylum, relevance, interest, work, Dutch Guilder, simplify</td>
<td>accession, new EU members, human rights, short term, conditions</td>
</tr>
<tr>
<td>2. Dutch Identity in Strong Liberal EU: control, Dutch constitution, VVD, Jozias van Aartsen, voting Yes, economy, liberal, power, EU Constitution, exploitation, pro, efficiency, EU identity, protecting, Netherlands, national identity, superstate, surrender, Dutch identity, arguments</td>
<td>2. Unpopular EU Policies: agriculture, European level, EU countries, national constitutions, Turkey, MEPs, Jules Maaten, union, Yes voting countries, voting No</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Low Interest in Europe: Europe, raise interest, convince, Spain, Dutch, unclear, clear</td>
<td>3. Uneven Influence: influence, national level, big EU countries, citizens, EU legislation, status quo</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

- Dutch Liberties & Yes Camp
- National Vetoes Less Important
- CDA, PvdA & Turnout
- Distrust in Government
- Hope for French Referendum
- Try to Form an Opinion
- Never Again the Wars of the Past
- Parliamentary or Popular Ratification
### GroenLinks (GL, Green Left, green-alternative)

<table>
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</thead>
<tbody>
<tr>
<td>1. Incoherent Rules for World Economy &amp; Poverty: combat, EU, constitution, convince, labour, Dutch identity, trade, goal, different legislation, poverty, Dutch constitution, negative, world economic powers, poor countries, important</td>
<td>1. No Superstate: competences, national constitutions, superstate, false</td>
<td>Intransparent politics, less, decisions, European level, EU Council, more, EU Commission, EU Parliament, control, national level</td>
<td>Influence, No camp, national preferences, big EU countries, euro-sceptic countries, interest, Netherlands, other countries, relevance</td>
<td>compromise, migrants, human rights, protection, antidermi-nation, social state, asylum</td>
<td>treaties, Comité Grondwet Nee, Joost Eigendijk, doubts, pro, Yes camp, possible</td>
<td>cooperation, policy fields, power, peace, balance, necessary, Europe, war</td>
<td>threat, NGL, Geert Wilders, SP, Jan Marijnissen</td>
</tr>
</tbody>
</table>

### ChristenUnie (CU, Christian Union, Christian social conservative)

<table>
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</thead>
<tbody>
<tr>
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<td>Follow, goal, opinion poll, French referendum result, campaign material,</td>
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</tr>
</tbody>
</table>

- No Military in Iraq
- Developed Countries’ Energy Waste
- Borders & Problems
- Foreign Policy, Development & Security
- Nationally Bounded Prosecution
- Domestic Health & Education Policy

- Rich EU Countries
- Constitution Too Far
COMMUNICATION, CONTEXTUALIZATION, & COGNITION

<table>
<thead>
<tr>
<th>EU, loss of influence, surrender, Netherlands, small countries, Turkey</th>
<th>contra, discontent, bad, job loss, Yes camp, vote No, citizens, CU, Dutch constitution, irrelevant, worries, foolish, social state, No camp, Dutch identity, distrust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fields: education, health, policy fields</td>
<td>legislation, EU constitution, Christianity, SGP, SP, fundamental rights, good, government</td>
</tr>
<tr>
<td>3. Loss of Identity: decision procedures, loss of identity, Dutch liberties, typical, threat, superstate</td>
<td>underestimation, long term, everyone, Jan Peter Balkenende, Politics, campaign</td>
</tr>
<tr>
<td>National identity, unclear, relevance, interest, pro, clear</td>
<td>Parliament, subsidiarity, more</td>
</tr>
<tr>
<td>Legitimacy, usually</td>
<td>Reaching</td>
</tr>
</tbody>
</table>

Socialistische Partij (SP, Socialist Party, neo-marxist)

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>1. EU Better Without Army: army, duty, NATO, EU, EU legislation, before, better</td>
<td>controversy, referendum, French referendum, French result, Dutch politics, confidence, EU politics, Dutch people, parliament, turnout, impact, Dutch identity, elections, problem</td>
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<td></td>
</tr>
<tr>
<td>2. Threats Posed by EU Constitution &amp; Minister Donner Europe, threat, EU Constitution, Netherlands, Harry van Bommel, war, Piet Hein Donner, referendum failure, superstate, Dutch constitution, contra, Jan Marijnissen</td>
<td>influence, Christianity, knowledge, clear, opinion polls, CDA, unclear, justice interior</td>
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<tr>
<td>Differences in National Legislations</td>
<td>Social State &amp; Labour Relations</td>
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<tr>
<td>Agriculture, different legislation, national constitutions, new EU members, goal, negotiate, more</td>
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<tr>
<td>Big Countries’ Preferences</td>
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<tr>
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<tbody>
<tr>
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<td>2. Threats Posed by EU Constitution &amp; Minister Donner Europe, threat, EU Constitution, Netherlands, Harry van Bommel, war, Piet Hein Donner, referendum failure, superstate, Dutch constitution, contra, Jan Marijnissen</td>
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<tr>
<td>1. EU Better Without Army: army, duty, NATO, EU, EU legislation, before, better</td>
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187
### NRC Handelsblad (Highbrow Newspaper), phase I (Introduction)

<table>
<thead>
<tr>
<th>Diversity of Interests Among the Peoples of Europe</th>
<th>Parties Debate Pros &amp; Cons of Referendum Expectations</th>
<th>Economic Threat &amp; Welfare</th>
<th>Immigration Across Open Borders</th>
<th>Intergovernmental Coordination</th>
<th>New &amp; Future Member States</th>
<th>Countries Outside the Eurozone</th>
<th>Dutch Liberality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Diversity of Interests in Europe: accession, Hungary, diversity, Europe, F Bolkestein, P Fortuyn, we, EU commissioner, power, EU countries, EU, god, surrender influence, Christianity, Poland, A Kwasniewski, I Kaczynski, Iraq, national preferences, Germany, France</td>
<td>1. Pros &amp; Cons of the Expected Yes Vote: poll, vote Yes, referendum, VVD, SP, Dutch constitution, EU constitution, pro, contra</td>
<td>economy, L Brinkhorst, Ministry of Economic Affairs, too late, social state, employees, work, job/economic loss, reform</td>
<td>borders, open, security, national level, immigration, EU level, simplify, police, asylum, veto, justice, migrants</td>
<td>Finland, EU Council, Ministry of Foreign Affairs, D de Villepen, French foreign minister</td>
<td>Cyprus, future, Turkey, Malta, Bulgaria, Romania, new member states</td>
<td>currencies, euro, Swedish, British, Danish, UK, T Blair</td>
<td>Dutch identity, liberal, JP Balkenende, W Bos, M Verhagen, opposition</td>
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<tr>
<td>3. Periphery: unite, worries, self, you, convention, EU commission, small countries, Netherlands</td>
<td>3. Periphery: disinterest, government, doubts &amp; distrust, No camp, campaign, Yes camp, threat, vote No, turnout, Dutch, ChristenUnie, SGP</td>
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</tbody>
</table>

### NRC Handelsblad (Highbrow Newspaper), phase V (Campaign)

- History of EU Politics
- Polish Concern With Catholic Church
- Minority Policy in Hungary
- German-Polish Disagreements
- Cooperation Within NATO
- Charter of Fundamental Rights
<table>
<thead>
<tr>
<th>Dutch Referendum Campaign</th>
<th>EU Level Interference With National Policy &amp; Preferences</th>
<th>French &amp; UK Referenda</th>
<th>US Anti-Terror Policy</th>
<th>EU Member States</th>
<th>Price Rises Due to the Euro</th>
<th>Christianity &amp; ChristenUnie</th>
<th>Balkan Enlargement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pro &amp; Con Arguments: another referendum, referendum, Dutch constitution, EU constitution, contra, pro, vote Yes, vote No, government, citizens, information, Dutch, qualified majority voting, constitutional rules, arguments</td>
<td>1. EU Superstate: another Europe, decisions, EU level, Europe, superstate, EU, EU countries, EU legislation</td>
<td>elections, UK, British, T Blair, French referendum, UK referendum, French result, French, France, Jacques Chirac, JP Raffarin, D de Villepen, uncertainty, Luxemburg, JC Juncker, G Fini</td>
<td>conflicting interests (dispute), discontent, worries, USA, T van Gogh, Islam, Afghanistan, GW Bush</td>
<td>Italy, Spain, Greece, EU Parliament, Lithuania, Austria, Hungary, good</td>
<td>currencies, euro, guilder, Eurozone, cheaper, more expensive</td>
<td>power, Christianity, ChristenUnie, A Rouvoet, religion, church</td>
<td>accession, Bulgaria, Croatia, Romania, new member states, Turkey</td>
</tr>
<tr>
<td>2. Camps &amp; Parties: No camp, Yes camp, campaign, VVD, J van Aartsen, PvdA, CDA, GroenLinks, SP, LPF, M Herben</td>
<td>2. Periphery: national constitutions, national preferences, Yes countries, legal incoherence, EU commissioner, status quo, democratic, national level, other countries, simple majority voting, veto, power block, EU Commission, open, agriculture, union</td>
<td>3. EU Ban on Drugs: borders, controversial Dutch legislation, drugs, combat, cooperation, threat, crime, police</td>
<td>3. EU Ban on Drugs:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Periphery: cynicism, better, opinion poll, invalid reason, result, turnout, positive, M Verhagen, D66, B Dittrich, relevance, Dutch identity, Netherlands, We, No countries, short term, too late, J Borrell, Comité Grondwet Nee, internet, doubts</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>
COMMUNICATION, CONTEXTUALIZATION, & COGNITION

<table>
<thead>
<tr>
<th>distrust, online voting advisers</th>
<th>4. Radicals’ Campaigns: Pim Fortuyn, flyers, G Wilders, media</th>
</tr>
</thead>
</table>

**NOS Journaal (News Show, Public Television)**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Constitutional Referenda: constitution, Europe, French referendum, referendum, Dutch constitution, EU constitution</td>
<td>accession, arguments, turkey, J Marijnissen, controversial Dutch legislation, drugs</td>
<td>surrender influence, No camp, campaign, G Wilders, D66</td>
<td>Euro, Guilder, VVD, false, more expensive</td>
<td>combat, crime, veto, EU level, EU legislation</td>
<td>surrender, Dutch identity, big countries, other countries</td>
<td>opinion poll, positive, JP Balkenende, clear</td>
<td>social state, PvdA, better, W Bos</td>
</tr>
</tbody>
</table>

**Barend & van Dorp (Talk Show, Private Television)**

|-------------------------------------------|-----------------------------------------|-------------------------------------|---------------------------------|-------------------------------|------------------------|-----------------------------|--------------------------------|

- Parliamentary Ratification in Germany
| bureaucracy, constitution, social state, A Rouvoet, simplify, big countries, ChristenUnie, necessary, hope, influence, Yes countries, No countries, superstate | competences, EU level, EU, EU legislation, national level, EU Parliament, before, GroenLinks | culture, Spain, national preferences, Spanish, Dutch identity, diversity, problem | conflicting interests, French result, NGL, Europe, EU politicians, politics | decide, parliament, surrender, citizens, K Buitenweg | referendum, result, we, VVD, expect | borders, crime, combat, asylum, compare | Euro, Guilder, discontent, cheaper | Zalm: Jobs! | SP Worried About War | International Politics | What Should One Vote? |
**IX.7. Agreement patterns ‘Frames in Communication’**

Table IX.7.1: *Unique and common associations in the political discourse of ChristenUnie (CU), GroenLinks (GL), SP & VVD (VV)*

<table>
<thead>
<tr>
<th></th>
<th>VV total</th>
<th>unique total</th>
<th>two nets total</th>
<th>three nets total</th>
<th>GL total</th>
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<tbody>
<tr>
<td>all lines</td>
<td>1064</td>
<td>3843</td>
<td>349</td>
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<td>432</td>
<td>1428</td>
<td>55</td>
<td>5</td>
<td>384</td>
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</tbody>
</table>

**Diagram:**

- VV only
- SP ∩ VV
- GL ∩ VV
- CU ∩ GL ∩ VV
- GL ∩ SP ∩ VV
- CU ∩ GL ∩ VV
- CU ∩ SP ∩ VV
- CU only
- CU ∩ SP
- SP only
- CU total
- total lines
- SP total
- clusters only

**Numbers:**

- 1370
- 376
- 104
- 5
- 108
- 36
- 2
- 97
- 19
- 2
- 7
- 1
- 1617
- 4254
- 1258
- 335

192
Table IX.7.2: Unique and common associations in the journalistic discourse of Barend & van Dorp (BD), NOS Journaal (NJ), and NRC Handelsblad phases I (N1) & V (N5)

<table>
<thead>
<tr>
<th></th>
<th>BD total</th>
<th>unique total</th>
<th>two nets total</th>
<th>three nets total</th>
<th>NJ total</th>
</tr>
</thead>
<tbody>
<tr>
<td>all lines</td>
<td>347</td>
<td>6109</td>
<td>653</td>
<td>119</td>
<td>686</td>
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<tr>
<td>clusters only</td>
<td>172</td>
<td>1984</td>
<td>179</td>
<td>40</td>
<td>288</td>
</tr>
</tbody>
</table>

**Diagram:**

- BD only
- N5 ∩ BD
- NJ ∩ BD
- N1 ∩ NJ
- NJ only
- all lines
- clusters only

**Table:**

<table>
<thead>
<tr>
<th></th>
<th>BD only</th>
<th>N5 ∩ BD</th>
<th>NJ ∩ BD</th>
<th>N1 ∩ NJ</th>
<th>NJ only</th>
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<tbody>
<tr>
<td>all lines</td>
<td>241</td>
<td>46</td>
<td>2</td>
<td>26</td>
<td>406</td>
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<tr>
<td>clusters only</td>
<td>143</td>
<td>15</td>
<td>3</td>
<td>11</td>
<td>184</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>N1 ∩ BD</th>
<th>ALL</th>
<th>N1 ∩ N5</th>
<th>N1 ∩ N5 ∩ BD</th>
<th>N1∩NJ ∩ N5</th>
<th>N5 only</th>
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</thead>
<tbody>
<tr>
<td>all lines</td>
<td>18</td>
<td>15</td>
<td>1</td>
<td>10</td>
<td>94</td>
<td>133</td>
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<td>1</td>
<td>1</td>
<td>5</td>
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<td>51</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>N1 only</th>
<th>N1 ∩ N5</th>
<th>N5 only</th>
</tr>
</thead>
<tbody>
<tr>
<td>all lines</td>
<td>2265</td>
<td>428</td>
<td>3197</td>
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<tr>
<td>clusters only</td>
<td>582</td>
<td>96</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>total lines</th>
<th>N5 total</th>
</tr>
</thead>
<tbody>
<tr>
<td>all lines</td>
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<td>3938</td>
</tr>
<tr>
<td>clusters only</td>
<td>2204</td>
<td>1278</td>
</tr>
</tbody>
</table>
IX.8. Moderator guidelines ‘Frames in Cognition’

Discussion rationale

The discussion is split into one ‘and also’-part, and one ‘I see that differently’-part. As will be clear from the outline below, the first part serves mainly the purpose of listing everything that comes to mind, and putting it on the map. This part follows rules similar to brainstorming: Every idea is good, so criticism is only allowed in form that adds to the existing range of ideas (‘I don’t think that’s the main point, but there is also X and Y’). Active moderation should be largely limited to situations where the discussion gets stuck or runs off track. In the second part, the concepts’ alignment on the map is discussed, probing criticism, seeking qualification and differentiating between more and less relevant concepts.

This should also be reflected in the style of discussion: other ideas, in the first part, need not relate to the previous ones, and may be appropriately introduced as ‘and also, I find that...’. In the second part, on the contrary, reference to the currently discussed concept is crucial. Instead of additionality, the rule here is competition. Not every idea is as good as the others, so the task is to compete with arguments and see how much thought there is behind introduced concepts. Note, however, that this competition is a means, not an ends. It serves to encourage participants to justify, elaborate, and take stands. By no means should ideas be ‘outcompeted’ and silenced. The prototypical introduction of a new thought is ‘I see that differently, …’

Due to the small number of groups, and the nature of research, it appears advisable to have all groups conducted by the same moderator. This way, comparability can be increased, and the building familiarity of the moderator with peoples’ responses to the outlined questions can be utilized. Also, it reduces preparation efforts for the moderator.

Data gathering rationale

The purpose of the focus group, including pretest, is to elicit sense-making and association patterns respondents have developed to understand the draft EU Constitution. The discussion moves from spontaneous (Pretest) and uncued (Q1-2), over dimensionally cued (effects, reasons, Q3-4), personally tied (Q5-6), politically relevant (Q7-9) and projective (Q10-11) questions towards systematic probing (phase II). The underlying idea for phase I is to explore thinking in as many directions as possible, thus including personal and inferential thinking-back items, counterfactual reasoning, forward-looking projection and normative grounding beside the items assessing current ideas and attitudes. Thus, the cognitive network providing the understanding of the European constitutional process shall be sketched. In the second phase, the research interest concerns how much and what these concepts contribute to this understanding, and how these contributions interact with other concepts considered relevant. Thus, the suggested ten starting items for phase II do not represent assumedly most relevant concepts, but a selection that is distributed such that most things that are considered by respondents should be accessible from these (e.g., ‘Business’ is expected to render ‘Growth’ ‘Globalization’, ‘Employment’ and the notions of neoliberal vs. social policy options accessible as well).
Guidelines for discussion phase I

The first phase of the group discussion is largely unstructured, relying on associations and thoughts provided by the participants. The group is asked to discuss first the European Constitution (EC), what it ‘is’, what it was good for, why it was created, what their personal attitude towards it comes from, why it was rejected, and what should happen now (see questions below). Using associations that the participants took down in the pre-test should be encouraged. This discussion should be as free as possible, with minimum interventions by the facilitator. Clarification of statements can be sought, insisting should be avoided. The purpose of this stage is to derive as many concepts as possible, which the participants consider relevant to the understanding of the EC. The information required concerns primarily the meaning of associated concepts, and the quality of their links to the EC. Beyond this, linkages between these concepts are of interest. In this stage, no deep examination of concepts takes place; instead it serves to sketch the overall cognitive map(s) within which the Constitution is located.

Participants can be encouraged to follow trains of thought (e.g., explaining how in their mind EC is caused by A, which again depends on B and C and was related to D), but this should not go too much into detail. Also, discussants are welcome to disagree on whether or not, and how concepts are related, however, this should not be discussed any further but postponed to phase II. As a rule, disagreement is fine as long as it leads to the introduction of other ideas (‘I think, it’s not so much A but B.’), and should be postponed if it contests an idea’s validity itself (‘I think that is just not true.’) Where concepts remain unclear, the moderator should seek clarification, but not elaboration. Generally, insisting should be unnecessary.

Under all circumstances, it should be avoided that the discussion gets stuck circling around one concept. The latest when information becomes redundant, the moderator should pick up other previously mentioned but not yet explored concepts, or, if appropriate, move on to the next question. It is fine, however, if the discussion returns to one concept, indicating a new link that wasn’t discussed before.

The questions for this phase are arranged such that participants are likely to tap one or another of these in the natural course of discussion. Logically, they build three clusters: One concerning the understanding and sense-making of the project, one touching upon the formation of an attitude towards it, and one focussing the understanding and evaluation of the political happenings in and since the referendum. Should the group jump between questions within one cluster, or discuss the next one first before returning to the former, that is no problem at all as long as all aspects are covered. Premature jumps between the clusters, however, should be cut off, except when the former is sufficiently covered and can be abandoned. Aside these limitations, spontaneous manoeuvring between questions of one cluster is preferred to prompted transitions.

During the discussion, the moderator fills in cards with concepts raised in the discussion. These should be kept close to participants’ wordings. Asking participants for suggestions (‘How would you summarize this idea in a few words?’) can be used to focus contributions, if necessary. The cards will be used to structure the second phase of the discussion.
Guidelines for discussion phase II

The second phase of the discussion is much more structured than the first, investigating what connections people do make beyond spontaneous association. Based on a pre-selected range of cards, those concepts, which came up in phase one, are replaced by the cards worded in the participants’ words. Subsequently, the group is asked to arrange the cards in a relation map, grouping closely related issues and drawing lines for relevant links. For practical reasons, I would suggest to start with a selection of ten cards to be displayed, which are arranged first, in an order suggested by the group; subsequently, cards would be added one by one (random order), including the possibility to put a card aside for a moment and place the next one(s) first.

During this, the participants are asked to justify suggested positionings, and to elaborate on the quality and the relevance of the perceived links. Clarification should be sought where it is not provided through the group interaction. Participants should be actively engaged to state their opinion on suggested positionings, and prompted for disagreement or unease.

In this discussion, the facilitator is free to suggest other positionings of concepts and elicit comments as to why the suggestion is seen as appropriate or not. Most relevantly, the moderator should probe whether participants accord with claims for social reasons (yielding to perceived superior knowledge, need for harmony, indifference) without understanding them or considering them relevant. The option to disagree with a card’s positioning on the basis of not seeing its relevance should be explicitly kept open. If the participants agree that something should not be part of the map, removal of a card is possible. Both for agreed positionings and agreed removals, dissenters should be noted. Dissent must be treated as perfectly acceptable.

Participants are encouraged to discuss disagreements, but under the constraint that the whole group should be involved. Debates between two opponents should be opened up, by asking other participants for their opinions. It is not intended to come to an agreement, so redundant discussions should be terminated, just noting that an issue remains controversial. The value of these discussions is that participants reveal their reasoning, not that they arrive at any consensual conclusion. Also, more interesting than which side prevails is how to see what understanding is shared, and what is not.

The danger most important to avoid in this phase is a monopolization of the discussion by the more outspoken (or knowledgeable) participants. It is okay (and unsurprising) if for some issues some discussants have more to add than others, but if this pattern persists across issues, these participants should be silenced. Aside the active involvement of passive participants, the moderator can in such cases also stress that the group discussion is not about knowledge, but about diversity in perceptions. Therefore, more elaborate and founded perceptions are by no means privileged over crude and attitude-based ones.

Focus group questions phase I

Introductory comment

As you may have guessed from the questionnaire, I would like to hear your opinions about several issues concerning the European Constitution, on which you had a vote one year ago. In that respect, I am interested in your personal views: What you think, what
you believe, also if you don’t really know a lot about it. So this is not primarily about what you recall or know about the whole debate, but about what of all that made sense to you. Please do feel free do discuss whatever comes to mind from my questions!

Cluster 1: Sense-making

› If you had to explain this to someone who never heard of it, what would you say was this draft European constitution all about?
› Were there particular questions or confusions for yourself about the draft constitution? What were they about?
› What do you think would have been the main effects if this draft constitution had been adopted?
› [If the issue doesn’t come up itself, please insert: ‘It was also often said that the draft constitution would have made Europe more democratic, that is, given more influence to the people…’]
› Could you think of what intentions different actors pursued in this constitutional process? What actors?

Cluster 2: Attitude formation

› Was there anything in this draft constitution that might have touched things that are important to you personally? What? How so?
› Thinking back to when you were asked to cast a vote in the referendum, what reasons were important for making up your mind?

Cluster 3: Political opinion

› In your opinion, what were the reasons that led to the failure of the constitutional referendum here in the Netherlands?
› [Leave out if really necessary] What are, in your opinion, the consequences of this Dutch ‘No’ in the referendum? Do you have any personal feelings concerning this outcome?
› Do you think that this referendum, rejecting the draft constitution, changed anything in how much influence ordinary people have on European politics?
› [Leave out if necessary] This summer, the European heads of governments will discuss how to proceed with regard to the European constitutional process. Could you speculate a bit about what might be the possible future developments?
› [Leave out if necessary] What do you think should be done next?

Underlined words are key words in the question. While in most cases they are obvious, in some cases they are not (note, for instance, that in Q4 ‘different’ is more important than ‘actors’ – the latter are being followed up upon only in the second part).

Focus group questions phase II

Introductory question

› Now, I have collected a number of issues that you and other people have said to be related to the European Constitution. How would you group and arrange them on a map? You can also draw lines and arrows if you want to indicate that something is related. Also, if you feel that something is not really relevant here, we can dismiss cards.
Concepts to be arranged

**Bureaucracy**
- Member states
**Business**
- European Parliament
- Civil society
- Elites
- Superstate
- Harmonization
- EU trading block
- Common voice in the world
- Security policy
- Enlargement
- Fortress Europe
- Social policy

**Employment**
- Economic growth

**Globalization**
- Legal necessity
- Practical considerations
- Legitimacy
- Transparency

**Democratic Europe**
- European citizens
- National identity
- National democracy

**Efficiency of decision making**
- Unify treaties
- Conflicts

**Visions of Europe**
- European vs. national interests

**Domestic politics**
- Symbolic policy
- Least common denominator

**Negotiated compromise**
- One side prevails

**Impulse for integration**
- Cement current state
- Political manifesto
- Fundamental rights protection
- No change

The items in bold face are those suggested as ten starting concepts. The list is arranged in a logical structure which derives from the analysis of answers in the pilot run; the implied categories are: ‘Actors & Interest bearers’ (1-6), ‘Teleologies & Political projects’ (7-14/15), ‘Pressures & Necessities’ (15/16-19/20), ‘Legitimacy & Democratic support’ (20-24/25), ‘Institutional & Structural imperatives’ (25/26-27), ‘Interests’ (28-30/31), ‘Off-topic influences’ (31-32), ‘Qualities & Outcomes’ (33-40).

Note that this list is only a guideline. Concepts arising from the group discussion should generally substitute similar or identical concepts from the list. The list mainly serves to ensure that a certain range of concepts is touched regardless of the discussion outcomes from the first phase.

The cards discussed are not limited by this list. This depends entirely on the group process. Concepts considered irrelevant, or such that can be unequivocally placed, without any need for discussion perceived by the group, can be treated quite briefly. However, every concept that is retained on the relation map should be at least briefly discussed so the reason why it is arranged this way is made explicit. This also serves to probe whether there is really full agreement, or whether just the placement is uncontroversial, the substance or link remaining subject to debate.
IX.9. Coding guidelines ‘Frames in Cognition’

Coding does not serve quantitative analysis, it functions as a step to formalize text into proposition structures. Therefore, it is important that coding is exhaustive and semantically sensitive, while it is unimportant how many different categories there are, as long as their boundaries can be defined. What is coded is semantic concepts. This requires that not only can different formulations be coded into the same category, but also the same words may be coded differently depending on their meaning, which derives also from the context. All coding takes place within a context of 50 words before and after the coded paragraph, but the context should only be used as background information to resolve references or indeterminacies in the coded concepts. The codes are developed in vivo, so they emerge as their content occurs. If something new occurs, it becomes a new code. The codes do not need to form any kind of tree or systematic structure. The key criterion is that with the coded concepts and named arrows between them, one can fully represent the original semantic content of a statement. Thus, every semantically required concept in every statement must be coded one way or another. However, to reduce irrelevant information, the following formalizations apply before coding:

- Ignore all statements by the moderator, but transfer elements of these statements into the coded replies, if necessary (e.g., in elliptic responses, or where moderator statements are referenced explicitly)
- Ignore passages that only serve as qualifiers or rhetorical formulae (e.g., ‘I think’, ‘actually’, ‘have the feeling that’)
- Reduce wordiness: not fast = slow, unless there is reason to keep the negation form; reasons may be that there is no unique reduction, if the focus lies on negating one quality, without implying the opposite (e.g., ‘not negative’ is not the same as ‘positive’)
- Ignore passages which are off topic, concerning the interview situation, or other things not made relevant to the EU Constitution. If in doubt, the relevant criterion for relevance is whether a participant claims it is relevant, either explicitly, or by conversational implication.
- Reduce all coded statements to their propositional structure, i.e., formalize into concepts and relations using the syntactic information as input, but not retaining syntax beyond semantic relations.
- Code only required parts of the propositions made. To test this, try what happens to the meaning of a formulation if you delete elements. If the meaning changes the concept must be coded. If the meaning remains, or the change affects only off-topic information, then it should not be coded. E.g., in the sentence ‘the EU gives you the possibility to live in any member state’, the concept ‘to live’ matters; in the sentence ‘it’s advantageous for the people who live in the Netherlands’, it can be eliminated without changing the core meaning. Perform test after reducing to propositional level, to avoid counting concepts as relevant which are only syntactically, but not semantically necessary.
- Treat indirect, figurative, ironic, idiomatic, referential or elliptic statements according to what they mean, not what they say, e.g., ‘The information on TV was always, the Constitution is good for you, so vote yes and shut up’, code Information, Tv,
biased, pro, Vote Yes, Not Taken Seriously. ‘Waterhoofd’ does not require any codes as ‘water’, but can be replaced with ‘bureaucracy, negative connotation’
**IX.10. Codebook ‘Frames in Cognition’**

<table>
<thead>
<tr>
<th>Code Name</th>
<th>Code Description and Coding Rules</th>
<th>Word root required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controversy</td>
<td>Controversy within the group, if explicitly marked; code if participants explicitly state they do not agree with an introduced statement;</td>
<td>A</td>
</tr>
<tr>
<td>Accept</td>
<td>EU Constitution would, or could have been accepted; the opposite of ▶ Result</td>
<td>A</td>
</tr>
<tr>
<td>Accession</td>
<td>of (past or future) new EU members; code also for Enlargement</td>
<td>A</td>
</tr>
<tr>
<td>Achievement</td>
<td></td>
<td>E</td>
</tr>
<tr>
<td>Adapt</td>
<td>Changes in the EU Constitution and EU Constitution, including those allowing deviations between MSs, in order to meet criticisms or to make it more palatable</td>
<td>A</td>
</tr>
<tr>
<td>Again</td>
<td>In the future, expectancy of repetition of events or behaviour</td>
<td>C</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Including Farming, Fishing etc.; code also for Farmers, Agricultural Enterprises, Agricultural Products, etc.</td>
<td>C</td>
</tr>
<tr>
<td>Army</td>
<td></td>
<td>E</td>
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<tr>
<td>Arrogance</td>
<td>Including implicit reference to Arrogance and behaviour evaluated as arrogant; do not code if the stress is on not admitting citizens into decision making (▶ Behind Closed Doors)</td>
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</tr>
<tr>
<td>Autonomy</td>
<td>Also Independence, Self-determination, Sovereignty</td>
<td>A</td>
</tr>
<tr>
<td>Behind Closed Doors</td>
<td>Some political process, with specific focus on citizens’ possibilities to participate, feel involved and obtain information.</td>
<td>A</td>
</tr>
<tr>
<td>Blame</td>
<td>Blaming Netherlands for (being so stupid and) calling a Referendum</td>
<td>A</td>
</tr>
<tr>
<td>Borders</td>
<td>Internal Borders within EU</td>
<td>E</td>
</tr>
<tr>
<td>Bourgeoisie</td>
<td>Elites, Rich individuals, Upper (Middle) Class and well-off professionals, as a social group</td>
<td>C</td>
</tr>
<tr>
<td>Bureaucracy</td>
<td>Also circumscriptions (Paper work, Water head, etc.)</td>
<td>C</td>
</tr>
<tr>
<td>Cities</td>
<td>In opposition to rural/other areas</td>
<td>E</td>
</tr>
<tr>
<td>Combat</td>
<td>Combat problems or prevent their emergence (terrorism, crime, migration, etc.)</td>
<td>A</td>
</tr>
<tr>
<td>Compare</td>
<td>Explicit comparison, looking at other cases and explaining implications by drawing parallels; also explicit mentioning</td>
<td>A</td>
</tr>
<tr>
<td>Comply</td>
<td>(actual and future) Member States complying with EU rules</td>
<td>A</td>
</tr>
</tbody>
</table>

**FREE CODES**

- E: *Explicit word root*
- C: *E or Circumscriptions*
- A: *Abstract/not required*
<table>
<thead>
<tr>
<th>Concept</th>
<th>Description</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compromise</td>
<td>Explicit, and circumscriptions (make mutual concessions, …)</td>
<td>E</td>
</tr>
<tr>
<td>Conflicting Interests</td>
<td>Between Countries, Groups and the Public; code whenever it is explicitly mentioned that one side wants something and another doesn’t; do also code if the conflict concerns opinions on something do not code if factual information is meant (Contradictory);</td>
<td>A</td>
</tr>
<tr>
<td>Constitution</td>
<td>As generic concept, a Constitution; if concrete constitutions are meant, code National Constitutions, Dutch Constitution, EU Constitution</td>
<td>E</td>
</tr>
<tr>
<td>Constitutional Rules</td>
<td>Basic legal rules, main lines, fundamental law in general; if human rights protection is mentioned, code Human Rights</td>
<td>A</td>
</tr>
<tr>
<td>Continues</td>
<td>All thoughts indicating that the EU Constitution might, or will, still come in the future, further attempts will be made, or people are still being busy with making it come into force somehow</td>
<td>A</td>
</tr>
<tr>
<td>Control</td>
<td>Someone being able or unable to convince someone else</td>
<td>E</td>
</tr>
<tr>
<td>Convince</td>
<td>States working together/making rules together/negotiating and agreeing on rules with the stress on ‘together’. If the stress is on deciding, code Decide</td>
<td>C</td>
</tr>
<tr>
<td>Cooperation</td>
<td>Paying money for something, or causing costs; including EU membership contributions and the distribution of it</td>
<td>E</td>
</tr>
<tr>
<td>Costs</td>
<td>General references to national currencies such as those before EMU, and those still existing; code only if it is not important which concrete cases are meant; code relevant cases separately</td>
<td>E</td>
</tr>
<tr>
<td>Decide</td>
<td>States coming to joint decisions/agreeing on rules with the stress on ‘deciding’. If the stress is on working together, code Cooperation; if it is on trading/negotiating, code Negotiate</td>
<td>A</td>
</tr>
<tr>
<td>Democratic</td>
<td>References to things being/becoming democratic, Democracy, and the principle of majority decisions</td>
<td>E</td>
</tr>
<tr>
<td>Deny &amp; Admit</td>
<td>In the sense of acknowledging and not acknowledging facts; by third actors, not Self</td>
<td>E</td>
</tr>
<tr>
<td>Diversity</td>
<td>Differences between (European) cultures and nations, also lacking commonalities, or being described as stubborn and resistant to integrate, or diversity as a theme itself</td>
<td>C</td>
</tr>
<tr>
<td>Economy</td>
<td>And economic; including specific kinds of business or enterprise, unless it appears as interest group Interest Groups</td>
<td>A</td>
</tr>
<tr>
<td>Education</td>
<td>Code both if someone specific (including Self) is characterized by her education, or if Education is mentioned in general</td>
<td>E</td>
</tr>
<tr>
<td>Keyword</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Efficiency</td>
<td>Faster, more efficient performance of political, administrative, or economic institutions</td>
<td></td>
</tr>
<tr>
<td>Elections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>And electricity; code whenever word root appears</td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>Nature, Environment, and Environmental Policy, including related NGOs</td>
<td></td>
</tr>
<tr>
<td>EU Identity</td>
<td>Also Common Identity</td>
<td></td>
</tr>
<tr>
<td>Euro</td>
<td>Also Common currency and other circumscriptions; code also for the Euro introduction/EMU process</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>All references to the EU or Europe, as political or geographical entity, undifferentiated; do not code if the reference stresses the belonging togeth</td>
<td></td>
</tr>
<tr>
<td>Everyday Life</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exchange</td>
<td>Exchange Currencies, or other forms of withdrawing/obtaining foreign currencies, including those currencies that necessitate exchange for Eurozone travellers</td>
<td></td>
</tr>
<tr>
<td>Exploit</td>
<td>One actor taking advantage of another’s wealth or other resources; requires intentionality, just benefiting from someone else does not suffice; code regardless of connotation/evaluation</td>
<td></td>
</tr>
<tr>
<td>Failed</td>
<td>The EU Constitution and the Referendum; code if the stress is on the Referendum result terminating, or potentially terminating, the EU Constitution, or political ambitions linked to it; if the stress is on the Final result, code Result</td>
<td></td>
</tr>
<tr>
<td>First Referendum</td>
<td>All thoughts stressing that the Constitutional Referendum has been the first chance for the Dutch to cast their vote directly on the European Integration Process, and that before they might have wanted, but not gotten their say, so they carried that over to the Constitutional Referendum; code only if the link to the Referendum is made, complaining about no influence before does not suffice alone</td>
<td></td>
</tr>
<tr>
<td>Follow</td>
<td>As opposed to lead</td>
<td></td>
</tr>
<tr>
<td>Freedom Travel</td>
<td>Freedom of Travelling, Settlement and Labour in the EU, as principle and practise</td>
<td></td>
</tr>
<tr>
<td>Goal</td>
<td>Intentions/Goals pursued with the EU Constitution; code also if the existence of differing or conflicting goals is mentioned; also code for inquiries (Why? What did they want to achieve? etc.)</td>
<td></td>
</tr>
<tr>
<td>Gratitude</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hide</td>
<td>People trying to distract from their own problems</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>The History of Europe and European (Founding) States</td>
<td></td>
</tr>
<tr>
<td>Human Rights</td>
<td>Fundamental rights and Human rights</td>
<td></td>
</tr>
<tr>
<td>Identity</td>
<td>Personal and collective, but unspecified; also national cultures, nationalisms, traditions; code named cases</td>
<td></td>
</tr>
</tbody>
</table>
separately (EU Identity, Dutch Identity); Attention! The personal Identity of a Dutch person need not be Dutch identity, so code Identity for ‘my identity’, and the Dutch identity only for ‘my identity as a Dutch’, or ‘the Identity of the Dutch’, etc.

Ignore
The outcome of the Dutch Referendum being ignored

Immigration
Unnamed, impersonal foreigners coming or being invited to come to Netherlands; also code for the history of ethnic groups’ immigration in the Netherlands

Impact
Individuals’ personal influence on political decisions; any level

Influence
Countries’ or political institutions’ influence on political decisions; any level

International Politics
In general, not confined to EU context

Interpretation
Of the Referendum Result

Interest Groups
Actors described as having a commercial interest in the ratification of the EU constitution

Just Punishment
Also specific reactions expected in reaction to the failed referendum perceived as just punishment of those responsible for the failure, especially the government

Laws
National laws or rules which are affected by the EU Constitution, should be protected from it, or represent in other ways national rules which are made relevant to the Constitution

Leave EU
The notion of countries leaving the EU

Legal
Different rules/laws applying in different places, with the stress on legal incoherence; if the stress is more on different (legitimate) ways of dealing with things, code Diversity or National Preferences; may also be between regions

Liberalization
And Privatization and Globalization as abstract processes

Minorities
Minorities within the EU countries, referred to by that term or in contrast to the majority population, including specific examples of minority populations

Minority Vote
The yes voters in the Dutch Referendum, if the Result is being discussed

Missed Chance
The failed Referendum as a missed chance to proceed in European integration, towards a Constitution or something else

Mix
European nationalities mixing and exchanging, towards a cosmopolitan European people; also code for the parallel of national Euro coins mixing

National Constitutions
Single or several existing national constitutions, unnamed or such that the individual cases are not important

National Level
The national political level as the place where decisions are, could be, or ought to be made; code only in contexts where
other levels are raised or implied, i.e., do not code just because Den Haag or the Dutch government are named as actors, unless the level is stressed explicitly, or these are contrasted with regional or European level actors

**National Preferences**

Countries/Nations’ idiosyncratic interests or preferences in doing things; do not code if the stress is on Conflicting Interests, Diversity; do code National Preferences and not Conflicting Interests if it is other countries’ (potential) desire to do things differently from how it is currently done in the Netherlands

**Nothing**

Pertaining to the consequences of the Referendum and/or the (potential) consequences had the Constitution been adopted; code both if it is mentioned that these had no consequences, and if it is stressed that there is no information about (suspected) consequences; code also for complaints that since the referendum the topic has vanished from information channels; if the absence of consequences is attached to individual voting rather than to the overall result, code Impact

**Overrule**

European rules, or foreign interests, overruling, replacing or constraining Dutch laws or constitutional rules

**Panic**

Political reactions to the referendum result, indicating consternation/panic, but not indicating any lesson learnt, or a way that lies still ahead (Wake Up)

**Parents Participate**

Countries’ participation in the European Union, both as actively contributing to furthering Integration, and as taking part in EU policies such as EMU or others

**Policy Fields**

Unspecified areas of policy; code also if ‘else’ is contrasted with named policy fields, implying all other policy fields

**Politics**

And unspecified politicians, unless named or attached to the European level (EU Politicians)

**Poll**

Calls upon citizens to cast their vote, not confined to the Referendum or elections, but more general e.g. as a way of citizens’political participation; code only if the collective act of voting is meant, not the individual vote (Vote); double code with Referendum if the Referendum is named only as one peculiar occasion to cast votes

**Power**

Political and economic Power in a global context; code also if this is merely circumscribed, e.g., as the EU striving to speak with one voice vis-à-vis other powers, or gaining level standing (balance) with other world powers

**Problem Protect Defend**

National or regional laws, rules, peculiarities, against detrimental European influence, or against being overruled via Europe.
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Push Through</td>
<td>Political decisions being carried out/pushed through without asking the people for their opinion, including the intention/strategy to do so; code if the stress is on the pushing of the political initiative, rather than the keeping people out (.behind closed doors)</td>
</tr>
<tr>
<td>Raise Interests</td>
<td>(the need to/attempts to/chances to) generate higher popular interest and involvement in EU politics; do not code if only lacking interest is mentioned (disinterest)</td>
</tr>
<tr>
<td>Reality</td>
<td>Explicit stress on something being a fact, or reality; also code if counterfactual reasoning occurs</td>
</tr>
<tr>
<td>Referendum</td>
<td>The EU Constitutional Referendum</td>
</tr>
<tr>
<td>Regional</td>
<td>All references to things taking place on a sub-national level, or in specific geographical sub-national regions</td>
</tr>
<tr>
<td>Registration</td>
<td>Domestic bureaucracy in everyday life, such as registration of working places, etc.</td>
</tr>
<tr>
<td>Relevance</td>
<td>The EU’s general relevance for oneself, a group, the people, a country, or else; code only if mentioned in abstract, named impacts code separately</td>
</tr>
<tr>
<td>Result</td>
<td>The actual outcome of the Dutch Referendum; also code if circumscribed as collective vote (we have said no), but do not code if the stress is on the individual votes (vote); do not code either if the stress is on the results’ consequence of failing the EU constitution or political ambitions linked with it (failed)</td>
</tr>
<tr>
<td>Ripe &amp; Ready</td>
<td>The member states or people being ripe or ready for another step in European Unification, which can be the EU Constitution (past or in a possible second attempt), or other aspects; code also if people’s getting used to/accommodated with European policies, and thereby becoming supportive for further integration, is mentioned</td>
</tr>
<tr>
<td>Rules</td>
<td>European rules or laws applying in all member countries</td>
</tr>
<tr>
<td>Search</td>
<td>All kinds of information seeking behaviour and efforts to find out things</td>
</tr>
<tr>
<td>Security</td>
<td>Including police and institutions of the judiciary branch</td>
</tr>
<tr>
<td>Simplify</td>
<td>All kinds of references to things that have become, or could become, simpler thanks to European political developments; code also if it is stressed what is now possible, if the implication is that things have become simpler; (‘I can…’ may suffice)</td>
</tr>
<tr>
<td>Social State</td>
<td>Welfare State and everything the word root social</td>
</tr>
<tr>
<td>Something at least</td>
<td>The notion that, despite not being perfect, the EU Constitution could have provided some progress at least (in general)</td>
</tr>
<tr>
<td>Standstill</td>
<td>On the European level; a situation characterized by no or very slow further integration</td>
</tr>
<tr>
<td>Status Quo</td>
<td>Characterizations of legal or political provisions that are</td>
</tr>
</tbody>
</table>
already in force, and therefore represent no change caused by the EU Constitution; ‘w/that is already there’ suffices

Subsidies

Summary

The notion of bringing existing legal or political documents together into one more coherent/transparent/condensed document, (without necessarily adding much new content)

Surrender

To lose something valued to European Integration/Harmonization, or the loss of relevance of something thanks to Europe; do not code if the loss is the money for the membership contribution

Too Far

The notion that something in European political developments goes too far, that Europe makes decisions of attempts steps that people are not ripe for, or one personally rejects

Trade

Also the exchange of goods across borders, and other circumscriptions

Transparency

Of European Politics; general references to gaining more insights into European political processes, and these becoming more comprehensible; requires that the object that becomes clearer is the process itself, and not only the information about it

Try

Future Attempts to do anything with the European Constitution, with the stress on attempting/trying

Turnout

Broken Promises

The notion that certain behaviour would contradict what the actors have been asserting before

Uniformity

Uniform rules across the EU cutting short national peculiarities, or making otherwise no differences between countries; must occur in abstract or with a negative or negative implication; also code references to vanishing or losing one’s (collective or literal) individuality in the mass; do not code if uniformity is mentioned as providing tangible, named benefits (› Harmonization)

Union

Europe being together, belonging together; code also references to the EU which stress its encompassiveness (e.g., ‘the whole EU’), or the presence of all constituencies (‘all Countries’)

Unite

Europe coming together, with a stress on the process or the Goal; code also all references to European Integration as a process, and to the Member States coming together to form one Union

Unity

In general and abstract, including references to legal harmonization; code unless coded under › Uniformity, › Union, or › Unite

Unprofessionalism

References to people expected to know what they are doing, code whether or not they fall short of this expectation; code
also if performance, including campaign behaviour is characterized as unprofessional

**Veto**
The ability to block or stop European political developments, seen as something desirable

**Vote**
The individual act of voting, without focus on what the vote is cast for; code statements concerning one’s own (opinion on) voting as well as everybody’s voting, as long as the focus is the individual act to turn out and vote; do not code if the focus is on what vote is cast (Vote Blank/No/Yes)

**Vote Blank**
Casting one’s vote in the EU Referendum but choosing neither yes nor no, but a blank or invalid ballot

**Vote No**
Casting one’s vote in the EU Referendum choosing No

**Vote Yes**
Casting one’s vote in the EU Referendum choosing Yes

**Wake Up**
Political reactions to the Dutch Referendum Result, suggesting the realization that something must change / one cannot go on as before, but maintaining that there is a way ahead; code also if parallels are drawn to other similar events; do not code if the stress is on the reaction, but no further proceeding is implied (Panic)

**War**

**Way**
Statements concerning, in general, the way something is done, or the process leading to an outcome (e.g., the process of the Euro introduction); code also for inquiries or rhetorical questions stressing the process underlying (e.g., ‘How do you resolve these different interests’); do not code if the stress is explicitly on the existence of different ways to proceed (Ways)

**Ways**
Statements as Way, but stressing explicitly that different ways could have been, or could be chosen

**Work**
All references to jobs, (un)employment, working places and conditions in the Netherlands; also code for employees or employers; do not code if Cheap Labour or Work Abroad applies

**World Economic Powers**
Powerful Countries, Economies or Regions on a global scale, in general; may co-occur with the concrete examples

---

**TREE CODES**

<table>
<thead>
<tr>
<th>TREE CODES</th>
<th>Code only explicit occurrences or close circumscriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DUTCH IDENTITY</strong></td>
<td>References to legislation seen as typically Dutch, which is controversial in other countries and thus potentially threatened by harmonized EU legislation, e.g., Abortion, Drugs, Euthanasia, Gay Marriage, and Antidiscrimination</td>
</tr>
<tr>
<td>Dutch Identity</td>
<td>Including references to tokens and symbols of Dutch identity, unless coded elsewhere within this tree; Also ‘being</td>
</tr>
<tr>
<td>DUTCH POLITICS</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>Dutch Politics</td>
<td>In general, including politicians in general, unless specified as</td>
</tr>
<tr>
<td></td>
<td>EU politicians</td>
</tr>
<tr>
<td>Balkenende</td>
<td>Jan Peter Balkenende</td>
</tr>
<tr>
<td>Camp No</td>
<td>Parties opposing the ratification of the EU Constitution</td>
</tr>
<tr>
<td>Camp Yes</td>
<td>Parties supporting the ratification of the EU Constitution</td>
</tr>
<tr>
<td>Fortuyn</td>
<td>Comparisons and analogies related to Pim Fortuyn</td>
</tr>
<tr>
<td>Government</td>
<td>The Dutch government; code also if referred to by symbolic</td>
</tr>
<tr>
<td></td>
<td>circumscriptions (e.g., Den Haag if the government is meant);</td>
</tr>
<tr>
<td></td>
<td>code also if the coalition parties are mentioned in their role as</td>
</tr>
<tr>
<td></td>
<td>government parties; also government representatives/spokespeople</td>
</tr>
<tr>
<td>Parliament</td>
<td>The Dutch Parliament; code also if referred to by its name</td>
</tr>
<tr>
<td></td>
<td>(Second Chamber), function (legislation) or symbolic</td>
</tr>
<tr>
<td></td>
<td>circumscriptions (e.g., Den Haag if the parliament is meant);</td>
</tr>
<tr>
<td>Parties</td>
<td>Unspecified references to political parties; code also if not</td>
</tr>
<tr>
<td></td>
<td>exclusively Dutch parties are meant</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EU CONSTITUTION</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EU Constitution</td>
<td>The EU Draft Constitution, or the Constitution; do not code</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>if the reference is (actual) Constitutions in general (National</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Constitutions), or Constitutions as a kind of law/treaty (</td>
<td></td>
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<tr>
<td></td>
<td>Constitution)</td>
<td></td>
</tr>
<tr>
<td>Advantage</td>
<td>Claimed consequences of the EU Constitution, which are qualified</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>as conducive, or positive, either in abstract or for some actor;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Code also if this consequence is actually not one that comes</td>
<td></td>
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<tr>
<td></td>
<td>from the Constitution, what matters is what the participants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>state; do not code if it is acknowledged that something is not</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a consequence of the Constitution</td>
<td></td>
</tr>
<tr>
<td>Consequences</td>
<td>Claimed consequences and changes induced by the EU Constitution</td>
<td>C</td>
</tr>
<tr>
<td>Content</td>
<td>The content/substance of the EU Draft Constitution, in general;</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>code also ‘What is in it’, and other circumscriptions; do not</td>
<td></td>
</tr>
<tr>
<td></td>
<td>code if concrete examples are named, code these separately</td>
<td></td>
</tr>
<tr>
<td>Disadvantage</td>
<td>Claimed consequences of the EU Constitution, which are qualified</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>as not conducive, or negative, either in abstract or for some</td>
<td></td>
</tr>
<tr>
<td></td>
<td>actor; Code also if this consequence is actually not one that</td>
<td></td>
</tr>
<tr>
<td></td>
<td>comes from the Constitution, what matters is what the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>participants state; do not code if it is acknowledged that</td>
<td></td>
</tr>
</tbody>
</table>

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something is not a consequence of the Constitution

The Draft Constitution as a text or book with pages; code also references to specific articles or provisions claimed to be read in it/citing the text as source and proof

<table>
<thead>
<tr>
<th>EU COUNTRIES</th>
<th>Code all EU member states and membership candidates; code also if referred to by its nationals, but the collective actor is meant (otherwise PEOPLE); do not code if the stress is on all member states (Union)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU Countries</td>
<td>Unnamed EU Countries (in the sense above, including candidates), or references to unspecified countries that must be EU Countries due to the logic of the point made; Code only if not coded otherwise in this tree, i.e., if none of the specified roles applies</td>
</tr>
<tr>
<td>Big Countries</td>
<td>referred to as (examples of) a group or type of countries; code also for references to (a group or type of) member states that is capable by means of its superior power to dominate other EU countries; as code also for more general remarks about big states, if raised in a European context</td>
</tr>
<tr>
<td>Conservative Countries</td>
<td>referred to as (examples of) a group or type of countries which hold conservative, backward or religiously inspired preferences in legislation, morality and conduct</td>
</tr>
<tr>
<td>Euro Countries</td>
<td>Countries belonging to the EMU</td>
</tr>
<tr>
<td>Liberal Countries</td>
<td>Countries circumscribed as liberal</td>
</tr>
<tr>
<td>Migration Countries</td>
<td>Countries mentioned with respect to migration, as origins or transit countries of migrants</td>
</tr>
<tr>
<td>New Members</td>
<td>Countries being referred to as New Member States, and Countries in the Accession Procedure</td>
</tr>
<tr>
<td>No Countries</td>
<td>Countries being referred to as being opposed to, or having voted against the (idea of an) EU Constitution</td>
</tr>
<tr>
<td>Non Euro Countries</td>
<td>Countries referred to as not being part of the EMU; code also for countries that are seen as not participating, or resisting certain forms of EU integration, both in concrete cases and generally</td>
</tr>
<tr>
<td>Other Countries</td>
<td>References to examples of ‘other’ EU Countries, serving as a reference for comparison, while the specific case selected does not matter/could be replaced without changing the argument/statement.</td>
</tr>
<tr>
<td>Poor Countries</td>
<td>Countries categorized as poor, or economically weak/backward</td>
</tr>
<tr>
<td>Rich Countries</td>
<td>Countries characterized as being wealthy, rich, or possessing a strong economy</td>
</tr>
<tr>
<td>Small Countries</td>
<td>referred to as (examples of) a group or type of countries; code also for references to (a group or type of) member states that are seen as too small to exert power, or act economically in a global market on their own; as code also</td>
</tr>
</tbody>
</table>
COMMUNICATION, CONTEXTUALIZATION, & COGNITION

for more general remarks about small states, if raised in a European context; do not code if Netherlands is only named ‘small’, without reference to belonging to a group of small countries (small)

<table>
<thead>
<tr>
<th>Travel Countries</th>
<th>References to countries where, due to the current state of European integration, one can (or cannot) travel to, live in, or work in easily (yet); code also for references to countries as tourist destinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes Countries</td>
<td>Countries being referred to as being supportive of, or having voted in favour of the (idea of an) EU Constitution</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Code whenever the Netherlands are not referred to as an example or case of countries (coded elsewhere in this tree); code also for specific places and cities within the Netherlands raised as examples of Dutch places; do not code for regions within the Netherlands raised as examples of minority populations (Minorities)</td>
</tr>
</tbody>
</table>

**EU POLITICS**

<table>
<thead>
<tr>
<th>EU Commission</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU Parliament</td>
<td>E</td>
</tr>
<tr>
<td>EU Politicians</td>
<td>C</td>
</tr>
<tr>
<td>EU Politics</td>
<td>C</td>
</tr>
</tbody>
</table>

And members of the EU Parliament or Commission; code also if referred to by symbolic circumscriptions (e.g., Brussels) if EU politicians, not EU politics abstracted from individual people (EU Politics), are meant

European politics in general, political things happening in Europe; code also if referred to by symbolic circumscriptions (e.g., Brussels) if EU politics in general, not EU politicians as actors (EU Politicians), is meant; code also for references to the European/Federal level of decision making as the place where decisions are, could be, or ought to be made

**INFO CONTENT**

<table>
<thead>
<tr>
<th>Arguments</th>
<th>Claims about consequences/(dis)advantages of the EU Constitution, or other Reasons being advanced for forming an opinion or voting one way or another; also code inquiries or statements that arguments have been lacking (e.g., ‘But why is it good for us, that was not said’) Code also for references to information qualified as lacking, having, or needing substance such as Arguments, Proof, Exemplification, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>All references to information provided or proliferated concerning the EU Constitution, the Referendum, and EU Politics; includes media coverage, campaign-provided information, and also information provided by individuals (e.g., ‘politicians should tell us’); also code demands for information, and lack of information; usually comes with</td>
</tr>
<tr>
<td>Qualities</td>
<td>A Qualities code attached</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Rhetoric</td>
<td>Information that is not informative, but mainly performative; do not code if information is qualified as Bad, Unclear etc., but if an actor's information behaviour in general is meant and characterized as strategic, set in-scene and empty</td>
</tr>
<tr>
<td>Symbolic</td>
<td>Symbolic politics, or signalling, explicitly</td>
</tr>
</tbody>
</table>

### INFORMATION MEDIA

<table>
<thead>
<tr>
<th>Campaign</th>
<th>References to the Campaign in general; code also if specific campaign material is mentioned (e.g., Flyers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media</td>
<td>The media in general; Code all media channels as sources of information in passive exposure (e.g., news, TV, newspapers, radio); do not code of media channels actively used to seek information</td>
</tr>
<tr>
<td>WWW</td>
<td>Online sources and the Internet; code also for all media channels used for active information searches</td>
</tr>
</tbody>
</table>

### MIND STATES

<table>
<thead>
<tr>
<th>Mind States</th>
<th>Code only explicit references or close circumscriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doubt &amp; Distrust</td>
<td>Expressing doubt in information, or in the correctness in one's own opinion; also code if reservations about one's opinion are mentioned, such as deciding to vote yes despite maintaining criticisms towards the Treaty; code also for distrust in politics, politicians, the media, or other information providers</td>
</tr>
<tr>
<td>Disinterest</td>
<td>Expressing lacking interest in, or other priorities than politics, EU politics, and the EU Constitutional Referendum</td>
</tr>
<tr>
<td>Discontent</td>
<td>Expressing discontent, being upset, annoyed, etc., with something preceding the EU Constitutional Referendum (typically, the Government, the Euro, or Information); code also general unwillingness to go along with the suggested courses</td>
</tr>
<tr>
<td>Expect, Hope, Intuition</td>
<td>Intuition and Feelings as bases of one's opinion or decision; code only if the proposition requires the form of 'feel', ignore if it could be replaced with 'think' or 'find' ('I feel I am not sufficiently informed'...)</td>
</tr>
<tr>
<td>Invalid Reason</td>
<td>Denying the validity of suggested or mentioned reasons for one's opinion or decision, or claiming that a reason is not relevant, or should not count because the Referendum is about something else; code also modest forms (e.g., 'that's actually not what it was about, but it mattered nevertheless')</td>
</tr>
<tr>
<td>Knowledge</td>
<td>One's own, or someone else's knowledge about or understanding of EU politics, the EU Constitution or</td>
</tr>
</tbody>
</table>
COMMUNICATION, CONTEXTUALIZATION, & COGNITION

Opinion
People having, forming, or sticking to an opinion about something, or sharing their viewpoints; code also circumscriptions (e.g., ‘I couldn’t make that one out’, ‘I knew I would vote No’)

Uncertainty
Uncertainty of the future, inability to forecast what will happen, what consequences will be; always concerns the future, and the indeterminacy of it

Worries
One’s Worries, being afraid, fearing things that could happen or are expected to happen; only code personal feelings (of oneself, someone else, or the ‘people’)

OTHER COUNTRIES

Far Far Away
Other regions of the world, both referring to individual countries, regions or continents not coded under this tree or EU Countries

USA
Including President George Walker Bush

PEOPLE
Code only if nationals, not countries are meant (COUNTRIES)

Cheap Labour
And Cheap Labourers; code also for references to labour migrants and their receiving lower payment for work

EU People
In general, or all of them

Poor People
People categorized as poor

Migrants
Referring to migrants coming to or settling in the Netherlands

Foreigner
Non-EU Foreigner, unspecified

QUALITIES

Bad
Bad quality, about information or compromises; code attached to information if it is qualified as unreliable, imprecise, or literally bad; do not code negative evaluations (negative); do not code either if information is explicitly judged as bad because of its lack of substance or arguments provided (in this case, code Arguments proposition structure allows, else substantial)

Better
Better quality, about information; requires at least implicit comparison to something bad, or explicit mentioning

Biased
Biased, partial, not balanced, one-sided, propagandistic, about information

Big
About parties, not Big Countries

Cheaper
Code only in reference to living expenses

Clear
Clear, conclusive, about information

Complex
Complex, voluminous, difficult to oversee due to complexity, about information or the European Draft Constitution and it’s text; code only if the stress is on the amount and organization of information, not its quality,
accessibility, or presentation

Continuous
Continuous, about information/coverage; code all references to a steady, ongoing provision of information about European politics and related matters

Contra
Intending, or intended to persuade towards a no-vote, about actors or information; code also collective actors’ standpoints if qualified as decided against the EU Constitution

Contradictory
Contradictory, about information; code only if conflicting factual claims, or conflicting convictions and interpretations are meant; do not code conflicting opinions not referring to information provided (→ Conflicting Interests)

Dry
Dry, unappealing, not well-presented, about information; code only if the stress is on the manner in which information is presented, not the quality of the information itself (→ Bad)

False
Factually wrong, false, inaccurate, about information; code only if a participant explicitly mentions that some information was such; do not code if information is merely sloppy or allowed misleading conclusions without being factually wrong (→ Bad)

Foolish
Foolish, stupid, not smart, childish, ridiculous, about behaviour of politicians; code also characterizations of political happenings as a game

Important
Important, about various objects

Less
Less, about bureaucracy or similar, or about membership contributions

Little
Little, insufficient, about information; concerns only the amount of accessible information, not its quality; code only if the focus is on the little amount of information provided, not the little utility (→ Bad), or informative substance (→ Substantial) within possibly much information

Minor
The role of the EU Constitution (not) being a minor part in EU integration

More
More, about various objects; code determined by proposition structure, code if required to maintain meaning in coded proposition

More expensive
More expensive; code also if ‘more’ is omitted but implied

Necessary
Necessary, needed to achieve a desired goal; about the EU Constitution, Higher Interest, and some other objects

Negative
Negative, not desirable, about various objects; code only explicit subjective evaluations by a participant; do not code if something is ‘negative for somebody’ (→ Disadvantage); do code if the evaluation is general both in the object and the affected (e.g., ‘Europe is bad for us’)

Open
Open, about borders; code also the antonym (closed, about
| Positive | Positive, desirable, about various objects; code only explicit subjective evaluations by a participant; do not code if something is ‘positive for somebody’ († Advantage); do code if the evaluation is general both in the object and the affected (e.g., ‘Europe is good for us’). | A |
| Possible | Possible, likely to succeed, work out, or deliver; about the feasibility of the EU Constitution and the plans and ambitions linked to it; code all references discussing expectations about the project’s likelihood or capability to deliver. | A |
| Pro | Intending, or intended to persuade towards a yes-vote, about actors or information; code also collective actors’ standpoints if qualified as decided in favour of the EU Constitution. | A |
| Relieved | Relieved or satisfied with referendum failure, about † Self | E |
| Typical | Typical, characteristic, about behaviour | E |
| Unclear | Unclear, inconclusive, about information; code if information is criticized as not clear, but it is not further specified whether this is because of lacking quality, amount, substance, palatability, or structure († Bad/Little/Substantial/Dry/Complex); | C |
| Usual | Usual, generally expectable, previously known, unsurprising; about behaviour; code if something is characterized as generally or usually the case, or is depicted as part in a long term, easily foreseeable trend | A |

**TIME**

<table>
<thead>
<tr>
<th>Code only if important for the proposition meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the Referendum</td>
</tr>
<tr>
<td>Earlier unspecified</td>
</tr>
<tr>
<td>Long Term</td>
</tr>
<tr>
<td>Now</td>
</tr>
<tr>
<td>Short Term</td>
</tr>
<tr>
<td>Simultaneous</td>
</tr>
<tr>
<td>Temporary</td>
</tr>
<tr>
<td><strong>COMMUNICATION, CONTEXTUALIZATION, &amp; COGNITION</strong></td>
</tr>
<tr>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td><strong>Too brief before the Referendum</strong></td>
</tr>
<tr>
<td>Before the referendum, but explicitly qualified as too brief before this/too late during the campaign period</td>
</tr>
<tr>
<td><strong>UNSPEC. ACTORS</strong></td>
</tr>
<tr>
<td><strong>All</strong></td>
</tr>
<tr>
<td><strong>Everyone</strong></td>
</tr>
<tr>
<td><strong>Noone</strong></td>
</tr>
<tr>
<td><strong>People</strong></td>
</tr>
<tr>
<td><strong>Self</strong></td>
</tr>
<tr>
<td><strong>They</strong></td>
</tr>
<tr>
<td><strong>We</strong></td>
</tr>
<tr>
<td><strong>Who</strong></td>
</tr>
<tr>
<td><strong>You</strong></td>
</tr>
</tbody>
</table>

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## IX.11. Frame list ‘Frames in Cognition’

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Frame</th>
<th>Valence</th>
<th>Complexity</th>
<th>Integration</th>
<th>Sources</th>
<th>Neighbours</th>
<th>Vote Choice</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOV Government</td>
<td>Arrogance &amp; pushing through</td>
<td>–</td>
<td>+</td>
<td>+</td>
<td>INF EUR DEM</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Balkenende’s blunders</td>
<td>–</td>
<td>o</td>
<td>o</td>
<td>+</td>
<td>INF</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Distrust &amp; cynicism</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>FEE</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moral threat</td>
<td>–</td>
<td>o</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INF Information</td>
<td>Provision: little, bad &amp; too late</td>
<td>–</td>
<td>o</td>
<td>+</td>
<td>GOV PRO UNC</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Quality: conflicting &amp; unclear</td>
<td>–</td>
<td>o</td>
<td>+</td>
<td>–</td>
<td>GOV PAR UNC</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Reliability: false</td>
<td>–</td>
<td>–</td>
<td>o</td>
<td>+</td>
<td>ECO EUR SUR</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neutrality: biased</td>
<td>–</td>
<td>–</td>
<td>+</td>
<td>–</td>
<td>GOV PAR UNC</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Guidance: unanimity</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td></td>
<td>PAR</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>EUR Euro</td>
<td>Consequences: more expensive</td>
<td>–</td>
<td>o</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Late euro-referendum</td>
<td>–</td>
<td>–</td>
<td>o</td>
<td></td>
<td>DEM GOV</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Practical utility</td>
<td>+</td>
<td>+</td>
<td>o</td>
<td></td>
<td>SIM</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Loss of identity symbol</td>
<td>–</td>
<td>+</td>
<td>+</td>
<td>–</td>
<td>SUR</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invalid yet relevant for vote</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td>o</td>
<td>PRO FEE</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>LAB Labour</td>
<td>Cheap labour migration</td>
<td>–</td>
<td>o</td>
<td>–</td>
<td></td>
<td>FEE</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Liberalization &amp; retrenchment</td>
<td>–</td>
<td>o</td>
<td>o</td>
<td></td>
<td>FEE ECO</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>SUR Surrender</td>
<td>Influence &amp; independence</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td>FEE</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Identity</td>
<td>–</td>
<td>+</td>
<td>+</td>
<td>–</td>
<td>FEE PAR PRO EUR</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>NEC Necessity</td>
<td>Performance of EU</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td></td>
<td>PRO</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>POS Possibility</td>
<td>Further integration/implementation</td>
<td>–</td>
<td>+</td>
<td>–</td>
<td></td>
<td>UNI UNC</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>ENL Enlargement</td>
<td>Influence on acceding countries</td>
<td>+</td>
<td>o</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>POW Power</td>
<td>Unite to gain political power</td>
<td>+</td>
<td>o</td>
<td>–</td>
<td></td>
<td>UNI</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Unite for global competition</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td></td>
<td>UNI</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>DEM Democracy</td>
<td>Transparency &amp; accountability</td>
<td>+</td>
<td>o</td>
<td>–</td>
<td></td>
<td>PRO</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Institutional weights</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td></td>
<td>PRO</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>People’s influence</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td></td>
<td>EUR</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>BUR Bureaucracy</td>
<td>Hopes for less bureaucracy</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td></td>
<td>PRO</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Eurocracy &amp; costs</td>
<td>–</td>
<td>o</td>
<td>o</td>
<td>+</td>
<td>UNI ECO</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>PRO Progress</td>
<td>Not much change anyway</td>
<td>+</td>
<td></td>
<td></td>
<td>INF UNC</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Streamlining the status quo</td>
<td>+</td>
<td>–</td>
<td>+</td>
<td></td>
<td>DEM</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Enhanced policy cooperation</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td></td>
<td>NEC SEC</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>The Constitution is…</td>
<td>o</td>
<td>o</td>
<td>–</td>
<td>+</td>
<td>SUR EUR</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>PAR Party Cues</td>
<td>Controversy</td>
<td>o</td>
<td>–</td>
<td>–</td>
<td></td>
<td>INF</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>SP &amp; CU</td>
<td>–</td>
<td>o</td>
<td>–</td>
<td>–</td>
<td>INF SUR</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Unanimity</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td></td>
<td>INF</td>
<td></td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

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| FEE Feelings | Discontent | – | – | – | – | INF GOV EUR | x | x |
| Intuition | – | – | – | – | x |
| Worries | – | – | – | – | SUR LAB | x |
| UNC Uncertainty | Doubts | – | – | o | – | INF POS PRO | x |
| Risk-averse No-voting | – | – | – | – | x |
| UND Understand | No knowledge | – | – | o | UNC INF PRO | x | x |
| SIM Simplify | Travel, work, & pay abroad | + | + | o | EUR PRO | x | x |
| Simplify immigration | – | – | – | – | SEC | x |
| ECO Economy | Which countries benefit | + | + | – | PRO LAB | x |
| – | – | – | – | – | |
| SOV Sovereignty | Endangered sovereignty | – | – | – | – | x |
| UNI United EU | No United States of Europe | – | o | – | – | POW POS | x | x |
| A closer union | + | – | – | + | POW NEC | x |

Note: In the Valence column, + indicates positive, – indicates negative valence. In the Complexity and Integration columns, +, o, and – indicate high, medium, and low internal frame complexity, and integration with other clusters outside the frame. In the Source column, + and – indicate that a theme was used mainly by Yes- or No-voters, respectively. The crosses in the last column show whether frames occurred in accounts of individual or collective votes.
COMMUNICATION, CONTEXTUALIZATION, & COGNITION

IX.12. Patterns of similarity ‘Frame Acquisition’

Figure IX.12.1: Local context structures similar to concept contexts in Yes voters’ contributions

<table>
<thead>
<tr>
<th>All Focus Groups</th>
<th>Yes Voters only</th>
</tr>
</thead>
<tbody>
<tr>
<td>J ≥ 0.15</td>
<td></td>
</tr>
<tr>
<td>bad</td>
<td></td>
</tr>
<tr>
<td>biased</td>
<td></td>
</tr>
<tr>
<td>dry</td>
<td></td>
</tr>
<tr>
<td>false</td>
<td></td>
</tr>
<tr>
<td>important</td>
<td></td>
</tr>
<tr>
<td>less</td>
<td></td>
</tr>
<tr>
<td>link</td>
<td></td>
</tr>
<tr>
<td>more expensive</td>
<td></td>
</tr>
<tr>
<td>positive</td>
<td></td>
</tr>
<tr>
<td>pros</td>
<td></td>
</tr>
<tr>
<td>border</td>
<td></td>
</tr>
<tr>
<td>bureaucracy</td>
<td></td>
</tr>
<tr>
<td>coalitions</td>
<td></td>
</tr>
<tr>
<td>constitution</td>
<td></td>
</tr>
<tr>
<td>crime</td>
<td></td>
</tr>
<tr>
<td>democratic</td>
<td></td>
</tr>
<tr>
<td>democracy</td>
<td></td>
</tr>
<tr>
<td>economy</td>
<td></td>
</tr>
<tr>
<td>education</td>
<td></td>
</tr>
<tr>
<td>efficiency</td>
<td></td>
</tr>
<tr>
<td>environment</td>
<td></td>
</tr>
<tr>
<td>epa</td>
<td></td>
</tr>
<tr>
<td>influence</td>
<td></td>
</tr>
<tr>
<td>noneurocountries</td>
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<tr>
<td>participatory</td>
<td></td>
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<tr>
<td>parties</td>
<td></td>
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<tr>
<td>power</td>
<td></td>
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<tr>
<td>push through</td>
<td></td>
</tr>
<tr>
<td>relevance</td>
<td></td>
</tr>
<tr>
<td>rules</td>
<td></td>
</tr>
<tr>
<td>seat</td>
<td></td>
</tr>
<tr>
<td>units</td>
<td></td>
</tr>
<tr>
<td>usa</td>
<td></td>
</tr>
<tr>
<td>vote</td>
<td></td>
</tr>
<tr>
<td>vs</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
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<tr>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Only Jaccard index values of J ≥ 0.15 are shown. Figures in cell are percentages of commonality, cell shades reflect association strength.
## Figure IX.12.2: Local context structures similar to concept contexts in No voters’ contributions

<table>
<thead>
<tr>
<th>All Focus Groups</th>
<th>No Voters only</th>
</tr>
</thead>
<tbody>
<tr>
<td>bad</td>
<td></td>
</tr>
<tr>
<td>biased</td>
<td></td>
</tr>
<tr>
<td>complex</td>
<td></td>
</tr>
<tr>
<td>contradiction</td>
<td></td>
</tr>
<tr>
<td>dry</td>
<td></td>
</tr>
<tr>
<td>link</td>
<td></td>
</tr>
<tr>
<td>moreexpensive</td>
<td></td>
</tr>
<tr>
<td>open</td>
<td></td>
</tr>
<tr>
<td>positive</td>
<td></td>
</tr>
<tr>
<td>pro</td>
<td></td>
</tr>
<tr>
<td>againstreferendum</td>
<td></td>
</tr>
<tr>
<td>borders</td>
<td></td>
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<tr>
<td>spirit</td>
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Notes: Only Jaccard index values of $J \geq 0.15$ are shown. Figures in cell are percentages of commonality, cell shades reflect association strength.
Figure IX.12.3: Local context structures similar to concept contexts in all focus group discussions

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<th>All Contributions</th>
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<td>NRCH1</td>
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<tr>
<td>0.15</td>
<td>0.15</td>
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</table>

Notes: Only Jaccard index values of \( J \geq 0.15 \) are shown. Figures in cell are percentages of commonality, cell shades reflect association strength.
IX.13. Alternative representation ‘Frames in Cognition’

Figure IX.13.1: *Focus group discussion networks according to the clustering algorithm of chapter V*

All participants

Yes voters

No voters
IX.14. Acronyms used within network representations

ALGD  Algemeen Dagblad (tabloid newspaper)
BNVD  Barend & van Dorp (commercial daily television talkshow)
BRAB  Brabants Dagblad (regional newspaper)
BUIT  Buitenhof (public weekly television talkshow)
CDAX  Christendemocratisch Appel (CDA) (Christian democratic party)
CGWN  Comité Grondwet Nee (Anti-EU-Constitution NGO platform)
CUXX  ChristenUnie (CU) (Christian Party)
D66X  Democraten ’66 (D66) (leftwing liberal party)
DVHN  Dagblad van het Noorden (regional newspaper)
EUXX  European Union
FG1-4  Focus groups 1 (students), 2 (blue collar), 3 (senior citizens) & 4 (white collar)
GLXX  GroenLinks (GL) (green party)
GOVT  Government
HI    Focus group contributions by highly politically interested participants
LO    Focus group contributions by politically disinterested participants
LPFX  Lijst Pim Fortuyn (rightwing populist party)
ME    Focus group contributions by medium politically interested participants
METR  Metro (free newspaper)
NO    Focus group contributions by No voters
NOSJ  NOS Journaal (public television news show)
NOVA  NOVA / Den Haag vandaag (public daily television talkshow)
NRCH  NRC Handelsblad (broadsheet newspaper)
PVDA  Partij van de Arbeid (PvdA) (social democratic party)
RTL4  RTL4 Nieuws (commercial television news show)
SGPX  Staatskundig gereformeerde partij (SGP) (Christian party)
SPXX  Socialistische Partij (SP) (socialist party)
TELE  Telegraaf (tabloid newspaper)
TOTAL All focus group contributions
TROU  Trouw (broadsheet newspaper)
VLKK  Volkskrant (broadsheet newspaper)
VVDX  Volkspartij voor Vrijheid en Democratic (VVD) (rightwing liberal party)
WILD  Groep Wilders (rightwing splinter group, formerly VVD)
YES  Focus group contributions by Yes voters

Most concept codes have been given self-explanatory names. However, in the codes applying to politicians, the following acronyms have been added in front of the surname and given name:
ek… Eerste Kamerlid (member of the first parliamentary chamber)
ep… member of the EU Parliament
gv… member of government
tk… Tweede Kamerlid (member of the second parliamentary chamber)
The suffix “…voorzitter” denotes the leaders of the respective parliamentary groups.
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Nederlandse Samenvatting

Frames bepalen de betekenis van informatie door deze vast te leggen in een selectieve, cohereente en doelbewust gekozen context. In de laatste decennia zijn onderzoekers begonnen om te bestuderen hoe de gebruik van specifieke frames interpretaties en evaluaties kan beïnvloeden. Daaruit hebben zij een grote verscheidenheid aan benaderingen om frames te analyseren afgeleid. Complementaire, alsmede tegenstrijdige, theorieën zijn in kaart gebracht om het functioneren van bekende framingeffecten te verduidelijken. Een aspect dat grotendeels aan de wetenschappelijke aandacht is ontglipt, is hoe framegeïnduceerde variaties in betekenis verband houden met de discursieve constructie als ook de cognitive verwerving van de betekenis die nodig is om een complexe realiteit te begrijpen. Deze dissertatie behandelt deze vraag. Het ontwikkelt en test een perspectief op framing, welke frames ziet als ingebed binnen grotere semantische netwerken.

In het theoretische tweede hoofdstuk worden frames geconceptualiseerd als lokale coherente patronen binnen de propositionele structuur van discours en cognitie. Deze benadering naar framing bereikt vier belangrijke doelstellingen: Ten eerste verstrekt het een conceptualisatie van framing, die zowel aan linguïstische en psychologische (vooral schemagebaseerde) betekenistheorieën gerelateerd is. Dit maakt een herformulering van bestaande theorieën en bevindingen over framing binnen een gemeenschappelijk kader mogelijk – het semantische netwerk. Ten tweede verschaft het een platform waarop tegenstrijdige verwerkingsmodellen worden geïntegreerd in een enkelvoudig gefaseerd cognitief proces. Ten derde worden op basis van dit geïntegreerde model voorspellingen gedaan over de cognitieve reconstructie van frames vanuit de communicatie, die mensen in staat stelt om informatie op een betekenisvolle manier in een cohereente context te integreren. Frames worden dus gedefinieerd als structuren welke de verwerving van complexe kennis vergemakkelijken en sturen. Uiteindelijk staat deze conceptualisatie een gedetailleerdere en preciezere operationalisatie van frames toe dan gebruikelijke holistische benaderingen en maakt een inductieve identificatie van frames mogelijk.

De beweringen en voorspellingen die afgeleid worden uit het theoretische model worden empirisch getest in de daaropvolgende hoofdstukken. Hoofdstuk III introduceert het voorbeeld dat gekozen is voor dataverzameling. Dit onderzoek analyseert de beweringen en de frames die gedurende de referendumcampagne in Nederland geïntroduceerd zijn in relatie tot de EU-grondwet, en plaatst deze naast de opvattingen en cognitieve frames die gevormd zijn door de Nederlandse kiezers. De EU-grondwet is geselecteerd als een belangrijke, maar nieuwe aangelegenheid die gerelateerd is aan de schaarste, doch goedgeorganiseerde, bestaande kennis onder het Nederlandse electoraat. Het voorbeeld is dus geschikt om de verwerving van kennis vanuit de publieke communicatie te bestuderen.

In hoofdstuk IV worden de centrale beweringen met betrekking tot de cognitieve mechanismes van de frameverwerking experimenteel getest. Proefpersonen worden blootgesteld aan geframede boodschappen, waarin de semantische context, het focale onderwerp en de evaluatieve koers was gevarieerd. Vervolgens werden de spontane associaties met het focale concept geregistreerd. In lijn met het theoretische model indiceren de resultaten dat framing het best begrepen kan worden als een voornamelijk semantisch effect, waarin contextuele cues verschillende schematische kennis oproepen bij de informatieverwerking. De evaluatieve verschuivingen die vaak worden opgemerkt
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in het onderzoek naar framing effecten, zijn af te leiden uit de kennis die aangeboord wordt voor de verwerking en zijn niet direct beïnvloed door het frame.

Hoofdstuk V analyseert de structuur van de frames die beschikbaar waren voor de Nederlandse kiezers in de discours van de massa media en de campagnes van de politieke partijen. Gebaseerd op de geregistreerde propositionele structuren zijn de verwachtingen over de samenstelling en de opstelling van de frames binnen het discours getest. De resultaten tonen aan dat frames in persuasieve verklaringen aan elkaar gerelateerd zijn binnen een narratieve structuur, terwijl frames in de nieuwsberichtgeving niet noodzakelijk coherente patronen vormen. Toch was de consonantie tussen verschillende nieuwsframes opmerkelijk hoger dan binnen het politieke discours.

Wat betreft de cognitieve representaties, hoofdstuk VI beoordeelt de opvattingen over de EU-grondwet die gevormd zijn door de Nederlandse kiezers. Het belang van de framestructuren in het scheppen van coherente frames binnen verklaringen wordt verder bevestigd. De geïdentificeerde cognitieve frames wijken echter op een systematische manier af van de frames die verstrekt zijn in het publieke discours. Mensen beschikken over aanzienlijke beoordelingsvrijheid bij de keuze welke frames zij accepteren en betrekken in de constructie van hun opvattingen. Kiezers volgden in hun verhalen nauwelijks de publiekelijk bepleite patronen, maar combineerden verschillende overwegingen en gebruikten frames om geselecteerde stukjes kennis te verbinden.

Om de overeenkomsten en verschillen tussen de gecommuniceerde en verworven frames verder te onderbouwen, voert hoofdstuk VII een vergelijkende analyse uit tussen de geconstrueerde semantische netwerken. Eén van de bevindingen was dat de televisie en de politieke discours de meeste invloed hadden op de vorming van het begrip van mensen, gevolgd door de kwaliteitskranten. Verder tonen de resultaten aan dat mensen regelmatig frames met een tegenovergestelde evaluatieve koers combineren en in overeenstemming brengen. Mensen waren opmerkelijk afhankelijker van gecommuniceerde frames over nieuwe, onopvallende en actuele issues, terwijl bestaande kennis van reeds lang bestaande issues verstrekte frames meestal verdroeg.

Samengevat betoogt deze dissertatie dat frames integraal zijn aan de formatie van coherente beweringen in een discours en cognitie. Het pleit voor een breed kijk dat niet zo veel focust op geïsoleerde, opzichzelfstaande frames en hun effecten, maar op de wisselwerking tussen verschillende met elkaar verbonden frames in communicatie en cognitie. Dit onderzoek verstrekt een theoreti
coch theoretisch raamwerk om te onderzoeken hoe frames een coherente betekenis vanuit disparate beweringen creëren. Gelijktijdig beschouwt het hoe verschillende frames aan elkaar gerelateerd zijn binnen narratieve en persuasieve communicatie. Door het bestuderen van structuren buiten en binnen het frame verstrekt het een methodologische benadering welke theoretische belangen kan in waarneembare maatstaven vertalen. Vandaar dat de op semantisch netwerk gebaseerde kijk op frames onze kennis van frames vergroot in ten minste drie opzichten. Ten eerste helpt het om diverse concepten te ontrafelen die waren verward in de literatuur. Hierdoor komt er meer precisie in het theoretische debat. Ten tweede stimuleert het een methodologisch raamwerk dat in staat is om de winst in de theoretische precisie te vertalen in goed gedifferentieerde maatstaven. Uiteindelijk relateert het frames aan andere belangrijke concepten in het onderzoek naar communicatie en informatieverwerking. Deze dissertatie benadrukt dus de relevantie van frames, die voor een groot deel ligt in de contributie van het creëren van betekenis uit informatie.
English Summary

Frames affect the meaning of information by embedding it within selective, coherent, and purposefully chosen context. Over the last decades, researchers have ventured to explore how the provision of specific frames affects and alters people's interpretations and evaluations. They have derived a wide variety of approaches to the study of frames, and have advanced complementary as well as competing theories of how the well-known framing effect can be explained. A related aspect that has largely eluded scientific attention so far, however, is how frame-induced variations of derived meaning relate to the discursive construction, as well as the cognitive acquisition and elaboration of meaning required to make sense of a complex reality. This thesis addresses this question. It develops and empirically tests a perspective on framing that views frames as embedded within larger semantic networks.

In the theoretical second chapter, frames are conceptualized as locally coherent patterns within the propositional structure of discourse on the one hand, and cognition on the other. Linking this view to the dominant perspectives on framing in scientific discourse, this approach achieves four main objectives: First, it provides a conceptualization of frames that relates to both linguistic and psychological (notably: schema-based) theories of meaning. It hence allows reformulating past theorizing and findings about frames within a common conceptual framework – the semantic network. Second, as a consequence, it provides a platform upon which the competing process models advanced within the study of framing effects can be integrated into a single, multi-stage cognitive process. Third, based on this integrated model, predictions can be made about the cognitive reconstruction of frames from communication, enabling people to embed information meaningfully into coherent context. Frames are thus understood as structures facilitating and directing the acquisition of complex knowledge. Finally, the developed conceptualization allows a much more detailed and precise operationalization of frames than common holistic approaches, and enables an inductive identification of frames.

The various propositions and predictions derived from the theoretical model are empirically tested in the subsequent chapters. Chapter III introduces the case chosen for data collection: This study captures the propositions and frames advanced in relation to the EU Constitution during the referendum campaign in the Netherlands, and juxtaposes these with the beliefs and cognitive frames formed by Dutch voters. The EU Constitution has been selected as a salient but novel concern which related to scarce but well-organized prior knowledge among the Dutch electorate. It therefore provides a suitable case for studying the acquisition and integration of knowledge from public communication.

In chapter IV, the core theoretical propositions regarding the cognitive mechanisms of frame processing are tested experimentally. For this purpose, subjects were exposed to framed messages varying with regard to their semantic context, focal issue, and evaluative drift. Subsequently, participants’ spontaneous associations with the focal concept were recorded. In line with the theoretical model, results indicate that framing is best understood as a predominantly semantic effect, wherein contextual cues raise different schematic knowledge for information processing. The evaluative shifts often noted in the
study of framing effects derive from the knowledge tapped for processing and are not
directly affected by the provided frame itself.

Chapter V focuses on the structure of frames rendered available to Dutch voters,
analyzing the contents of mass media discourse and the political parties’ referendum
campaigns. Based on the recorded propositional structures, several expectations about the
composition and alignment of frames within discourse are tested. Results show that
frames relate to one another within the narrative and argumentative structure of
persuasive accounts, while the frames used in news reporting do not necessarily form
cohherent patterns. However, consonance between different sources’ news frames was
markedly higher than within political discourse.

Turning toward cognitive representations, chapter VI assesses the belief structures
formed by Dutch voters with regard to the EU Constitution. While the importance of
frame structures in crafting coherence within accounts is further corroborated, the
identified cognitive frames deviate in systematic ways from those provided in public
discourse. Notably, people show considerable discretion of which available frames they
accept and include into their accounts. Voters’ narratives rarely followed those templates
advocated in public, but combined considerations taken from various sources, using
frames to weave connections between the selected shards of knowledge.

In order to further substantiate the differences and similarities detected between
communicated and acquired frames, chapter VII performs a comparative analysis of the
semantic networks constructed from either source. It finds that television and political
sources were most influential for the formation of people's understandings, followed by
broadsheet newspapers. Moreover, results show that people combined and reconciled
frames with opposing evaluative drift, advanced by rival campaigning actors. People were
notably more reliant on communicated frames regarding novel, unobtrusive, and current
issues, while prior knowledge mostly overrode provided frames on familiar, long standing
issues.

In summary, this thesis argues that frames are integral to the formation of coherent
accounts in discourse and cognition. It advocates a wide view that focuses not so much
on isolated, single frames and their effects, but on the interplay of various interrelated
frames in both communication and cognition. This study provides a theoretical
framework for investigating how frames create coherent meaning from disparate
propositions. Simultaneously, it considers how multiple frames relate to one another
within narrative and persuasive communication. Thus addressing structures both beyond
and within the frame, it provides a methodological approach that is well-tailored to
translate the theoretical concerns into discernible measures. The semantic network based
view on frames advanced in this study hence furthers our understanding of frames in at
least three respects: First, it helps disentangling several concepts that have been
confounded in the literature, adding precision to the theoretical debate. Second, it
supports a methodological framework capable of translating the gain in theoretical
precision into well-differentiated measures. Finally, it contextualizes frames, relating these
to other important concepts in the study of communication and information processing.
The present dissertation thus underscores the relevance of frames, which rests to a large
degree in their contribution to the creation of meaning from information.