OVERCOMING COGNITIVE CONSTRAINTS TO STRATEGIC ADAPTATION:

EXPLORING THREE PERSPECTIVES

DISSERTATION
of the University of St. Gallen,
School of Management,
Economics, Law, Social Sciences
and International Affairs
to obtain the title of
Doctor of Philosophy in Management

submitted by
Emmanuelle Reuter
from
Luxembourg

Approved on the application of
Prof. Dr. Günter Müller-Stewens
and
Prof. Steven W. Floyd, PhD

Dissertation no. 4435

Difo-Druck GmbH, Bamberg 2015
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The University of St. Gallen, School of Management, Economics, Law, Social Sciences and International Affairs hereby consents to the printing of the present dissertation, without hereby expressing any opinion on the views herein expressed.

St. Gallen, 19, May 2015

The President:

Prof. Dr. Thomas Bieger
ACKNOWLEDGMENTS

Just as overcoming cognitive constraints is a key challenge for decision-makers when they strategically adapt to a discontinuous environment, it is a key challenge for any person seeking to adapt to a changing environment. Starting this dissertation project represented a significant change in my career trajectory. Prior to entering the world of management and organizations, I was trained in cognitive sciences. I entered the field with a strong fascination with and interest in understanding how managers’ cognition works in real-life professional decision-making.

Despite this fascination, which still prevails today, I faced important obstacles. Most importantly, distinguished people offered me an abundance of opportunities to learn and adapt to this novel setting and to accomplish this dissertation. This personal life experience inspired my thinking and fed back into the content of this thesis. Not only the formal education process, but also the more informal social relationships make important imprints on cognition and learning processes.

A number of key people were particularly influential in shaping my learning process. I am very grateful for their continuous guidance, support, and inspiring conversations – on a professional and a personal level.

For their exceptional guidance, I wish to thank the members of my PhD committee:

- First, I truly thank Günter Müller-Stewens, my PhD supervisor, for his trust in this dissertation project. Our interactions repeatedly provided me with sharp reality tests and, above all, the important intellectual freedom that encourages a young PhD student to engage in collaborations and develop ideas.

- Second, I am greatly indebted to Steven Floyd, my co-advisor, for sharing his invaluable expertise, professional wisdom, continuous encouragement, and unparalleled openness to engage with my sometimes fairly abstract puzzles. Through our interactions, I discovered a deep fascination for theory development and conceptual paper writing. His advice has profoundly shaped my thinking. I owe him a debt of gratitude.

- Third, I am truly grateful to have met and been able to collaborate with Tomi Laamanen, my co-advisor. His sharp perspective on my work helped me to spur my learning curve with just the right mix of carrots and sticks. Tomi set me on a number of inspiring projects that substantially helped me turn my sometimes abstract puzzles into empirical projects and, above all, to engage in a truly fascinating empirical setting. I express my gratitude for having taken me on this path.

- Fourth, several people have been decisive during the dissertation process. I wish to thank Pietro Beritelli, Thomas Bieger, Joep Cornelissen, Royston Greenwood,
Claus Jacobs, Christian Laesser, Tom Lawrence, Christoph Lechner, and Charles-Clemens Rüling.

For providing access to critical resources, my thanks the following institutions for their support:

- Fonds National de la Recherche Luxembourg, for its generous funding for my PhD studies.
- Through the collaboration with the KPMG AG Switzerland, I had the unique opportunity to learn about the contemporary challenges faced by the Swiss private banking industry. It further granted me access to expert industry knowledge, and to unique and fascinating data.
- Numerous managers from various private banking institutions generously offered their time to share their expert knowledge and insights, despite an often truly challenging environment.
- The University of St. Gallen has provided me with an exceptional research infrastructure.

For their continued encouragement and support, I thank my colleagues, friends, and family:

In particular, I thank the colleagues and friends whom I had the privilege to meet at St. Gallen: Michael Boppel, Stephanie Grubenmann, Xena Welch Guerra, Markus Kreutzer, Sven Kunisch, Tim Lehmann, Johanna Müller, Markus Schimmer, Torsten Schmid, and Carola Wolf. Thank you for the inspiring collaborations, the stimulating discussions, the great runs across the hills around St. Gallen, and for exploring Swiss traditions and – above all – the Swiss Alps.

I extend my gratitude to my long-standing friends Anne-Marie Henrion and Danielle Loewen. Although I have spent far too little time with them, I am very grateful for their understanding and the deep friendships we share.

Special thanks go to my wonderful family, who gave me endless love and continuous support. My family has triggered in me high curiosity, which made me start this dissertation journey.

My deepest gratitude goes to my ex-colleague and partner and now my husband, Florian Ueberbacher. It is a blessing that I met Florian in St. Gallen and that we have embarked on a beautiful joint life journey. I thank him for his unconditional love as a partner, for his continuous support, but also for the inspiring academic collaboration.

This dissertation is dedicated to Florian.

St. Gallen, August 2015
Emmanuelle Reuter
TABLE OF CONTENTS

A. ABSTRACT 1

B. INTRODUCTION TO DISSERTATION 1

C. ARTICLE I 37


   In preparation for submission to the Organization Science.

D. ARTICLE II 82

   Reuter, E. Cognitive Motivation and Strategic Flexibility Development: A Motivated Reasoning Perspective.

   In preparation for submission to Academy of Management Review.

E. ARTICLE III 123


   In preparation for submission to Academy of Management Journal.

F. DISCUSSION AND CONCLUSIONS 177

G. CURRICULUM VITAE 202
LIST OF FIGURES

Figure 1.B. Dissertation Framework ................................................................. 24

Figure 2.B. Summary of the Dissertation ....................................................... 28

Figure 3.C. Relationships between Attention Capacity and Attention Load Dynamics .... 47

Figure 4.C. Attention Capacity in Strategy Frame-Building: Attention Load Dynamics and Social Influences ................................................................. 50

Figure 5.D. Cognitive Motivation’s Role for Strategic Flexibility Development .......... 92

Figure 6.E. Data Structure ............................................................................. 146

Figure 7.E. Implication of Actors in Institutional Conflict Episodes .................... 153

Figure 8 E. Theoretical Model ....................................................................... 153

Figure 9.F. Dissertation Findings .................................................................... 179
LIST OF TABLES

Table 1.B. Overview of Attention Capacity Limitations and Related Constructs ............ 9
Table 2.B. Overview of Reasoning Routines and Related Constructs ......................... 12
Table 3.B. Overview of the Institutional Prescriptions and Related Constructs ............. 15
Table 4.C. Proposed Attention Load Effects of Social Influence Behaviors ............... 53
Table 5.E. Summary of Data Inventory ........................................................................ 134
Table 6.E. Event Timeline (Conflict Episode 1) ....................................................... 139
Table 7.E. Event Timeline (Conflict Episode 2) ....................................................... 142
Table 8.E. Representative Data for Theoretical Categories and Dimensions ............. 167
LIST OF ACRONYMS AND ABBREVIATIONS

AIE    Automated Information Exchange
Art.   Article
CEO    Chief Executive Officer
CH     Switzerland
CHF    Swiss Franc
C&NW   Chicago and North Western
DoJ    Department of Justice
Dr.    Doctor
e.g.   exempli gratia (for example)
et al. et alii (and others)
EU     European Union
FATCA  Foreign Accounts Tax Compliance Act
GNP    Gross National Product
ICT    Information and Communication Technology
i.e.   id est (this is)
MIB    Master in International Business
MOC    Managerial and Organizational Cognition
M.Sc.  Master of Science
OECD  Organization for Economic Co-operation and Development
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD-MC</td>
<td>OECD Model Convention</td>
</tr>
<tr>
<td>PhD</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>SMS</td>
<td>Strategic Management Society</td>
</tr>
<tr>
<td>QI</td>
<td>Qualified Intermediary</td>
</tr>
<tr>
<td>TMT</td>
<td>Top Management Team</td>
</tr>
<tr>
<td>U.S.</td>
<td>United States</td>
</tr>
<tr>
<td>$</td>
<td>US Dollar (currency)</td>
</tr>
<tr>
<td>WWII</td>
<td>World War II</td>
</tr>
</tbody>
</table>
HOW MUCH?
HOW?
WHAT?
A. ABSTRACT

**English.** Prior research uncovered that decision-makers face important cognitive constraints to strategically adapt to a discontinuous environment. With the purpose to further scholarly understanding of this managerial problem, this dissertation investigates how social influence mechanisms can support strategic decision-makers to overcome the cognitive constraints involved in strategic adaptation to discontinuous change. The dissertation has two overarching purposes: First, it seeks to develop theory on the dynamic processes through which decision-makers can overcome their cognitive constraints. Second, it develops theory on the particular roles of social influence mechanisms from the organization’s internal and external context for shaping these dynamics.

This dissertation proceeds as follows: Chapter A provides a summarized overview of existing literature and introduces the dissertation’s overarching framework, with related conceptual definitions upon which the subsequent theoretical arguments build. It motivates the dissertation’s overall research focus and three specific research questions that will be addressed within three single-standing articles. The first two articles (Chapters C and D) comprise conceptual studies. They offer conceptual accounts of how top managers vary in their use of attention capacity, and of reasoning routines by highlighting linkages between social influences and these cognitive processes. Chapter E comprises an empirical study on the deinstitutionalization of Swiss banking secrecy. This article elaborates on how social conflict processes force decision-makers to overcome institutionalized prescriptions in order to engage in institutional change.

Chapter F offers a discussion of the dissertation’s major implications – a detailed conceptual and empirical elaboration of the social influences dynamics that instigate decision-makers to overcome cognitive constraints and to foster strategic adaptation to discontinuities.


Kapitel F diskutiert die wichtigsten Beiträgen dieser Dissertation - eine detaillierte konzeptionelle und empirische Betrachtung wie verschiedene soziale Einfluss-Dynamiken strategische Entscheider dazu anregen, ihre kognitiven Einschränkungen zu überwinden und strategische Adaptierungen vorzunehmen.
B. INTRODUCTION TO DISSERTATION

Abstract
This chapter sets the stage for the dissertation’s core focus: the study of whether and how decision-makers can overcome the cognitive constraints involved in strategic adaptation to discontinuities, and the particular role of the organization’s social context therein. With a definition of the dissertation’s core concepts, I deduce three central research foci and related research questions from the dissertation’s broader conceptual aim and from a succinct overview of existing literature. I will then elaborate on and address these research foci and questions in subsequent chapters.
B.1. Strategic Adaptation to Discontinuous Change

Studying adaptation to discontinuous change has been an important research focus, not least within the organization theory, strategy, and psychology research traditions. Like humans in their evolutionary history, decision-makers in organizations are conceived as having to adapt to changing environments, in order to be able to make decisions that are timely and appropriate and that secure long-term continuity in their organizations (e.g. March, 1994). Following the observation that decision-makers often fail to adapt in the face of a disruption, adaptation to different types of discontinuities has become a central topic of scholarly research.

A decision-maker is defined here as an individual person who administers an organization. While in some situations, a decision-maker enjoys decision-making autonomy, in others, an organizational decision-making process distributes some of the autonomy across a small group of decision-makers (Simon, 1997 [1947]). In this dissertation, I consider decision-makers as the most elementary constitutive unit of analysis in organizations, whether organizations are corporations, social groups, or states (c.f. Hambrick & Mason, 1984; Ingram & Clay, 2000; March & Simon, 1993 [1958]; Simon, 1997 [1947]).

A discontinuous change represents a change in the external environment that has the potential to significantly impact the organization’s current or future strategy (c.f. Dutton, Fahey, & Narayanan, 1983) and often requires internal adaptation of the organization, in such a way that it departs from existing ways of organizing (Gilbert, 2005). Today’s organizations face discontinuities across domains of organizational activity, for instance in their political, economic, social, technological, environmental, or legal contexts (c.f. EEA, 2011; McCarthy, Lawrence, Wixted, & Gordon, 2010).

To illustrate, the private banking industry – in Switzerland in particular – faced a number of discontinuities that were tightly interrelated and with significant potential for transforming the industry. Following the financial crisis, the private banking industry has been severely been hit by an extensive regulatory wave, targeting risk control, customer protection, and transparency. In turn, this brought with it new areas for technological innovations to address increasing needs for data management and efficiency. As a result, for banks to succeed, their decision-makers were required to identify and implement opportunities for strategic adaptation¹.

This dissertation’s research focus has been significantly shaped by the insights gained from the Swiss private banking industry, both for its conceptual and empirical purposes. However, the challenges that this particular industry faced in recent years largely reflect the more general developments in the strategic environment of today’s organizations. According to the McKinsey Quarterly Insights, published by McKinsey Quarterly in September 2014, top decision-makers across industries are grappling with the possible impacts on their firm’s strategy of global discontinuities, such as big data and other technological innovations, growing geopolitical risk, demographic change, urbanization, poverty, fragmentation of governance, and sustainability (c.f. EEA, 2011). In the backdrop of these developments, decision-makers increasingly face difficulties to cope with the uncertainties and complexities associated with such discontinuities (Guillén & Ontiveros, 2012; Müller-Stewens & Müller, 2009). For this reason, it is a topic of general and timely relevance.

B.2. A Cognitive Perspective on Strategic Adaptation

From a cognitive perspective, adaptation has been conceptualized as a dynamic process in which decision-makers need to continuously align their alertness to and understanding of the discontinuities they are likely to face – that is, they need to maintain an effective cognition-environment equilibrium (Daft & Weick, 1984). From a cognitive perspective, strategic adaptation refers to decision-makers’ deployment of cognitive activities alone, and/or in interaction with others, in order to perceive, interpret, and form beliefs about discontinuities, which – in turn – shape the choices they make for securing the organization’s profitability or survival in a changed and changing environment (c.f. Dutton & Duncan, 1987; Plambeck & Weber, 2009). For instance, some scholars pointed to the role of the CEO and his team’s attention to a discontinuity – a regulatory or technological change - as an important predictor for a firm’s subsequent strategic adaptation to it (Cho & Hambrick, 2006; Eggers & Kaplan, 2009). Others have investigated the content and structure of decision-makers’ beliefs about the strategic environment and its links to a firm’s action programs. For instance, the level of comprehensiveness of their beliefs (Nadkarni & Narayanan, 2007) and the timeliness of belief change (Barr & Huff, 1997) are critical factors for successful
strategic adaptation to discontinuities. In turn, misperceiving or ignoring the significance of environmental change can lead to the demise of an entire organization or industry (e.g. Porac, Thomas, & Baden-Fuller, 2011; Tripsas & Gavetti, 2000). Decision-makers’ cognition, through the attention focus that it sets, the beliefs it develops, and the decisions and actions it implies, acts as a critical mediator between a discontinuous environment and organizational responses (Nadkarni & Barr, 2008).

B.3. Decision-makers’ Cognitive Constraints to Strategic Adaptation

However, decision-makers face important cognitive constraints to strategic adaptation. With this explicit or implicit assertion, prior research has uncovered a number of cognitive constraints to strategic adaptation, with cognitive constraints as the key explanation why decision-makers fail to strategically adapt to important discontinuities. In this dissertation, I define *cognitive constraints* as the set of effective limitations that decision-makers face at the level of their cognition when they strategically adapt to discontinuities. *Cognition* is addressed here in broad terms, as involving two sets of mental processes: One set is largely driven by the automatic mobilization of cognitive structures, while the other is largely driven by fairly conscious and effortful reflective processes that are capable of deliberation and justification. Both types of mental processes continuously interact with the emotional, motivational, cultural, and social processes that decision-makers live in organizations (c.f. DiMaggio, 1997; Kahneman, 2011; Simon, 1997 [1947]; Vaisey, 2009; Weick, 1995).

Most generally, in the Carnegie tradition, decision-makers have been conceptualized to be boundedly rational, that is, they face limitations in terms of the available knowledge and in terms of the available attention capacity (Simon, 1997 [1947]: 20). Beyond a purely cognitive (or mental) dimension, bounded rationality involves a set of other mechanisms, for instance in the realms of emotions and motivations, which interplay with cognition. In this respect, it has been suggested that, despite decision-makers’ intentions to be rational, to serve a useful purpose, they are only boundedly intentional. At times, actors may be motivated by momentary objectives, self-interest, and striving for power and goals that are discrepant with an organization’s goals (Simon, 1997 [1947]: 88).

Also neo-institutionalists predominantly conceive of boundedly rational decision-makers as actors who tend to pursue self-interest and tend to have limited knowledge and limited attention capacity (Ingram & Clay, 2000). As such, the assumption of boundedly rational decision-makers has diffused widely across
disciplines and theoretical perspectives, with a predominant emphasis on the nature and consequences of critical biases and the failures of decision-makers to adapt to their surrounding environment (Kahneman, Slovic, & Tversky, 1982).

A first dominant research emphasis has concentrated on decision-makers’ *attention capacity limitations* as a key cognitive constraint to strategic adaptation (*how much* of a discontinuity can decision-makers attend to?). Because the attention requirements of discontinuous environments frequently surpass the available attention capacity to handle these demands, a core emphasis of prior research has been on understanding the nature and implications of attention capacity limitations. *Attention capacity limitations* are generally defined as the effective limitations to the number of items and the duration that decision-makers can simultaneously attend to these items in perceptual (e.g. Lavie, 1995, 2005) and working memory (e.g. Miller, 1956; Peterson & Peterson, 1959). In other words, important limitations exist in terms of the amount of attention load induced by attentional activities that decision-makers they can effectively use attention capacity for at a given point in time (c.f. Cohen, March, & Olsen, 1972; Ocasio, 1997; Sutcliffe & Weick, 2008). Subsequently, scholars have emphasized the largely negative consequences for strategic adaptation to discontinuities of decision-makers’ limited attention capacity (e.g. Driver & Streufert, 1969; O'Reilly, 1980; Weick, 1970). *Decision-makers’ limited attention capacity (cognitive constraint 1) constitutes an important cognitive constraint for strategic adaptation to discontinuities.*

A second dominant research emphasis has concentrated on decision-makers’ use of *simplification* mechanisms as key cognitive constraint to strategic adaptation. Because decision-makers generally lack knowledge in discontinuous environments, and they face important attention capacity limitations, they tend to use simplification mechanisms as a remedy to these limitations. I refer to *simplification* here as the set of mechanisms through which decision-makers tend to satisfice on action courses that are ‘good enough’ and through which they avoid some of the complexities of the surrounding environment when taking critical decisions (c.f. Simon, 1997 [1947]: 119). Prior literature pointed to two important aspects of simplification: *how* decision-makers attend to the discontinuity and *what* decision-makers precisely attend to.

With respect to the first (*how?*) question, managerial cognition scholars, who are interested in decision-makers’ behaviors, pointed to decision-makers’ relatively automatic use of reasoning routines as a key cognitive constraint to strategic adaptation (*how do decision-makers attend to a discontinuity?*). In particular, decision-makers’ *reasoning routines* refer to the set of mental processes and motivations with
which decision-makers mobilize readily-available cognitive structures relatively automatically (c.f. Dutton, 1993; Kahneman, 2011; Vaisey, 2009; Weick, 1995). Cognitive structures are activated from memory and help structure the complexities of an environment relatively efficiently in terms of what has worked well in the past (e.g. Daft & Weick, 1984; Eisenhardt, Furr, & Bingham, 2010; Hambrick & Mason, 1984; Kahneman et al., 1982; Schwenk, 1984). This – in turn – shapes the understanding, timing, and ways organizational resources are deployed and the organizational goals that are being addressed (Dutton & Jackson, 1987). Despite the stated benefits for cognitive economy, however, scholars have found increasing empirical evidence for the negative implications of decision-makers’ use of largely automatic reasoning routines for strategic adaptation to discontinuities (e.g. Tripsas & Gavetti, 2000). In discontinuous environments, decision-makers are rather required to make real-time and flexible adjustments to the actual developments they face (c.f. Eisenhardt et al., 2010) and override the largely automatic use of reasoning routines (c.f. Stanovich, 2011). As such, decision-makers’ simplification mechanisms – specifically their reasoning routines (cognitive constraint 2) – constitute an important cognitive constraint for strategic adaptation to discontinuities.

With respect to the second (what?) question, cultural and institutional theorists emphasized decision-makers’ mobilization of cognitive structures that are derived from the cultural or institutional prescriptions of the context in which they are situated (what in a discontinuous environment do decision-makers attend to?). These relatively stable cultural or institutional prescriptions structure the complexities of a discontinuous environment. Institutional prescriptions refer to the set of socially constructed and shared guidelines in the larger institutional and cultural context, which decision-makers use for interpreting organizational reality (c.f. Berger & Luckmann, 1967; DiMaggio, 1997; Thornton, Ocasio, & Lounsbury, 2012; Zucker, 1977), and which motivate action by prioritizing some interests and alternatives more than others (c.f. Greenwood, Mia, Kodeih, Micelotta, & Lounsbury, 2011; Vaisey, 2009). However, discontinuous environments often give rise to conflicting institutional prescriptions, which create important tensions and challenges for decision-makers. On the one hand, the simplifying effects of institutional prescriptions maintain stability and continuity. On the other hand, they constrain decision-makers’ adaptation, which has important negative implications for an organization’s social legitimacy and resources (e.g. Greenwood et al., 2011). As such, decision-makers’ simplification mechanisms – specifically their institutional prescriptions (cognitive constraint 3) – constitute an important cognitive constraint for strategic adaptation to discontinuities.
In the following sub-chapters, I will elaborate on the three cognitive constraints: (1) attention capacity limitations (\textit{how much?}), (2) reasoning routines (\textit{how?}), and (3) institutional prescriptions (\textit{what?}), with a specific emphasis on their implications for strategic adaptation.

B.3.1. Cognitive Constraint 1: Attention Capacity Limitations

Concerning (1), decision-makers’ \textit{attention capacity limitations} are defined, as noted, as the effective limitations to the number of items and the durations that decision-makers can simultaneously attend in perceptual (e.g. Lavie, 1995, 2005) and working memory (e.g. Miller, 1956; Peterson & Peterson, 1959). In other words, important limitations exist in terms of the amount of attention load (\textit{how much?}) induced by attentional activities that decision-makers can effectively use attention capacity for at any given point in time (c.f. Cohen et al., 1972; Ocasio, 1997).

In organizational settings, decision-makers particularly face important capacity limitations to find “time, or other resources - to be comprehensive in their analyses or search for solutions” (Hambrick, Finkelstein, & Mooney, 2005: 478), to attend to “the range of consequences of their actions, how these consequences would be valued, and the scope of available alternatives” (Cohen et al., 1972; Ocasio, 1997: 187). In this respect, attention refers to “the noticing, encoding, interpreting, and focusing of time and effort by organizational decision-makers on both (a) issues: (…) problems, opportunities, and threats; and (b) answers: the available repertoire of action alternatives: proposals, routines, projects, programs, and procedures” (Ocasio, 1997: 189).

Since attention is necessary for performing activities such as communication, information processing, interpretation, attention capacity is a particularly acute limitation during any general type of cognition-related activity. In this respect, organization scholars have highlighted attention capacity as a severe constraint in a number of activities that underlie strategic adaptation to discontinuities and that are associated with a top-level executive’s job (Hambrick et al., 2005), such as the processing of information (e.g. Driver & Streufert, 1969; Miller, 1972; O'Reilly, 1980; Sutcliffe & Weick, 2008; Weick, 1995), the solving of complex organizational problems (e.g. Cohen et al., 1972; Walsh, 1995), and strategic decision-making (e.g. Eisenhardt & Zbaracki, 1992).

A common theme is that attention capacity limitations are particularly acute in settings that induce high attention load for a decision-maker. \textit{Attention load} is referred to the spending of time, effort, and energy on attention-related activities (c.f. Cohen et
al., 1972; Ocasio, 1997). In terms of antecedents, attention load is caused by decision-makers’ endeavors to engage with high complexity (e.g. Driver & Streufert, 1969), high time pressure (e.g. Schick, Gordon, & Haka, 1990), or ambiguity (e.g. Weick, 1995), owing to the attention load that these situations imply for a decision-maker.

When attention load surpasses the attentional requirements imposed by the surrounding environment (Cohen et al., 1972; Sutcliffe & Weick, 2008), it leads to a range of negative consequences for the decision-maker’s strategic adaptation. Attention overload impairs decision-makers’ interpretations and understandings of an environment (Driver & Streufert, 1969; Miller, 1972), their social interactions (Baron, 1994; Meier, 1963), and the general effectiveness with which they make decisions (Eisenhardt & Zbaracki, 1992). However, scholars found that when simplifying the attentional requirements imposed by the surrounding environment, decision-makers can escape some of the negative consequences that are associated with attention overload. In this respect, scholars advanced the role of individual (e.g. Snowball, 1980; Sutcliffe & Weick, 2008) and the collective (e.g. Cohen & Levinthal, 1990) accumulation of domain knowledge, as well as the according mobilization of reasoning routines (e.g. Eisenhardt et al., 2010; Gavetti, Levinthal, & Rivkin, 2005) as an important remedy for decision-makers’ attention capacity limitations.

The following Table 1.B. provides a brief overview of attention capacity limitations and related constructs, as advanced in prior literature. However, as the following two sections outline, despite being a remedy for attention capacity bottlenecks, decision-makers’ simplification mechanisms, such as reasoning routines and institutional prescriptions, have important negative implications for strategic adaptation to discontinuities. Next, I will provide an overview of research on the nature and impacts of decision-makers’ reasoning routines on strategic adaptation to discontinuities.
### Table 1.B. Overview of Attention Capacity Limitations and Related Constructs

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Discontinuity characteristics</th>
<th>Definitions</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attention capacity limitations</strong></td>
<td>Load experience</td>
<td>“The assumption of some limitation or ‘bottleneck’ in processing is crucial in the early and late selection approaches, as it is this limitation that is thought to produce the requirement for selection.”</td>
<td>Lavie, 1995: 451</td>
</tr>
<tr>
<td></td>
<td>Magnitude of requirements</td>
<td>The effective limitations to the number of items and the duration that decision-makers can simultaneously attend to these items in working memory</td>
<td>Miller, 1956; Peterson &amp; Peterson, 1959</td>
</tr>
<tr>
<td></td>
<td>Magnitude of requirements</td>
<td>“[L]imited attentional capability of humans – to the range of consequences of their actions, how these consequences would be valued, and the scope of available alternatives.”</td>
<td>Ocasio, 1997: 187</td>
</tr>
<tr>
<td></td>
<td>Magnitude of requirements</td>
<td>“Participants within an organization are constrained by the amount of time they can devote to the various things demanding attention. […] Attention is limited here to interrelations among four such streams [problems, solutions, participants, choice opportunities].”</td>
<td>Cohen et al., 1972: 2-5</td>
</tr>
<tr>
<td></td>
<td>Associated load experience</td>
<td>“Although load can become excessive as inputs increase, it also can become excessive when capacity is limited.”</td>
<td>Sutcliffe &amp; Weick, 2005: 58</td>
</tr>
<tr>
<td><strong>(Over)load experience in information processing</strong></td>
<td>Complexity, eucity, noxity of inputs</td>
<td>“Individuals […] respond in a curvilinear fashion to three components of input load: complexity of information, noxity (unpleasantness) and eucity (pleasantness).”</td>
<td>Driver &amp; Streufert, 1969: 272</td>
</tr>
<tr>
<td></td>
<td>Complexity of requirements</td>
<td>“…increases in the complexity of the information processor’s environment beyond an optimal point results in a lowering of the processor’s ability to make judgments.”</td>
<td>Miller, 1972: 31</td>
</tr>
<tr>
<td></td>
<td>Complexity of requirements</td>
<td>“The reduction of performance due to an overload is termed a selective attention deficit. […] It is because processing capacity is overloaded in numerous situations that a subset of the information arriving must be given special attention. Any selective-attention deficit, therefore, implies a corresponding capacity limitation.”</td>
<td>Schneider &amp; Shiffrin, 1977: 4</td>
</tr>
<tr>
<td></td>
<td>Magnitude of requirements</td>
<td>Induced by the limitations to the “processing capacity in comparison with the magnitude of the decision problems that organizations face.”</td>
<td>Simon, 1973: 270; c.f. Snowball, 1980: 323</td>
</tr>
<tr>
<td><strong>Job load</strong></td>
<td>Time pressure</td>
<td>“[T]he demands on an entity for information processing time exceed its supply of time.”</td>
<td>Schick et al., 1990: 315</td>
</tr>
<tr>
<td></td>
<td>Subjective experience of job difficulty</td>
<td>“…the degree to which a given executive experiences his or her job as difficult or challenging. […] the level of job demands depends, in part, on the degree to which the executive’s capabilities are appropriate for the situation.”</td>
<td>Hambrick et al., 2005: 474-475</td>
</tr>
</tbody>
</table>
B.3.2. Cognitive Constraint 2: Reasoning Routines

Concerning (2), decision-makers’ reasoning routines refer to the set of mental processes and motivations with which decision-makers mobilize readily-available cognitive structures relatively automatically (c.f. Dutton, 1993; Kahneman, 2011; Vaisey, 2009; Weick, 1995). These – in turn – shape the understandings, timing, and ways organizational resources are deployed and the organizational goals that are being addressed (Dutton & Jackson, 1987). At the individual decision-maker level, a cognitive structure constitutes an internally accepted statement, a conceptual tool to help visualize, articulate, organize, and assign meaning to a disparate set of events and is referred to in terms of mental models, causal maps (e.g. Barr & Huff, 1997), frames (e.g. Cornelissen & Werner, 2014), schemas (e.g. Dane, 2010; Nadkarni & Narayanan, 2007), conceptual categories (e.g. Dutton & Jackson, 1987), knowledge, or belief structures (e.g. Walsh, 1995). As such, reasoning routines constitute the linking pin through which decision-makers mobilize their experiential and socialized backgrounds when making strategic decisions for an organization.

On the one hand, decision-makers mobilize their personal, functional, and industry backgrounds (e.g. Hambrick & Mason, 1984) - their domain expertise from memory (e.g. Dane, 2010). On the other hand, decision-makers mobilize the socially constructed and socially shared cognitive structures, for instance, common cognitive frameworks (e.g. Bogner & Barr, 2000: 221) or industry recipes (Spender, 1989: 188) in a given social setting. Along these lines, organizational research has uncovered different reasoning routine types, such as categorization (e.g. Durand & Paolella, 2013; Dutton & Jackson, 1987), analogical reasoning (e.g. Cornelissen & Clarke, 2010; Gavetti et al., 2005), and heuristics (e.g. Eisenhardt et al., 2010). With reasoning routines, readily available cognitive structures, such as existing category schemes, causal logics, are activated. They help to simplify the situational, by focusing on some aspects while ignoring others.

Despite reasoning routines constituting a practical way for coping with all the demands that decision-makers face (Daft & Weick, 1984), their automatic use may turn into a liability. Reasoning routines tend to become highly taken-for-granted and obsolete in discontinuous environments. As a result, the automatic use of reasoning routines may lead to increasingly inaccurate and overly simplified pictures that over time reflect the existing cognitive structure more closely than the original environment (Duhaime & Schwenk, 1985; Dutton & Jackson, 1987). Decision-makers tend to become inflexible in their reasoning (Dane, 2010). This inflexibility is often referred to as cognitive inertia, as “the inability of strategists to revise their mental models of
competitive space sufficiently quickly to adapt successfully to the changing environment”. In particular, when decision-makers need to strategically adapt to discontinuities, they “may become overly dependent on the shared mental model that has come to prevail, to the extent that their perceptions of what it takes to compete effectively becomes out of step with the changing material conditions of the marketplace” (Hodgkinson, 1997: 922-923).

To illustrate, Porac, Thomas, and Baden-Fuller’s (1989) study of the Scottish knitwear industry illustrates how manufacturers, and infomediaries (e.g. industry analysts or media) routinely mobilized the “Hawick mind” when they reasoned about the industry’s competitors, or the relationships with suppliers and customers. However, over time, the industry participants became largely dependent on the reasoning routines, such that their perceptions of what it took to effectively compete became out of step with the discontinuities that the industry had known at that point in time. The study suggests that, as a result of this “inward” focus, Scottish textile employment dropped by more than 40%, followed by a decrease in sales by half between 1995 and 2005 (Porac et al., 2011).

This phenomenon has been extensively studied across various contexts: decision-makers’ definitions of competition (e.g. Hodgkinson, 1997; Porac et al., 1989; Reger & Huff, 1993), market positions (e.g. Greve, 1996, 1998), problems (e.g. Duhaime & Schwenk, 1985; Gary & Wood, 2011; Lyles & Mitroff, 1980), as well as in the context of decision-makers’ conceptualizations of a company’s resources, products, or business model (e.g. Benner & Tripsas, 2012; Prahalad & Bettis, 1986; Tripsas & Gavetti, 2000). Decision-makers’ reasoning routines during strategic adaptation has further been studied across a range of different discontinuities: in the technological, regulatory, competitive, and economic realms, etc.

In this respect, Table 2.B. provides an overview of the reasoning routine and related constructs, as advanced in prior managerial cognition literatures. While reasoning routines refer to the processes or behaviors how individual decision-makers mobilize a readily available cognitive structure (the how?), the next section concentrates on the content of the mobilized cognitive structure (the what?) – institutional prescriptions as a third source of cognitive constraint to strategic adaptation.
## Table 2.B. Overview of Reasoning Routines and Related Constructs

<table>
<thead>
<tr>
<th>Reasoning routines</th>
<th>Discontinuity type</th>
<th>Supporting definitions</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Categorization</strong></td>
<td>Strategic issues</td>
<td>“[Decision-makers] form cognitive categories based on their observations of the features or attributes of objects. Cognitive categories are comprised of objects with similar perceived attributes and reflect the structure of the objects in the environment […] Once an object is categorized, the cognitive representation built over time is an inaccurate, simplified picture that matches the category prototype more closely than did the original stimulus”</td>
<td>Dutton &amp; Jackson, 1987: 77-78</td>
</tr>
<tr>
<td><strong>Analogical reasoning</strong></td>
<td>Complex settings</td>
<td>“process of mapping from a source context of prior experience to the current, ‘target’ context is precisely what constitutes analogical reasoning”</td>
<td>Gavetti et al., 2005: 692; c.f. Gick and Holyoak, 1980</td>
</tr>
<tr>
<td><strong>Heuristic reasoning</strong></td>
<td>Dynamic settings</td>
<td>“Heuristics are rules of thumb that provide shortcuts in problem solving”</td>
<td>Eisenhardt et al., 2010: 1267; c.f. Tversky &amp; Kahneman, 1974</td>
</tr>
<tr>
<td><strong>Activation of beliefs</strong></td>
<td>Competition</td>
<td>“[B]eliefs about the identity of the firm, its competitors, suppliers and customers […] over time the mental models of competing strategists become similar thereby creating ‘group-level’ beliefs about the marketplace.”</td>
<td>Porac et al., 1989: 399-400</td>
</tr>
<tr>
<td></td>
<td>Technology</td>
<td>“[A] crucial challenge for organizations facing radical technological discontinuities is the ability to distinguish changes that require only the development of new technological capabilities from changes that also require the adoption of different strategic beliefs.”</td>
<td>Tripsas &amp; Gavetti, 2000: 1159</td>
</tr>
<tr>
<td></td>
<td>Technology</td>
<td>“[T]here is a reciprocal interaction between beliefs, artifacts, and routines that gives rise to two cyclical processes. One is a process of inversion at the micro level of individual cognition wherein evaluation routines designed to judge specific artifacts begin reinforcing researchers’ beliefs.”</td>
<td>Garud &amp; Rappa, 1994: 344</td>
</tr>
<tr>
<td><strong>Activation of causal logics</strong></td>
<td>Economic downturn</td>
<td>“Given cognitive limitations, mental maps will always be incomplete; inaccuracy may increase, however, as environments change […] Mental models that can no longer accommodate or explain occurrences in the environment must be altered and new understandings of the environment must be developed.”</td>
<td>Barr et al., 1992: 16-17</td>
</tr>
<tr>
<td></td>
<td>Regulation</td>
<td>“How a newly recognized event is incorporated into the strategic frame, in particular how it relates to the performance of the firm and to other events that impact performance, is more closely associated with variations in the timing of strategic response across firms than noticing the event. […] the old strategic frames, which are unlikely to hold concepts corresponding to a new environmental event, must change in quite specific ways before new action is initiated.”</td>
<td>Barr &amp; Huff, 1997: 361</td>
</tr>
</tbody>
</table>
B.3.3. Cognitive Constraint 3: Institutional Prescriptions

Concerning (3), decision-makers’ *institutional prescriptions* refer to the set of socially constructed and shared guidelines in the larger institutional and cultural context, from which decision-makers draw to interpret organizational reality (c.f. Berger & Luckmann, 1967; DiMaggio, 1997; Thornton et al., 2012; Zucker, 1977), and which motivate action by prioritizing some interests and alternatives more than others (c.f. Greenwood et al., 2011; Vaisey, 2009; Weber & Glynn, 2006). Prescriptions are institutionalized to the extent that they are widely shared, reproduced in day-to-day activities, and considered to be legitimate (DiMaggio, 1997).

For cognitive institutionalists, these guidelines largely constitute cognitive structures, in terms of deeply ingrained forms of cultural knowledge. They “direct[s] search for sources of stability and consistency in our beliefs and representations, […] make[s] some ideas or images more accessible than others” (DiMaggio, 1997: 267). These cognitive structures are referred to, for instance, as *institutions* (e.g. Barley & Tolbert, 1997), *institutional categories* and *typified understandings* (e.g. Berger & Luckmann, 1967; Zucker, 1977), *institutional logics* (e.g. Ansari, Wijen, & Gray, 2013; Thornton & Ocasio, 2008), *frames* (e.g. Cornelissen & Werner, 2014; Fiss & Hirsch, 2005; Goffman, 1974; Kennedy & Fiss, 2009; Meyer & Hoellerer, 2010), or *culturally available schemata* (e.g. DiMaggio, 1997).

Institutional prescriptions not only exist within individual decision-makers, but are also shared at a supra-individual level, since they are embedded in and carried by culturally loaded contexts, such as ideologies, and social movements. Even though they acknowledge that institutional prescriptions are enacted at the individual decision-maker level, institutionalists more generally move to more macro levels of analysis (Garud & Rappa, 1994). They tend to rather emphasize how institutional prescriptions persist with relative high stability at more macro levels of wider groups of decision-makers. In this respect, the institutionalization process describes how institutional prescriptions come to be socially constituted and shared at the level of fields of decision-makers (Berger & Luckmann, 1967), thereby “provid[ing] abstract scripts and rules for appropriate behaviors in particular social settings” (Cornelissen & Werner, 2014: 4). Most generally, institutional prescriptions not only constitute cognitive structures but also the set of motives and interests that guide behavior and action of actors in an institutional environment (c.f. Greenwood et al., 2011; Weber & Glynn, 2006).}

Institutional prescriptions then provide compelling explanations for the reasons why institutions tend to endure with relatively high stability, for the reasons why
Institutions come to resemble one another over time, and for the reasons why institutional arrangements also largely differ across cultural (national or industry-level) boundaries. Institutions comprise not only cognitive, but also normative and regulative aspects that provide meaning and stability (Scott, 2001). They govern behavior with respect to social expectations and moral obligations; such that conformity is ensured and deviant behavior is counteracted. Because institutional prescriptions grant the necessary legitimacy to operate in a given institutional environment, they tend to be widely diffused in that context, while at the same time they may differ from other institutional settings (Djelic & Sahlin-Andersson, 2006). Consequently, decision-makers have strong social motivations for conforming to institutional prescriptions, for instance by adopting the locally appropriate ways of behaving (Kennedy & Fiss, 2009). In this respect, a large body of research has concentrated on the diffusion of institutional prescriptions (e.g. Djelic & Quack, 2008; Fiss & Zajac, 2004), their negotiation, and their settlement (e.g. Meyer & Hoellerer, 2010).

As decision-makers need to adapt to discontinuities, for instance to competing prescriptions, the existing institutional prescriptions may rather act as an “enduring constraint” (Clemens & Cook, 1999: 442). Because their mobilization often is unaware, unspoken, and swift, institutional decision-makers may become overly dependent on the institutional prescriptions that have come to prevail, thereby preventing them from thinking of alternatives to existing arrangements (DiMaggio, 1997). Rather, decision-makers tend to face important tensions and challenges when faced with conflicting demands (Greenwood et al., 2011; Oliver, 1991). They tend to rather prioritize interests in line with existing guidelines, which motivates actors’ resistance (e.g. Lawrence, 2008), and inertia to change (e.g. Mahoney & Thelen, 2009; Seo & Creed, 2002; Zucker, 1977). Consequently, for institutional adaptation and change to occur, the deinstitutionalization of the existing prescriptions frequently becomes a necessary prerequisite (e.g. Ahmadjian & Robinson 2001; Davis, Diekmann & Tinsley, 1994; Djelic & Sahlin-Andersson, 2006; Maguire & Hardy, 2009; Oliver, 1992).

To summarize, Table 3.B. provides an overview of the institutional prescriptions and related constructs, as advanced in the neo-institutional theory literature.
<table>
<thead>
<tr>
<th>Institutional prescriptions</th>
<th>Discontinuity type</th>
<th>Supporting definitions</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional prescriptions</strong></td>
<td></td>
<td>“[T]he set of socially constructed and shared guidelines in the larger institutional and cultural context, which decision-makers use for interpreting organizational reality and which motivate action by prioritizing some interests and alternatives more than others.”</td>
<td>Own definition</td>
</tr>
<tr>
<td><strong>Institutions</strong></td>
<td></td>
<td>“[A]ctors create institutions through a history of negotiations that lead to 'shared typifications' or generalized expectations and interpretations of behaviour. The patterned relations and actions that emerge from this process gradually acquire the moral and ontological status of taken-for-granted facts which, in turn, shape future interactions and negotiations.”</td>
<td>Barley &amp; Tolbert, 1997: 94</td>
</tr>
<tr>
<td>Evidence of health hazards; Transnational governance</td>
<td>Institutions comprise three pillars – regulative, normative, and cognitive, that confer legitimacy and require conformity.</td>
<td>Scott, 2001 cf. Maguire &amp; Hardy, 2009; Djelic &amp; Sahlin-Andersson, 2006</td>
<td></td>
</tr>
<tr>
<td><strong>Institutional frames</strong></td>
<td>Shareholder value; Globalization; Total Quality Management</td>
<td>Framings are ‘‘schemata of interpretation’ that enable individuals ‘to locate, perceive, identify and label’ occurrences within their life space and the world at large.”</td>
<td>Goffman, 1974; cf. Fiss &amp; Hirsch, 2005; Kennedy &amp; Fiss, 2009; Meyer &amp; Hoellerer, 2010</td>
</tr>
<tr>
<td>Environmental change</td>
<td>“Typified’ understandings of the situation lead to institutionalization and cultural persistence through generational uniformity of cultural understandings, maintenance of these understandings, and resistance of these understandings to change.”</td>
<td>Zucker, 1977: 726; Berger &amp; Luckmann, 1969</td>
<td></td>
</tr>
<tr>
<td><strong>Institutional logics</strong></td>
<td>Climate change</td>
<td>“a set of rules and conventions—for deciding which problems get attended to, which solutions get considered and which solutions get linked to which situations</td>
<td>Thornton &amp; Ocasio, 2008: 114; c.f. Ansari et al., 2013</td>
</tr>
<tr>
<td><strong>Culturally available schemata</strong></td>
<td>n.a.</td>
<td>“This routine, everyday cognition relies heavily and uncritically upon culturally available schemata-knowledge structures that represent objects or events and provide default assumptions about their characteristics, relationships, and entailments under conditions of incomplete information.”</td>
<td>DiMaggio, 1997: 269</td>
</tr>
</tbody>
</table>
In summary, so far, this chapter has highlighted that, when attempting to adapt to a discontinuity, decision-makers face three important cognitive constraints – (1) attention capacity limitations, (2) reasoning routines, and (3) institutional prescriptions (see Tables 1.B., 2.B., and 3.B.). All three cognitive constraints have been found to have important negative implications, in that they limit decision-makers’ strategic adaptation to discontinuities. Next, I will identify the main shortcomings in existing literature, in order to motivate the dissertation’s research focus.
B.4. Shortcomings in Prior Literature

With its original emphasis on the nature and the largely negative implications of decision-makers’ cognitive constraints, prior research appears to have primarily advanced mechanisms that account for how decision-makers circumvent the cognitive constraints they face when strategically adapting to discontinuities. As developed in the previous sections, a core emphasis of prior research appears to have been on simplification mechanisms as a remedy to cognitive constraints. Much less research appears to have accounted, first, for the possibility that decision-makers actually overcome their cognitive constraints. Furthermore, although prior research has advanced the roles of the internal and external organization contexts, it has accounted less well for how the organization’s (institution’s) internal and external contexts can shape this process. To address these shortcomings in prior literature, this dissertation addresses the following overarching research questions:

**Dissertation Research Questions:**

Whether and how decision-makers overcome the cognitive constraints involved in strategic adaptation to discontinuities. What the influence of the organization’s social context is in shaping whether and how cognitive constraints can be overcome.

These considerations are of high practical and theoretical importance and of timely relevance for organizational research. First, they are of high practical relevance. In real-world settings, decision-makers frequently face not only one discontinuity at a time – the dominant focus of prior research, but discontinuities frequently arise together and tend to be highly interconnected (c.f. McCarthy et al., 2010). These so-called “complex” environments are particularly load-demanding for executives. As such, how top executives make successful strategic decisions in complex environments is of crucial importance for firm survival. Furthermore, discontinuous environments often are unfamiliar to decision-makers, so that decision-makers lack familiar experience (Camillus, 2008; Guillén & Ontiveros, 2012), with which they could make simplifications of the requirements. The question how decision-makers successfully adapt to discontinuities that are unfamiliar is of high practical relevance.

Second, they are of high theoretical importance. With the original research emphasis on the nature and largely negative implications of decision-makers’ cognitive constraints to strategic adaptation, existing research appears to have primarily emphasized simplification mechanisms as a remedy to cognitive constraints. Numerous studies, however, have shown that the mere reliance on simplification
mechanisms by top decision-makers can threaten the organization’s survival and lead
to the demise of entire industries (e.g. Porac et al., 2011; Tripsas & Gavetti, 2000).
Notwithstanding the importance of simplification mechanisms, their effectiveness in
discontinuous environments hinges upon whether decision-makers are able to also make “real-time adjustment of actions in response to actual events” (Eisenhardt et al.,
2010: 1265). Rather, than investigating into decision-makers’ attributes, such as
personality or experience backgrounds, as source of adaptability – as most prior
research did (c.f. Dane, 2010; Eisenhardt et al., 2010; Gavetti et al., 2005; Hambrick,
Geletkanycz, & Fredrickson, 1993; Nadkarni & Herrmann, 2010; Sutcliffe & Weick,
2008), this dissertation seeks to better understand whether cognitive constraints by
themselves can differentially unfold.

Third, this is a question of high timely relevance, in light of the generalized
recognition that the micro-level mechanisms through which adaptation and change
unfold are less well understood and theorized across organization theories. One of the
major reasons for this shortcoming may be that prior research may have been overly
pessimistic concerning the true potentials of a decision-maker’s mind. Such
pessimistic views may have come at the expense of a more fine-grained and nuanced
understanding of a decision-maker’s actual cognitive potentials.

Recent managerial cognition researchers advanced that the dominant emphasis
on ‘small-brained’ decision-makers, who cannot think outside of their cognitively
constrained and myopic box, have not accounted well for the creative and innovative
potentials of the managerial mind (Porac & Tschang, 2013). Similarly, researchers in
the broader Carnegie tradition have acknowledged that the assumption of cognitively
constrained decision-makers may have led to a conception of choice as primarily a
“semi-automatic” endeavor that is heavily informed by the past and cannot but
replicate the “status quo”. With this dominant emphasis, the very possibility of
“intelligence”, despite cognitive constraints, is poorly accounted for (Gavetti, Greve,
Levinthal, & Ocasio, 2012). Similarly, with the assumption of cognitively constrained
decision-makers, cultural and institutional perspectives cannot account well for the
origin and processes through which institutions come to adapt to changing conditions
(Ingram & Clay, 2000).

A few research perspectives have begun to address these shortcomings. While
some scholars advocate a view of a completely unbound or unconstrained managerial
mind (Porac & Tschang, 2013), others advance more middle ground perspectives (c.f.
Eisenhardt & Zbaracki, 1992). These scholars point to the possibility that, under some
circumstances, decision-makers’ cognitive constraints may be more malleable than typically assumed.

In this respect, some scholars propose that decision-makers balance reasoning routines with “flexibility-injecting” structures (Eisenhardt et al., 2010). Others point to the need to account for different types of mental processes (c.f. Gavetti et al., 2005; Helfat & Peteraf, 2014; Helfat & Peteraf, 2014), and the role of skill development and learning (c.f. Bartunek, Gordon, & Weathersby, 1983; Dunbar, Garud, & Raghuram, 1996). Also, cultural and institutional theorists promote views of culture as a “toolkit” that decision-makers differentially and strategically mobilize, depending on their cognitive abilities, motivations, and existing institutional prescriptions (c.f. Vaisey, 2009; Weber & Glynn, 2006). Relatedly, “institutional work” perspectives (c.f. Lawrence & Suddaby, 2006) shed light onto the different ways in which institutions are maintained, recreated, in order to better account for the possibility of creative, entrepreneurial accomplishments. Together, these insights provide important and justified grounds upon which the question whether and how decision-makers overcome their cognitive constraints can build to further our understanding of the ways in which decision-makers become more flexible and make real-time adjustments in their thinking and acting in the face of discontinuities.

Furthermore, decision-makers’ cognition is closely connected to the structural and social context, in which it operates in organizations (c.f. March & Simon, 1993 [1958]; Ocasio, 1997; Simon, 1997 [1947]; Weick, 1995). This suggests that organizations dispose of other vehicles than experience-based simplification for shaping decision-makers’ strategic adaptation. I seek to uncover the nature and the dynamics of the influences by the organization’s (institution’s) internal and external context for shaping whether and how decision-makers overcome the cognitive constraints involved in strategic adaptation to discontinuities.

Much may thus be gained from a more fine-grained and nuanced understanding of cognitive constraints, and of the ways in which they unfold in organizations, in general and in the context of strategic adaptation to discontinuities in particular. I will further refine and address this gap by grounded it in distinct streams of research in the following chapters.
B.5. Purpose of the Dissertation: Exploring Links between Cognitive Constraints and Influences of the Organizational Context

To develop explanations of whether and how decision-makers overcome the cognitive constraints involved in strategic adaptation to discontinuities, the purpose of this dissertation is to develop (1) process perspectives on the particular ways in which organizational decision-makers can overcome cognitive constraints, and to account for (2) the specific influences of an organization’s internal and external contexts on shaping whether and how decision-makers overcome the cognitive constraints involved in strategic adaptation to discontinuities.

Concerning (1), it is important to distinguish cognitive constraints as an attribute of individual decision-makers or of their cultural context from cognitive constraint as process (c.f. Simon, 1978). Simon (1955: 104-114) argued that there are no reasons to believe that rationality is unattainable and that simplification does apply all the time (as an “Apologetic” view would suggest, Stanovich, 2011). Rather, cognitive constraints may differentially unfold as a process (Simon, 1978). Processes connote the actual dynamics and practices through which cognitive constraints unfold and through which they can be overcome. This distinction is important, because accounting for processes and dynamics may help us understand variation in the specific ways that cognitive constraints can in some circumstances be overcome (c.f. Eisenhardt & Zbaracki, 1992).

Concerning (2), it is important to distinguish the influences of the internal or external organizational contexts for circumventing decision-makers’ cognitive constraints from the influences that shape how decision-makers’ cognitive constraints unfold. For the latter, a core function of the internal and external organizational context is to temper or even alleviate individual decision-makers’ cognitive constraints through influence structures and processes. Influences may stem from not only an organization’s internal but also from the external context. The influences from the organization are generally referred to as the “means that the organization employs to influence the decisions of individual members” (Simon, 1997 [1947]: 112). Specifically, influences from the organization’s internal or external contexts are “concerned with the physiology of the human body, [and] the laws of skill-training” (Simon, 1997 [1947]: 46-92). The influences from the organization’s internal or external organizational context thus connote a more fine-grained understanding of their impacts on the ways in which a decision-maker’s cognitive constraints unfold.
In this dissertation, I define *influences* as the means employed by an organization’s internal or external context to shape decision-makers’ cognitive constraints involved in strategic adaptation to discontinuities.

First, such influences can emanate from the specific ways in which the organization’s internal or external context is structured (Simon, 1997 [1947]: 52). In this respect, influences from the *structural context* incorporate influences from a decision-makers’ position in a larger organizational design or the team structure that organizes the relationships between decision-makers and other organizational members. It has been suggested that a decision-maker’s functional background affects the content and the motivation of what he or she sees (Dearborn & Simon, 1958), and the according strategic decisions. Others pointed to the influences of top management team characteristics such as functional background diversity on the timing and type of changes implemented by an organization (c.f. Cho & Hambrick, 2006; Hambrick, Cho, & Chen, 1996). Notwithstanding the tremendous insights of prior studies, with their primary emphasis on internal structural characteristics, this dissertation seeks to understand dynamics *how an organization’s internal structural context influences whether and how decision-makers overcome cognitive constraints*.

They also incorporate influences from decision-makers’ embeddedness within wider external networks that organize the relationships between decision-makers and their external formal and informal social ties. In this respect, it has been found that the heterogeneity of decision-makers’ external ties influence the timing with which they attend to discontinuities (Maula, Keil, & Zahra, 2012) and the strategic choices they make (Geletkanycz & Hambrick, 1997). While decision-makers have a number of external ties, external advisors play an important role among those (c.f. Haunschild, 1994; Kieser & Wellstein, 2008; McDonald, Khanna, & Westphal, 2008; Simon, 1997 [1947]). Advisors have the potential to shape not only what decision-makers attend to but also how they deal with information (c.f. Beckman & Haunschild, 2002: 98). With its primary emphasis on external structural characteristics, this dissertation seeks to uncover dynamics *how an organization’s external structural context influences whether and how decision-makers overcome cognitive constraints*.

Second, these influences can further emanate from the ways in which the interaction processes unfold between the decision-maker and other parties from within or outside an organization’s context (Simon, 1997 [1947]: 52). Social influence behaviors have been found to be a widespread part of everyday social life in organizations (c.f. Kipnis, Schmidt, & Wilkinson, 1980; Lawrence, 2008; Lawrence, Mauws, Dyck, & Kleysen, 2005; Lechner & Floyd, 2012; Yukl & Falbe, 1990). Social
influence behaviors also take place beyond organizational boundaries (c.f. Djelic & Quack, 2003; c.f. Haunschild, 1994; Westphal & Bednar, 2008).

In this vein, the Blackwell Encyclopedia of Sociology Online refers to social influence as the set of processes through which decision-makers’ “thoughts, feelings, attitudes or behaviors that result from the interaction with another person or group” are effectively altered. Since in this dissertation the unit of analysis is decision-makers, I will refer to them as the targets of the social influences from “senders” of the organizational context. Yet, a social influence may not only be “sent” by a person but also by norms and prescriptions (French & Raven, 1959). Since its inception, social influence research has uncovered a broad variety of mechanisms of direct or indirect social influences (Denrell, 2008), with a primary emphasis on senders’ persuasion, and targets’ attitude change, compliance to, and conformity with the senders’ message (c.f. Cialdini & Goldstein, 2004; Petty & Cacioppo, 1986). With the primary emphasis of prior research on the priming and activation of cognitive content, this dissertation seeks to explore dynamics and mechanisms (other than the priming and activation of cognitive content) how internal and external social influences shape the dynamics how decision-makers overcome cognitive constraints.

Exploring the links between decision-makers’ process of overcoming cognitive constraints and the influences from an organization’s internal or external context leads to developing three distinct research foci. As developed in detail in the following sections, each research focus addresses a specific form of influence from an organization’s internal and/or external context: social influences from the organization’s external context (Research Focus 1); structural influences from the organization’s internal and external context (Research Focus 2); social influences from the institution’s internal and external context (Research Focus 3).
**Research Focus 1 (how much?):** How social influences from an organization’s external context shape decision-makers’ use of limited attention capacity.

Research Focus 1 explores the links between decision-makers’ attention capacity limitations (cognitive constraint 1 – how much?) and the social influences from the organization’s external context.

**Research Focus 2 (how?):** How structural influences from an organization’s internal and external context shape decision-makers’ use of reasoning routines.

Research Focus 2 explores the relationships between decision-makers’ largely automatic use of reasoning routines (cognitive constraint 2 – how?) and the structural influences from an organization’s internal and external context.

**Research Focus 3 (what?):** How social influences from the organization’s external and internal context shape decision-makers’ use of institutional prescriptions.

Research Focus 3 explores the linkages between decision-makers’ use of institutional prescriptions (cognitive constraint 3 – what?) and the social influences from the institution’s internal and external social contexts.

On the basis of each research focus, I will derive three more specific theoretical gaps grounded in related literatures: a load theory perspective on attention capacity limitations grounded in the attention-based view, a motivated reasoning perspective on reasoning routines grounded in a Carnegie tradition of managerial cognition research, and a social conflict perspective on institutional prescriptions grounded in the institutional work and institutional conflict perspectives in neo-institutional theory. I will now briefly outline each of these three research foci and will address them in the subsequent chapters.

Figure 1.B. displays the concepts and relationships advanced in this dissertation with the dissertation focus on exploring linkages between cognitive constraints, strategic adaptation to discontinuities and influences by the organizational/institutional context. Even though they are stand-alone and independent research projects, the dissertation’s overall framework highlights how the dissertation’s three research foci fit within a wider research stream.
Figure 1.B. Dissertation Framework

Influence by the Organization’s/ Institution’s Internal and External Context

- Research Focus 1 (RF1): Social Influences by the Organization’s External Context
- Research Focus 2 (RF2): Structural Influences by the Organization’s Internal and External Context
- Research Focus 3 (RF3): Social Influence by the Institution’s Internal and External Context

Decision-makers’ Cognitive Constraints
- RF1: Limited Attention Capacity
- RF2: Reasoning Routines
- RF3: Institutional Prescriptions

Strategic Adaptation to Discontinuities
- RF1: Complexity of Decision-makers’ Strategic Frame
- RF2: Decision-Makers’ Strategic Flexibility Development
- RF3: Institutional Stability vs. Adaptation

Theoretical Perspectives

- Research Focus 1: Load Theory perspective grounded in the Attention-based view of organizational decision-making
- Research Focus 2: Motivated Reasoning Perspective grounded in managerial cognition research in the Carnegie tradition
- Research Focus 3: Conflict perspective grounded in the institutional work tradition of Neo-Institutional theory
B.5.1. Research Focus 1

Research Focus 1 (how much?) seeks to uncover *how social influences from an organization’s external context shape decision-makers’ uses of limited attention capacity*. It is addressed in ARTICLE I from a load theory perspective (c.f. Lavie, 1995, 2005; Paas, van Gog, & Sweller, 2010; van Merriënboer & Sweller, 2005) and is grounded in the attention-based view of organizational decision-making (Ocasio, 1997, 2011). It deductively builds theory on how the social influences that decision-makers receive from their external advisors shape the effectiveness with which decision-makers use and sometimes expand their available attention capacity to build a complex frame when they strategically adapt to discontinuities.

As previously developed, a decision-maker’s attention capacity is limited in terms of the amount of attention load that it can effectively bear. It is a particularly acute limitation for CEOs when they adapt to complex situations. In complex situations, they are required to build a complex strategic frame, which is particularly load-demanding (c.f. Nadkarni & Narayanan, 2007; Weick, 1995). ARTICLE I therefore focuses on how decision-makers generally and CEOs in particular vary in the effectiveness with which they use their available attention capacity for the attention load involved when they build a complex strategic frame. The article highlights that not only the *amount* but also the *type* of attention load experience – extrinsic or germane – matters for uncovering how attention capacity unfolds, as developed by educational and cognitive psychologists. Furthermore, external advisors (c.f. Haunschild, 1994; Kieser & Wellstein, 2008; McDonald et al., 2008; Simon, 1997 [1947]) influence decision-makers’ use of attention capacity by facilitating either a germane or an extrinsic attention load dynamic. Arguments are supported with illustrations of social influence behaviors that are frequently used in organizational settings (e.g. Jarzabkowski & Kaplan, 2014; Sonenshein, 2006; Yukl & Falbe, 1990).

**Title of ARTICLE I:** CEOs’ Attention Capacity in Strategy Frame-building: Attention Load Dynamics and Social Influences

**Co-authors:** Tomi Laamanen and Steven Floyd

**Article Status:** An empirical derivative of this article has been nominated for the Overall Best Paper Award at the Strategic Management Society in 2014.

Earlier drafts were accepted for presentation at the Attention Workshop at ETH Zürich, at the Annual Academy of Management Meeting in 2014, and at the Strategic Management Society Annual Meetings in 2013 and 2014.

**Target:** In preparation for submission to the *Organization Science*. 
B.5.2. Research Focus 2

Research Focus 2 (how?) seeks to uncover how structural influences from an organization’s internal and external context shape decision-makers’ uses of reasoning routines. It is addressed in ARTICLE II from a motivated reasoning perspective (c.f. Kruglanski & Webster, 1996; Stanovich & West, 2000) and is grounded in a Carnegie tradition of managerial cognition research (e.g. Barr, Stimpert, & Huff, 1992; Dane, 2010; Gavetti et al., 2005; Schwenk, 1984). It deductively builds theory, first, on the ways in which decision-makers can learn to overcome the automatic use of reasoning routines and, second, on the influences from an organization’s internal and external structural on moderating that process.

As previously developed, decision-makers’ uses of largely automatic reasoning routines is a constraint for strategic adaptation to discontinuities. It is a particularly acute limitation for CEOs when they are required to develop novel and broad beliefs about a discontinuity and its relationships to the firm’s strategy. CEOs are then required to reason reflectively. The core argument is that cognitive motivation can explain how CEOs overcome the automatic use of reasoning routines – automatic System I reasoning – and reason more reflectively – reflective System II reasoning. The conceptual model develops theory on the critical roles of cognitive motivation and its links to key influences from an organization’s internal and external context. It specifically highlights the moderating impacts of top management team diversity and of shareholder structure on cognitive motivation. Arguments are supported with illustrations from prior case studies, such as the Scottish knitwear industry’s failure to adapt to a changing competitive landscape (Porac et al., 1989), Polaroid’s failure to adapt to the digital wave (Tripsas & Gavetti, 2000), and variations in two U.S. railroad companies’ adaptations to a regulatory discontinuity (Barr et al., 1992).

**Title of ARTICLE II:** Cognitive Motivation and Strategic Flexibility Development: A Motivated Reasoning Perspective

**Article Status:** This article has been nominated as Top 10 Finalist for the SMS Best Conference PhD Paper Prize, and was awarded the Strategy Process Interest Group 2012 Best Conference Proposal Award.

Earlier versions of this article have been accepted for presentation at the Academy of Management Annual Conference in 2011, 2012, and 2013; and at the Strategic Management Society Annual Meeting in 2012.

**Target:** In preparation for submission to the *Academy of Management Review.*
B.5.3. Research Focus 3

Research Focus 3 (what?) seeks to uncover how social influences from an institution’s external and internal context shape decision-makers’ uses of institutional prescriptions. It is addressed in ARTICLE III and grounded in an institutional conflict (c.f. Fligstein & McAdam, 2012) and work perspective (c.f. Lawrence & Suddaby, 2006) on deinstitutionalization (Zietsma & Lawrence, 2010). It inductively builds theory on how incumbents’ fortification work, by mobilizing incumbent prescriptions, fosters the escalation of a social conflict with outside challengers, which eventually and unintendedly erodes the incumbent institutional model.

The mobilization of institutional prescriptions is integral to incumbents’ fortification work with the purpose to maintain the status quo and stability (c.f. Maguire & Hardy, 2009; Mahoney & Thelen, 2010) when they are faced with conflicting demands by outside challengers. However, with fortification work, incumbents risk fueling institutional conflict with outside challengers (Zietsma & Lawrence, 2010). ARTICLE III develops theory on the types of actors and of the intra- and inter-group dynamics involved in conflict escalation that lead up to the deinstitutionalization of an incumbent institution. The theory is developed based on an extensive empirical study of the transnational conflict between the U.S., the E.U., and the Swiss private banking industry over the adoption of a transnational standard (e.g. Automated Information Exchange standard). This standard stood in fundamental conflict with the incumbent institution (e.g. banking secrecy), and therefore provoked an institutional conflict. The core finding is that guardians’ fortification work has important unintended consequences. Specifically, it provided a context of safety for incumbents to circumvent conflicting demands and it legitimized radical challengers’ efforts at breaching the incumbent model. This eventually opened the stage for reformatory challengers to provoke the institution’s eventual erosion.

**Title of ARTICLE III:** An Institutional Conflict Perspective on the Deinstitutionalization Process: The Case of Swiss Banking Secrecy

**Co-authors:** Florian Ueberbacher

**Article Status:** Earlier versions of this article have been accepted for presentation within workshops on Neo-Institutional Theory at University of Zürich, University of St. Gallen 2014, at the PhD workshop at the 4th Alberta Institutions Conference in Banff (Canada) in 2015, and at the 11th Workshop on New Institutionalism in Organization Theory in Vienna (Austria) in 2015.

**Target:** In preparation for submission to the *Academy of Management Journal.*

Figure 2.B. summarizes the broader research gaps addressed by this dissertation, and its purposes, and highlights the main findings, with their implications.

Figure 2.B. Summary of the Dissertation

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**Main Shortcoming in Prior Research**

With the original research emphasis on the nature and largely negative implications of decision-makers’ cognitive constraints to strategic adaptation, existing research appears to have primarily emphasized simplification mechanisms as a remedy to cognitive constraints. Much less consideration has been given to the possibility that decision-makers overcome their cognitive constraints.

**Dissertation Research Questions**

- How can decision-makers successfully overcome the cognitive constraints involved in strategic adaptation to discontinuities?
- What are the nature and dynamics of the influences by the organization’s (institution’s) context on how decision-makers overcome the cognitive constraints involved in strategic adaptation to discontinuities?

**Research Purposes of the Dissertation**

- Toward process perspectives on how (organizational and institutional) decision-makers overcome cognitive constraints
- Exploring the nature and dynamics of the influences by the organization’s (whether a corporation or an institution) internal and external context on shaping the dynamics how decision-makers overcome the cognitive constraints involved in strategic adaptation to discontinuities

**Central Argument of the Dissertation**

I argue that, first, attention load, cognitive motivation and deinstitutionalization importantly shape whether and how decision-makers overcome the cognitive constraints involved in strategic adaptation to discontinuities. Second, the social and structural influences by the organization’s internal and external context importantly shape how the dynamics unfold.

**Research Foci in the Dissertation**

- How social influences by the organization’s external context shape decision-makers’ use of limited attention capacity
- How structural influences by the organization’s internal and external context shape decision-makers’ use of reasoning routines
- How social influences by the institution’s external and internal context shape decision-makers’ use of institutional prescriptions

**Implications for Theory from Dissertation Research**

- Decision-makers’ cognitive constraints to strategic adaptation may be more malleable than typically assumed: Attention load, cognitive motivation, and social conflict processes explain variation in the dynamics with which limited attention capacity, reasoning routines, institutional prescriptions unfold.
- Impact of social influences on cognitive constraints: Social influences – by external advisors, top management team, shareholder structure, radical and reformative challengers - shape how decision-makers overcome cognitive constraints.

**Main Findings from Dissertation**

- Overcoming attention capacity limitations (how much?) through germane attention load and facilitated by advisors’ social influences.
- The cognitive, affective, multimodal, and collaborative dimensions of external advisors’ social influence behaviors not only shape the content of what CEOs see, they also facilitate how and the effectiveness with which CEOs attend to the complexities of a discontinuous environment and build a complex strategic frame.
- Overcoming reasoning routines through strategic flexibility development and influenced by top management team and shareholder structures. Cognitive motivation predicts whether and how decision-makers learn to become more flexible in their reasoning, and is shaped by internal and external social influences – top management team diversity, shareholder activism.
- Overcoming institutional prescriptions through conflict escalation and the combined influences of intra- and inter-group dynamics. Guardians’ protection work (mobilizing existing institutional prescriptions) vis-à-vis reformative challengers bears unintended consequences with actors inside and outside the incumbent institution, which eventually leads to the institution’s erosion and abandonment.

**Implications for Practice from Dissertation Research**

- Identification of key strategic competences for Swiss private banks’ strategic adaptation to discontinuities. Making use of attention capacity, making use of reflective reasoning strategies, and accommodating conflicting demands in strategic change are key strategic competences for decision-makers when they adapt to discontinuities.

The dissertation proceeds, next, with Articles I (chapter C), II (chapter D), and III (chapter E). It ends with a Discussion and Conclusion (chapter F) section.
References


Introduction

(Eds.), *The Oxford Handbook of Organizational Decision Making*. Oxford: Oxford University Press.


C. ARTICLE I


In preparation for submission to the Organization Science.
CEOs’ Attention Capacity in Strategy Frame-Building: Attention Load Dynamics and Interpersonal Influences

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Acknowledgments:
We would like to thank Sven Kunisch, Günter Müller-Stewens, and Florian Ueberbacher for helpful comments. Earlier drafts have benefitted from comments at the “Attention workshop” at ETH Zürich; at the Annual Academy of Management meeting in 2014; at the Strategic Management Society Annual Meeting in 2013 and 2014. Emmanuelle Reuter benefitted from funding for doctoral studies granted by the FNR, Luxembourg.
Abstract

In complex settings, limited attention capacity often binds people’s thoughts, actions, and interactions. There are limits to the amount of attention load induced by attentional activities for which they can effectively use attention capacity at a given point in time. In this article, we explore how social influence behaviors at the CEO-advisor interface provide fertile ground for a reconsideration of the assumptions that surround attention capacity as a limitation. To this end, we synthesize cognitive and educational psychology insights on the constraining (extrinsic) and enabling (germane) types of attention load dynamics. We build our theory on the connections between a sender’s (advisor’s) influence behaviors and the effectiveness with which the target (CEO) uses attention capacity to build a strategy frame. We root our arguments in the claim that social influences shape the different types of attention load dynamics on which attention capacity is spent. Collectively, our arguments expand – and to some extent challenge – the theory on attention capacity limitations and open novel avenues into the study of attention load and social influence behaviors in organizations.

Keywords: attention capacity, attention load, frame of reference, strategy frame, social influence, CEO-advisor interface
C.1. Introduction

“Attention is the chief bottleneck in organizational activity, and the bottleneck becomes narrower and narrower as we move to the tops of organizations.”
(Simon, 1973: 270)

“CEOs and their colleagues in the C-suite […] so badly need uninterrupted time to synthesize information from many different sources, reflect on its implications for the organization, apply judgment, make trade-offs, and arrive at good decisions.”
(Dean & Webb, 2011)

Like any other human (Miller, 1956; Peterson & Peterson, 1959), decision-makers in organizations have a limited attention capacity stock, which refers to the limitations in the amount of attention load induced by attentional activities for which they can use attention capacity effectively for at a given point in time (c.f. Ocasio, 1997). In turn, attention load results from decision-makers’ spending of effort, time, and energy in attention-related activities (c.f. Cohen, March, & Olsen, 1972; Ocasio, 1997). With these insights, a long-standing research interest that continues to have widespread appeal across academic and non-academic literature (Dean & Webb, 2011; Hambrick, Finkelstein, & Mooney, 2005) is an examination of how CEOs cope with their attention capacity limitations.

Attention capacity limitations are particularly acute in complex situations (e.g. Driver & Streufert, 1969; Miller, 1972). Complex situations characterize environments that involve a great number of often highly diverse and frequently changing issues (McCarthy, Lawrence, Wixted, & Gordon, 2010), and thus they imply high amounts of attention load to attend to them. Yet, in order for him or her to make critical decisions for the organization, the CEO typically cannot eschew attending to and developing an understanding of complex situations (Daft & Weick, 1984; Hambrick & Mason, 1984; Nadkarni & Barr, 2008).

Prior research has emphasized that leveraging the simplifying effects of readily available or “given” frames of reference provides a mechanism to circumvent attention capacity bottlenecks and thus a remedy for attention load experience (c.f. Eisenhardt, Furr, & Bingham, 2010; March & Simon, 1993 [1958]; Schwenk, 1984; Walsh, 1995). Frames of reference are conceptual tools that guide individual perceptions, inferences, and actions in context (Cornelissen & Werner, 2014). By focusing on what has worked in the past, they simplify the complexities of the environment (Schwenk, 1984). On the one hand, scholars advanced the activation of frames of reference from memory (c.f. Cohen & Levinthal, 1990; Dutton & Jackson, 1987; March & Simon, 1993 [1958]; Simon, 1997 [1947]; Snowball, 1980; Sutcliffe & Weick, 2008). On the other hand, researchers put forward the priming of frames of reference from decision-makers’
social ties in and around the organization (c.f. Hambrick & Mason, 1984; March & Simon, 1993 [1958]; McDonald, Khanna, & Westphal, 2008; Simon, 1997 [1947]).

Notwithstanding the benefits that simplification has in providing some structure and efficiency, decision-makers in complex situations are required to have some capacity for real-time adjustment to the actual developments in the environment (Eisenhardt et al., 2010). In complex situations, leveraging the simplifying effects of readily available frames of reference tends to create an overly narrow field of vision. It may not do justice to the actual complexities of a strategic environment (Camillus, 2008; Guillén & Ontiveros, 2012), nor to the uniqueness of the firm’s action alternatives (McDonald & Westphal, 2003; Schwenk, 1984; Tripsas & Gavetti, 2000), but rather fosters imitation across firms (Haunschild, 1994).

In complex situations, frames that reflect the situational complexity constitute a success factor by increasing the range of possible and firm-specific action alternatives (c.f. Ashby, 1956; Bartunek, Gordon, & Weathersby, 1983; Nadkarni & Narayanan, 2007; Weick, 1995). A complex strategy frame is a particular type of frame that incorporates a high range of “cause-effect understandings about industry boundaries, competitive rules, and strategy-environment relationships” (Nadkarni & Narayanan, 2007: 689). Rather than simplifying the situational complexity as a remedy to attention capacity bottlenecks, successful decision-makers may effectively manage their attention capacity and attention load for developing a complex strategy frame.

From a theoretical viewpoint, this raises the critical though generally overlooked question: How do decision-makers spend their attention capacity on the attention load dynamics involved when they are developing a complex frame of reference in complex situations? This question is important, because it provides insight not into whether attention capacity is limited or circumvented but into how the available attention capacity is spent effectively. By synthesizing educational and cognitive psychology insights on germane (enabling) and extrinsic (constraining) attention load dynamics, the purpose of this article is twofold: first, to build theory around the effectiveness with which decision-makers use attention capacity for different types of attention load dynamics in frame-building; second, to uncover how the organization’s social context influences decision-makers’ attention capacity. We aim to accomplish the latter by building theory around what and how specific influence behaviors shape decision-makers’ attention capacity use. We specifically focus on social influences within the micro-interactions between the CEO (target) and his or her external advisor (sender). External advisors have been found to play an important role in influencing CEOs’ understandings of the issues faced in the environment (c.f.
Kieser & Wellstein, 2008; March & Simon, 1993 [1958]; McDonald et al., 2008; Simon, 1997 [1947]). They are particularly influential in complex situations (c.f. Haunschild, 1994).

We argue that by unleashing either a rather germane or an extrinsic attention load dynamic, the cognitive, affective, multimodal and collaborative dimensions of the sender’s (advisor’s) influence behaviors can explain the effectiveness with which the target (CEO) uses – and sometimes augments – the available attention capacity to build a complex frame of reference (strategy frame) in a complex environment.

Our theorizing creates opportunities to reconsider assumptions of attention as a fixed limitation, as well as new avenues that facilitate the study of relationships between social influence and attention dynamics in organizations. We wish to shed light on how CEOs’ attention capacity to develop a complex strategy frame (c.f. Bartunek et al., 1983) may unfold differentially as a result of germane and extrinsic load dynamics. It is perhaps as important to trigger the germane as it is to circumvent the extrinsic load dynamics for CEOs to build a complex frame. We further seek to extend the dominant emphasis of social influence research on structural considerations and cognitive content (e.g. Cialdini & Goldstein, 2004; Haunschild, 1994; McDonald et al., 2008; Petty, Wegener, & Fabrigar, 1997) by uncovering the effects of cognitive, affective, multimodal and collaborative influence behaviors on attention load dynamics (c.f. Denrell, 2008). We start with an overview of prior literatures concerned with attention capacity limitations. We then develop propositions on the linkages between attention load dynamics and social influence behaviors, which we have identified in prior studies (e.g. Jarzabkowski & Kaplan, 2014; Kaplan, 2008; Yukl & Falbe, 1990).

C.2. Limited Attention Capacity: Frames of Reference as Remedy to Attention Load

In this article, we define attention load as the spending of time, effort and energy on attention-related activities (c.f. Cohen et al., 1972; Ocasio, 1997). Attentional activities “encompass the noticing, encoding, interpreting, and focusing of time and effort by organizational decision-makers on both (a) issues: (...) problems, opportunities, and threats; and (b) answers: the available repertoire of action alternatives: proposals, routines, projects, programs, and procedures.” (Ocasio, 1997: 189). These attentional activities, and the attention load that they induce, underlie a whole range of more general cognitive activities, such as information processing, interpretation, and sensemaking (c.f. Miller, 1972; O'Reilly, 1980; Schick, Gordon, & Haka, 1990;
Sutcliffe & Weick, 2008; Weick, 1970). Therefore, decision-makers’ attention load is of central concern for those perspectives that see decision-makers’ attention to and understanding of the environment as a prerequisite for choices and actions that are consequential for the organization (c.f. Cohen et al., 1972; Daft & Weick, 1984; Hambrick & Mason, 1984; Ocasio, 1997, 2011; Simon, 1997 [1947]).

C.2.1. Limited Attention Capacity and Amount of Attention Load Experience

Attention load experience is a challenge for decision-makers, because their attention capacity to deal with it is limited (for related reviews see: Edmunds & Morris, 2000; Eppler & Mengis, 2004). Attention capacity (perceptual and working memory) is generally referred to as a limitation in terms of available resources (Miller, 1956, 1994), and duration (Peterson & Peterson, 1959) for attentional activity. It means that people can selectively attend to seven – plus or minus two – cues in their mind for roughly 20 seconds and even less when these cues interact with each other. It is one of the main reasons for decision-makers’ bounded rationality (Simon, 1997 [1947]).

Prior research primarily emphasized that the amount of attention load constrains the available attention capacity. It suggested that the amount of attention load increases with “the quantity of information impinging upon the processing organism per unit of time” (Snowball, 1980: 323), as well as with the quality of the demands encountered in a cognitive task (e.g. Champoux, 1992; Ganster, 2005; Hambrick et al., 2005; Janssen, 2001; Xie & Johns, 1995). For example, Weick (1995: 87) suggests that attention load stems from “a complex mixture of the quantity, ambiguity, and variety of information that people are forced to process.” Attention overload has therefore been referred to as the state where the amount of attention load surpasses the available attention capacity (e.g. Sutcliffe & Weick, 2008; Weick, 1970).

C.2.2. Frames of Reference as Remedy to Attention Load Experience

In turn, prior research advanced leveraging the simplifying effects of “given” or readily available frames of reference as a mechanism to circumvent attention capacity bottlenecks (March & Simon, 1993 [1958]; Schwenk, 1984; Walsh, 1995). Because frames of reference channel attentional activity on some aspects while ignoring others, they act as a practical remedy for individual decision-makers’ attention load experience (c.f. Ocasio, 1997; Simon, 1997 [1947]). Frames of reference, including schemas (Dane, 2010; Nadkarni & Narayanan, 2007), categories (Dutton & Jackson, 1987), and cognitive representations (Nadkarni & Barr, 2008), constitute conceptual tools that help perceive, visualize, articulate, organize and assign meaning to a given situation (Cornelissen & Werner, 2014; March & Simon, 1993 [1958]; Walsh, 1995).
On the one hand, prior research has highlighted the largely automatic activation of readily available frames of reference from memory (c.f. Cornelissen & Werner, 2014; Dane, 2010; Dutton & Jackson, 1987; Kahneman, 2011) as a simplifying mechanism. Activation is the mechanism through which information is retrieved from memory by means of associative or semantic networks in the decision-maker’s brain. In this respect, scholars emphasized the role of domain expertise to simplify situational requirements and as a remedy to attention load (e.g. Eisenhardt et al., 2010; Gavetti, Levinthal, & Rivkin, 2005; Schwenk, 1984; Snowball, 1980; Sutcliffe & Weick, 2008). Others highlighted the role of collective team (e.g. Hambrick & Mason, 1984) or organizational memory (e.g. Cohen & Levinthal, 1990).

On the other hand, prior research highlighted the largely automatic priming with readily available frames of reference through social influences (c.f. Cornelissen & Werner, 2014; Kahneman, 2011). Priming is often referred to as the mechanism through which exposure to a person (sender) influences the decision-maker’s (target’s) adoption of or compliance with an available frame of reference, because it activates associative or semantic networks in the decision-maker’s brain (e.g. Cornelissen & Werner, 2014; Hodgkinson, Bown, Maule, Glaister, & Pearman, 1999). Social influence literatures have extensively elaborated on the nature and effectiveness of senders’ priming influence behaviors, as well as on the conditions under which targets adopt or comply with a primed frame (see for reviews: Cialdini & Goldstein, 2004).

The organizational literature also emphasizes priming effects (c.f. Kipnis, Schmidt, & Wilkinson, 1980; Yukl & Falbe, 1990). Social influences constitute a vehicle through which particular frames of reference are activated and mobilized both inside (Kaplan, 2008) and outside the organization. For example, priming takes place within top management teams (e.g. Hambrick, Cho, & Chen, 1996), or between decision-makers and external partners (e.g. Beckman & Haunschild, 2002; Haunschild, 1994; McDonald & Westphal, 2003). This line of research identified the negative consequences of priming. It found that through priming by similar social ties, decision-makers tend to get reassurance in their existing frames at the expense of attending to the situation’s uniqueness (McDonald et al., 2008).

Notwithstanding the benefits of their simplifying effects, however, readily available frames of reference are often an inaccurate and overly simplified representation of the situation that matches the prototype more closely than the original environment (Dutton & Jackson, 1987: 77-78). Readily available frames of reference often lack consideration of alternative scenarios (e.g. Schwenk, 1984; Tripsas & Gavetti, 2000), or of the distinctiveness of the situation or the firm
These empirical insights corroborate that the activation of or priming with readily available frames of reference is often one candidate explanation of imitation across firms and of companies’ failure to adapt successfully.

Instead of conceiving of available frames of reference as a simplifying mechanism only, a first purpose of this article is to uncover whether and how decision-makers succeed in making better use of the available attention capacity to build their own frame of reference effectively. We argue that much may be gained from taking into consideration not whether attention capacity is limited or can be circumvented, but how the available attention capacity is spent on the attention load dynamics involved in frame-building. From such a dynamic attention load perspective, decision-makers may vary in the effectiveness with which they use the available attention capacity stock for the attention load dynamics involved in building a frame that reflects the situational complexity (c.f. Ashby, 1956; Bartunek et al., 1983; Nadkarni & Narayanan, 2007; Weick, 1995).

In this paper, frame-building constitutes a process during which decision-makers spend their available attention capacity on attentional activities (and the associated attention load) to increase their frame’s level of complexity. The level of frame complexity is defined as the extent to which the frame reflects the breadth or variety of issue, action alternative concepts embedded in complex situations (differentiation) and the interconnectedness between these concepts (integration) (Nadkarni & Narayanan, 2007).

Because developing a complex frame involves a high level of ambiguity (Weick, 1995), organizational decision-makers (targets) are particularly receptive to senders’ social influences (Pfeffer, 1981). Yet, the dominant emphasis of prior research on structural characteristics of decision-makers’ social ties may come at the expense of a more fine-grained understanding of the mechanisms through which social influences affect targets. Simplification may then consist only of a subset of the full range of social influence effects. It is likewise possible that social influences shape how the target uses his or her attention capacity. Instead of conceiving of social influences only in their simplification role, a second purpose of this article is thus to uncover what and how the social influences by the organization’s context shape decision-makers’ use of attention capacity for the attention load dynamics involved when they build their own frame of reference.

This possibility follows from three core insights. First, recent research has uncovered the role of social influence in shaping the target’s search processes (c.f.
Denrell, 2008). Second, educational psychology research highlights the role of instructional influences that increase (or decrease) the range of actors’ attentional operations under influence compared with what they could achieve alone (Paas, van Gog, & Sweller, 2010; Vygotsky, 1978). Third, the definition of social influence adopted in this article and advanced by the *Blackwell Encyclopedia of Sociology Online (published online)* refers to social influence as the set of processes through which targets’ “thoughts, feelings, attitudes or behaviors that result from the interaction with another person or group [sender(s)]” are effectively altered. The definition suggests that in terms of effects, social influences may not only affect specific cognitive content but also targets’ affective states and behaviors.

Furthermore, with regard to social influence motives, social influence connotes a supporting motive that helps overcome some of the ambiguities of complex situations (Lawrence, Mauws, Dyck, & Kleysen, 2005; March & Simon, 1993 [1958]). Social influence also connotes a political dimension, in terms of senders’ “intentional acts of influence to enhance or protect the self-interest of individuals or groups” (Allen, Madison, Porter, Renwick, & Mayes, 1979: 77; French & Raven, 1959; Lawrence et al., 2005). As a result of senders’ influence behaviors, the target’s attention capacity to build a complex frame may be affected by either creating greater coupling or decoupling with the situational complexity.

**C.3. Attention Load and Social Influences for Frame-Building**

To establish an approach that would better account for how decision-makers use the available attention capacity effectively to develop a complex frame of reference in interaction with their social context, we draw on recent educational and cognitive psychology insights. In order to advance a *dynamic attention load perspective*, we synthesize educational and cognitive psychology insights (which we reference here as “load theory”) on load dynamics (e.g. Choi, van Merrienboër, & Paas, 2014; Lavie, 1995; Paas et al., 2010; van Merriënboer & Sweller, 2005). As is the purpose with load theorists, our purpose is to uncover and explain the types of load dynamics that shape the building of a complex frame. As mentioned previously, attention load in the organizational context unfolds both in perception and in actual cognitive engagement (c.f. Ocasio, 2011).

Such an attention load perspective takes into account that attention is not only a solitary activity of individual decision-makers. Instead, decision-makers’ attention is socially (Ocasio, 1997), affectively and modally constituted and distributed. In this respect, load theorists examine the effects of instructional influences, with their
cognitive, affective, multimodal and collaborative dimensions, on actors’ load
dynamics when the latter develop frames of reference (Choi et al., 2014; Paas et al.,
2010). The influence of the natural context, however, remains less well understood in
load theory (Janssen, Kirschner, Erkens, Kirschner, & Paas, 2010).

In the organizational context, the “instructor” analogy may require a more
thoughtful mapping. It has been suggested that a core function of the organizational
context is to temper individual decision-makers’ attention bottlenecks through
influence structures and processes (March & Simon, 1993 [1958]: 54; Simon, 1997
[1947]). Because social influence behaviors are widespread and part of everyday social
life in organizations (c.f. Floyd & Lane, 2000; Lawrence et al., 2005; March & Simon,
1993 [1958]; Park, Westphal, & Stern, 2011; Simon, 1997 [1947]; Yukl & Falbe,
1990), we focus on the effects that social influences have on decision-makers’ use of
the available attention capacity for attention load.

Specifically, load theory advances that actors vary in how effectively they use
the available attention capacity stock to attend to the complexities that are intrinsic to
the situation and need to be understood. Actors can engage in either a germane or an
extrinsic attention load dynamic. Figure 3.C. graphically illustrates the relationships
between attention capacity, the extrinsic and germane attention load dynamics.

Figure 3.C. Relationships between Attention Capacity and Attention Load
Dynamics

A germane attention load dynamic refers to the actual time, energy, and effort
devoted to attentional activities that pertain (or are intrinsic) to the complex nature of
the situation. Hambrick (2005) highlighted that decision-makers in an organizational
setting need to find “time, attention and other resources to be comprehensive in their
analyses and search for solutions.” This process involves operations such as attending
to the specificities of the local situation, to diverse problem aspects, to a specific
problem sub-aspect, and simulating alternative developments. All of these operations
are directly relevant to the perception of issues and the formation of a frame that
reflects the situational complexity.
An *extrinsic attention load dynamic* refers to the actual time, energy, and effort devoted to attentional activities that do not pertain (or are not intrinsic) to the complex nature of the situation itself (Sweller, 2010; van Merriënboer & Sweller, 2005). Educational psychologists highlighted distractions such as time-dependent noise in the environment, the unnecessary assembling of problem sub-aspects, coordination of the team members, etc., as causes for extrinsic load. Some scholars have also pointed out that that top decision-makers in an organizational setting face extraneous demands outside the firm’s core strategy problems (Hambrick et al., 2005). March and Simon (1993 [1958]) evoke the lack of clarity in an influence and the consequent pathology for the decision-makers’ adaptiveness. These attentional activities are not directly relevant to the perception of issues and the formation of a frame of the situation at hand.

Both kinds of attention load dynamics compete for the available attention capacity stock, so that the attentional resources spent on one dynamic crowd out available attention capacity for the other one (e.g. Paas et al., 2010; van Merriënboer & Sweller, 2005). Furthermore, the theory suggests that the available attention capacity can, under some circumstances, be expanded through germane load engagement (e.g. Choi et al., 2014; Fredrickson, 2001; Kirschner, Paas, & Kirschner, 2009).

The attention load perspective advanced next accounts for the distinct attention load effects of frequently employed social influence behaviors in organizations, along with their cognitive, affective, multimodal and collaborative dimensions. We observe that by taking into account targets’ attention load dynamics and the ways in which they are influenced by senders’ social influence behaviors, it is possible to have a better understanding of the *effectiveness* with which decision-makers use and sometimes augment their attention capacity when building a complex frame.

**C.4. CEOs’ Use of Attention Capacity for Building a Complex Strategy Frame: Social Influences and Attention Load Dynamics**

In this section, we draw on load theory for insights into attention load dynamics. In so doing, we will be able to build our theory on the particular ways in which senders’ social influence behaviors are likely to shape targets’ use of attention capacity for the attention load dynamics involved in complex frame-building. In organizations, the CEO’s strategy frame is of critical importance (Hambrick & Mason, 1984). It reflects his or her view of strategic issues and possible linkages to concrete action programs (e.g. Nadkarni & Barr, 2008). It is also binding to a course of action (e.g. Benner & Tripsas, 2012). A CEO’s frame-building forms an integral part of his or her day-to-day
work (c.f. Hambrick et al., 2005) and underlies a range of more general strategy processes in organizations, such as strategic decision-making, agenda-setting and calendar-driven planning processes.

We focus on a particular type of interface in which social influence behaviors are particularly influential in shaping the CEO’s endeavors for building a strategy frame: the CEO-advisor interface. This interface characterizes episodes of one-on-one interactions between the CEO and his or her external advisor on frame-related matters. Advisors may be in a good position to contribute to the CEO’s frame-building by bringing in outside viewpoints (McDonald et al., 2008; McDonald & Westphal, 2003). Importantly, advisors also shape how the CEO (target) attends to information (c.f. Beckman & Haunschild, 2002: 98) by creating either greater coupling or decoupling between the target’s frame and the situational complexity. Here, advisors are external, informal or formal social contacts (senders), such as hired consultants, attorneys, business association members (Haunschild, 1994; McDonald & Westphal, 2003; Whittington, 2006), colleagues at other companies (McDonald et al., 2008), or mentors. Advisors are particularly influential when they have authority, and provide information, and training (Simon, 1997 [1947]: 90).

Like other actors (Kaplan, 2008), advisors also pursue self-interested motives (Kieser & Wellstein, 2008) and seek to gain compliance with their preferred viewpoint. Influences can be motivated by interests that may be at odds with those of the decision-maker (Simon, 1997 [1947]). Furthermore, with influences that are ill-structured or motivated by goals that do not align with those of the company, they can create pathologies in targets (Denrell, 2008; March & Simon, 1993 [1958]: 54). As such, the influences that CEOs (targets) experience within one-on-one interactions with their advisor (sender) may significantly vary in the extent to which they unleash a germane or an extrinsic attention load dynamic.

Attention load may not be the only factor that shapes the complexity of CEOs’ strategy frames, and social influence behaviors may not be the only factor that shapes attention load dynamics. The proposed framework (see Figure 4.C.), however, is designed to spotlight the specific contribution of the attention load dynamics, and their linkages to key social influence behaviors in the context of the CEO-advisor interface. Furthermore, and consistent with the broader theoretical goal, this framework uncovers how social influence behaviors can enable or constrain the target. The next section will start with the baseline proposition. We will subsequently elaborate on the moderating effects on attention load dynamics of cognitive, affective, multimodal and collaborative influence behaviors that are commonly used in organizational settings.
Specifically, these social influence behaviors are likely to play an important role in shaping how decision-makers spend their attention capacity in frame-building. **Figure 4.C.** depicts the key proposed relationships.

**Figure 4.C. Attention Capacity in Strategy Frame-Building: Attention Load Dynamics and Social Influences**

### C.4.1. Complex Frame-Building and Attention Load Dynamics

From the perspective that decision-makers need to attend to the environment, in order to be able to act on it and make strategic choices (c.f. Daft & Weick, 1984; Hambrick & Mason, 1984; Nadkarni & Barr, 2008), complex environments require decision-makers to build complex frames (Ashby, 1956; Weick, 1995). In specific, CEOs’ frame complexity allows them to respond to more and more varied stimuli and to implement strategic changes accordingly. Therefore, it benefits firm performance (Eisenhardt et al., 2010; Nadkarni & Narayanan, 2007). Furthermore, complex frames allow decision-makers to be proactive in the choices they make rather than rationalizing actions after the fact (Daft & Weick, 1984; Nadkarni & Barr, 2008).

Characteristically, *situational complexity* involves a large number of issues and action alternatives that may be tightly interconnected, stem from very different domains of an organization’s task environment (e.g. regulatory, technological, demand, market, competition), differ in relative importance, and may change frequently (e.g. Campbell, 1988; Driver & Streufert, 1969; Eisenhardt et al., 2010; McCarthy et al., 2010; Miller, 1972). For instance, Miller (1972) specifically refers to financial reporting as a complex situation, in that it involves multi-dimensional information or concepts that require substantial integration of thought.
However, attending to the attributes associated with complex situations is particularly load-demanding (Hambrick et al., 2005) and decision-makers perceive them as difficult (Driver & Streufert, 1969; March & Simon, 1993 [1958]; Miller, 1972). To build complex frames, decision-makers need to spend attention capacity in order to attend comprehensively to “the range of consequences of their actions, how these consequences would be valued, and the scope of available alternatives” (Ocasio, 1997: 187). Because developing complex frames involves time and resources, this development is necessarily limited by the available attention capacity.

On the one hand, when the level of situational complexity surpasses the available attention capacity to deal with it, the resulting attention overload experience will likely constrain the decision-maker’s level of frame complexity. A state of attention overload unleashes a range of negative effects for the decision-maker. It significantly constrains cognitive functioning, and effective decision-making (e.g. Chewning & Harrell, 1990; Driver & Streufert, 1969; Hambrick et al., 2005; Herbig & Kramer, 1994; O'Reilly, 1980), or even job performance (Xie & Johns, 1995). Excessive attention load levels impair not only individual decision-makers’ motivation (Champoux, 1992; Gardner & Cummings, 1988; Janssen, 2001) to engage in attentional activity but also their social interactions with others (Baron, 1994), which at times puts effective organizational functioning severely at risk (Meier, 1963; Rudolph & Repenning, 2002). However, this negative side may consist only of a subset of the full range of attention load dynamics.

On the other hand, when the level of situational complexity lies within the range of the available attention capacity, the resulting attention load experience will likely enable the decision-maker’s level of complexity. Attention load also has a positive effect. It activates the motivation (Gardner & Cummings, 1988; Xie & Johns, 1995) to engage attentively with the situation. Attention load is also a signpost that time is being spent, and cognitive effort and energy exerted (e.g. Coles, 1974; Driver & Streufert, 1969; Miller, 1972). Some attention load even appears to be necessary for decision-makers to notice important subtleties (e.g. Weick & Sutcliffe, 2006), and the quality of the issues they face (Rerup, 2009).

Taken together, the following baseline proposition suggests that the relationship between situational complexity and the level of complexity of decision-makers’ (CEOs’) frame is inverted U-shaped.

Proposition 1: For a given attention capacity stock, the relationship between the level of situational complexity and the level of complexity of the decision-maker’s frame is likely to be inverted U-shaped.
In the theorizing that follows, we submit that the proposed relationship in Proposition 1 is moderated by the type of influence behavior that the decision-maker (CEO/target) experiences from his or her interactions with a sender (advisor).

C.4.2. Impacts of the Sender’s Influences on the Target’s Attention Load Dynamics

In this section, we theorize that, during episodes of interaction on frame-related matters, the type of influence behaviors that senders use is likely to moderate the relationship between the level of situational complexity and the level of complexity of the target’s frame. For example, such episodes of one-on-one interaction can take place in meetings, strategy workshops, or phone calls, and over extended or short-term periods of time. During these episodes of influence (c.f. Lawrence et al., 2005), the advisor’s influence behavior will likely unleash in the target either a germane or an extrinsic attention load dynamic.

While the range of possible influence behaviors could be endless in principle, the purpose here is less to take into consideration all possible influence behaviors. It is instead to showcase the effects of the cognitive, affective, multimodal, and collaborative dimensions of influence behaviors more generally and through related attention load effects. We illustrate each of the influence dimensions with behaviors that have been empirically uncovered in organizational settings on repeated occasions (e.g. Jarzabkowski & Kaplan, 2014; Park et al., 2011; Yukl & Falbe, 1990). Although we recognize that the cognitive, affective, multimodal and collaborative effects may be closely intertwined and evident in any particular behavior (or any constellation of behaviors), we believe that the social influence behaviors derived here are likely to be closely associated with one primary load effect.

Table 4.C. summarizes the proposed attention load effects of the cognitive, affective, multimodal and collaborative influence behaviors inside organizations. These relationships will be elaborated next in the specific context of an episode of a one-on-one interaction between a CEO and his or her external advisor during strategy frame-building episodes.
## Table 4.C. Proposed Attention Load Effects of Social Influence Behaviors

<table>
<thead>
<tr>
<th>Targeted Influence Dimension (Sender/Advisor)</th>
<th>Cognitive</th>
<th>Affective</th>
<th>Multimodal</th>
<th>Collaborative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposition 2</strong></td>
<td>Influence Behavior: Triggering domain-general elaboration e.g. domain-general conceptual and analytical elaboration (e.g. Floyd &amp; Lane, 2000; Jarzabkowski &amp; Kaplan, 2014; Lechner &amp; Floyd, 2012; Santos &amp; Eisenhardt, 2010; Yukl &amp; Falbe, 1990)</td>
<td>Load Effect: Enhances saliency of intrinsic issue and action concepts, and their linkages (e.g. Paas et al., 2010; van Merriënboer &amp; Sweller, 2005)</td>
<td></td>
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<tr>
<td><strong>Proposition 4, 5a</strong></td>
<td>Influence Behavior: Inducing positive or low negative emotional experience e.g. inspirational appeals to values, ideals, ingratiation (e.g. Dutton et al., 2001; Kipnis et al., 1980; Sonenshein, 2006; Yukl &amp; Falbe, 1990)</td>
<td>Load Effect: Increases motivation and the temporary availability of attention capacity (e.g. Ashby et al., 1999; Erez &amp; Isen, 2002; Estrada et al., 1997; Fraser et al., 2012; Fredrickson et al., 2001; Sussman et al. 2013)</td>
<td></td>
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<tr>
<td><strong>Proposition 5b</strong></td>
<td>Influence Behavior: Inducing high negative emotional experience e.g. intimidating, threatening, upward appeals (e.g. Lawrence et al., 2005; Maitlis &amp; Orecik, 2004; Kipnis et al., 1980; Yukl &amp; Falbe, 1990)</td>
<td>Load Effect: Enhances the saliency of interferences; decrease the motivation to use and the temporary availability of attention capacity (e.g. Evans &amp; Stecker, 2004; Um et al., 2012)</td>
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<tr>
<td><strong>Proposition 6</strong></td>
<td>Influence Behavior: Triggering multi-modal elaboration, eg. auditive, visual, and haptic modalities e.g. multi-modal interaction interface, strategy tools, incorporation of the physical environment (e.g. Jarzabkowski &amp; Kaplan, 2014)</td>
<td>Load Effect: Distributes load across multiple modalities (e.g. Choi et al., 2014; Mousavi et al., 1995; van Merriënboer &amp; Sweller, 2005)</td>
<td></td>
<td></td>
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<tr>
<td><strong>Proposition 8</strong></td>
<td>Influence Behavior: Triggering collaborative elaboration e.g. collaboration (e.g. Fredrickson, 1984; Fredrickson &amp; Mitchell, 1984)</td>
<td>Load Effect: Distributes load across collaborating parties (e.g. Jansen et al., 2010; Kirschner et al., 2011)</td>
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</table>
Cognitive Influence Behaviors’ Attention Load Effects. Most commonly, social influence behaviors involve a cognitive dimension, as the sender’s influence behavior affects the target’s cognitive elaboration on a stimuli (Petty & Cacioppo, 1986). As the target attends to and elaborates on the sender’s stimuli, he or she uses attention capacity for attention load. Load theorists suggest that depending on whether such elaboration is based on issues and action alternatives that are relevant to the company’s strategic goals, it may unleash a germane versus an extrinsic attention load dynamic (van Merriënboer & Sweller, 2005). As a result, it will either increase or decrease the target’s level of frame complexity during frame-building episodes. We argue that the cognitive dimension of social influence behavior – that is, whether it is triggering domain-general elaboration or distracting from it (and triggering domain-specific elaboration) – determines whether targets engage in a germane or an extrinsic attention load dynamic.

A sender’s cognitive influence behavior triggers domain-general – rather than domain-specific – elaboration, when it provides an overarching structure or template that may be filled by the target with situation-specific content. For instance, the set of themes, meanings (Jackson & Dutton, 1988), facts and figures that describe the strategic relevance of the focal issues and action alternatives in a given setting may be incorporated in the domain-general template. In so doing, it provides greater latitude for a flexible adjustment to the circumstances. It has been suggested that “semi-structures” (c.f. Eisenhardt et al., 2010), or “weak methods” (Newell & Simon, 1972) provide some structure to focus attention while at the same time leaving open the possibility to incorporate situation-specific aspects. The target’s domain-general elaboration may be of conceptual or analytical nature.

Through domain-general conceptual influences, the sender may shape the target’s understanding of linkages between meanings and concepts by advancing a higher-order strategy theme, for instance in a strategy framework (Jarzabkowski & Kaplan, 2014). A particular trigger for domain-general conceptual elaboration is the use of figurative language and the target’s stimulation of mental imagery. Domain-general mental imagery promotes the target’s foresight and mental visualization of strategic issue and action alternative concepts. For instance, advisors may use metaphors, or similes, that help focus attention selectively on some aspects while ignoring others. The greater the distance between the figure of speech’s domain and the focal issues, the more domain-general the figure is. In this respect, Santos and Eisenhardt’s (2009) study reveals that decision-makers at Magic adopted the “supermarket” metaphor for the construction of an online marketplace. With this
metaphor, decision-makers focused attention on a coherent set of supermarket attributes and their linkages to value creation. Thus, senders’ cognitive influence behavior that triggers domain-general conceptual elaboration is likely to provoke an increase in the target’s frame complexity through germane load engagement.

Senders’ focusing forms of cognitive influences may also include behaviors that provoke the target’s domain-general analytical elaboration. Analytical elaboration processes, such as rational or hypothetical reasoning, for example on the basis of facts and evidence (c.f. Yukl & Falbe, 1990), are domain-general. Senders may deploy influence behaviors that focus targets’ attention on a logical set of issues as well as on the possible cause-effect relationships between issues and a firm’s action alternatives (c.f. Nadkarni & Narayanan, 2007). Senders can do so by synthesizing factual data and evidence that support the strategic nature of particular issues, e.g. from markets or operations (c.f. Floyd & Lane, 2000; Wooldridge & Floyd, 1989). The provision of analyses helps to reduce the ambiguities surrounding an issue’s consequences (c.f. Lechner & Floyd, 2012) and makes the possible linkages to the company’s overall strategic goals more salient. As such, senders’ cognitive forms of influence behavior tend to provoke an increase in the target’s frame complexity, as they engage in germane load for analytical elaboration.

Taken together, we suggest in the following proposition that senders’ domain-general forms of cognitive influence behavior are likely to strengthen the positive effect between the levels of situational complexity and of the decision-maker’s frame complexity during the frame-building episode.

Proposition 2: Senders’ domain-general forms of cognitive influence behaviors are likely to strengthen the positive effect of situational complexity on targets’ frame complexity by increasing the level of complexity during frame-building episodes.

Senders’ distracting forms of cognitive influence behavior are likely to trigger extrinsic load on top of the situational requirements and crowd out attention capacity for germane load. Thus, they are likely to trigger a decrease in the level of complexity of the decision-maker’s frame. Senders’ cognitive influence behavior is distracting in nature to the extent that it raises the saliency of interferences and hides the saliency of issues that are of strategic relevance and thus intrinsic to the firm’s strategy development goals. Distracting forms of cognitive influence behavior are characteristic of raising the saliency of competing ideas or people and of hiding the saliency of the situation’s intrinsic issues.
In terms of *distracting ideas*, competing issue and action concepts may become salient from senders’ use of domain-specific rather than domain-general influences. Advisors are frequently hired for their domain-specific expertise (Simon, 1997 [1947]). While domain-specific expertise confers on them the necessary professional legitimacy, it also bears the downsides of greater cognitive entrenchment (Dane, 2010). Advisors’ domain-specific influences will tend to lead to rapid closure on specific issues and action alternatives at the expense of greater comprehensiveness in the consideration of alternative issues and actions.

Advisors’ personal motivations to expand their legitimacy and power bases may trigger domain-specific influences (c.f. French & Raven, 1959). Advisors may intentionally or unintentionally mobilize political strategies to gain the CEO’s attention for a specific viewpoint. Senders have been found to sell and frame issues in ways that highlight and gain support for their preferred viewpoint (e.g. Floyd & Wooldridge, 2000; Kaplan, 2008). For instance, advisors may seek to gain the CEO’s attention for specific definitions of the organizational problems and strategic solutions. By raising specific issues, they are able to make claims on the CEO’s strategic goals and resource allocations as a basis for expanding or compensating their power basis. For example, they may seek to extend their own business by selling a product as a solution to a specific organizational issue (Kieser & Wellstein, 2008). Furthermore, self-interested advisors may use exchange behaviors that are explicitly or implicitly reminiscent of a promise to receive rewards or a reciprocated favor (Yukl & Falbe, 1990). Thus, they increase the saliency of a past event rather than of the current situation’s issues. These influence strategies, in turn, direct the target’s attention to ideas that may be at odds with the issues involved in the complex situation.

In terms of *distracting people*, the sender as a person may distract the CEO from attending to the situation’s complexity. CEOs tend to seek advice primarily from others who are similar to them, and who reassure and ascertain their preferred viewpoint (e.g. McDonald & Westphal, 2003). As such, through the perceived confidence in “similar” people, CEOs may refrain from engaging in germane load to deal with the situation’s actual complexity. Furthermore, because CEOs seek advice not only from “friends” but also from “competitors” (McDonald & Westphal, 2003), they will face advisors, who will be exclusive and vying to keep the “secrets” of future “competitive advantage.” CEOs may then be drawn to discern the trustworthiness of a person, the “hidden” agenda and strategic motives of their advisors. Because discerning the political from the strategic motives of people is particularly load-
demanding (c.f. Gioia & Thomas, 1996), they will engage in additional extrinsic attention load for attentional control.

Finally, beyond active attempts at giving sense to preferred viewpoints, senders may also hide the issues and linkages to the firm’s action alternatives that are intrinsic to the situation’s complexity. In this respect, advisors may engage in more covert forms of sense-hiding by intentionally or unintentionally ignoring factual evidence that competes with their preferred viewpoint (Sonenshein, 2006).

As a consequence of senders’ distracting forms cognitive influence behavior, CEOs are likely to miss not only the important subtleties but also add additional extrinsic load that crowds out attention capacity for germane load. The additional extrinsic load provokes a decrease in frame complexity by reducing the attention span on intrinsic issues. The following proposition suggests that the distracting forms of cognitive influence behavior are likely to strengthen the negative effect of situational complexity on the level of complexity of the target’s frame. As a result of the influence episode, senders are likely to provoke a decrease in the level of complexity of the target’s strategy frame.

Proposition 3: Senders’ distracting forms of cognitive influence behavior are likely to strengthen the negative effect of situational complexity on targets’ frame complexity by decreasing the level of complexity during frame-building episodes.

Affective Social Influence Behaviors’ Attention Load Effects. Senders’ influence behaviors do not only affect the target’s cognitive elaboration (cognitive dimension) but also his or her affect. Influence behaviors have an affective dimension, to the extent that they induce an emotional experience in the target, for instance by appealing to the target’s personal ideals and values. By triggering an emotional experience in the target, affective influence is likely to moderate the relationship between situational complexity and the level of complexity of the target’s frame by either strengthening or weakening it through the type of attention load dynamic induced.

Whether targets engage in a germane or an extrinsic attention load dynamic is shaped by the valence and level of arousal of the target’s emotional experience (c.f. Fredrickson, 2001; Sussman, Heller, Miller, & Mohanty, 2013). In this respect, we can distinguish the following emotions: low positive emotional experience, such as tranquility, and comfort; low negative emotional experience, such as disappointment, or dejection; highly negative emotional experience, such as anxiety, fear, or anger; and finally, highly positive emotional experience, such as enthusiasm and excitement.
(Watson, Wiese, Vaidya, & Tellegen, 1999). For example, by framing a decline in profitability in strongly negative terms as a “crisis,” which involves a “loss” of personal reputation, or alternatively as a “chance” to tap into further growth markets, the influence behavior is likely to provoke different affective and related motivational reactions in the target (e.g. Dutton & Jackson, 1987).

On the one hand, senders’ affective influence behaviors of positive valence are likely to increase the target’s use and sometimes expansion of their attention capacity. Affective influence behaviors of positive valence constitute influence behaviors that facilitate a positive emotional experience (irrespective of the level of arousal) in the target, such as inspirational appeals, and/or ingratiation behaviors (c.f. Yukl & Falbe, 1990). By unleashing a germane load dynamic, senders’ affective influence behaviors of positive valence are likely to strengthen the relationship between situational complexity and targets’ frame complexity. Senders tend to provoke an increase in the target’s frame complexity for several reasons that are outlined next:

First, senders’ affective influence behaviors of positive valence are likely to increase the target’s use of attention capacity for germane load by enhancing the saliency of intrinsic issues, as well as the motivation to use attention capacity to address them (Erez & Isen, 2002). In this respect, senders’ affective influence behaviors of positive valence may provoke higher openness for elaborating on a situation’s entire complexity “Gestalt,” rather than a focus on single sub-issues (Estrada, Isen, & Young, 1997). Experiments have shown that individuals in conditions of joy or contentment were more likely to widen the array of thoughts and actions that came to their mind (Fredrickson, 2001). On a related note, positive emotional states, like subjective well-being, optimism and success, are associated with more global rather than local attentional orientations (Basso, Schefft, Ris, & Dember, 1996). Thus, by enhancing the saliency of the situation’s complexity “Gestalt” and the target’s motivation to attend to it, senders’ affective influence behaviors of positive valence are likely to unleash a germane load dynamic.

Second, senders’ affective influence behaviors of positive valence are likely to expand the target’s use of the available attention capacity for germane load by increasing the temporary availability of attention resources. Positive emotional experience expands the available capacity to deal with germane load by increasing the dopamine level in the brain (Ashby, Isen, & Turken, 1999) This increase follows from the “broaden-and-build” argument suggesting that positive emotional experience, irrespective of the level of activation, expands the temporary availability of personal – attentional, intellectual, psychological – resources (Fredrickson, 2001). This expansion
enables decision-makers to distribute the attention load across a wider range of attention capacity resources. Consequently, senders’ affective influence behaviors may temporarily augment the CEO’s available attention capacity resources for a germane load dynamic.

In organizations, advisors may also facilitate a positive mood and attitude by calling on the CEO’s values and ideals, and eliciting enthusiasm through inspirational appeals (c.f. Yukl & Falbe, 1990). In this respect, packaging or embellishing behaviors may include inspirational appeals with issues couched in more or less positive terms (e.g. Dutton, Ashford, O’Neill, & Lawrence, 2001; Sonenshein, 2006). Similarly, ingratiation behaviors seek to put the CEO in a positive mood by avoiding confrontation, conforming to his or her opinion, and flattering the CEO (Park et al., 2011; Yukl & Falbe, 1990).

Senders’ affective influence behaviors of positive valence are likely to enhance the saliency of the situation’s complexity “Gestalt.” In turn, this will increase the target’s motivation to attend to the situational complexity, as well as the attention capacity that is available to the target at a given point in time. On the basis of these arguments, the following proposition argues that senders’ affective influence behaviors of positive valence are likely to provoke an increase in the level of complexity of the target’s frame.

Proposition 4: Senders’ affective influence behaviors of positive valence are likely to strengthen the positive effect of situational complexity on targets’ frame complexity by increasing the level of complexity during frame-building episodes.

We further argue that senders’ affective influence behaviors of low negative valence are likely to reinforce the inverted U-shaped relationship. Senders’ affective influence behaviors of low negative valence induce an emotional experience of negative valence and of low arousal in the target. For instance, through intimidation, by making appeals to possible negative consequences, or to supervisory bodies’ approval of claims (Yukl & Falbe, 1990), advisors will provoke low negative experience in CEOs. By arousing the emotions of the CEO, low negative affective states are likely to produce heightened awareness for and saliency of the situation’s complex “Gestalt” (e.g. Sussman et al., 2013), thus creating a sense of “urgency” (Dutton & Duncan, 1987). This affective state raises targets’ awareness of strategic issues and triggers a germane load dynamic to address them. As such, senders’ affective influence behaviors of low negative valence are likely to reinforce the positive effect of situational complexity on the level of complexity of the target’s
frame by raising the situational complexity “Gestalt” as a basis for germane load. This line of thinking leads to the following proposition:

Proposition 5a: Senders’ affective influence behavior of low negative valence is likely to strengthen the positive effect of situational complexity on targets’ frame complexity by increasing the level of complexity during frame-building episodes.

By contrast, senders’ affective influence behaviors of highly negative valence are likely to restrict the use and temporary availability of attention capacity. Affective influence behaviors of highly negative valence constitute influence behaviors that facilitate a highly negative emotional experience in the target, e.g. through the use of episodic acts of intimidation or force (e.g. Lawrence et al., 2005). Senders’ affective influence behaviors of highly negative valence are likely to strengthen the negative relationship between situational complexity and targets’ frame complexity. By unleashing an extrinsic load dynamic that restricts the use and temporary availability of attention capacity, these influences are thus likely to decrease the level of complexity of the target’s frame. Arguments in this respect are outlined next.

First, senders’ affective influence behaviors of highly negative valence are likely to decrease the temporary availability of attention capacity. Highly negative affect creates extrinsic load on top of the situation’s intrinsic complexity, as the negative emotional experience adds extrinsic load by itself (Fraser et al., 2012). It increases extrinsic load beyond what actors would need to deal with if they did not have the affective effect. Strongly negative emotional states, like subjective anxiety or depression, narrow the attention focus (Basso et al., 1996), even beyond neutral (e.g. merely cognitive) conditions (Fredrickson, 2001). As a result, senders tend to unleash additional extrinsic load experience in the target.

Second, senders’ affective influence behaviors of highly negative valence are likely to increase the target’s use of attention capacity for extrinsic load by enhancing the saliency of interferences. By using affective influence behaviors of highly negative valence, advisors may seek to undermine opposing and to promote their preferred issues. At times, they will block the CEO’s elaboration, for example by slowing down the provision of information, or by building opponent coalitions against the CEO (c.f. Yukl & Falbe, 1990). In such situations, CEOs will be drawn to interfering people and ideas. In this respect, senders’ behaviors that unleash a highly negative emotional experience will crowd out the available attention capacity for germane load by raising extrinsic load in the target.
Third, senders’ affective influence behaviors of highly negative valence are likely to reduce the target’s motivation to use the available attention capacity for germane load. In this respect, cognitive psychologists have found an “attentional bias” against highly negative emotional experiences, such that attention may be briefly oriented toward the negative influence and then rapidly avoided (Bradley, Mogg, & Millar, 2000; Mather & Carstensen, 2003). Scholars have emphasized that a highly negative emotional experience decreases the motivation to use attention capacity (c.f. Evans & Stecker, 2004). Social influence scholars have also highlighted the paralyzing effect of fear (Cialdini & Goldstein, 2004). Organizational scholars have emphasized the avoidance of the “danger zone” surrounding a highly negative emotional experience (Maitlis & Ozcelik, 2004). Hence, senders’ affective influence behaviors of highly negative valence will reduce targets’ motivation to engage with germane load.

Senders’ affective influence behaviors of highly negative valence will reduce the available capacity resources for germane load by enhancing the share of extrinsic load, by directing actors’ attention away from making effective use of the available attention capacity and by decreasing actors’ motivation to use the available attention capacity for germane load. Based on these arguments, we propose that senders’ affective influence behaviors of highly negative valence are likely to decrease the level of complexity of the target’s frame during the frame-building episode.

Proposition 5b: Senders’ affective influence behaviors of high negative valence are likely to strengthen the negative effect of situational complexity on targets’ frame complexity by decreasing the level of complexity during frame-building episodes.

Multimodal Influence Behaviors’ Attention Load Effects. Attention load is not only socially constituted and distributed (Ocasio, 1997) but also distributed across multiple modalities, for instance across the target’s combined use of visual, auditive and haptic modalities. In particular, senders may trigger the use of multiple modalities (instead of single modalities only).

As an example, CEOs may be triggered to visually attend to graphical representations in strategy frameworks, in combination with auditive attention to spoken news reports, and sometimes paired with haptic attention to a digitally animated strategy framework on their iPad. In particular, the tactile sensory system may be incorporated through the surrounding physical environment, the spatial location or physical artifacts (c.f. Kirsh, 1995), which enhances the range of modalities at their disposal. The multimodal dimension of social influence behaviors must be managed carefully, so as to enhance—rather than constrain—the use of attention capacity for germane load. In particular, the physical environment has both enabling
and constraining affordances for the target (Jarzabkowski & Kaplan, 2014). We argue that, depending on whether senders’ influence behaviors trigger the use of multiple modalities rather than constraining it (triggering the use of single modalities), the social influence is likely to strengthen the relationship between situational complexity and the target’s frame complexity through the type of attention load dynamic induced during episodes of frame-building. Arguments in this respect are outlined next.

First, multimodal forms of influence behaviors are likely to be germane in nature, to the extent that they trigger the use of a combination of the visual, tactile, and/or auditory systems in their frame-building endeavors. Under such circumstances, multimodal forms of influence behaviors are likely to increase the level of complexity of the target’s frame. As developed previously for cognitive influence, also multimodal influences may provide “semi-structures” (c.f. Eisenhardt et al., 2010), or “weak methods” (Newell & Simon, 1972) that channel attention to a general structure, while at the same time leaving open to the target the possibility to incorporate multiple modalities for attending to the situation’s complexities.

At the level of the CEO-advisor interface, the type of communication interface between the advisor and the CEO is an important source of multimodal influence, which may trigger the CEO’s use of multiple modalities. The communication interface may vary in the extent to which it is triggering or distracting the target’s use of multiple modalities. In this respect, advisors often tend to use combinations of auditory and visual channels. For example, advisors use face-to-face or video-based interactions that place great emphasis on their intonation, but also on gestures, and body language (c.f. Cornelissen & Werner, 2014). By doing so, they seek to raise the saliency of intrinsic issues in speech. Alternatively, by putting greater emphasis on visual illustrations or symbolic images (c.f. Meyer, Hoellerer, Jancsary, & Van Leeuwen, 2013), advisors can raise the saliency of issues by triggering the target’s mental imagery and visualization.

The simultaneous use of multiple modalities enables actors to distribute load and thus to enhance their capacity across the available modalities (Choi et al., 2014; Mousavi, Low, & Sweller, 1995; van Merriënboer & Sweller, 2005). By triggering targets’ multimodal elaboration, targets will temporarily offload attentional requirements on multiple modalities. The use of multiple modalities then enables targets to temporarily distribute the requirements among a greater stock of available attention resources. As an example, CEOs may temporarily offload the requirements of imagining complex relationships on the surrounding physical environment (Kirsh, 1995). They can do so by using flipcharts or screens to depict relationships, thus
utilizing combinations of multiple modalities, such as visual, haptic, and verbal channels. Thus, by triggering the target’s use of multiple modalities, senders’ influence behaviors may facilitate the temporary expansion of the CEO’s available attention capacity resources for a germane load dynamic.

The following proposition argues that multi-modal forms of influence behavior are likely to increase the level of complexity of the target’s frame during the interaction episode. It does so by facilitating the target’s use of attention capacity for germane load, and by temporarily expanding the available attention capacity for germane load beyond what the target would dispose of with the use of a single modality.

**Proposition 6:** Senders’ multi-modal forms of influence behavior are likely to strengthen the positive effect of situational complexity on targets’ frame complexity by increasing the level of complexity during frame-building episodes.

Second, unimodal forms of influence behaviors are likely to be *extrinsic* in nature, to the extent that they trigger the target’s use of a single modality only. Unimodal forms of influence behaviors trigger the target’s use of either the visual, tactile, or the auditory systems in their frame-building endeavors. Unimodal forms of influence behavior, by channeling the target’s attentional elaboration with some modality more than another one, they tend to be restrictive in nature for embracing the focal situation’s complexity.

In the context of the CEO-advisor interface, advisors frequently employ strategy tools to influence the CEO in his or her strategy frame-building endeavors. By their very nature, strategy tools are not only highly domain-specific (Meyer et al., 2013), but often highly modality-specific; they predetermine what is important to be perceived and what is not. For this very reason, they are commonly used in complex environments (Jarzabkowski & Kaplan, 2014). While this predefined structure facilitates their use across people and across settings, this structure may also be overly restrictive in limiting targets’ attention to some aspects of the situation’s complexity more than others usability or even prove to be outdated in complex environments. With these in-born functionalities, they may constrain real-time adjustments to novel developments. In particular, targets are then required to use attention capacity to attend to aspects that are omitted in the strategy tool, and to uncover ways to use the tool more flexibly to attend to the situation’s complexity. These attentional activities create additional extrinsic load in the target.
At times, advisors, with the purpose of pursuing their own goals, may even purposefully select unimodal, at the expense of multimodal interaction formats, in order to advance specific definitions of the organization’s problems and maintain control over the target’s attention. In order to gain support for their preferred viewpoint, advisors may select uni-modal, rather than multi-modal engagement with particular strategy frameworks, in order to deflect attention from some issues at the expense of others (Jarzabkowski & Kaplan, 2014). By deflecting the target’s attention, it may help advisors raise awareness, legitimacy, and acceptance for some issues and potentially to hide others. The unimodal forms of influence behavior are thus likely to be distracting rather than supporting, and create additional extrinsic load.

Based on these arguments, the following proposition argues that unimodal influence behavior is likely to decrease the level of complexity of the target’s frame during the frame-building episode. It does so by adding extrinsic load and by constraining the target to distribute attention load across modalities.

Proposition 7: Senders’ unimodal forms of influence behavior are likely to strengthen the negative effect of situational complexity on targets’ frame complexity by decreasing the level of complexity during frame-building episodes.

In summary, the model outlined thus far uncovered one-way influences by the sender and their effects on the target. We have argued that a sender’s influences that facilitate a target’s germane attention load are likely to increase the level of complexity of the target’s frame. Although senders’ influence behaviors bear the potential to expand the available attention capacity temporarily (e.g. through positive affect or multimodal distribution), the target’s attention capacity alone may still be limited in addressing the complexities of the situation.

**Collaborative Influence Behaviors’ Attention Load Effects.** A core function of the organization is the social distribution of the target’s attention load (March & Simon, 1993 [1958]; Ocasio, 1997). Along these lines, a core empirical finding of load theory is that actors can surpass attention capacity limitations in their elaborations on complex situations through involvement of collaborating partners (Kirschner et al., 2009; Kirschner, Paas, & Kirschner, 2011). The collaborating dimension of social influence behavior refers to the extent to which senders involve the counterparty through their influence behavior. Yet, by involving more people in a sensemaking effort, the associated coordination needs also grow (Kirschner et al., 2009). The collaborating dimension of social influence behaviors must be managed carefully, so as to enhance the use of attention capacity for germane load, rather than to constrain it. We argue that, depending on whether the collaborating dimension of social influence
is truly **collaborative** versus **coordinating** in nature, it is likely to strengthen or weaken the relationship between situational complexity and the target’s frame complexity through the type of attention load dynamic induced during episodes of frame-building. The following arguments support our thinking:

First, social influence behaviors are **collaborative** in nature to the extent that they facilitate the target’s distribution of attention load among multiple people. In organizations, decision-makers frequently identify problems, and generate alternatives through interactions with each other (Fredrickson & Mitchell, 1984). Collaborative forms of social influence trigger the target to divide his or her attention labor by offloading attentional activities on other people (c.f. Simon, 1997 [1947]). In this respect, in complex environments, advisors are often hired to overcome temporary capacity bottlenecks. They are then asked to carry out specific tasks for the CEO (c.f. Kieser & Wellstein, 2008). For example, CEOs may hire special task forces (c.f. Joseph & Ocasio, 2012) to develop market reports, or seek consultation on specific regulatory matters.

By facilitating the target’s attention load distribution, attention capacity is freed up for the target to engage in germane load. Furthermore, when senders’ influence stimulates collaboration with others on issues that are intrinsic to the situation’s complexity, the target is likely to further increase germane load, and thus the level of complexity of his or her frame. Specifically, the alternation between attention load distribution and integration into the target’s frame may reap the benefits of collaboration between the target and other parties, so as to attend comprehensively to the complex situation. In this respect, scholars have found that decision-makers who bring in further collaborators (c.f. Lechner & Floyd, 2012) will provoke shared sensemaking and joint elaboration of comprehensive understanding (c.f. Fredrickson & Mitchell, 1984). Thus, collaborative forms of social influence behaviors are likely to increase the level of complexity of the target’s frame during the frame-building episode.

**Proposition 8:** Senders’ collaborative forms of social influence behavior are likely to strengthen the positive effect of situational complexity on targets’ frame complexity by increasing the level of complexity during frame-building episodes.

Second, senders’ social influence behaviors are **coordinating** in nature to the extent that the social influence is centered on organizing the collaboration process rather than on attending to the situational complexity. By doing so, it constrains the target to reap the benefits of collaboration and of the distribution of attention load among multiple people. By creating additional extrinsic load, it is likely to decrease
the level of complexity of the target’s frame during the frame-building episode. In this respect, recent social psychology and organization research has emphasized the role of group faultlines in creating important process losses in social interaction, which explains why members fail to reap the benefits associated with the involvement of multiple people (for recent reviews: Mathieu, Maynard, Rapp, & Gilson, 2008; Thatcher & Patel, 2012). Such process losses are particularly widespread and relevant in complex situations (c.f. Li & Hambrick, 2005). In specific, the level of heterogeneity between the CEO and his or her collaborators induces higher coordination needs. It creates a “strain” on the CEO (c.f. Hambrick et al., 1996) to participate in reducing possible factions, group conflict, and behavioral disintegration (c.f. Li & Hambrick, 2005). This may be one reason why CEOs tend to avoid others who are not similar to them (McDonald et al., 2008). Consequently, the CEO will spend more attention resources on coordinating process problems and thus on extrinsic load than on the situational complexity. For instance, the CEO will manage distrust or disbelief in an issue’s relevance, deal with conflict in interactions, manage fluid interaction processes, etc.

In this respect, Jacobides’s (2007) study of the Greek government agency illustrates an extrinsic load dynamic that occurred as a result of a highly fragmented attention focus between a CEO and his collaborators over a complex diplomatic problem. By raising additional interferences and the need to spend attentional activities on greater coordination, the additional extrinsic load caused by these activities tends to crowd out the target’s available attention capacity for germane load. Therefore, senders’ coordinating forms of social influence behaviors are likely to decrease the level of complexity of the target’s frame. This leads to the final proposition:

Proposition 9: Senders’ coordinating forms of social influence behavior are likely to strengthen the negative effect of situational complexity on targets’ frame complexity by decreasing the level of complexity during frame-building episodes.
C.5. Discussion

In this article, we have developed a conceptual model of the ways in which the cognitive, affective, multimodal and collaborative dimensions of senders’ influence behaviors enable or constrain targets’ attention capacity to build a complex frame. They do so through their impact on different types of attention load dynamics – enabling (germane) versus constraining (extrinsic) attention load dynamic. Though rich with insights, organizational research appears to have primarily emphasized the simplifying effects of frames of reference, with their activation or priming as a remedy for attention capacity limitations. Little, if any, work has considered the possibility that targets may actually vary in the effectiveness how they use the available attention capacity for different types of attention load dynamics, and the particular roles of social influences for shaping targets’ use of the available attention capacity.

To that end, we have developed an attention load perspective by synthesizing cognitive and educational psychology insights and by drawing on the view that attention is socially (Ocasio, 1997), affectively and collaboratively constituted and distributed (c.f. Choi et al., 2014; Kirschner et al., 2009; Paas et al., 2010). We have built theory on the different ways in which the cognitive, affective, multi-modal and collaborative dimensions of senders’ influence behaviors shape the effectiveness with which targets use and sometimes expand the available attention capacity. In particular, the sender’s influence behaviors can have a positive effect on the level of complexity of the target’s frame of reference by inducing germane load and expanding the available attention capacity. They can also have a constraining effect by provoking extrinsic load and restricting the available attention capacity. We illustrated the proposed relationships in the context of the CEO strategy frame-building episodes in interaction with his or her external advisor. Next, we discuss implications for theory and research on attention and social influence research, and research on strategy frames. Finally, we outline avenues for future research.

C.5.1. Implications for Research on Attention and Managerial Cognition

Research has shown that decision-makers’ capacity to attend to a multitude of issues is critical for organizations to succeed in the environment in which they operate (Cohen et al., 1972; March & Simon, 1993 [1958]; Ocasio, 1997, 2011). After all, it is still the individual decision-maker and the CEO in particular (Hambrick et al., 2005; Hambrick & Mason, 1984), who confronts the complexities of the firm’s strategic environment with his or her attention capacity limitations. Therefore, the CEO’s attention capacity
to make real-time adjustments in his or her thinking is a critical factor for the organization’s success (c.f. Eisenhardt et al., 2010).

To date, despite widely assumed attention capacity limitations (Ocasio, 1997, 2011; Simon, 1997 [1947]), the attention capacity and attention load constructs have been relatively under-theorized at the individual level. When considered in isolation, an individual decision-maker’s attention capacity stock appears to be rather fixed and limited (Miller, 1956, 1994; Peterson & Peterson, 1959). In this article, we have argued that by incorporating the cognitive, affective, multi-modal and collaborative aspects of the social context, and their effects on attention load dynamics, decision-makers can vary in their use and expansion of the available attention capacity to develop a complex frame. The theory advanced here extends and goes some way toward challenging the idea that attention capacity is merely a fixed stock. We propose instead a dynamic view of attention capacity with underlying attention load dynamics.

For example, through positive emotional experience, decision-makers can temporarily expand the available attention capacity. This prospect resonates with positive psychology research (e.g. Fredrickson, 2001) that reveals the types of interventions and psychological processes enabling individuals to thrive, rather than focusing solely on inherent limitations. Future research may further deepen the “broaden-and-build” proposition by disentangling a more nuanced understanding of the underlying mechanisms, and of the contingencies. For instance, one may uncover sources of variation in the broadening effect according to the type of emotional experience. A rich avenue for future research is also to study possible interaction, substitution or cumulative effects of the cognitive, affective, multimodal and collaborative influence dimensions on the broadening of attention capacity.

A further insight concerns the concept of “time.” In order to be able to trace underlying dynamics, the theory advanced here calls for greater emphasis on longitudinal process studies on how attention capacity unfolds over extended periods of time. Cognitive psychologists generally conceptualize attention as a perception process that happens within fractions of a second (e.g. Lavie, 1995, 2005). Some organization research investigated attention as something that is sustained, or a process that evolves over time, for instance during sensemaking (e.g. Ocasio, 2011; Rerup, 2009; Weick & Sutcliffe, 2006). Future research on attention load may gain from research designs that move beyond tracking attention spans in milliseconds in laboratory settings to studying attention load dynamics in social settings and over extended periods of time.
In addition, the dynamic view developed here has shifted away from the mere consideration of attention capacity as a fixed stock, which depends on the amount of attention load encountered. Instead, it has considered different types of load dynamics – extrinsic and germane – and the different ways in which they shape the available attention capacity. A core finding of prior research has been the disentangling of attention load antecedents, with the largely negative consequences of overload for organizations (see for reviews: Edmunds & Morris, 2000; Eppler & Mengis, 2004). By contrast, a relatively small line of research also emphasizes the positive forces of attention load experience (Cohen et al., 1972; Gardner & Cummings, 1988; Weick & Sutcliffe, 2006) – which are both common and consequential. Attention load experience is not only a symptom that we spend time, effort and energy on attentional activities that are ineffective, but it is also a sign that we attend to the difficulties that are intrinsic to a situation (Hambrick et al., 2005; Weick & Sutcliffe, 2006). We have argued in this article that the interactions between different attention load types determine variation in the effectiveness of decision-makers’ attention capacity use. Our model suggests that it might be even more important to increase germane load than it is to decrease extrinsic load, because germane load has both a positive effect and crowds out attention capacity for extrinsic load.

Attention load proves to be consequential and positive, because it enables decision-makers to embrace the situational complexity in their frame. By doing so, this paper reversed the relationship that has been the focus of most prior research, namely between frames of reference and attention capacity (e.g. Cohen & Levinthal, 1990; Snowball, 1980; Sutcliffe & Weick, 2008) with frames of reference as remedy to the experience of attention load. While much research has concentrated on their structural characteristics and their measurement, we know much less about the processes through which frames of reference emerge. Most research has emphasized activation mechanisms (Bingham & Kahl, 2013). In this article, we asked how decision-makers succeed in developing a complex frame by effectively spending the available attention capacity on attention load. This question is important, because often strategic environments are complex and unfamiliar to the decision-maker (Camillus, 2008; Guillén & Ontiveros, 2012) and require real-time adjustments in their thinking to succeed (Barr, Stimpert, & Huff, 1992; Eisenhardt et al., 2010). The model outlined here suggests that CEOs’ use of attention capacity for germane load is necessary for them to spend “time, attention and other resources to be comprehensive in their analyses and search for solutions” (Hambrick et al., 2005: 479). Furthermore, it is importantly influenced by the social context.
C.5.2. Implications for Research on Social Influence

Our model suggests that the level of complexity of a decision-maker’s (target’s) own frame is importantly shaped by the social influences that he or she experiences. A focus on another social influence mechanism would extend the existing research that has primarily suggested that attention capacity limitations are circumvented through the activation of or the priming with frames of reference from the CEO’s network (e.g. Haunschild, 1994; McDonald et al., 2008; McDonald & Westphal, 2003). The attention load perspective advanced here explains why social influence behaviors may at times either constrain or facilitate the CEO in making adaptive decisions for the organization (McDonald et al., 2008; McDonald & Westphal, 2003). This suggests that, in order to incorporate a fine-grained understanding of the one-on-one interactions and the actual dynamics that they unleash, it is important to move beyond mere structural considerations of CEOs’ networks. By doing so, one can explain variation in the individual advisor’s contribution to the CEO’s frame-building process.

Rather than highlighting the priming effects of social influences, we built our theory on the social influence effects that senders had on targets’ attention load dynamics. We responded to the call to better examine the effects that social influences have on the actual dynamics of how the target addresses his or her environment (Beckman & Haunschild, 2002). Uncovering the social influence effects on enabling and constraining attention load dynamics may open a novel avenue for exploring the effectiveness of advisors’ interactions with their CEO at the level of micro-interactions (Kieser & Wellstein, 2008; Whittington, 2006). Educational psychology insights may open particularly rich avenues in this direction.

In addition, by uncovering what kind of types of influence behaviors senders employ in organizations, and what kind of effect on targets’ attention load, we may offer an integrated perspective on the existing views on social influence. Prior organization research connoted social influence from two perspectives. On the one hand, scholars approached social influences from the perspective of the target. They argued that social influence may help to overcome the ambiguities and uncertainties of the target’s interpretive activity (Lawrence et al., 2005). Influence processes are seen as enabling the target to make decisions adequately, and being specifically “concerned with the physiology of the human body, [and] the laws of skill-training” (Simon, 1997 [1947]: 46-92). On the other hand, scholars conceived of social influence from a political perspective of motivated senders, where senders seek “to enhance or protect the self-interest of individuals or groups” (Allen et al., 1979: 77; French & Raven,
Our model shows how senders’ motivated behavior to influence the target can facilitate or constrain targets’ frame-building endeavors.

In particular, this article integrated different dimensions of social influence behavior: cognitive, affective, multimodal and collaborative. It specified the germane and extrinsic effects of each dimension. The attention load perspective may advance existing research concerned with physical tools and artifacts in organizations by providing an attention load explaining why physical artifacts at times unleash enabling or constraining affordances (Jarzabkowski & Kaplan, 2014). Similarly, the conceptual model may advance existing research concerned with the ambiguous effects of decision-makers’ comprehensiveness on the effectiveness of decisions and on firm performance (Fredrickson, 1984; Fredrickson & Mitchell, 1984). This paper advances an attention load explanation for why comprehensiveness in the analyses of the CEO and his or her collaborators may at times be positive (by unleashing germane load) or negative (by unleashing extrinsic load) for decision outcomes. As such, the attention load dynamics advanced here may serve as mechanisms to (re-)conceptualize some of the insights gained in prior research.

These contributions can be used to guide future research to study how social influences effect decision-makers’ cognition and action. Each of the propositions advanced here can be readily tested with empirical research with different qualitative and quantitative data. For instance, future research may validate and further enrich the types of social influence behaviors and practices and the process dynamics through which they unfold (c.f. Whittington, 2006). It can also validate the proposed relationships between senders’ influence behaviors and targets’ attention load dynamics and study the effectiveness of senders’ influence behaviors, for instance by drawing from survey methods (c.f. McDonald et al., 2008). Recent developments in self-report instruments for the measurement of attention load may prove particularly beneficial in this respect (e.g. Leppink, Paas, Van der Vleuten, Van Gog, & Van Merrinboer, 2013). A quantified approach for studying social influence practices may be helpful in this respect (e.g. Laamanen, Reuter, Schimmer, Ueberbacher, & WelchGuerra, 2015).

Our model is necessarily limited to an emphasis on the effects of social influence behaviors on attention load dynamics and to episodes of one-on-one interactions. Consequently, there exists great potential for investigating more complex constellations of social influences that involve more actors and over longer periods of time. For example, assuming that social interaction is marked by important path dependencies (Weick, 1979), one avenue for future research could be to uncover the
path dependencies of the social influence episodes over time. With such studies, another avenue for future research could be to incorporate the social influences of the target vis-à-vis the sender. Our study is necessarily limited to the social influences from the advisor on the CEO. But it is likewise possible that the CEO influences his or her advisor. For instance, one could examine whether the CEO’s initial frame of the organizational problems importantly shapes the types of dynamics through which social influence subsequently unfolds. Does the initial frame persist over time? What types of influences are most successful at breaking it and fostering germane load engagement? Finally, the sender may also experience attention load in the influence episodes. As such, the dynamic alteration of influence episodes between the sender and the target and vice versa may be a fruitful avenue in which to pursue the balancing of attention load.

While we believe social influence behaviors play a key role in shaping a CEO’s attention load, other aspects, such as further personal commitments, are likely to have an impact on the CEO’s attention load by reinforcing or attenuating the relationships advanced here. One avenue could be to study the types of characteristics of the CEO-advisor dyad, and their effects on the effectiveness of social influence and on the processes in which the influence dynamics unfold over time. Consequently, it is clear that this paper has planted the seeds for a number of opportunities for future management and organization research.

With respect to social influence research more generally, most research investigates the relative success of the sender in shaping the target’s perceptions, interpretations or attitudes on particular frame contents (c.f. Cialdini & Goldstein, 2004; French & Raven, 1959; Yukl & Falbe, 1990). Much less research has studied the impact of social influence on the target’s cognitive dynamics (see Denrell, 2008, on "search processes"; Park et al., 2011), and specifically on the target’s attention load dynamics. While some research addressed the likelihood that the target elaborates on a message (Chaiken, 1980), it does however less well account for the effectiveness with which targets spend mental effort. The focus of this article has been to build theory on how social influence behaviors shape the effectiveness with which targets use their attention capacity for attention load dynamics in frame-building.

Finally, the cross-fertilization of attention load and organizational research offered in this article may have implications for cognitive and educational psychologists. They have greatly advanced our knowledge and measurement of germane and extrinsic load forces, which explain variation in actors’ attention capacity to understand complex problem situations (e.g. Lavie, 1995, 2005; Paas et al., 2010;
van Merriënboer & Sweller, 2005). However, with a primary emphasis on the study of micro-level attention dynamics in laboratory settings, first, and of children or the elderly, second, these scholars remain rather silent about the determinants that shape load dynamics of professionals in real-life, organizational settings. Based on a synthesis of recent insights, the model advanced here builds theory on the relationships between frequently employed social influence behaviors in organizations and their attention load effects on targets.

For instance, educational psychologists advanced instructional influences (Choi et al., 2014), which increase the range of actors’ cognitive processes with such influence compared with what they could achieve alone (Vygotsky, 1978). Our model uncovered a range of “facilitating” influence behaviors that are widespread in the natural organizational setting. We highlighted the effects of strategy tools, of collaboration, of self-interested influence strategies, etc. The facilitating nature can be found in such general classes of influence behaviors, such as triggering multimodal, domain-general elaboration, collaboration, or inducing positive and low negative affective experience. By contrast, the constraining nature can be found in general classes of influence behaviors, such as distracting from domain-general, multimodal elaboration, triggering coordination, and inducing a highly negative affective experience.

**C.6. Conclusion**

In this article, we have theorized about how decision-makers vary in the effectiveness with which they use the available attention capacity to address complex situations. Connecting strands of cognitive, educational psychology and organization research, we highlighted the effects of social influence behaviors on the CEO’s attention load dynamics when he or she builds a complex strategy frame. CEOs experience social influence during interaction with their advisors, whose influence behaviors unleash either an enabling (germane) or a constraining (extrinsic) load dynamic. These contributions can be used to re-conceptualize and guide the study of how decision-makers in general, and CEOs’ attention load dynamics in particular, unfold, and of the ways in which social interactions in organizations shape the effectiveness of attention capacity use in the strategy frame-building process.
References


D. ARTICLE II

Reuter, E. Cognitive Motivation and Strategic Flexibility Development: A Motivated Reasoning Perspective.
In preparation for submission to the Academy of Management Review.
Cognitive Motivation and Strategic Flexibility Development:  
A Motivated Reasoning Perspective

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Acknowledgments:
I would like to express my deepest gratitude to Steven Floyd for his continuous support in developing this paper. I further thank Pamela Barr, Flore Bridoux, Joep Cornelissen, Tomi Laamanen, Juha-Antti Lamberg, Günter Müller-Stewens, Hart Posen, and Florian Ueberbacher for insightful comments. Earlier drafts have benefited from comments at the Academy of Management Conference, the Strategic Management Society, and at the JMS paper development workshop. Emmanuelle Reuter benefitted from funding for doctoral studies granted by the FNR, Luxembourg.
Abstract

Prior research points to firms’ strategic flexibility as the ability to adapt quickly to environment changes, and particularly to CEOs’ roles in either enhancing or inhibiting firms’ strategic flexibility. This paper treats strategic flexibility at the level of the individual decision-maker. It develops theory on how decision-makers, and CEOs in particular, learn to become more flexible over time, and on the specific roles of the organizational context in this process. Drawing from motivated reasoning insights, this paper outlines four cognitive motivational states (absolutist misers, absolutist tacticians, diverse misers, diverse tacticians), as well as the influence of the organizational context – task-related diversity of top management team and share of active shareholders – in order to explain when and how decision-makers learn to develop greater strategic flexibility through repeated engagement in reflective reasoning over time. Contributions are made to research concerned with upper echelons and adaptive managerial cognition.

Keywords: strategic flexibility, cognitive motivation, commitment to status quo, learning, motivated reasoning, dynamic managerial capabilities
D.1. Introduction

“History is a nightmare from which I am trying to awake.”
- The character Stephen Dedalus, in James Joyce’s Ulysses.

In an interview by Jim Aisner, Professor Richard S. Tedlow says: “Andy looks at Gordon and says, ‘If the board should kick us out and bring in new management, what do you think the new management would do?’ And Gordon answers immediately, ‘Get us out of memories.’ Andy then says, ‘Why don't we walk through the revolving doors, come back in, and do it ourselves?’” (podcast, Harvard Business School Working Knowledge, November 9th 2006).

Strategic flexibility has often been viewed as a necessity for firms to prosper in changing environments (e.g. Grewal & Tansuhaj, 2001; Hitt, Keats, & DeMarie, 1998; Nadkarni & Narayanan, 2007; Zhou & Wu, 2010). Prior literatures most generally refer to strategic flexibility as a firm’s ability to overcome inertial forces and identify, make assessments of major changes in the technological, regulatory, competitive, and global landscapes, in order to make real-time adjustments in actions. While most research explained differences across firms’ strategic flexibility via organizational factors, more recent research has demonstrated that CEO cognition plays a significant role in facilitating firms’ strategic flexibility by either enhancing or constraining it through the choices they make (Eisenhardt, Furr, & Bingham, 2010; Nadkarni & Herrmann, 2010). That is, strategic flexibility seems to be associated with decision-makers who are able to come up with a greater breadth and novelty of beliefs about the organization and its possible relationships to its changing environment (e.g. Barr, Stimpert, & Huff, 1992; Dane, 2010; Gavetti, Levinthal, & Rivkin, 2005; Nadkarni & Narayanan, 2007; Shimizu & Hitt, 2004). Rather than conceptualizing organizations’ strategic flexibility, this article approaches strategic flexibility as a cognitive ability of individual decision-makers – the underpinnings and development of which remain poorly understood.

From the perspective that decision-makers act on the basis of beliefs (March & Simon, 1993 [1958]; Simon, 1997 [1947]), prior research found significant evidence for the fact that decision-makers’ inflexibility in the choices they make is related to difficulties in overcoming existing or status quo beliefs\(^2\) (e.g. Geletkanycz & Black, 2001; Hambrick, Geletkanycz, & Fredrickson, 1993; Hodgkinson, 1997; Nystrom & Starbuck, 1984; Schwenk, 1984; Tripsas & Gavetti, 2000). Like the cognitive

\(^2\) We follow Nystrom and Starbuck’s (1984: 278) conception of beliefs as the most elementary unit of analysis, which includes at least the following concepts: cognitive representations (e.g. March & Simon, 1993[1958]; Simon, 1997[1947]), mental models (e.g. Barr et al., 1992; Hodgkinson, 1997; Porac et al., 1989), cognitive maps (e.g. Huff, 1990), interpretive schemes (e.g. Bartunek, 1984), schemas (e.g. Nadkarni & Narayanan, 2007), frames (e.g. Barr & Huff, 1997; Benner & Tripsas, 2012; Kaplan, 2008), categories or cognitive taxonomies (e.g. Porac & Thomas, 1990), or ideologies (e.g. Salancik & Porac, 1986; Starbuck, 1982).
psychology literatures (e.g. Kahneman, 2003; Stanovich & West, 2000), we refer to this tendency as the commitment to status quo beliefs (Starbuck, 2009: 930): “[t]he effects of enduring beliefs are so pervasive that they deserve first mention. Other reactions [...] are contingent on beliefs that people bring to their situations.” The difficulty to overcome existing beliefs is vividly illustrated in the interaction between Andy Grove (former CEO of Intel) and his boss Gordon Moore in the epigraph.

Despite tremendous advances in adaptive managerial cognition scholarship, research seems to have accounted mainly for differences across decision-makers’ strategic (in)flexibility. A predominant emphasis has been on uncovering the nature of, and on critical aspects that either strengthen or inhibit, dominant biases. Although some scholars have accounted for the possibility that decision-makers can individually progress in their ability to update beliefs and to become more flexible over time (c.f. Barr et al., 1992; Bartunek, Gordon, & Weathersby, 1983; Dunbar, Garud, & Raghuram, 1996; Garud & Rappa, 1994; Lant, Milliken, & Batra, 1992), we lack an understanding of how they learn to do so. Instead, research suggests that learning is rather associated with decision-makers’ increasing committed to existing pathways (e.g. Gavetti & Rivkin, 2007; Hambrick et al., 1993) than to exploring new beliefs (Starbuck, 2009). An intriguing question, then, is to uncover whether and how decision-makers learn to better integrate new information with existing beliefs, in order to enhance their understanding of the situation at hand – a process we refer to as individual decision-makers’ strategic flexibility development.

The purpose of this article is to advance a more developmental (or Meliorist) account of when and how individual decision-makers learn to become more flexible through reflective reasoning. In this article, we draw from recent dual process theory insights on motivated reasoning (Kruglanski & Webster, 1996; Stanovich & West, 2000; Tetlock, Skitka, & Boettger, 1989), which suggest that decision-makers’ use of either more associative (System I) or more reflective (System II) reasoning explains individual differences in belief formation. Specifically, cognitive motivation importantly shapes whether decision-makers reason about problems rather by association (System I) to status quo beliefs, or rather reflectively (System II) by decontextualizing beliefs from existing narratives, bringing them to a level of awareness, in order to simulate novel and varied alternatives offline. Cognitive motivation is a state that is defined in terms of the goals and needs that decision-makers possess concerning belief formation (Kruglanski & Webster, 1996). We

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3 In this article, “we” is used for editorial purposes.
4 For consistency, we henceforth include under reasoning all types of search (i.e. forward-looking or backward-looking, local, distant, etc.) logics (i.e. analogical, deductive, inductive, heuristic, etc.).
suggest that four distinct motivational states – *absolutist misers, absolutist tacticians, diverse misers, and diverse tacticians* – characterize the interactions between the individual and social dimensions of cognitive motivation, predicting whether and how decision-makers learn to develop greater flexibility through reflective reasoning. In addition, interactions between cognitive motivation and the organization’s internal and external context – *task-related diversity of top management team and share of active shareholders* – may further strengthen or weaken the proposed relationships between cognitive motivation and decision-makers’ strategic flexibility development.

Our theorizing not only opens avenues to the study of individuals’ strategic flexibility development, to integrate fairly separate research streams on motivation and reasoning, but also for the study of motivation and its implications for organizations (e.g. Bobbitt & Ford, 1980). Despite significant advances, research has examined the impact of fairly ‘stable’ decision-maker characteristics (e.g. Dane, 2010; Nadkarni & Herrmann, 2010; Nadkarni & Narayanan, 2007). In uncovering the role of motivated reasoning in the context of CEOs’ strategic flexibility development, we emphasize a possibility that has received little attention – namely, that individual development may impact flexibility-related outcomes perhaps as much as structural organizational changes, such as successions.

We build our arguments as follows. We begin with conceptualizing the cognitive underpinnings of decision-makers’ strategic flexibility and develop a motivated reasoning perspective that, in our view, integrates and extends our understanding of decision-makers’ reasoning about the strategic environment. We then develop a model of CEO strategic flexibility development, outlining links between cognitive motivation, belief formation, and the organizational context. We will then discuss implications for the study of upper echelons, adaptive managerial cognition and motivated reasoning.

**D.2. Strategic Flexibility and Motivated Reasoning**

To better understand how decision-makers learn to develop strategic flexibility over time, we first consider what strategic flexibility is at the level of individual decision-maker cognition, and conceptualize its underlying cognitive mechanisms. We then propose the cognitive motivation concept, in order to advance a motivated reasoning perspective on strategic flexibility development.
D.2.1. Conceptualizing Decision-makers’ Strategic Flexibility

Recent strategic leadership scholars point to the particular role of fairly ‘stable’ executive characteristics in either enhancing or constraining their firms’ strategic flexibility – firms’ ability to adapt to changes in their external environment. While strategic flexibility requires top-level decision-makers to be sensitive to discontinuities, to develop an understanding of the strategic environment, make assessments of strategic alternatives, and take action (Eisenhardt et al., 2010; Shimizu & Hitt, 2004), particular individual traits or attributes significantly enable or constrain this process. For instance, CEO personality traits – such as extraversion, emotional stability and openness to experience – are associated with higher flexibility in strategic choices than traits such as conscientiousness. Nadkarni and Herrmann (2010: 1067) infer that these traits explain the types of beliefs that CEOs develop, as well as whether and how they change beliefs over time. Others emphasize the role of expertise (Eisenhardt et al., 2010). Research on upper echelons often recognizes top-level decision-makers by virtue of distinct and accomplished traits or attributes, which are inferred to affect selective perception and information processing – critical aspects, from the perspective that individual differences across strategic leaders importantly affect organizational outcomes (Finkelstein & Hambrick, 1996; Hambrick & Mason, 1984).

Other scholars more directly study the impact of decision-makers’ cognitive content and structures on the flexibility of the strategic choices they make (e.g. Barr et al., 1992; Dane, 2010; Nadkarni & Narayanan, 2007). A core assumption is that decision-makers act on the basis of beliefs. While knowledge is more generally seen as a “justified true belief”, we accept a definition with lay epistemic origins: A belief consists of a personal “theory” that “describe[s] how and why things happen” (Nystrom & Starbuck, 1984: 278). A belief is an outcome of inductive or deductive reasoning, linking observed facts with cognitive processes, such that beliefs help one understand the world (Weick, 1995). In particular, these researchers suggest that decision-makers form beliefs about action alternatives and about the own reasoning strategies employed.

First, beliefs about action alternatives (or first-order beliefs) represent interpretations of the relationships between an organization and its external environment (Barr et al., 1992; Nadkarni & Narayanan, 2007; Shimizu & Hitt, 2004). They involve understandings of the available resources, and the ways in which these resources can be deployed, manufactured, and distributed (Zhou & Wu, 2010), as well as of the requirements for these resources to be marketed (Garud & Rappa, 1994), for
instance in a given competitive landscape (Hodgkinson, 1997; Porac, Thomas, & Baden-Fuller, 1989). They further include understandings of the internal processes needed to support the intended strategies (Gilbert, 2005; Worren, Moore, & Cardona, 2002), of the possible links between different action alternatives, and the possible payoffs of different alternatives (Gavetti & Levinthal, 2000).

Second, beliefs about reasoning strategies (or second-order beliefs) represent interpretations about the (in)appropriateness of the own cognitive strategies employed (Bartunek, 1984; Garud & Rappa, 1994). These beliefs involve embedded assumptions, norms, and values – the larger assumptions about why events happen, and what a firm should do – that help to evaluate, sustain, and define first-order beliefs (Garud & Rappa, 1994; Schwenk, 1984). For instance, Garud and Rappa’s seminal study showed that decision-makers’ second-order beliefs delineated appropriate ways for assessing the possible merits of cochlear implants. To promote flexibility, decision-makers need to understand the accuracy of their own evaluations (Shimizu & Hitt, 2004).

In fact, research indicates that those decision-makers who make strategic choices of higher flexibility tend to have conceptualized strategic alternatives of greater variety that are more broadly connected (Dane, 2010; Nadkarni & Narayanan, 2007) and of greater distance from the status quo – of greater novelty (Gavetti & Levinthal, 2000; Gavetti & Rivkin, 2007). In turn, decision-makers who form beliefs of lower breadth and novelty tend to be fairly inflexible in the choices they make (Nadkarni & Narayanan, 2007; Tripsas & Gavetti, 2000).

**D.2.2. Decision-makers’ Strategic Flexibility and Belief Updating**

From this cognitive perspective, strategic flexibility has a resemblance to Bayes’ theorem. Bayes’ theorem implies that strategic flexibility occurs when decision-makers update existing beliefs in a proposition by taking into account new evidence (Starbuck, 2009), which is necessary to form beliefs of greater novelty and breadth. Particularly, beliefs are updated when the merits of generating new beliefs surpass the merits of utilizing existing beliefs. Over repeated trials, the degree of initial belief about a strategic alternative may then be strengthened, weakened, or remain the same, depending on novel evidence.

However, extant experimental evidence suggests that, contrary to what Bayes’ theorem recommends, individuals do give less weight to new evidence than to prior beliefs (e.g. Kahneman, 2003; Stanovich & West, 2000). Instead, because decision-makers tend to contextualize problems associatively with “existing beliefs,
expectations, or a hypothesis at hand” (Nickerson, 1998: 175), they bracket or even reorganize information, in order to confirm rather than to contradict existing beliefs, and avoid expansive search efforts (Schwenk, 1984). As a result, they tend to be committed to status quo beliefs. The commitment to status quo beliefs becomes evident in two core tendencies: One points to the extent that belief formation is biased towards one’s own or existing, readily available opinions. The second reflects the extent that prior beliefs interfere with reasoning in argument evaluation, and is said to exist when beliefs are formed based on their believability rather than their validity (e.g. Stanovich & West, 2000).

As an example in the organization setting, Tripsas and Gavetti’s study illustrates that the reliance on existing beliefs about strategic alternatives, for instance, beliefs in the superiority of the “razor/blade” revenue model, in customers’ dedicated need for the “photographic quality” of print images, explained Polaroid’s eventual failure to renew its business in light of the digitalization trend. Barr et al.’s (1992) study shows great variation across decision-makers’ belief updating in light of novel environment contingencies (see also Barr & Huff, 1997).

D.2.3. Belief Updating and Motivated Reasoning

These developments suggest that decision-makers’ belief updating, which underlies strategic flexibility, is at least to some extent a function of their reasoning ability. First, in probing the effect that dual reasoning systems have, dual process theorists (DPT) suggest that variation in commitment to status quo bias serves as evidence for dual systems of reasoning: On the one hand, commitment to the status quo suggests that the more automatic, typically fast, effortless associative (System I) reasoning strategies are at work. Individuals then take as a point of departure a model of the world that is given, by retrieving similar and accessible information from memory (Kahneman, 2003), and develop beliefs without conscious awareness of the reasons there are to hold them. On the other hand, reflective reasoning strategies (System II) represent the more sophisticated, deliberate, slow, and effortful mental operations (e.g. counterfactual, hypothetical, and probabilistic thinking). Belief updating and the resulting flexibility in reasoning is a manifestation of reflective reasoning, which enables the simulation of alternative world models offline by decontextualizing beliefs from personal narratives and then bringing them to a level of awareness (Stanovich & West, 2000). While much prior research has outlined the existence of two cognitive

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5 The commitment to the status quo beliefs label used here encompasses a number of systematic biases that have been reported by decision theorists (e.g. Stanovich & West, 2000; Kahneman, 2003) and organization theorists (e.g. Schwenk, 1984), for instance, belief, my-side, confirmation, prior hypothesis, anchoring, escalating commitment biases, etc.
systems, it has primarily emphasized either the more associative (System I) reasoning strategies (Kahneman, 2003), or individual differences across decision-makers’ use of either systems both among cognitive psychology (e.g. Stanovich & West, 2000) and organization researchers (e.g. Geletkanycz & Black, 2001; Hambrick et al., 1993; Kiesler & Sproull, 1982; Louis & Sutton, 1991).

Second, motivated reasoning scholars specifically suggest the crucial role of cognitive motivation to explain differences across individuals’ reasoning outcomes (e.g. Kruglanski, 1989; Kruglanski & Webster, 1996; Tetlock, 2000). *Cognitive motivation* refers to the goals and needs one possesses concerning belief formation, and assumes that beliefs are in part adopted to satisfy psychological needs (Kunda, 1990). It suggests that treating belief updating (and strategic flexibility) solely from a perspective of individual differences in fairly ‘stable’ traits or attributes neglects the body of evidence that ‘state’ variables, such as managers’ motivational orientations (e.g. Bobbitt & Ford, 1980), shape reasoning. Some motivational orientations activate decision-makers’ commitment to particular action courses, insulating them from crucial information and thereby fostering inflexibility, while others promote greater flexibility. Organization research has emphasized self-interested motivations and the role of ‘situational’ context factors (e.g. incentives) in manipulating executive behavior (Finkelstein & Hambrick, 1996). Beyond incentives, other aspects of the larger social context may activate decision-makers’ motivational orientations, specifically cognitive motivation, to fixate on specific beliefs and reasoning strategies at the expense of others.

The concept of strategic flexibility advanced here is grounded in a more developmental (e.g. Barr et al., 1992; Bartunek et al., 1983; Dunbar et al., 1996; Garud & Rappa, 1994; Hedberg, 1981; Lant et al., 1992) or ‘Meliorist’ (Stanovich & West, 2000) perspective. It suggests that strategic flexibility is not only a matter of fairly ‘stable’ attributes, which account for variation across decision-makers’ belief formation. Instead, a Meliorist perspective proposes that decision-makers can make progress by making better use of their reasoning systems. Also, Simon (1955: 104) emphasized that, although simplification does occur, it may not apply all the time. Strategic flexibility, then, constitutes a sort of ability that decision-makers can develop. It, thereby, accounts for differences within decision-makers over time. Although some pathways towards greater flexibility have been proposed, including research on debiasing (Larrick, 2004), or unlearning (Hedberg, 1981), the underlying mechanisms through which, and the particular influences of, the organization’s internal and external context (March & Simon, 1993 [1958]; Simon, 1997 [1947]) in
shaping how decision-makers learn to update existing beliefs with broader, more novel beliefs remain poorly understood. The next section builds theory around how individual decision-makers, differentially, learn to become more flexible over time through enhanced use of reflective reasoning (System II).

D.3. Cognitive Motivation and Strategic Flexibility Development

To establish a more developmental (or Meliorist) approach of the decision-maker and his or her reasoning, that better links the individual decision-maker with the learning potentials involved in belief formation, we take as our starting point Kiesler and Sproull’s (1982) view that decision-makers’ use of the reflective system may be affected more by social influences and differences in intention and learning than their use of associative processes.

Drawing from motivated reasoning scholars (Kruglanski, 1989; Kruglanski & Webster, 1996), our theorizing proposes four distinct motivational states, which predict when and how decision-makers, differentially, learn to make greater use of reflective reasoning in order to update existing beliefs with broader, more novel beliefs. The proposed relationships will be outlined with case illustrations from prior research (Barr et al., 1992; Porac et al., 1989; Porac, Thomas, & Baden-Fuller, 2011; Tripsas & Gavetti, 2000). **Figure 5.D.** illustrates the proposed relationships. We then propose organizational context factors that influence changes in motivational states, in ways that lead decision-makers to progress towards greater (or worsen towards inferior) strategic flexibility over time.

**Figure 5.D. Cognitive Motivation’s Role for Strategic Flexibility Development**

Kruglanski (1989: 2-3) gave a well-known account of the *epistemic conundrum*: “though we cannot informationally manage without inputs from some of the people, we also cannot manage with inputs from all the people. We need to be selective about who we listen to and delineate the boundaries of our informational community.” *Cognitive motivation* is defined here as the intention for pragmatic and cognitive self-regulation along a social and an individual motivational continuum: *need for diversity vs. absolutism*, and *need for openness vs. closure*.

**The need for diversity vs. absolutism.** The need for diversity (vs. absolutism) constitutes a social motive of what or who holds as a sufficient knowledge source, which determines to whom a decision-maker assigns epistemic authority. Because decision-makers typically rely on the self but more often on others as knowledge providers, an important assumption is that beliefs are not only individually but also socially constructed and influenced by others whose judgments are respected (Garud & Rappa, 1994). By granting epistemic authority to a social source, the veracity of its statements, assumptions, value-based rationales, causal beliefs, and validity criteria are accepted (see Haas, 1992; Knorr-Cetina, 1999; Tetlock, 2002). The *need for diversity* dimension of cognitive motivation refers to the extent to which decision-makers distribute epistemic authority to general and diverse, rather than to specific and homogeneous, social sources (Kruglanski, 1989).

A low need for diversity is characteristic for decision-makers who grant authority to preferred social sources (e.g. Dutton & Dukerich, 1991; McDonald, Khanna, & Westphal, 2008; Porac et al., 1989), which makes ‘ready-made’ belief sets easily available for the use of associative reasoning. In turn, a high need for diversity is characteristic for eschewing commitment to particular social sources leading to more reflective considerations. In the organizational setting, decision-makers grant epistemic authority to social sources, such as the self, superiors, advisors (e.g. McDonald et al., 2008; Tripsas & Gavetti, 2000), more general social groupings (i.e. management teams, industry task forces, industry analysts, transaction partners, etc.) (e.g. Barr & Huff, 1997; Greve, 1996; Porac et al., 1989), or a set of social norms (i.e. a political or business ideology) (e.g. Salancik & Porac, 1986; Starbuck, 1982). Social identification may act as a strong predictor for the distribution of epistemic authority, since it inspires prediction and control (Greve, 1996; McDonald et al., 2008). For instance, Porac et al. (1989) found that Scottish knitwear producers derived knowledge claims from existing transaction partners. Consultants, agents, and informal trade associations conveyed to producers stable, homogeneous (normative and causal)
beliefs about the nature of demand for Scottish garments and the capabilities required to satisfy demand through word-of-mouth.

**The need for openness vs. closure.** In addition to a social motive, decision-makers also have an individual motivation: The need for openness (vs. closure) refers to an individual motive of what counts as a sufficient evaluation of a claim. Decision-makers with a high need for openness eschew commitment, and avoid the seizing and freezing on preferred shortcuts; instead, they integrate claims that sometimes contradict the preferred point of view. In turn, this is positively related to reflective reasoning. Decision-makers with a high need for closure leap to conclusions using shortcuts for argument evaluation (e.g. Cacioppo & Petty, 1982; Kruglanski & Webster, 1996). To limit cognitive costs, they tend to introduce simplifications while reasoning (Schwenk, 1984), to rapidly stop search once they have at their disposal a ‘satisficing’ strategy (Simon, 1997 [1947]). For instance, in their study of juror verdicts, Kuhn, Weinstock, and Flaton (1994) identified important variation across jurors’ reasoning about a verdict and about their own reasoning strategies. When satisficing, jurors selectively drew on evidence, and constructed a single story that eventually led to more extreme conclusions entertained with higher certainty than jurors who used a multiple theory elaboration strategy. In the organization context, Plambeck and Weber (2009) found that decision-makers varied in the extent to which they held ambiguous beliefs about the EU enlargement issue, which – in turn – explained variation in the scope, novelty, and riskiness of organizational actions.

Taken together, the need for diversity and the need for openness dimensions of cognitive motivation explain variation in the extent to which decision-makers reason either associatively or more reflectively. Next, we outline how the two motivational continua spell out four distinct motivational states – *absolutist misers, absolutist tacticians, diverse misers*, and *diverse tacticians* – which predict decision-makers’ use of reflective reasoning and the likelihood that they learn to update existing beliefs (thereby becoming more flexible) over time.

**D.3.2. Interactions of Cognitive Motivation and Strategic Flexibility Development**

**Absolutist misers.** Absolutist misers, who have low cognitive motivation (characteristic of a low need for diversity and a low need for openness), will be unlikely to develop greater strategic flexibility over time, given their confidence in preferred beliefs derived from preferred social sources. To avoid cognitive effort, they tend to activate knowledge from memory that is consistent with the desired conclusions (Sinclair & Kunda, 1999). These beliefs persist relatively automatically.
over time, through the use of associative reasoning, such as the availability heuristic (Anderson & Lindsay, 1998), local analogies (Gavetti et al., 2005), and other satisficing strategies.

In turn, this commitment to existing beliefs also shapes their relationships with others in their roles as information sources. Absolutist misers tend to break off contacts with ‘other-minded’ people, who they consider as informationally irrelevant and cognitively costly. By doing so, they restrict their social environment, insulating themselves from novel or diverse sources.

Over time, as they experience feedback on the effectiveness of their thinking, absolutist misers will engage in selective learning of agreeable arguments. In situations of positive feedback, these decision-makers remain committed to their idiosyncratic beliefs. When feedback implies low effectiveness, and high dissonance (Fiske & Taylor, 1991) with their needs, these decision-makers adopt postures of denial and resistance. Integrating feedback is unlikely, since it would first contradict their preferred beliefs as well as require a reflective posture, which given their focus on economy, is unlikely to occur. They tend to reduce uncertainty by withholding contradictory or even truncating information, so as to fit observations by association with existing beliefs (Lyles & Mitroff, 1980: 113).

For instance, during Edwin Land’s time at Polaroid, specifically the senior managers in the team may have been in an absolutist miser state. Land, an autocratic personality with strong control over the firm, had a huge hold on the executive team through a number of core beliefs (Tripsas & Gavetti, 2000). He strongly disbelieved in the added-value of market research, through which alternative information sources could have challenged his firmly held beliefs about customer behavior. Despite the growing trend toward digitalization, and declining sales between 1980 and 1985, market research had been in the late 1980s only, when top management had undergone some changes, which may have led to more reflective analyses. Executive turnover is generally seen as a vehicle for unfreezing commitment to status quo (see also Lyles & Mitroff, 1980: 114).

Another core belief was in the razor/blade business model, given Land’s “absolute commitment to both science and instant photography” (Tripsas & Gavetti: 1150, emphasis added). Even after his official role at Polaroid, his imprint remained immense. Senior managers continued to anchor their reasoning about the emerging digital photography in analogy to the instant cameras and the razor/blade business model, where money was made on the film – a belief they could easily relate to, as one interviewee noted. This analogy was so pervasive that, even in the early 1990s, newly
hired individuals had to continuously “fight” with senior management over new business concepts. Senior managers continued to reason by association with Edwin Land’s beliefs, which even led to the denial of otherwise obvious facts. As the core belief in “photographic quality” in the early 1990s illustrates, Land’s influence kept senior managers from considering data about strategic opportunities in alternative hard copy technologies. One member of the Electronic Imaging Division noted (Tripsas & Gavetti, 2000: 1156):

“We had the capability… but there was disbelief that ink jet could be near photographic quality. Mathematical models and demos couldn’t convince people.”

A senior executive referred to the strategic decision as follows:

“I spent an awful lot of my life, [Senior Manager X] spent almost all of his life – a lot of us… [Senior Manager Y] spent an awful lot of his life focusing on improving the quality of the instant image… So that was an everyday, all day part of our lives… so that can’t help but have been indelible in the DNA or something.”

Strikingly, this senior executive had no arguments for the decision not to also enter hard copy technologies – it was what the company had always done. Even after the fact, he showed little awareness of his own reasoning strategy. As a result, absolutist misers, since they perpetuate existing beliefs from committed social sources with associative reasoning, are less likely (than their diverse and tactician counterparts) to update existing beliefs over time.

Proposition 1: Absolutist misers (low need for diversity; low need for openness) are unlikely to learn to become flexible over time.

Absolutist tacticians. Absolutist tacticians (characteristic of a low need for diversity and a high need for openness) tend to actively create commitment among like-minded social sources and actively construct commitment to status quo beliefs. They are therefore unlikely to update existing beliefs and to develop greater strategic flexibility over time.

The belief world a decision-maker is motivated to perpetuate also shapes his or her relationships with others in their role as targets. When decision-makers face positive feedback from repeated engagement in reasoning, absolutist tacticians will be motivated to use their need for openness to actively construct evidence in ways that further reinforce the desired conclusions (Kunda, 1990). By polarizing in the direction of existing beliefs, either through deduction from existing norms and assumptions, or through induction from observable facts, decision-makers maintain, justify, and rationalize the validity of accepted beliefs (Haas, 1992). This reinforcement also has a coordinative function in relation to others (Barr & Huff, 1997), by rendering the
accepted beliefs readily (Anderson & Lindsay, 1998) and collectively (Garud & Rappa, 1994) available for the use of automatic reasoning.

For instance, one core belief of fairly successful Scottish knitwear producers was that the scope of a successful Scottish knitwear firm embraced minor variations in traditional ‘Scottish quality’. By collectively providing various arguments in favor of these competitive boundaries, industry participants limited their awareness of alternative competitive threats (Porac et al., 1989: 408):

“I don’t think we have a lot of competition in this company. There is a crowd out in Hong Kong that manufactures for Ralph Lauren’s Polo. They have copied us stitch for stitch. That is certainly a bit of a threat. But they got it wrong. They’ve missed some of the details… We are different, and few people do it like us.”

When decision-makers face negative feedback, absolutist tacticians – we argue – will be motivated to engage in reflective reasoning, in order to actively rationalize or distort facts, so as to fit preferred beliefs (e.g. Duhaime & Schwenk, 1985; Lyles & Mitroff, 1980). In the Polaroid context, Edwin Land, despite early signs of declining company performance, accommodated facts, made conclusions (i.e. only large-scale research projects, little or no market research) in ways that conformed to the major premise that science was the most important tool for product development. Over time, in the two cases of Edwin Land and knitwear producers, key decision-makers polarized in the direction of a preferred social source to the exclusion of others. With the following proposition, we argue that, through repeated engagement in active reasoning in self-serving ways, absolutist tacticians are unlikely to update existing beliefs with broader and more novel beliefs.

Proposition 2: Absolutist tacticians (a low need for diversity, a high need for openness) are unlikely to learn to become flexible over time.

Diverse misers. Depending on the feedback they receive, diverse misers (characterized by a high need for diversity and a low need for openness) tend to temporarily overcome commitment to status quo beliefs by updating existing beliefs. Diverse misers do not have a preferred strategy for resolving the epistemic conundrum: While decision-makers who need diversity interact with a variety of different social sources, misers, given their high need for cognitive economy, can only manage with some of these informational sources. We argue that the diverse miser motivational state is a transient state, where both needs coexist in tension. The dissonance motivates decision-makers to move to a more stable motivational state by either learning to cultivate a lower need for closure or a lower need for diversity. While the cultivation of higher openness opens up a window of opportunity for flexibility, higher absolutism creates an opportunity for commitment to status quo.
Thus, actors tend to become either ‘movers’ or ‘stayers’ (Huff, Huff, & Thomas, 1992).

We argue that, as a result of positive feedback, diverse misers are inclined to shift towards greater absolutism and become ‘stayers’ over time. Given the positive reinforcement, diverse misers tend to satisfice by replicating the most convincing or most widespread arguments with some reflection (Fiske & Taylor, 1991: 227). In turn, the need for diversity may be downplayed at the expense of the need for cognitive economy. As a result, they remain subject to existing beliefs, and updating is very unlikely to occur over time.

The study of U.S. railroad CEOs’ beliefs illustrates a reasoning episode on traffic decline after WWII, where Rock Island’s decision-makers were motivated to integrate information from multiple sources, such as internal, regulatory policies, competitive, economic, and market developments (Barr et al., 1992: 26-27). At the same time, they also needed to reach rapid closure, by downplaying the economic situation to be of short duration and essentially beyond their control. The authors highlighted the impact of this on the firm’s relative prosperity. We argue that the effects of positive feedback triggered little change in openness, which would have been necessary for them to engage with the new developments in the industry environment. Instead, over a 15-year period, managers conceptualized strategic alternatives associatively by seizing and freezing on similar observations made in the past and in alignment with existing assumptions. Therefore, we suggest the following proposition:

**Proposition 3a:** For positive feedback, diverse misers (a high need for diversity, a low need for openness) are unlikely to learn to become flexible over time.

To the contrary, when faced with negative feedback, diverse misers may be inclined to temporarily shift towards a state of greater openness. Diverse misers may then become temporary ‘movers’ before their commitment to the status quo ‘refreezes’. At Rock Island, it is only when performance declined in 1964 that a temporary belief change about strategic choices occurred, before they soon ‘refroze’ (Barr et al., 1992: 29). Also, D’Aveni and MacMillan (1990) found that decision-makers who address long-term problems, rather than denying them, made more effective decisions.

Negative feedback heightens the experience of stress (see Barr & Huff, 1997; Huff & Schwenk, 1990). The associated need to find causal explanations or attributions may induce a temporary shift in openness, when decision-makers seek
explanations by interacting with a variety of social sources, and reconcile arguments from these sources. However, given the dissonance this situation implies, diverse misers soon refreeze again at lower levels of openness. Even after repeatedly negative feedback, diverse misers’ focus on short-term problems constrains the additional time spent on long-term issues. They are thus unlikely to shift towards a higher need for openness on a more sustainable basis. This leads to the following proposition:

Proposition 3b: For negative feedback, diverse misers (a high need for diversity, a low need for openness) are likely to become flexible on a temporary basis.

**Diverse tacticians.** Finally, diverse tacticians (characterized by a high need for diversity and a high need for openness) are in a state of high cognitive motivation. We argue that diverse tacticians learn to develop greater flexibility through repeated engagement with reflective reasoning. To fulfill their need for diversity, diverse tacticians eschew definite knowledge from specific sources (Kruglanski & Webster, 1996) and embrace a variety of perspectives on a problem. To fulfill their need for openness, diverse tacticians engage in distant search (Gavetti, 2005; Gavetti & Levinthal, 2000), seek to understand novel connections between the firm and its environment (Barr et al., 1992), evaluate alternatives, and challenge existing assumptions. Over time and by virtue of their motivation to repeatedly engage in reflective reasoning, diverse tacticians ‘train’ to become more flexible in their reasoning, irrespective of the feedback they face.

To illustrate, the reasoning of the Chicago and Northwestern (C&NW) railroad company, compared to that of Rock Island’s decision-makers, evolved quite differently between 1950 and 1973. It eventually led to significant renewal in the reasoning and the strategic choices that were adopted (Barr et al., 1992). Ben Heineman, the appointed chairman, had limited experience with the company and the industry culture. C&NW’s decision-makers, while they initially reached closure rapidly, they subsequently listened to a diverse set of social sources over a six-year period qualified as “unlearning” (Barr et al., 1992: 29). The authors suggest that such unlearning, which may have been initiated by negative feedback, led decision-makers to introduce novel concepts definitions, to form novel causal beliefs, and to experiment with alternative understandings. The very acts of introducing novel concepts, which are unfamiliar to decision-makers’ existing belief frameworks, illustrate that there has been a shift in reasoning strategies. The authors argue that C&NW’s decision-makers had engaged in some form of second-order learning (Barr et al., 1992: 30). Similarly, Garud and Rappa (1994) illustrate that a shift in beliefs about technological alternatives was accompanied by a change in reasoning strategies to evaluate these
alternatives. Diverse tactician decision-makers, through repeated practice, further increase the set of reasoning strategies available for reflectively reasoning about a situation. The next proposition suggests that diverse tacticians will learn to permanently update their beliefs, and develop higher strategic flexibility through repeated engagement in reflective reasoning.

Proposition 4: Diverse tacticians with high cognitive motivation (a high need for diversity, a high need for openness) are more likely to learn to become flexible over time.

So far, the focus has been on the ways in which four distinct motivational states shape the likelihood that decision-makers learn to develop strategic flexibility through repeated engagement in reflective reasoning and with the feedback they experience. Even though these motivational states are distinct, decision-makers are not necessarily closely tied to one state over time. Instead, to become more flexible over time, a progression towards higher cognitive motivation levels is necessary. The next section specifies how the situational organization context opens up opportunities for decision-makers’ strategic flexibility development by triggering shifts in decision-makers’ motivational orientation. In specific, it has been suggested that the organization’s internal and external context starkly influences decision-makers in whether and how they succeed in overcoming cognitive bounds and motivational constraints (March & Simon, 1993 [1958]; Simon, 1997 [1947]).

D.3.3. Strategic Flexibility Development and Organizational Context

While psychology researchers suggest that virtually everyone has a cognitive motivation, these lines of research have tended to primarily emphasize cross-sectional individual-level effects, source effects, and context-level effects, on either of the two cognitive motivation dimensions (e.g. Cacioppo, Petty, Feinstein, & Jarvis, 1996; Kruglanski, 2005; Tetlock et al., 1989). With this emphasis little if any work has explored whether and how organizational factors shape the unique development of adult decision-makers’ cognitive motivation. The purpose of this section, is to uncover the specific influences from the organization’s internal and external contexts (March & Simon, 1993 [1958]; Simon, 1997 [1947]) in strengthening or weakening shifts in decision-makers’ cognitive motivational orientations (and, thereby, strengthening or weakening the proposed relationships, in Propositions 1 to 4). The focus will be on the unique development of CEOs’ cognitive motivation, because CEOs have the biggest potential to impact the organization’s flexibility through the choices they make (Finkelstein & Hambrick, 1996; Nadkarni & Herrmann, 2010). To the extent that any organizational factor has the potential to influence CEOs’ cognitive motivation, a
comprehensive consideration of these factors is beyond the scope of our theorizing. Instead, our theorizing is confined to two factors characteristic of the influences of the organization’s internal and external contexts – the level of top management teams’ (TMTs) task-related diversity and the share of active shareholders. We specifically argue that these two structural aspects, by activating distinct cognitive motivational states, are likely to moderate the CEO’s strategic flexibility development process through the underlying social influence effects on CEOs’ motivation and reasoning. Because these dynamics implicate more general social influence phenomena, understanding how these two factors shape decision-makers’ cognitive motivations allows us to contribute to both the organizational and psychology literatures.

**Top management team’s task-related diversity.** In organizational settings, decision-makers rarely form beliefs about the organization and its relationship to a changing environment, and make consequential strategic choices as a solitary endeavor only. To shape the firm’s strategic direction, the decision-maker at the apex of the relevant hierarchy, the CEO (or team leader), engages with other members of the firm’s top management team within more or less formal decision processes (Finkelstein & Hambrick, 1996). They participate in brainstorming sessions, debate, and assess alternatives. CEOs are presented with results from investigative work. While we will now focus on the influence of the TMT, CEOs can similarly be influenced by other members of the corporate elite, such as a board of directors, advisors, industry task forces, etc.

Prior research pointed to the ambiguous results concerning the effect of TMTs’ task-related diversity on strategic decisions. Task-related attributes differ from personal attributes in that they include the set of skills and characteristics that are directly related to the belief formation task. TMTs’ task-related diversity addresses the extent to which top team members are heterogeneous (rather than homogeneous) with respect to task-related attributes, in particular heterogeneity in functional background, in education and in industry tenure (c.f. Hambrick, Cho, & Chen, 1996). Top team members may have very different individual functional, industry or experience backgrounds, for which they may have been hired in the first place. As such, diverse (homogenous) teams are very likely to raise the CEO’s attention for different (similar) aspects of the same industry or organization, as they share different (similar) skills, and have different (similar) access to outside information networks (e.g. Bunderson & Sutcliffe, 2002; Dearborn & Simon, 1958). Yet, the implications of TMTs’ task-related diversity remain unclear.
On the one hand, TMTs’ task-related diversity tends to increase the range and variety of environmental observations and the breadth of perspectives on a same issue (c.f. Bantel & Jackson, 1989; Hambrick et al., 1996; Sutcliffe, 1994). In a similar vein, psychologists have shown that the combination of diverse team members’ claims, by increasing the sample of experiences, reduces bias in reasoning, especially in estimation tasks, such as forecasting or evaluation (Clemen, 1989). On the other hand, TMTs’ task-related diversity tends to create higher turnover, create important schisms in the team, and produce strategic decisions of lower novelty, of greater consensus to reconcile diversity in the team (c.f. Ancona & Caldwell, 1992; O'Reilly, Snyder, & Boothe, 1993). From this, it follows that TMTs’ task-related diversity should moderate the CEOs’ strategic flexibility development process by raising awareness on a wider variety of different issues or different perspectives on the same issue or alternative (Lant et al., 1992) that need to be incorporated in their own reasoning about the situation at hand. But the overall performance effect remains unclear (c.f. Murray, 1989).

We argue that CEOs’ strategic flexibility development benefits from task-related diverse teams to the extent that they are cognitively motivated to incorporate the team members’ inputs into their own reasoning – a mechanism through which they may involve some TMT members more than others (c.f. Blau, 1964; Bunderson, 2003; Hambrick, 2007). Specifically, the interaction (or fit) between the CEO’s existing cognitive motivation and the situational requirements – top team members’ task-related diversity – will affect whether or not CEOs learn to become more flexible. Top team members’ task-related diversity can either fulfill existing motivational needs or provoke shifts towards higher or lower cognitive motivational orientations. In this sense, task-related diverse (as opposed to task-related similar) team members may be particularly fruitful for activating the need for openness, such that CEOs will consider not only their preferred viewpoints, but also the different perspectives of the other top team members and engage in more extensive reflective reasoning. In turn, when diverse teams create dissonance with CEOs’ current motivational orientation, particularly their need for openness, CEOs will deploy distinct social and cognitive strategies to resolve such dissonance. We will theorize these interactions next.

**High levels of TMTs’ task-related diversity** are likely to activate an even higher need for diversity in decision-makers with a high need for openness, when they repeatedly engage in reflective reasoning. Cognitively open decision-makers require more extensive processing of various types of available information and feedbacks before reaching conclusions. They are less likely to be persuaded automatically by
others without engaging in reflective reasoning by themselves (Cacioppo et al., 1996; Kruglanski & Webster, 1996). In this respect, diverse tacticians are particularly well placed (compared to their diverse miser counterparts) to fulfill their needs for openness and diversity when situated in task-related diverse teams. In these settings, they will thus activate even higher needs for openness and diversity through repeated engagement in reflective reasoning over time.

Absolutist tacticians, we argue, will selectively assign epistemic authority to preferred in-group team members, so as to reduce the dissonance between the situational requirements of task-related diverse teams and their low need for diversity. Because absolutists generally favor autocratic team structures (Kruglanski, 2005), absolutist tacticians will assign epistemic authority to selected members. Specifically, the selection is likely to be based on ‘expert’ or ‘prestige’ grounds (see Finkelstein, 1992; Raven, 1993). Experts and highly prestigious top managers may be trusted for providing definite knowledge on the problem at hand. For expert grounds, experts represent top managers with functional, industry or experience backgrounds that are most suitable for addressing the issue domain at hand. For prestige grounds, prestigious top managers are perceived to have a high status, which can be derived from their expertise, industry and education background, or other aspects, such as their standing in the ‘managerial elite’ (e.g. the roles they occupy in external boards, etc.) (see Bunderson, 2003; Finkelstein, 1992). Even though absolutist tacticians select which sources they are influenced by, they actively reason and solve problems with these selected ‘in-group’ members. As a result, they are likely to activate a higher need for diversity from repeatedly reasoning reflectively with experts and prestigious managers’ knowledge claims, which may inherently differ from their own views.

In turn, when placed in task-related diverse TMTs, decision-makers with low levels of openness are less likely to activate higher need for diversity, since they will seize and freeze on selected and preferred ‘in-group’ members’ perspectives, to which they remain committed over time. In the following proposition, we suggest that when situated within task-related diverse teams, diverse and absolutist tacticians are more likely to activate even higher needs for diversity, which leads these decision-makers to form broader and more novel beliefs than their diverse and absolutist miser counterparts.

Proposition 5a: The extent of TMTs’ task-related diversity moderates decision-makers’ strategic flexibility development, such that the higher top teams’ task-related diversity, the more likely absolutist and diverse tacticians (with a high need for
openness) develop higher needs for diversity, compared to their absolutist or diverse miser (a low need for openness) counterparts.

**Low levels of TMTs’ task-related diversity** are likely to activate an even lower need for diversity in decision-makers with a low need for openness, when they repeatedly engage in reflective reasoning. In the same way as a high need for openness has the potential to inhibit determinate judgment, so does a low need for openness favor freezing on a determinate judgment. **Absolutist misers** best fulfill their needs by freezing on similar viewpoints in teams of low task-related diversity. As a result of repeatedly reasoning with fairly homogenous team members, they train in the automatic use of shortcuts, leading to a decrease in the level of breadth and novelty of beliefs over time.

Similarly, **diverse misers**, when they are situated in teams of low task-related diversity, despite the dissonance with their need for diversity, they are likely to follow their need for satisficing and develop higher absolutism over time. For the sake of cognitive economy and swift consensus, diverse misers will tend to use cues that prompt the use of simple rules of thumb or heuristics (c.f. Todorov, Chaiken, & Henderson, 2002). In particular, cues from similar members are considered ‘trustworthy’ and automatically accessible, and these similar members, who inspire trust, identification, and liking (Bunderson, 2003; Raven, 1993), are likely to be granted epistemic authority repeatedly over time. For instance, knowing that a team member is similar may prompt an acceptance of his or her judgment – “similar people can be trusted”. Furthermore, their judgments are consulted not only on specific issues, but on more general issues arising in their day-to-day professional lives. By doing so, diverse miser CEOs assign generalized ‘referent’ epistemic authority to similar team members (c.f. French & Raven, 1959). In this respect, organizational research has found support for a relationship between the level of functional similarity between the CEO and the TMT and the resulting increase in influence that team members have over core decisions (Homburg, Workman, & Krohmer, 1999). In addition, CEOs tend to select successors who have similar backgrounds (Smith & White, 1987; Westphal & Zajac, 1995). By repeatedly engaging in reasoning with top team members of low task-related diversity over time, these CEOs tend to perpetuate the in-group focus and train in the automatic use of cognitive shortcuts with which they freeze on similar others’ views.

In turn, tactician CEOs are less likely to develop a lower need for diversity, since they tend to seek to fulfill the high need for openness by avoiding shortcuts, using more expansive search for alternatives instead. On these grounds, we propose,
next, that diverse and absolutist misers, when situated in teams of low task-related diversity, they are likely to activate even lower needs for task-related diversity over time, which leads these decision-makers to form beliefs of lower breadth and novelty than their diverse and absolutist tactician counterparts.

*Proposition 5b*: The extent of TMTs’ task-related diversity moderates decision-makers’ strategic flexibility development, such that the higher top teams’ task-related diversity, the more likely diverse and absolutist misers (low needs for openness) develop lower needs for diversity compared to their diverse and absolutist tactician counterparts (high needs for openness).

**Shareholder structure.** Not only top management teams influence CEOs’ beliefs about the strategic environment and their own reasoning, but also other members of the corporate context, such as influential shareholders and their representatives. Even though a CEO is always accountable to a firm’s investors and their representatives, there exists great variation in the extent to which shareholders are actively implicated in management decision processes (e.g. David, Hitt, & Gimeno, 2001; Davis & Thompson, 1994). Shareholders increasingly mobilize outside of regular voting, to include private or public influence attempts. For instance, they can launch media campaigns or in private interaction with the CEO. Also, the scope of shareholder demands and the types of issues they raise have expanded well beyond traditional governance questions in the realms of CEO succession or compensation, or of board of director voting. They increasingly include more management-related demands that affect a CEO’s strategic choices (Davis & Thompson, 1994).

In line with this observation, we define the *share of active shareholders* (as opposed to passive shareholders), to capture the extent to which the shareholder structure is composed of investors and representatives who proactively express strategic concerns. By this, we mean expressions of concern for greater accountability to shareholders’ views and opinions, of concern for initiating changes in the CEO’s choices (c.f. David et al., 2001), and of concern for providing compelling justifications of these choices (c.f. Weick, 1995). By being active, shareholders have the very purpose of altering a CEO’s current thinking about the strategic environment, and to provoke or even pressure CEOs for greater flexibility in response to these demands. As such, the share of active (passive) shareholders should moderate CEO strategic flexibility development. However, prior research has found significant differences across CEOs’ reactions to shareholders and the resulting effectiveness of their decisions (e.g. Westphal, 1998; Westphal & Bednar, 2008). We argue that the extent to which the shareholder structure increases or decreases strategic flexibility
development depends on the CEO’s existing cognitive motivation to reflectively incorporate shareholders’ demands in his or her reasoning. In the following section, we theorize how the interactions between the share of active (or passive) shareholders and CEOs’ need for diversity explain whether and how CEOs progress towards higher or lower breadth and novelty in the beliefs they form over time.

**High shares of active shareholders** are likely to activate an even higher need for openness in decision-makers with a high need for diversity, when they repeatedly engage in reflective reasoning. Decision-makers with a high need for diversity fulfill their diversity needs and will learn to become more flexible through repeated engagement in reflective justification with active shareholders. Active shareholders raise demands for taking into account alternative strategic orientations, as well as assumptions and norms to evaluate these alternatives, which may differ from the ones that CEOs had, to date, considered acceptable. In response, CEOs are required to provide extensive justificatory rationales for their decisions and actions. By developing such justifications, CEOs’ accounts in public do not significantly differ from their own reasoning in private (Cornelissen, 2011; Tetlock & Manstead, 1985). Particularly, when decision-makers need high diversity, they will be more likely to reason reflectively, so as to substantively respond to shareholder demands. Thereby, decision-makers with a high need for diversity are likely to increase their willingness to pay close attention to evidence from diverse sources, to reduce overconfidence in singular perspectives, and to more generally eliminate biases by reasoning in more complex, multidimensional, and flexible ways (Tetlock, 1983; Tetlock et al., 1989).

For this reason, **diverse tacticians’** own needs are particularly congruent with active shareholders’ quests. By repeatedly producing justificatory accounts with diverse inputs, they increase their understanding of critics’ objections and become more self-critical towards the appropriateness of the own reasoning strategies, thereby further increasing their need for openness. As an illustration, Garud and Rappa’s (1994) study suggests that decision-makers who take into account a wider variety of justifications for a technological change (both new and old evaluation accounts), may learn to change their own beliefs about appropriate reasoning strategies.

Despite active shareholders being incongruent with **diverse misers’** needs, they are also likely to activate an increasingly higher need for openness over time. The justifications produced in response to active shareholders’ demands are likely to fuel progression from a motivational state where a CEO seeks out fairly expedient and obviously acceptable positions, to a state where he or she develops higher openness. Since diverse misers reflect on more complex strategic alternatives in interaction with
diverse sources, they make greater use of reflective reasoning and develop greater openness over time. In particular, shareholders’ feedback and satisfaction with CEO responses will facilitate such progression.

Specifically, a high share of active shareholders reflects a majority position. Numerical ‘majority’ (compared to minority) positions of the social influence source have been suggested to be particularly influential in shaping the target’s persuasion to new messages and to enhance the target’s argumentation quality upon that message (Horcajo, Petty, & Brinol, 2010). That is high shares of active shareholders may be particularly influential in shaping the CEO’s need for openness, as CEOs engage in higher quality reflective reasoning to address diverse demands for accountability over time. In the following proposition, we therefore suggest that the higher the share of active shareholders, the more likely they influence the development of higher needs for openness for decision-makers with a high need for diversity.

In turn, decision-makers with low diversity are less likely to develop a higher need for openness in interaction with active shareholders. Research suggests that decision-makers’ commitment to existing beliefs is exacerbated when they are particularly vulnerable (Fox & Staw, 1979), for instance when their competence or integrity is questioned in private and/or in public (Tetlock et al., 1989). To appease accountability demands, these CEOs are more likely to deploy impression management tactics, sometimes claiming responsiveness symbolically and without reflection on the substance of these quests (c.f. Westphal & Bednar, 2008). These decision-makers are more likely to play down active shareholders’ demands, rather than to engage with them as an opportunity for learning. These considerations lead to the following proposition:

Proposition 6a: The share of active shareholders moderates decision-makers’ strategic flexibility development, such that the higher the share of active shareholders, the more likely diverse misers and tacticians (high needs for diversity) develop higher needs for openness compared to their absolutist miser and tactician counterparts (low needs for diversity).

Low shares of active shareholders are likely to activate an even lower need for openness in decision-makers with a low need for diversity, when they repeatedly engage in reflective reasoning. Decision-makers with a low need for diversity lack the motivation to embrace diverse viewpoints, which is perfectly fulfilled in settings with low shares of active shareholders, or in other words with largely passive shareholders. Low shares of active shareholders reflect minority positions. Numerical ‘minority’ (compared to majority) positions in turn have been found to decrease persuasion to
targets’ arguments (Horcajo et al., 2010). That is low shares of active shareholders may lack the necessary influence to persuade the CEO of their accountability demands and of the validity of their arguments. As such, as low shares of active shareholders fail to persuade the CEO to believe in and to be accountable to a different viewpoint, the CEO with low need for diversity will perpetuate low need for openness through repeated engagement in reasoning over time.

In this respect, when they face largely passive shareholders, absolutist misers’ needs are perfectly fulfilled. For the sake of cognitive economy, they remain committed to their preferred viewpoints, by using ‘acceptability’ heuristics to assess accountability concerns. Acceptability heuristics are justificatory accounts that are believed to be legitimate to others. As such, they will fortify the use of acceptability heuristics through repeated engagement in reasoning over time. In settings with low shares of active shareholders, absolutist tacticians will resolve the dissonance with their high need for openness by remaining committed to their existing viewpoint and by developing reasoning strategies that align with the preferred viewpoint. If there are active shareholders, their minority positions are not sufficient to trigger absolutist tacticians’ use of more reflective reasoning strategies, because input diversity is missing. They will instead rather automatically defend courses of action that are ‘acceptable’ in light of their preferred perspectives. As such, through repeated use of acceptability heuristics with benevolent shareholders, these CEOs train to automatically use such shortcuts, through which they form beliefs that are of inferior novelty and complexity over time (c.f. Tetlock et al., 1989). To facilitate heuristic reasoning, they may at times ignore or rhetorically embellish disconfirmatory information in a self-serving manner. Consequently, CEOs with low need for diversity are likely to develop even lower needs for openness through repeated engagement in reasoning over time. In turn, counterparts with a high need for diversity, as argued above, are less likely to use shortcuts to embrace the diversity that they need. In that low shares of active shareholders may activate even lower needs for openness for CEOs with a low need for diversity, they are likely to moderate strategic flexibility development as follows:

**Proposition 6b:** The share of active shareholders moderates decision-makers’ strategic flexibility development, such that the lower the share of active shareholders, the more likely absolutist misers and tacticians (low needs for diversity) develop lower needs for openness compared to their diverse miser and tactician (high needs for diversity) counterparts.
In relation to the relationships we have theorized, Propositions 5a, 5b, 6a, and 6b outline the conditions under which the organizational context strengthens or weakens CEO strategic flexibility development. In particular, decision-makers who are cognitively motivated to reason reflectively about the relationship between the firm and its strategic environment should develop greater strategic flexibility over time. The organizational context – top management team task-related diversity and shareholder structure – can increase or decrease the likelihood that CEOs progress concerning the breadth and novelty of beliefs they form over time.

D.4. Discussion

Although it is rich with insights, prior research on managers or executives’ cognition on the one hand and on motivated reasoning on the other is grounded in a rather stable and cross-sectional view. In this tradition, research has uncovered individual-level, source-level, and context-level effects to explain variations across decision-makers’ uses of either the more automatic or the more reflective reasoning strategies and related impact on belief formation. Scholars have hardly (if at all) emphasized developmental perspectives, which allow adult decision-makers to make progress in their motivation to make use of more reflective reasoning strategies, through which they become more flexible in their choices over time. In this article, we addressed this question. In particular, broad and novel beliefs about strategic alternatives and about the own reasoning strategies are necessary for a CEO to be flexible in the strategic choices he or she makes for the firm. From the perspective of a CEO’s reasoning, we argued that individual cognitive motivational orientations explain differences in whether and how, over time, he or she progresses (or deteriorates) in the breadth and novelty of the own beliefs formed about the strategic environment. Furthermore, we theorized the specific ways in which organizational context factors – top management team task-related diversity and the share of active shareholders – either increase or decrease the proposed relationships between cognitive motivation and belief formation. In connecting these different research strands, our arguments provide novel insights on the role of decision-makers’ motivational orientations in organizations – a perspective that highlights not only the role that cognitive motivations play in developing greater use of reflective reasoning and thus greater strategic flexibility, but also the potential role that the organizational context plays in influencing CEO motivations. Our theorizing also informs theory on motivated reasoning.
D.4.1. Implications for Upper Echelons and Managerial Cognition Research

Management and organization research have developed an extensive understanding of the impact of decision-maker characteristics, traits, and cognitions on organizational behavior, specifically on strategic change and renewal (Finkelstein & Hambrick, 1996). While these research traditions have built significant insights on the nature and implications of individual-level effects, most work emphasizes relatively stable executive characteristics, primarily within cross-sectional research designs, such as expertise, age, personality, etc. In contrast, our theorizing suggests that CEOs can progress in their individual development. Specifically, the development of their cognitive motivation may impact the flexibility with which they learn to make strategic choices over time. We have argued that CEOs’ cognitive motivational states affect their use of reasoning strategies and the resulting beliefs they form about the strategic environment and about their own reasoning.

Throwing light on the processes and implications of CEOs’ individual development illuminates a possibility few management scholars have considered (except: Barr et al., 1992; Bartunek et al., 1983; Dunbar et al., 1996; Garud & Rappa, 1994) – that incumbent CEOs’ motivation to transform their reasoning may prove at times as impactful as CEO turnover for a firm that needs to adapt (more) flexibly to a changing environment. A core argument is that when company renewal is required, new CEOs can bring in the diversity and openness in ideas, skills, and knowledge needed for promoting strategic changes in firms that otherwise tend to be committed to the status quo. While acknowledging the importance of CEO turnover, there is a tradeoff between flexibility gains and the associated risk of abandoning existing and important capabilities. As highlighted in the epigraph, for Andrew Grove, a former CEO of Intel, the thought of not being a memory company anymore was a very difficult one with high emotional attachment. Yet, Andrew Grove succeeded in being flexible and to abstract from the legacy of the memory business to pave the way for the company’s future in the PC business. Along these lines, we find merit in the proposition that, in some circumstances, when CEOs learn to transform their thinking (e.g. Barr et al., 1992; Hedberg, 1981; Lant et al., 1992). A CEOs’ individual development might prove to be highly effective for a firm’s strategic flexibility. This is so, because it circumvents the potentially negative side-effects of a CEO change. Our model specifically suggests that CEO cognitive motivational orientation and its interaction with the organizational context play a role in opening or closing windows of opportunity for such transformations.
By conceptualizing CEOs’ strategic flexibility development and the contextual influences on this process, we complement prior research, which tended to emphasize fairly stable executive characteristics associated with a firm’s strategic flexibility or inflexibility (e.g. Dane, 2010; Eisenhardt et al., 2010; Geletkanycz & Black, 2001; Hambrick et al., 1993; Hambrick & Mason, 1984; Nadkarni & Herrmann, 2010). First, prior research has built on executive characteristics as proxies for theorizing important cross-sectional differences across executives’ cognitive processes. It further emphasized that decision-makers’ motivational orientation significantly affects organizational outcomes (Bobbitt & Ford, 1980) and that motivational microfoundations are consequential (Felin, Foss, & Ployhart, 2015). With our theorizing on the impact of the situational state variable – cognitive motivation – on the underlying cognitive and social dynamics, we extend this research tradition with an understanding of differences within executives – specifically, differences in executives’ strategic flexibility development over time. The model we advance here opens the ‘black box’ of CEO cognition and its dynamics with a focus on recent motivated reasoning insights. Second, strategic flexibility has primarily been a company-level construct (except: Shimizu & Hitt, 2004), we conceptualize strategic flexibility as an individual-level ability. Specifically, CEOs learn to become more flexible over time by developing their cognitive motivation to reflectively form beliefs of greater breadth and novelty. In our view, a focus on abilities and skills may complement extensive research on CEOs’ psychological make-up (Finkelstein & Hambrick, 1996) with a developmental perspective.

In this respect, this paper advances our understanding of the nature and development of one dynamic managerial capability type (c.f. Adner & Helfat, 2003; Helfat & Peteraf, 2014), which underlies firms’ strategic flexibility to make real-time adjustments to discontinuous environments. By developing broad and novel understandings of a situation, CEOs may learn to deploy resources more flexibly (e.g. Sirmon, Hitt, & Ireland, 2007), to overcome core rigidities (Leonard-Barton, 1992) or competency traps (Levitt & March, 1988).

Moreover, we have argued that the organization’s internal and external context plays an important role in influencing CEOs (c.f. March & Simon, 1993 [1958]; Simon, 1997 [1947]) through its effects on belief formation (c.f. French & Raven, 1959). While prior research’s emphasis on the influence of incentives on decision-makers’ self-interest motivation may explain an important portion, it is not the only motivator and motivation that explains executive behavior (Finkelstein & Hambrick, 1996). Instead, CEOs’ individual cognitive needs (Kruglanski & Webster, 1996) and
the wider epistemic communities (Haas, 1992; Knorr-Cetina, 1999) have the potential to significantly affect belief formation via their effects on cognitive motivation. We proposed two sources of social influence on CEO cognitive motivation:

On the one hand, and while research has suggested that TMT-CEO interactions influence individual CEO behavior (e.g. Boone, Van Olffen, Van Witteloostuijn, & De Brabander, 2004; Jackson et al., 1991), we find that a CEO’s need for diversity determines which top managers in a diverse TMT are given (epistemic) authority to exercise social influence in the first place. This finding suggests that the target’s motivation (need for openness) may be influenced by some people rather than others. Cognitive motivation shapes whether and how social influence dynamics unfold in diverse team processes, and whether CEOs take advantage of the informational benefits (e.g. Bunderson & Sutcliffe, 2002). On the other hand, and while research has advanced that investor-CEO interactions influence individual CEO behavior (e.g. Westphal & Bednar, 2008), we find that CEOs’ need for diversity determine the nature of their responses to shareholders’ active demands for greater accountability. In other words, an insufficient consideration of the targets’ readiness to be influenced – by the TMT or by investors – may capture only a proportion of social influence effects. Rather, by conceptualizing the CEO motivation to be influenced, our theory may account for some of the ambiguous findings of prior research concerning the effectiveness of task-related diverse TMTs (e.g. Hambrick et al., 1996; O’Reilly et al., 1993), and regarding the effectiveness of active shareholders influence (e.g. Davis & Thompson, 1994; Westphal & Bednar, 2008). Our model thereby advances an endogenous explanation of intra-team power distribution that roots in the CEO’s cognitive motivation to be influenced in the first place (Hambrick, 2007). In this view, power is ‘given’ to some top team members more than others – a proposition that suggests future research to go beyond merely structural views on power and influence to account for endogenous aspects. In addition, by theorizing the interactions between the social and individual dimensions of cognitive motivation, we further extend avenues for explaining less well-theorized variations across actors’ responses to accountability pressures (e.g. Cornelissen, 2012; Tetlock et al., 1989). In line with psychology findings, we specifically argue that the interaction between cognitive motivation (need for diversity) and the numerical majority positions of active shareholders are important for shaping CEOs’ elaboration on demands for greater accountability.

Although compelling in the context of upper echelons, the development of managers’ motivation to reason reflectively affects the flexibility with which they
make decisions throughout the organization more generally. Critical to explaining variation across firms’ strategic flexibility (Shimizu & Hitt, 2004) has been the idea that, owing to decision-makers’ commitment to the status quo, they face important constraints to update their beliefs in the face of a discontinuous environment (e.g. Geletkanycz & Black, 2001; Hambrick et al., 1993; Hodgkinson, 1997; Porac et al., 1989; Tripsas & Gavetti, 2000). With the process model advanced here, we may add to existing cognitive learning models (e.g. Barr et al., 1992; Hedberg, Bystrom, & Starbuck, 1976; Lant et al., 1992) by developing theory on the underlying reflective reasoning mechanism and its motivational determinants, with which decision-makers learn to overcome status quo beliefs and develop beliefs of greater breadth and novelty. While prior research has had different views on whether and how managers learn from feedback to update their beliefs (e.g. Lant et al., 1992; March & Simon, 1987 [1958]; Paich & Sterman, 1993; Staw, Sandelands, & Dutton, 1981), the four states advanced here explain differences in decision-makers’ motivation to learn from the feedback they receive by updating their beliefs. The model also opens avenues for greater consideration of managers’ cognition in interaction with their motivation.

D.4.2. Implications for Dual-process Theory on Motivated Reasoning Research

Besides uncovering overlooked aspects of motivated cognition and their implications for reasoning in organizations, our theorizing opens up avenues to consider individual actors’ cognitive motivation development through reflective reasoning. While previous scholarship has investigated stable, cross-sectional effects of adults’ cognitive ability, personal traits, social motivations on reasoning (and developmental perspectives with children) (Cacioppo et al., 1996; Lerner & Tetlock, 1999; Stanovich & West, 2000), our arguments suggest that, in organizations, adult decision-makers’ cognitive motivation is not only a matter of stable traits but can unfold differently over time. The particular way in which cognitive motivation develops depends on the interaction between two different cognitive motivation dimensions – the needs for openness and diversity on the one hand and on the (mis)fit between actors’ cognitive motivation with the organizational requirements. Advancing this possibility, we build a model of individual adult learning by proposing links between cognitive motivation development and its effects on belief formation in the context of CEO reasoning about the strategic environment.

Our theorizing leads us to reconsider a common assumption of dual-process theories – that there is an either/or distinction between two independent cognitive systems – one quite fast, automatic and based on intuition, and one quite slow, effort-intensive, and based on reflection. Whereas much previous research has depicted
stable aspects, such as cognitive ability, thinking dispositions, etc. as explanations for variation across actors’ use of one reasoning system over another one, our developmental (or Meliorist) perspective suggests that, in some conditions, actors can progress along a continuum (Stanovich & West, 2000) from one state to another one, depending on the interplay and activation of cognitive motivation. By taking into account both the individual and social dimensions, cognitive motivation may account for as yet unexplained differences in the likelihood that actors overcome biases in reasoning (Sa, West, & Stanovich, 1999). Additionally, the context in which actors are situated plays an important role in shaping cognitive motivation by either strengthening or weakening it with associated implications for reflective reasoning. Our theory thus proposes that contexts can be designed so as to improve actors’ reasoning. At the same time, contexts can carry unexpected drawbacks, for instance, when there is a mismatch between existing cognitive motivation and the contextual requirements.

D.4.3. Future Research Avenues

A key strength of this paper is that it offers a possible basis for empirical research on the proposed relationships between managers’ cognitive motivation and reasoning outcomes. Future research may test and further uncover fine-grained nuances to the proposed links, using quantitative or qualitative designs. The theorized relationships can provide avenues for longitudinal qualitative process studies, for instance using thinking-aloud protocols (Ericsson & Simon, 1980; Kuhn et al., 1994). The proposed relationships could also serve as a basis for hypotheses, using quantitative examination of the dynamics between cognitive motivation and reasoning outcomes in real-world or controlled experimental settings.

To start, scholars have greatly advanced our knowledge of the different types of sources that influence the CEO in the organizational context. Future research may build on these insights and the mechanisms advanced in this paper to advance our understanding of the conditions under which sources from the organization’s internal or external context vary in their effectiveness to influence the CEO. This paper advanced the role of CEO’s cognitive motivation that importantly interacts with source characteristics – as advanced by social influence research. Other attributes of the CEO may shape the effectiveness of social influences.

Moreover, upper echelons research may extend our understanding of the dynamics and implications of situational aspects – e.g. the CEO situated in his or her social context - on subsequent decisions and actions. For instance, we proposed that depending on the situational activation of cognitive motivation, CEOs vary in whom
they assign epistemic authority to within the TMT. While in our model the TMT constellation is given, CEOs’ cognitive motivation may also shape the hiring and replacement of top managers in the first place. An important addition for future upper echelon’s research is to open avenues for greater research on stable attributes to focus more extensively on longitudinal designs and study aspects of adult development.

We also discussed the reasoning strategies associated with cognitive motivation. While prior research has acknowledged the role of decision-makers’ belief updating as an important precursor of organizational adaptation, it has tended to primarily emphasize associative reasoning strategies that draw from prior experience (Simon, 1992: 155). We proposed reflective reasoning strategies to be consequential for belief updating. In line with the current trend of understanding decision-makers’ heuristic reasoning, future research could uncover the nature and the effectiveness of the more reflective, System II reasoning system to advance our understanding of the micro-level behaviors of successful strategy-making (Powell, Lovallo, & Fox, 2011).
References


In preparation for submission to *Academy of Management Journal*.
An Institutional Conflict Perspective on the Deinstitutionalization Process: The Case of Swiss Banking Secrecy

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Acknowledgments:
We would like to thank Royston Greenwood, Wesley Helms, Tomi Laamanen, Tom Lawrence, Don Palmer and Günter Müller-Stewens for insightful comments on earlier drafts as well as the participants of the Institutional Theory workshops at University of Zürich and University of St Gallen. The article has been accepted for presentation at the PhD workshop at the 4th Alberta Institutions Conference in Banff (Canada) in 2015, and at the 11th Workshop on New Institutionalism in Organization Theory in Vienna (Austria) in 2015. Emmanuelle Reuter benefitted from funding for doctoral studies granted by the FNR, Luxembourg. Florian Ueberbacher benefitted from funding for postdoctoral studies granted by the GFF, University of St Gallen, Switzerland.
Abstract

We conducted a longitudinal case study on the institutional conflict that led to the abandonment of the institution of Swiss banking secrecy. Based on an empirically grounded conceptualization of the types of actors involved in this conflict, we develop a process model that explains how these actors contributed to institutional conflict escalation that eventually led to the deinstitutionalization of this contested institution. Our research contributes to a more complex and a more dynamic perspective on institutional conflicts and their outcomes, compared to previous studies. It sheds light on hitherto under-researched intra- and inter-group dynamics among insiders and challengers of a contested institution and how these affect the unfolding, escalation, and outcome of institutional conflicts. Moreover, our study makes important contributions to deinstitutionalization research by developing theory on how institutional incumbents’ defensive institutional work can have important unintended consequences that lead to an institution’s eventual erosion and abandonment.

Keywords: Deinstitutionalization, institutional conflict, organizational fields, strategic responses, resistance to change, organizational scandals and transgressions, transnational standards
E.1. Introduction

Long dormant, the study of deinstitutionalization – the discontinuity and abandonment of a once established institution (Oliver, 1992) - has recently enjoyed increasing research attention (Maguire & Hardy, 2009). For conceptualizing how deinstitutionalization occurs, recent studies have particularly focused on the role of institutional conflicts (e.g. Fligstein & McAdam, 2012; Zietsma & Lawrence, 2010). In an institutional conflict, groups of actors with different and partially opposing institutions and interests: “insiders” seek to protect the institutional status quo and engage in defensive institutional work; “challengers” seek to disrupt the institution (Maguire & Hardy, 2009) by means of problematizations of the contested institution or attacks on incumbents. Most generally, institutional conflict thus contributes to deinstitutionalization if challengers succeed in undermining the contested institution (Maguire & Hardy, 2009) and in effecting institutional change (Zietsma & Lawrence, 2010).

However, to more fully capture how deinstitutionalization processes unfold, the institutional conflict perspective may gain from a more dynamic and refined conceptualization of what actors in institutional conflicts actually do to affect the conflict outcome (c.f. Lawrence & Suddaby, 2006). Prior research, with its dominant emphasis on the role of insiders and challengers (e.g. Fligstein & McAdam, 2012), has highlighted the decisive role of inter-group dynamics. It specifically uncovered the role of “institutional breaches” between these actors for deinstitutionalization to occur (c.f. Zietsma & Lawrence, 2010). This article seeks to contribute to this line of research: A first purpose of this article is to uncover a more fine-grained and nuanced understanding of intra-group dynamics among incumbent actors and challenging actors. A second purpose of this article is to shed light on the actual practices and dynamics through which the interaction between inter-group and intra-group dynamics effect, transform, maintain, and settle institutional conflict (c.f. Collins, 2012).

For this purpose, we conducted a longitudinal case study of the deinstitutionalization of the institution of Swiss banking secrecy. Swiss banking secrecy – originally a professional norm – has been a legally enforced institution since 1935. This institution had high economic and cultural significance for Switzerland, with a globally leading private banking business relying on the banking secrecy ideals, as well as a prospering financial services industry comprising up to 12% of Swiss GNP. The logic of banking secrecy, with its purpose to protect bank clients’ privacy,
stood in direct opposition to mounting “tax transparency” efforts aimed at combatting tax evasion at international and transnational levels. Actors at the level of transnational organizations, such as the Organization for Economic Co-operation and Development (OECD) and the European Union (EU), as well as at the bilateral level, such as the United States (U.S.), increasingly challenged banking secrecy, since it constrained the exchange of information on tax-related matters. Eventually, an institutional conflict ensued between these foreign challengers and Swiss incumbents – governmental authorities and banks – which led to a repeated loosening and the eventual deinstitutionalization of the contested institution.

Based on detailed qualitative analyses of multiple and rich data sources, we developed empirically grounded categories of actors and of their practices involved in this institutional conflict. We subsequently built on these categories and our data to develop a process model that explains how these actors contributed to institutional conflict escalation, defined in terms of an increase in the oppositional intensity with which the banking secrecy was eventually challenged. Institutional conflict escalation weakened insiders’ initially vehement institutional defense and paved the way for institutional erosion. This process explains the eventual deinstitutionalization of the contested institution.

By making the institutional conflict perspective more complex and dynamic, our study makes important contributions to this line of research (e.g. Fligstein & McAdam, 2012). While prior research has predominantly focused on the inter-group dynamics between insiders and challengers, our conceptualizations and findings complement this work. In specific, our study sheds light on both the inter-group and the intra-group dynamics among insiders and among challengers, and how these are consequential for the unfolding, escalation, and outcome of institutional conflicts. The findings of our study also have important implications for deinstitutionalization research (e.g. Maguire & Hardy, 2009; Oliver, 1992). Among the recent studies that have highlighted institutional conflict as a key driver of deinstitutionalization (e.g. Zietsma & Lawrence, 2010), prior research appears to have primarily focused on the actions of challengers as an explanation for deinstitutionalization (e.g. Maguire & Hardy, 2009). In contrast, our theory points to the consequential actions of incumbents, and the dynamics among incumbents in triggering the deinstitutionalization of a contested institution. Incumbents’ “static fortlike defense” (c.f. Kotler & Singh, 1981: 39) can have unintended consequences that sow the seeds for institutional conflict escalation. It may eventually require them to submit to challengers’ demands and may erode the institution they are committed to.
E.2. Deinstitutionalization: An Institutional Conflict Perspective

E.2.1. Deinstitutionalization

Institutions include regulative, normative, and cognitive systems that provide social settings with meaning and stability (Scott, 2001). Because institutions carry inherent tendencies towards persistence, inertness, and endurance, how their deinstitutionalization occurs cannot be taken for granted, but requires intensive study (Oliver, 1992). Scholars have studied the deinstitutionalization of different types of institutions, including organizational forms, business practices, governance models, or legal rules. Prior research concurs that, as a phenomenon, deinstitutionalization is conceptually distinct from other types of institutional transformation, such as change and adaptation (Maguire & Hardy, 2009).

According to prior research, we know that deinstitutionalization can occur for reasons that are external as well as internal to an institution: For the former, important macro-level trends in the context of an institution – such as broader political, social, cultural, or regulatory developments – can create pressures on institutions that bear the risk of rendering institutions outdated and illegitimate (Ahmadjian & Robinson, 2001; Oliver, 1992). Moreover, important stakeholders may consider an institution to be scandalous and illegitimate, which gives rise to external pressures on the incumbent institution (e.g. Clemente & Roulet, 2015; Den Hond & De Bakker, 2007; Jonsson, Greve, & Fujiwara-Greve, 2009; Maguire & Hardy, 2009). For the latter, internal reasons, such as illegitimate actions, can cause external challengers to arise in the first place and make claims on the incumbent institution (Jonsson et al., 2009). Alternatively, institutions can give rise to activities that have unintended yet destabilizing implications on their own (e.g. Davis, Diekmann, & Tinsley, 1994; Farjoun, 2002).

Despite these studies’ emphases of important aspects that contribute to deinstitutionalization, they do not uncover the underlying mechanisms and processes through which once-accepted institutions are effectively abandoned (Farjoun, 2002). As a result, the actual process dynamics through which deinstitutionalization occurs remain relatively poorly understood.
E.2.3. An Institutional Conflict Perspective

To develop a more fine-grained perspective of the processes that lead up to deinstitutionalization, we draw on political institutional perspectives (e.g. Clemens & Cook, 1999; Fliqstein & McAdam, 2012; Lawrence, 2008). We specifically focus on the role of institutional conflicts. The concept of field is at the center of political institutional perspectives (e.g. Fliqstein & McAdam, 2012). A field is broadly defined as an arena where actors with different institutions and interests meet and interact (see "inter-institutional field", c.f. Fliqstein & McAdam, 2012). These actors communicate and “interact more frequently and fatefully with one another than with actors outside of the field” (Scott, 1995: 56). These interactions can take place in the context of an industry (e.g. Garud, Jain, & Kumaraswamy, 2002) or a profession (e.g. Greenwood, Suddaby, & Hinings, 2002). Our focus is on interactions that take place around a contested issue or institution (Hoffman, 1999). Such fields bring together actors with disparate positions, interests, and resources. Fields then become more dynamic sites of conflict over a contested institution (Hoffman, 1999). Political perspectives regard institutional conflict between opposing actors not only as inherent to fields, but also as key driver of deinstitutionalization and institutional transformation (e.g. Fliqstein & McAdam, 2012; Seo & Creed, 2002).

According to the type of purposive action or ‘institutional work’ they engage in (c.f. Lawrence & Suddaby, 2006), political institutionalists tend to differentiate these actors into insiders and challengers of a focal institution (e.g. Fliqstein & McAdam, 2012): *Insiders* regard the focal institution as legitimate – as the right thing to do (e.g. Suchman, 1995) – or as beneficial to their interests. Insiders include ‘governance units’ of the contested institution (Fliqstein & McAdam, 2012), such as governmental authorities and industry associations (Dunbar & Wasilewski, 1985; Greenwood et al., 2002), as well as other ‘incumbent’ organizations such as companies. Governance units seek to provide a facilitative institutional context for incumbents, to maintain institutional stability, and to protect the institutional status quo (Fliqstein & McAdam, 2012). They are a “generally conservative force” (Fliqstein & McAdam, 2011). In the face of conflict in the field, insiders tend to engage in ‘defensive institutional work’. Such defensive work can include practices, such as countering challengers’ problematizations and undermining their legitimacy (c.f. Maguire & Hardy, 2009).

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6 While we acknowledge that scholars also use other terminology for conceptualizing such opposing groups – such as “insiders” vs. “outsiders” (Maguire & Hardy, 2009) or “defenders” vs. “aggressors” (Pruitt et al., 2003), we consider our general concepts both resonant with related terminology as well as most generative for our specific case.
In turn, the *challengers* of a focal institution consider the institution as illegitimate or detrimental to their interests (Fligstein & McAdam, 2012). They typically “occupy less privileged niches within the field and ordinarily wield little problematize over its operation” (Fligstein & McAdam, 2011: 6). They engage in ‘disruptive institutional work’, aiming to effect deinstitutionalization (Lawrence & Suddaby, 2006; Maguire & Hardy, 2009). This can involve problematizing the contested institution and promoting alternative institutional arrangements that are more in line with their interests or purposes (Maguire & Hardy, 2009). They can also more overtly attack incumbents (Den Hond & De Bakker, 2007).

Despite the substantial advances of these lines of research, they may involve at least two important shortcomings that limit our understanding of how institutional conflicts unfold and shape deinstitutionalization: First, with a dominant emphasis on the *inter-group* dynamics between incumbents and challengers (e.g. Fligstein & McAdam, 2012), institutional conflict research provides a fairly coarse-grained conceptualization of the types of actor positions that may be created during institutional conflicts. In turn, political scientists (c.f. Mahoney & Thelen, 2010), and social movement scholars (c.f. Den Hond & De Bakker, 2007) have begun to differentiate more fine-grained conceptualizations of *intra-group* actor roles and their consequential contributions to institutional transformation.

Second, and relatedly, with a dominant emphasis on the oppositional forces between incumbents and challengers (Fligstein & McAdam, 2012), current institutional conflict research cannot properly explain how the opposition can be overcome (e.g. Seo & Creed, 2002), how institutional conflicts escalate (Den Hond & De Bakker, 2007), and how ‘breaches’ in incumbents’ defense of a contested institution are achieved to effect deinstitutionalization (Zietsma & Lawrence, 2010). In turn, recent social conflict research provides a more complex picture of the interrelationships and interactions between different parties to a conflict (e.g. Pruitt, Rubin, & Kim, 2003), and of the specific ways in which these can lead to a breakdown or to the eventual defeat of one party to a conflict (c.f. Collins, 2012). We draw on some of these insights to contribute a better understanding of how the intra-group and inter-group dynamics between incumbents and challengers unfold in an institutional conflict to produce the deinstitutionalization of a contested institution. Therefore, we ask the following research question: *How do the intra-group and inter-group dynamics between incumbents and challengers involved in an institutional conflict contribute to the deinstitutionalization of a contested institution?*
E.3. Research Setting

Transnational fields constitute an ideal setting for studying institutional conflict and deinstitutionalization processes, because pressures for the abandonment of national institutions are tremendous and highly visible. The consequences of the increasing connectedness of business activities beyond national boundaries are a core concern in transnational fields (Djelic & Quack, 2008; Dobbin, Simmons, & Geoffrey, 2007). As a result, many national institutions, which had been appropriate within once-closed business systems and protected by sovereign nation-states, are being replaced by new transnational governance standards (Djelic & Sahlin-Andersson, 2006). These standards are “explicit, almost always written, statements” and prescribe how states and companies should behave when their actions affect other countries (c.f. Ahrne & Brunsson, 2006: 82). As new transnational standards frequently contradict national institutions, however (e.g. Ansari, Wijen, & Gray, 2013; Maguire & Hardy, 2006; Wijen & Ansari, 2007), the diffusion of such transnational institutions requires deinstitutionalization, that is, the abandonment of national institutions (Djelic & Quack, 2003; Dobbin et al., 2007). This may fuel institutional conflict over a contested national institution when the transnational institution has negative ‘distributional consequences’ for incumbents (c.f. Mahoney & Thelen, 2010), and when ideals and interests of national incumbents and international challengers clash (Djelic & Quack, 2003; Dobbin et al., 2007).

Specifically, we studied the deinstitutionalization process of the institution of Swiss banking secrecy. Swiss banking secrecy was a legally institutionalized business practice that was virtually taken for granted among Swiss authorities, bankers, and banking clients. Already in the 19th century, banking secrecy had been a widely shared and institutionalized professional norm among Swiss banks and bankers. In 1935, it was formalized into national law and subsequently governed among others by penal law (e.g. Art. 47 of Swiss banking law). Banking secrecy laws advance banks’ duty to protect any information gained in transacting with banking clients. They stipulate severe punishment for the disclosure of bank account information. For foreign citizens, Swiss banking secrecy provided an opportunity to circumvent taxes in their home countries, as it enabled them to “hide” untaxed money in Swiss bank accounts.

Also for Swiss banks, the banking secrecy contributed to a competitive advantage compared to banks from other countries without a banking secrecy. In 2012, the banking sector in Switzerland — a small country with only about 8 million
inhabitants – had close to 300 bank companies and 183,000 employees and contributed more than 6% to Switzerland’s GDP. Responding to bank clients’ concerns for privacy and protecting their assets against information disclosure, the institution of banking secrecy was particularly important for private banking, which is about the wealth management of (typically affluent) private clients. Swiss banks, which manage around US$ 2.200 billion in cross-border private banking assets, are the global leaders in cross-border private wealth management. Together, in 2012, they held a global market share of 26% (SwissBankersAssociation, 2013).

Swiss banking secrecy has long been a contested institution. In numerous novels and films – including Dan Brown’s *Da Vinci Code* and several James Bond films – a relationship is drawn between criminality and Swiss banks, often concerning the downsides of banking secrecy for money laundering, tax fraud, and tax evasion. Swiss banking secrecy faced repeated challenges, which manifested when foreign authorities or international organizations approached Swiss authorities or banks with a conflicting ‘transparency’ logic – information requests to clarify bank clients’ tax situations. This logic fundamentally conflicted with Swiss banking secrecy and its privacy logic of non-disclosure. However, despite numerous attempts to dismantle the institution, Swiss banking secrecy was very stable and withstood the test of time. Swiss government authorities and banks resisted demands to abandon banking secrecy and fiercely fended off any challenging demands. Furthermore, until recently, the Swiss population strongly approved of banking secrecy.

The timeframe for our study is 1998 to 2013. In 1998, tax crime and “tax transparency” became a formalized issue. The OECD – a transnational organization of 34 countries, including Switzerland, several large EU countries, and the U.S. – published a report according to which OECD member counties would lose hundreds of billions in tax duties every year. Subsequently, a conflict ensued in which the OECD, large EU countries, and the U.S. acted as challengers seeking to dismantle banking secrecy. They aimed for information exchange in tax matters to achieve their transparency goal. In this conflict, Swiss government authorities and banks acted as incumbents and protected banking secrecy. Eventually, however, Swiss authorities agreed to loosen banking secrecy in two instances, in 2009 and again in 2013, which marked the end of Swiss banking secrecy. The unfolding of these events has had tremendous implications for the private banking industry in Switzerland. The return on equity from a sample of 182 Swiss-based private banks fell from 17% to 2% between 2007 and 2013 (Hintermann, Christe, & Laamanen, 2014). As a result, the industry has
faced a consolidation wave and, increasingly, Swiss private wealth management companies gave up their licenses.

**E.4. Research Methods and Analysis**

With our purpose to *build* theory, we followed an interpretive and contextualist approach (Ketokivi & Mantere, 2010; Strauss & Corbin, 1990), which was sensitive to focal actors’ interpretations of events. It helped us to further interpret and structure the emerging themes in order to develop an account with theoretical generalizability.

**E.4.1. Data Collection**

This study is part of a larger research project on the adaptation of the Swiss private banking industry to radical environmental change. Significant media exposure of the conflict over Swiss banking secrecy, coupled with unique access to industry incumbents, provided us with a unique opportunity for collecting rich and insightful data. Data collection and exposure to different industry participants started in 2011. Over the course of several formal and informal interactions with key players, we realized that Swiss banking secrecy was subject to increasing international pressures that challenge its very existence. More systematic data collection on the gradual deinstitutionalization of the Swiss banking secrecy started in 2013 and continued until the end of 2014. We collected different types of data sources enabling us to triangulate our insights and create a reliable data set. **Table 5.E.** lists the data sources by type.
Table 5.E. Summary of Data Inventory

<table>
<thead>
<tr>
<th>Data type</th>
<th>Original data source</th>
<th>Purpose in the study</th>
</tr>
</thead>
</table>
| Media coverage  | Articles with keywords ‘banking secrecy’:  
  _Schweizer Bank (1998-2014): 402          | Uncovering key actors’ statements and actions |
| Archival interviews | _6 archival interviews that are publically available either in transcribed format or in documentaries. They comprise key representatives of the Swiss federal council, key industry players (2000-2013) | Uncovering key actors’ statements and actions |
| Archival data   | _Annual reports of focal private banks  
  _Original legal texts and investigation report by the U.S. authorities | Uncovering key actors’ statements and actions |
| Retrospective interviews | _35 interviews (23 on industry context, 12 on the banking secrecy) with key players of the Swiss private banking industry and of the Swiss governance units between 2013 and 2014 | Uncovering key actors’ statements; validation of key mechanisms |
| Secondary accounts | _2 book-length scientific analyses by historical and political scientists  
  _2 book-length analysis by industry participants  
  _2 reports by legal experts  
  _4 documentaries by Swiss national television | Triangulation of major actors and event timeline |
| Observational data | _Participation in multiple industry-specific events (2012-2013) (10 days)  
  _Extensive field notes  
  _Tape-recorded presentations by key actors: industry actors, lawyers, representatives of federal administrations (42 hours of recorded speech) | Triangulation of major actors and event timeline; identification of key dynamics |

Initially we sourced secondary accounts, such as historical analyses, documentaries, and reports, in order to establish a comprehensive and triangulated timeline of events. We added to this a close reading of 35 interviews, as well as of banks’ annual reports to develop a more detailed understanding of the context and strategies that are prevalent in the industry. This led to our eventual research focus and to a further sampling of data sources.

Our main data source constituted media data sampled according to their keyword hits on the topic. We focused our analysis on the national daily newspaper
Neue Zürcher Zeitung (NZZ), which was appropriate, since NZZ has a reputation for a fairly balanced coverage of economic issues and because it had the broadest coverage of banking secrecy and related issues. Since the media has a voice in staging actors, interpretations, and positions (e.g. Meyer & Hoellerer, 2010), we selected key actors’ statements (both originally quoted and paraphrased statements) as our primary unit of analysis. Furthermore, we selectively triangulated this primary data source with other media data, archival interviews with key actors, and publicly available archival data (e.g. U.S. investigation documents, legal texts, etc.). These selective triangulations gave us confidence in the validity of our choice to focus on NZZ as primary data source.

However, publicly available sources cannot account for other, more covert processes that have not reached the public sphere. As our analysis progressed, we therefore complemented this information with retrospective and semi-structured interviews with informants, who were purposefully sampled for their unique insights into the development of this institutional conflict. We interviewed representatives from incumbent private banks, Swiss governance units, leading industry media, industry experts, as well as key participants of the interstate negotiation processes. Each formal interview lasted around one hour, and was digitally recorded and transcribed. Interviews gradually moved from probes into taken-for-granted notions, towards probes into emerging theoretical constructs and relationships. We also asked interviewees about key junctures, stakeholders, and practices (see the sample interview guide in the Appendix 2). We were interested in interviewees’ honest accounts rather than official positions. We therefore offered interviewees strict confidentiality.

E.4.2. Data Analysis

Our data analysis combines established methodologies for longitudinal case analysis, content analysis, and abductive theory-building. Consistent with abductive qualitative methods (Ketokivi & Mantere, 2010; Locke, Golden-Biddle, & Feldman, 2008), our analysis was based on repeated circulations between data, emergent theoretical ideas, and prior literature. We uncovered theoretical concepts that were useful for making sense of our data, for digging deeper into our analysis, and for fleshing out a theoretical contribution. In this process, we gradually turned to political institutional perspectives in general and to institutional conflict research in particular, in order to make sense of and to conceptualize our data. Eventually, our data analysis encompassed three broad steps that we outline separately, although in reality they have been tightly connected. In the subsequent sections, we report our findings along these three analytical steps.
Developing a narrative account. Given our key interest in processes, we started by synthesizing the unfolding of key events. To do so, we relied on archival data that we triangulated with interview evidence (Jick, 1979; Miles & Huberman, 1994). We effectively started the analysis with visual maps of key events. With the event timeline at hand, we developed an increasingly rich and comprehensive case narrative (in English) that detailed the events and interactions leading up to the two instances, where the banking secrecy was loosened. This narrative, which included direct and paraphrased quotes by key informants (120 pages of single-spaced text), enabled us to synthesize the large amount of raw data (Miles & Huberman, 1994). As we detail below, this narrative enabled us also to develop theoretical concepts (a static concept formation analysis). Moreover, it helped us uncover dynamic patterns with temporal and causal orderings between these emerging theoretical concepts (a dynamic process analysis). We present a summarized version of this case narrative in the following section.

Concept formation. To answer our research question, we empirically derived concepts that load and refine concepts from prior institutional research in general and research on deinstitutionalization and institutional conflicts in particular. The concepts developed here capture the primary actor types involved in the institutional conflict that contributed to the deinstitutionalization of banking secrecy through practices of institutional conflict work. To do so, we relied on established procedures for grounded theory development, as recommended by Gioia and colleagues (Corley & Gioia, 2004; Gioia, Corley, & Hamilton, 2013). We fed the narrative account into the qualitative data analysis software Atlas.ti, to inductively identify and code emerging concepts and themes in our data. We constantly compared data across informants, over time, and with existing theory (Glaser & Strauss, 1967). In this process, we predominantly drew on existing literatures on deinstitutionalization (e.g. Maguire & Hardy, 2009), social conflicts (e.g. Collins, 2012), and political institutional perspectives (e.g. Fligstein & McAdam, 2012; Mahoney & Thelen, 2010). Initially, we relied on open-coding, developing codes with language that is representative of the meanings in informants’ statements. Subsequently, we integrated these codes into more general first-order codes. While comparing across time, we identified two temporal brackets (hereafter referred to as institutional conflict episodes). Within each of the two institutional conflict episodes, we could situate the recurrence of similar first-order codes: Bracket 1 covered 1998 to the end of 2009 – the first instance when banking secrecy was loosened. Bracket 2 covered 2009 to 2013 – the second instance of the loosening of banking secrecy. We then looked into similarities of emerging themes across the two
time brackets, and further refined our themes accordingly. We searched for relationships across categories and built theoretical second-order categories (axial-coding). Eventually, on an even higher level of analysis, we integrated these theoretical categories into aggregate theoretical dimensions. These theoretical dimensions entail conceptualizations of the four actor types that were most involved in the two institutional conflict episodes we analyzed, as well as conceptualizations of the type of purposive ‘institutional conflict work’ these actors engaged in (c.f. Lawrence & Suddaby, 2006). According to our analyses, these two dimension types were tightly connected. We arrived at these theoretical dimensions after repeated iterations of the above procedures during which concepts kept emerging. Eventually, we achieved theoretical saturation when the relationships among categories and themes no longer revealed novel insights (Glaser & Strauss, 1967).

**Process analysis.** As an additional step in our theory-building effort, we also engaged in a dynamic analysis to develop mechanisms and relationships that link the above concepts. To do so, we draw on research on social and intergroup conflicts (e.g. Collins, 2012; Pruitt et al., 2003). We specifically uncovered the actual temporal and causal processes that linked the four aggregate theoretical dimensions we identified in the first step. Following Corley and Gioia (2004), we mapped our theoretical dimensions onto the two institutional conflict episodes. We uncovered time brackets in which these themes were most salient in each episode. This motivated us to trace the operative mechanisms and processes that causally relate these dimensions. This step involved a comparison of the two brackets across time using methods for tracing causal processes in case studies (Haydu, 1998; Mahoney, 2004). On this basis, we eventually developed a theoretical model of the institutional conflict dynamics that led to the eventual deinstitutionalization of this contested institution.

**E.4.3. Trustworthiness of Research Procedures**

We employed several techniques to ensure that we met the criteria for data analysis trustworthiness (Miles & Huberman, 1994). To ensure the findings’ credibility, both authors were fully involved in all aspects of the data analysis. The data were independently coded by the two researchers. Disagreements between coders were solved through discussion to strengthen the codes and the interpretation process. During debriefing, both researchers adopted a devil’s advocate stance, challenging each other’s interpretations with alternative explanations for the findings. We performed plausibility checks with our informants, in order to ensure the validity of our emerging theory.
Overall, we stated a finding only if we could corroborate it across multiple informants and data sources. This helped us account for problems of retrospective bias, social desirability, and – more generally – to enhance our claims’ validity. Additionally, cross-period comparison helped us enhance our causal claims’ generalizability. To account for alternative explanations, we continuously checked for period-specific circumstances and for time dependencies on the interaction dynamics (Haydu, 1998). Furthermore, our assumption of equivalence is grounded in the preceding inductive analysis of emerging themes, from which we first captured the similarity of themes. To further strengthen our claims, we used counterfactuals and selective comparisons in our analysis (Abend, Petre, & Sauder, 2013).

E.5. How Switzerland Lost its Banking Secrecy

Below, we provide an abridged version of our case narrative about the deinstitutionalization of Swiss banking secrecy. It is developed around the key events and developments that led to the two instances of institutional erosion of banking secrecy (in 2009 and 2013). Hereby, institutional erosion is generally referred to in terms of the Swiss authorities’ decision to loosen banking secrecy. These two instances of institutional erosion marked important intermediary outcomes in the overall deinstitutionalization process of this contested institution.

E.5.1. Institutional Conflict Episode 1: The Road to Loosening Banking Secrecy in Tax Evasion Cases

A first major erosion of Swiss banking secrecy occurred as Swiss government authorities agreed in March 2009 to withdraw from the reservation against Art. 26 of the OECD standard for transnational administrative assistance in cases of tax evasion. From this date on, Swiss banks were required to exchange client information if authorities from another OECD country requested administrative assistance from Swiss authorities in cases of tax evasion. Prior to 2009, and in contrast to most countries, Switzerland had not regarded tax evasion (as defined in Swiss law) but only tax fraud as a criminal offense. Consequently, Swiss authorities had provided foreign authorities with legal assistance only if these could prove the case to be one of tax fraud, but not in cases of tax evasion. In this way, foreigners who evaded tax by moving their assets to Swiss banks could place their assets out of the reach of their native country’s authorities (e.g. Transparency, 2008). Table 6.E. lists the major events that contributed to a first instance of institutional erosion of the Swiss banking secrecy.
### Table 6.E. Event Timeline (Conflict Episode 1)

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>April</td>
<td>The OECD report <em>Harmful Tax Competition: An Emerging Global Issue</em> is released</td>
</tr>
<tr>
<td>2000</td>
<td>April</td>
<td>Switzerland takes an ‘invitee role’ in OECD negotiations, considering OECD developments ‘non-binding’</td>
</tr>
<tr>
<td></td>
<td>March</td>
<td>The U.S. tax authorities and Swiss banks sign ‘qualified intermediary agreements’ (QI)</td>
</tr>
<tr>
<td></td>
<td>March</td>
<td>A Swiss law firm publishes report detailing QI loopholes</td>
</tr>
<tr>
<td></td>
<td>April</td>
<td>The OECD report <em>Towards Global Co-operation: Progress in Identifying and eliminating Harmful Tax Practices</em> is released</td>
</tr>
<tr>
<td></td>
<td>June</td>
<td>Tax dispute between Switzerland and EU begins</td>
</tr>
<tr>
<td>2004</td>
<td>May</td>
<td>Switzerland proposes a withholding tax on indirect taxes to protect the banking secrecy</td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td>Start of the global financial crisis</td>
</tr>
<tr>
<td>2008</td>
<td>February</td>
<td>The German authorities announce that a Liechtenstein bank is facilitating tax evasion in Germany</td>
</tr>
<tr>
<td></td>
<td>July</td>
<td>The U.S. authorities accuse Swiss Bank Y of breaching the QI by facilitating tax evasion in the U.S.</td>
</tr>
<tr>
<td></td>
<td>July</td>
<td>The U.S. authorities demand administrative assistance for investigations into Bank Y clients</td>
</tr>
<tr>
<td></td>
<td>December</td>
<td>The U.S. authorities threaten to indict Bank Y</td>
</tr>
<tr>
<td></td>
<td>December</td>
<td>The Swiss authorities agree to transfer Bank Y client data to U.S. authorities under an emergency law</td>
</tr>
<tr>
<td>2009</td>
<td>February</td>
<td>OECD and EU representatives require Switzerland to adopt OECD standard for administrative assistance</td>
</tr>
<tr>
<td></td>
<td>March</td>
<td><strong>The Swiss authorities loosen banking secrecy and adopt the OECD standard for administrative assistance in cases of tax evasion (Art. 26)</strong></td>
</tr>
</tbody>
</table>

OECD’s problematizations of the banking secrecy formally began in 1998 with the publication of a report *Harmful Tax Competition: An Emerging Global Issue*. It outlined “harmful tax practices” – aspects that could undermine the integrity and fairness of tax systems and of competitiveness between states. The report called OECD countries to agree to transnational administrative assistance in cases of tax crime, as specified in Art. 26 of the OECD Model Convention (OECD-MC). OECD member countries with banking secrecy, such as Switzerland, Liechtenstein, Luxembourg, and Austria abstained from the report, because of its incompatibility with their own national banking secrecy law. Switzerland continuously expressed its reservations and took on an invitee role in these OECD discussions to refrain from...
explicit commitments. In April 2000, the OECD published another report: *Towards Global Co-operation: Progress in Identifying and eliminating Harmful Tax Practices*. Even though the report was more direct in its tone and included Switzerland as one of 47 “potentially harmful” tax regimes among OECD members (OECD, 2000: 12), the Swiss authorities maintained their defensive posture and rejected any calls for change. From 2000 on, a so-called tax dispute ensued between Switzerland and large EU countries, during which Switzerland’s banking secrecy was repeatedly problematized. However, as before, Swiss authorities kept defending its banking secrecy and refused any form of information exchange.

From late 2007, tax transparency has enjoyed increasing public attention, for at least two reasons: First, as the financial crisis unfolded, concerns for transnationally harmonized control frameworks arose, also in the area of tax transparency. Second, in 2008, it became public that challengers were investigating a prominent German top manager, who evaded taxes with the help of a bank in Liechtenstein. The investigation revealed that the bank had set up trusts and shell companies that evaded the payment of millions in tax in Germany. Hereafter, banking secrecy generally and in Switzerland again came up for harsh criticism by several countries individually and by the OECD at a transnational level. However, the Swiss government resisted these problematizations and defended the superiority of its banking secrecy.

This situation eventually changed in summer 2008, when U.S. authorities entered the conflict: The U.S. had been severely hit by the financial crisis and, according to our informants, was looking for financial resources. It became public that U.S. authorities were investigating employees of the U.S. branch of Bank Y, Switzerland’s largest bank, for breaching contractual obligations under the “qualified intermediary” agreement (QI). The QI agreement was concluded between the U.S. and Swiss banks in 2000. It required Swiss banks to collect withholding taxes on interest earned by their U.S. clients and share data about account ownership with the U.S. tax authority. Since a client’s approval was necessary for information transfer, the QI did not per se interfere with the banking secrecy. Swiss authorities made no objections to it. As later investigations by U.S. authorities noted, Swiss banks had seized upon a gap in the QI, which law firms had already made them aware of in 2000. Swiss banks, including Bank Y, had circumvented the QI. These banks established legal entities, such as foreign mailbox companies between the client and the bank, a matter that only became public in 2008. Subsequently, Bank Y was accused of having committed “conspiracy” by actively helping its U.S. clients evade taxes. The U.S. authorities filed a request for administrative assistance from Switzerland, which the Swiss authorities handled
hesitantly, since it conflicted with banking secrecy. Subsequently, in December 2008, the U.S. authorities escalated matters and threatened to indict Bank Y – a situation that would have very probably led to the bank’s collapse and to severe consequences for the Swiss economy as a whole. Eventually, on December 21, 2008, the Swiss authorities put into practice a state of emergency law. They agreed to the data exchange and required Bank Y to provide the U.S. authorities with bank account data on the 250 U.S. clients suspected to have committed tax crimes. The U.S. government and Bank Y agreed to suspend criminal proceedings. The price was the delivery of further client data and the payment of CHF780 million (US$870 million) in fines. Subsequent investigations revealed that several of these clients had only committed tax evasion rather than tax fraud. The U.S. authorities had breached Swiss banking secrecy.

In autumn 2008, after the U.S. investigations and threats became public, representatives of the OECD and of large EU countries sharply increased the intensity of their problematizations of Swiss banking secrecy. They also requested a modification of Swiss tax law and an information exchange (administrative assistance) not only in cases of tax fraud, but also in cases of tax evasion – as effected by the U.S. in the Bank Y case and as detailed in the OECD-MC Art. 26. Eventually, on March 14, 2009, Swiss government representatives announced that Switzerland wished to cooperate with other OECD countries, and that they would do so if there were reasonable grounds for suspecting tax crime, which would include both tax fraud and tax evasion. Bilateral agreements were subsequently renegotiated on the basis of the OECD standard, including the provisions for information exchange under Art. 26. With this, Swiss banking secrecy was generally loosened so as to release information, upon request, on tax evasion by individual foreign clients.

E.5.3. Institutional Conflict Episode 2: The Road to Loosening Banking Secrecy by Adopting the OECD Automatic Information Exchange (2009 to 2013)

Table 7.E. lists the major events that contributed to a second instance of institutional erosion of Swiss banking secrecy. In autumn 2013, it resulted in a more generalized loosening of Swiss banking secrecy for bank clients from other OECD countries. This loosening materialized, because Switzerland’s government decided to withdraw its reservations against an “automatic information exchange” (AIE) standard in tax matters. AIE involves the systematic and periodic transmission of “bulk” taxpayer information by the source country to the residence country concerning various categories of income. Consequently, from 2013 on, Swiss banks had to lift banking secrecy not only under certain agreed-upon conditions (the result of Episode 1). Swiss
banking secrecy no longer applied to foreign clients, as banks needed to automatically
release information on foreign OECD clients to other OECD countries. Since then,
AIE can provide foreign authorities with timely information on taxpayers’ non-
compliance. Within the EU, and several other OECD countries, the implementation of
the AIE had already either been agreed upon or even implemented since 2004.

**Table 7.E. Event Timeline (Conflict Episode 2)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Actor and event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>March</td>
<td>OECD and EU representatives call on Switzerland to adopt AIE</td>
</tr>
<tr>
<td></td>
<td>March</td>
<td>The Swiss authorities announce that a further erosion of its banking secrecy is out of the question</td>
</tr>
<tr>
<td></td>
<td>December</td>
<td>The Swiss authorities propose an expanded withholding tax to protect its banking secrecy</td>
</tr>
<tr>
<td>2010</td>
<td>March</td>
<td>The U.S. authorities develop the QI into FATCA (similar to AIE)</td>
</tr>
<tr>
<td></td>
<td>n.a.</td>
<td>Banks start closing their U.S. subsidiaries</td>
</tr>
<tr>
<td>2011</td>
<td>March</td>
<td>U.S. authorities announce investigations into 12 Swiss banks for transgressing U.S. laws</td>
</tr>
<tr>
<td></td>
<td>March</td>
<td>The U.S. authorities demand expanded administrative assistance from Switzerland</td>
</tr>
<tr>
<td></td>
<td>July</td>
<td>U.S. authorities threaten to indict Swiss Bank A</td>
</tr>
<tr>
<td></td>
<td>September</td>
<td>Switzerland’s parliament postpones a decision on expanded administrative assistance to the U.S.</td>
</tr>
<tr>
<td></td>
<td>November</td>
<td>The U.S. authorities indict several Swiss bankers</td>
</tr>
<tr>
<td>2012</td>
<td>January</td>
<td>The U.S. authorities indict Swiss Bank Z</td>
</tr>
<tr>
<td></td>
<td>January</td>
<td>Swiss Bank Z ceases to exist</td>
</tr>
<tr>
<td></td>
<td>March</td>
<td>Switzerland’s parliament agrees to expanded administrative assistance to the U.S.</td>
</tr>
<tr>
<td></td>
<td>March</td>
<td>The U.S. authorities begin pushing the Swiss authorities towards a “global deal”</td>
</tr>
<tr>
<td></td>
<td>December</td>
<td>The Swiss authorities agree to an early adoption of FATCA</td>
</tr>
<tr>
<td></td>
<td>December</td>
<td>EU countries with banking secrecy (Austria and Luxemburg) agree to adopt FATCA with the U.S.</td>
</tr>
<tr>
<td>2013</td>
<td>January</td>
<td>An EU law that includes a ‘most favored treatment clause’ becomes binding</td>
</tr>
<tr>
<td></td>
<td>February</td>
<td>EU: Austria and Luxembourg agree to abandon banking secrecy, adopting an AIE</td>
</tr>
<tr>
<td></td>
<td>February</td>
<td>EU: Austria and Luxembourg call on Switzerland to abandon banking secrecy</td>
</tr>
<tr>
<td></td>
<td>April</td>
<td>Public opinion in Switzerland changes: 73% favors abandoning banking secrecy for foreign banking clients</td>
</tr>
<tr>
<td></td>
<td>August</td>
<td>The Swiss authorities agree to the U.S. authorities’ “global deal” penalty system for Swiss banks</td>
</tr>
<tr>
<td></td>
<td>September</td>
<td>OECD and EU representatives increase pressure on Switzerland to abandon banking secrecy</td>
</tr>
<tr>
<td></td>
<td>October</td>
<td><strong>Swiss authorities loosen banking secrecy and adopt the OECD standard for AIE</strong></td>
</tr>
</tbody>
</table>
In early 2009, soon after the Swiss authorities had agreed to provide legal assistance in tax evasion cases, the OECD and large EU countries continued their problematizations of the Swiss banking secrecy. They called on the Swiss authorities to also adopt the AIE. The Swiss authorities reacted defensively, seeking to protect and fortify the country’s banking secrecy against further erosion. It argued that Bank Y had been a “unique” case and that banking secrecy would be maintained by all means. Even as problematizations mounted, the Swiss authorities maintained their defensive posture.

As in institutional Conflict Episode 1, this situation again changed once U.S. authorities entered the stage two years later: In spring 2011, the U.S. authorities accused 12 Swiss banks, including several prominent ones, of transgressing U.S. law. U.S. citizens with undeclared Swiss accounts had been promised amnesty in return for evidence on Swiss banking practices. However, according to U.S. investigations, several private banks had even increased the number and volume of undeclared accounts from U.S. citizens in the aftermath of the Bank Y case. The banks believed in the sovereignty of Swiss law on Swiss territory and, with this, had underestimated U.S. authorities’ extraterritorial reach. One private bank, for instance, had taken on undeclared accounts from Bank Y even after Bank Y had come under U.S. scrutiny. By 2010, it held approximately US$1.5 billion in undeclared U.S. taxpayer funds, according to the U.S. Department of Justice.

The U.S. authorities repeatedly announced that they expected, as in the Bank Y case, to get access to data on banking clients. They reserved the right to indict Swiss banks, as well as current and former Swiss bank employees. The U.S. authorities noted that their eventual goal was to reach a “global deal” with Switzerland that would yield fines in the range of US$10 billion, by pressuring every Swiss bank that had helped U.S. citizens evade taxes. However, as with the Bank Y case, Switzerland’s government initially reacted defensively and stated that legal assistance would only be provided in line with existing bilateral agreements. These agreements foresaw assistance (and thus information exchange) in foreign investigations into individual U.S. tax fraudsters, but not – what the U.S. authorities sought – regarding all U.S. clients of a Swiss bank at once. Subsequently, Switzerland’s parliament also reacted hesitantly. It announced that it would decide on this issue in a future session in spring 2012. Infuriated by the delays, the U.S. increased pressure on Switzerland in several ways: After indicting several bankers from the targeted banks in autumn 2011, the U.S. in January 2012 for the first time indicted a bank on foreign territory – Bank Z – which led to the bank’s immediate breakup and demise. Indeed, Bank Z’s demise “sent
shockwaves throughout the Swiss banking sector” (swissinfo, September 9, 2013). This led to immediate compliance by the Swiss authorities with U.S. demands. Only days later, a Swiss parliament expert task force recommended that parliament should agree to U.S. demands for expanded administrative assistance – which eventually happened in early March 2012. The U.S. authorities had breached Swiss banking secrecy for the second time.

This decision paved the way for the U.S. authorities to reach the “global deal” they had aimed for. The U.S. authorities subsequently launched negotiations with Switzerland’s government. In December 2012, as one of the first countries in the world to do so, Switzerland’s government also agreed to introduce FATCA\(^7\). The U.S. authorities had assured that early adoption would be considered beneficial to speeding up a global deal for Switzerland’s financial sector. Eventually, in summer 2013, Swiss authorities ratified the “global deal” program. Fourteen banks – two more than previously known – were excluded from the program, since they were under criminal investigation by the U.S. The remaining (about 300) Swiss banks were divided into three groups that each faced the payment of a pre-defined fine. These fines had increased exponentially compared to the earlier cases. According to the Swiss Bankers Association, this agreement was the only possible solution. It also warned of serious financial consequences as a result of the fines: “It will be a painful program but… it is better to have this program than none at all.”

As FATCA included elements of an AIE, pressures to offer similar concessions to OECD and EU countries mounted. The OECD and the EU also increased the intensity of their problematizations of Swiss banking secrecy, highlighting that “[T]he era of the banking secrecy and of making money at the cost of other countries has ended once and for all.” Moreover, in early 2013, Luxembourg and Austria had joined sides. These two countries were bound by a new EU law that included a most-favored treatment clause. They were requested to adopt the AIE after they had initiated negotiations with the U.S. on the implementation of FATCA.

Already in April 2013, public opinion in Switzerland had changed. According to an annual survey, the majority of the Swiss public favored abandoning Swiss banking secrecy vis-à-vis foreign tax authorities (compared to 68% in favor of banking secrecy in 2000). In June 2013, a federal task force called for a “proactive” stance on

\(^7\) The Bank Y case had led the U.S. authorities to strengthen their legal framework, so as to better counter tax evasion. The QI was extended into the Foreign Accounts Tax Compliance Act (FATCA), with an expected international rollout from 2014. FATCA applied to taxation and banking a principle of extraterritoriality of U.S. law that obliged non-American financial institutions to inform the U.S. tax authority about accounts held with them by U.S. citizens. If they failed to do so, banks would face a penalty tax on all earnings emanating from the U.S. as well as heightened scrutiny by U.S. tax authorities.
the part of Switzerland towards the AIE. Eventually, in October 2013, Switzerland’s government signed a convention – with 54 signing countries – for administrative assistance in tax matters under the banner of the OECD-MC Art. 26. As a result, Swiss authorities started negotiations over the adoption of the AIE. The era of banking secrecy for Swiss banks’ foreign clients had ended.

E.6. The Types of Actors and of Institutional Work involved in Institutional Conflict

In this section we address the question how the intra-group and inter-group dynamics between incumbents and challengers involved in an institutional conflict contribute to the deinstitutionalization of a contested institution. We present an empirically grounded conceptualization of four actor types and of their respective “institutional work” practices (c.f. Lawrence & Suddaby, 2006) that were most involved in the institutional conflict over Swiss banking secrecy. All four actor and institutional work types were similarly engaged in institutional conflict episodes 1 and 2. Our data structure (Figure 6.E.) shows how these theoretical dimensions and theoretical categories are grounded in our empirical first-order evidence. Table 8.E. (in the Appendix) contains further empirical first-order evidence in support for these theoretical conceptualizations.
E.6.1. Guardians: Institutional Fortification

In both episodes, several representatives of Swiss governance units (such as officials from Switzerland’s government and related federal administrations) acted as guardians of its banking secrecy. Believing in the sovereignty of the Swiss liberal state and in the superiority of privacy protection ideals (the banking secrecy model), they engaged in institutional fortification work. We conceptualize such fortification as a type of defensive institutional work (Maguire & Hardy, 2009). Defensive institutional work seeks to achieve “position defense”, in a way that is “static” and particularly “vehement” (c.f. Kotler & Singh, 1981: 39). These guardians sought to fend off problematizations of Swiss banking secrecy, as well as any demands that would endanger Swiss national sovereignty. In countless instances, they responded that “Banking secrecy is not up for debate!” – as one federal council stated. Specifically, guardians’ institutional fortification work involved the following:

**Polarizing institutional ideals**: Guardians repeatedly polarized, in both episodes. Such polarizing – a frequent response in conflict situations (e.g. Collins, 2012) – involved efforts to highlight the banking secrecy institution’s ideals as ‘right’ or ‘superior’, combined with efforts to devalue conflicting demands as inferior or wrong.
In their polarizations, guardians drew from a set of ideals to which they were committed, including Switzerland’s liberal state model, Swiss national identity and sovereignty, privacy protection, as well as the country’s heritage and tradition. Polarization work was prevalent in Conflict Episodes 1 and 2, but particularly pronounced in Episode 1. Swiss authorities repeatedly rebuked foreign problematizations by highlighting that tax evasion was not a problem for Swiss banks; it would be a natural indicator that other countries’ tax levels would be much too high.

**Defying conflicting institutional demands.** Defiance is another form of active resistance to institutional change (Oliver, 1991: 157). For guardians, defying conflicting demands took two forms: First, it involved attempts to *avoid commitment to challengers’ demands* for information exchange. In Episode 1, such avoidance was visible for instance when the Swiss authorities adopted an invitee role in the OECD negotiations, thereby avoiding binding commitments. Switzerland continuously expressed reservations to OECD-MC Art. 26. Also in the second episode, such avoidance was prevalent. For instance, guardians highlighted that wrongdoing in the Bank Y case was a single case only traceable to a few employees in that bank. Neither a general information exchange with foreign authorities nor any investigations into the other banks’ business models would be conceivable or necessary.

Second, to defy conflicting demands, guardians also aimed in both episodes to *propose substitutes* to challengers’ demands for transparency and information exchange. If successful, such substitutes could shift stakeholders’ attention away from the focal actor’s non-compliance with the original standard, thereby seeking to avoid negative consequences (Okhmatovskiy & David, 2012). In both episodes, these substitutes took the form of a *withholding tax model*. Guardians emphasized the withholding tax model’s “equivalence” and “efficiency”, thereby defending Swiss banking secrecy. They argued that this model would combat tax crime and would create “real” tax revenues, while the information exchange that reformative challengers sought would only lead to a “data cemetery”.

### E.6.2. Incumbents: Circumventing Conflicting Institutional Demands

Member organizations of the Swiss banking sector and closely affiliated organizations can be conceptualized as *incumbents* (c.f. Fligstein & McAdam, 2012). Like guardians, they had a strong attachment to Swiss banking secrecy and resisted conflicting demands – their weight in the field even rendered them “a major source of institutional inertia” (Mahoney & Thelen, 2009: 27). Incumbents were close allies of guardians – but only “as long as the institution’s benefits outstripped its costs” (ibid.). However, unlike guardians, some incumbents were motivated to exploit ambiguities,
and to seize the opportunities that existed in the institutional field to achieve their own ends (ibid.). Specifically, they seized international business opportunities that arose from this contradictory institutional environment. With these activities, incumbents also circumvented foreign institutional demands that conflicted with the banking secrecy institution in their pursuit of international business opportunities (e.g. Regner & Edman, 2014). This involved the following:

**Avoiding conflicting institutional demands.** In both episodes, incumbents pointed out that foreign demands and new agreements could “easily” be avoided. The business opportunities that arise from legal ambiguity or “grey areas” and the evasion of conflicting demands were predominantly outlined by industry-level organizations, such as banking associations or industry consultants. In Episode 1, one consultant highlighted that the QI agreement with the U.S. authorities could be circumvented by inserting a legal entity between the client and the associated bank. Similar gaps were also spotted in the Bilateral II agreement that Swiss authorities had negotiated with the EU. In this respect, one Banking Association explicitly stated in 2004 that the agreement would equally exclude legal entities, and clients’ investment behavior would adapt accordingly. In Episode 2, when the U.S. authorities had already ratified their FATCA agreements, the Swiss Banking Association announced in 2011 that some banks would “turn their backs on the American financial system, believing that relocating their branches to Switzerland or to other countries with weaker enforcement would protect them from U.S. interventions”.

**Exploiting institutional differences.** In both institutional conflict episodes, incumbents played off one institutional system against another. This involved attempts at buffering their clients by concealing their non-conformity to foreign institutional rules. Incumbents focused on benefitting from “grey areas” of other countries’ institutional requirements. In Episode 1, Bank Y is a case in point. Bank Y developed business by actively assisting clients with tax evasion and ensuring them that this will remain “strictly confidential”. It took advantage of Swiss banking secrecy while exploiting supposed gaps in the QI agreement, as the 2008 report by the U.S. Senate noted:

“[Bank Y] has not only maintained undeclared Swiss accounts for U.S. clients containing billions of dollars in assets, it has also adopted practices to ensure that, in keeping with Swiss bank secrecy laws, those undeclared accounts would not be disclosed to U.S. authorities.”

Moreover, incumbents sought to escape challengers’ use of force. Internationalization data reveals that a sample of 115 Swiss-based private banks
reduced their subsidiaries in the U.S. by 42% between 2008 and 2009\(^8\). These banks believed that keeping with Swiss jurisdiction and applying Swiss sovereign law, including its banking secrecy, would protect them from the U.S. authorities. But it was not only the banks with broad international presence that exploited banking secrecy, it was also widespread among offshore-focused private banks with little or no international presences. In the offshore model, private banks are located outside the client’s country of residence and therefore can specifically take advantage of Swiss jurisdiction in tax matters. Some offshore-focused private banks believed that the Bank Y case in Episode 1 was an interstate jurisdictional dispute and a problem primarily for global banks, but less so for the banks that concentrated on the offshore model based on the Swiss jurisdiction. Because they did not have an international presence, these offshore-focused private banks believed they would be exempt from this conflict. During the institutional conflict, they particularly advertised their jurisdictional focus on Switzerland as a unique selling proposition in their annual reports and other communication materials. A publication by the U.S. Department of Justice in 2013 states that many of them even increased their (untaxed) assets under management and their corresponding fees during the institutional conflict to capitalize on the business opportunities this presented for them.

E.6.3. Radical Challengers: Pressuring Institutional Transgressions

Representatives of the U.S. authorities – the third actor type in our study – are characterized as radical challengers (c.f. Den Hond & De Bakker, 2007; Haines, 1984; Zald & McCarthy, 1980). Challengers can be characterized to be “radical” if they “offer a more comprehensive version of the problem and more drastic change as a solution” (Zald & McCarthy, 1980: 8). They spend more time and resources on activities that foster deinstitutionalization rather than reinstitutionalization, and are more likely to affect material damage (Den Hond & De Bakker, 2007: 908-912). In our case, radical challengers enforced the sovereignty of the U.S. institutional order by pressuring and fining Swiss banks that had transgressed U.S. laws. The U.S. authorities derived their pressuring potential from several sources: First, they received insider information – gained from paid whistleblowers – and sentenced U.S. tax evaders. Second, they reframed some of the agreements in place with Swiss banks and Switzerland.\(^9\) Third, Swiss banks depended on the U.S. financial market and the U.S.

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\(^8\) Data are retrieved from a sample of 115 Swiss-based private banks’ annual reports. We are extremely grateful for the support by Tomi Laamanen and KPMG AG Switzerland in collecting the data, and for Maximilian Stallkamp’s assistance in analyzing the internationalization patterns.

\(^9\) To pressure Swiss banks and to acquire needed funds, however, the U.S. authorities also reinterpreted some of the agreements in place with Switzerland or Swiss banks, such as the QI agreement. According to our analyses,
dollar, which naturally put U.S. authorities in a very strong position. Any threat of exclusion from the U.S. dollar payment system can immediately endanger the survival of any financial service company. As a result, the U.S authorities succeeded in enforcing U.S. law both within and outside U.S. territory. Overall, the U.S. authorities’ pressuring work entailed the following:

_Threatening with institutional force._ The U.S. authorities repeatedly threatened legal action against incumbent banks or bankers, in order to motivate Swiss authorities to forward the information the U.S. authorities required to pursue their goals. In Episode 1, the U.S. authorities began menacing to institute legal proceedings against Bank Y when Swiss authorities delayed administrative assistance for 250 tax fraud cases from Bank Y. The U.S. authorities knew that an indictment could lead to the bank’s immediate collapse, since it would cause a bank run and would lead Bank Y’s correspondent banks to end business with Bank Y. In Episode 2, the U.S. authorities also threatened legal action against a Swiss bank – Bank A, the second-largest Swiss bank. Furthermore, in Episode 2, the threat of legal action was also inherent in the new FATCA agreement as well as in the “global deal” negotiations – both included strengthened legal frameworks for tax compliance that also aimed at collecting higher fines.

_Authorizing punitive efforts._ During Episode 2, the U.S. authorities also authorized punitive efforts to further increase its threat potential against Swiss banks. To do so, the U.S. authorities indicted Swiss banks and bank employees rather than merely threatening the possibility. The U.S. authorities took legal action against several high-profile Swiss bankers and bank managers in order to further increase the pressure on Swiss authorities and banks. Furthermore, in 2012, the U.S. authorities for the first time indicted a foreign bank – Bank Z – in a tax evasion scheme, because they chose to make an example of a bank. Bank Z is Switzerland’s oldest private bank and, owing to its off-shore model, had no subsidiaries or branches outside Switzerland. The U.S. authorities highlighted that the crystal-clear message that the U.S. had sent with the Bank Y case had not deterred Bank Z’s managers. The indictment of Bank Z led to the bank’s immediate breakup and demise.

several Swiss banks had already informed U.S. authorities in 2002 that the QI contained “loopholes”. Yet, at the time, the U.S. authorities ensured that banks would not be prosecuted if these were seized. Only a later reframing, in 2008, of such actions by banks as constituting a “conspiracy” against the U.S. enabled the U.S. authorities to criminalize Swiss banks, to mobilize force, and to fine Swiss banks.
E.6.4. Reformative Challengers: Institutional problematizing

The final actor type – representatives of the OECD and the large EU countries – are conceptualized as reformative challengers (c.f. Haines, 1984). Reformative challengers, in contrast to radical challengers, tend to believe that despite the fact that the counterparty forms part of the problem, it “can also be part of the solution” (c.f. Den Hond & De Bakker, 2007: 903). They mobilize awareness for specific definitions of the problem and invest effort in reinstitutionalization. In our case, they pursued ideals (i.e. transparency, transnational governance, the diffusion of standards that counter tax evasion throughout all OECD countries) that contradicted and challenged those of the guardians. Like radical challengers, they engaged in a form of “disruptive institutional work” (Maguire & Hardy, 2009). They problematized Swiss banking secrecy with the ambition to achieve mutual administrative assistance and related information exchange as a global institutional standard, so as to effectively combat tax crime on a transnational or even global basis. They engaged in problematizations to “shape the values and criteria” of the Swiss authorities in two ways (c.f. Oliver, 1991: 152).

Appealing to institutional ideals. In both episodes, OECD and EU representatives made repeated appeals to the Swiss authorities’ ideals and principles. They called for principles such as equality, responsibility, reciprocity, social justice, and fairness in the future choices of the incumbents of banking secrecy. These appeals were meant to effectively raise the Swiss authorities’ awareness of the conflict sources by appealing to widely agreed-upon principles and values. For instance, the OECD Secretary General in both episodes stated that the OECD had been developing standards for transparency and information exchange for years with the goal to eliminate “anti-competitive tax practices”. The openness of the global economy could only be maintained if all constituents acted “responsibly”. A refusal to exchange information no longer belonged to the current zeitgeist. Another recurring theme was that banking secrecy created benefits incurred at the cost of other states. Moreover, reformative challengers called for equal treatment with the U.S. at times when the U.S. authorities had already made received concessions from the Swiss authorities in both episodes. As friendly neighbor countries, one should at least expect the same level of information exchange in tax matters as the Swiss authorities granted the U.S. authorities. One could not be treated differently in the global war on tax crime.

Institutional stigmatizing. In both episodes, reformative challengers threatened Switzerland and the Swiss banking sector with stigmatization. Stigmatizing involves associating an actor with a label that evokes a collective perception that the actor
possesses “a fundamental, deep-seated flaw that deindividuates and discredits” the actor” (c.f. Devers, Dewett, Mishina, & Belsito, 2009: 157). In both episodes, such stigmatization was particularly prevalent after the U.S. investigations had become public. Representatives of EU governments labeled countries with banking secrecy, especially Switzerland, as “tax havens”. This enabled challengers to mobilize against Switzerland and to connect this stigmatization to sanctions. Members of several EU countries’ governments – led by Germany, France, and the UK – built an issue coalition to increase their joint problematization of Switzerland and countries with banking secrecy. They threatened to add Switzerland to a new OECD blacklist of 40 uncooperative countries in tax-related matters. Coupled with the blacklist, the EU made Switzerland’s market access to the Schengen area conditional upon greater cooperation on tax matters.

E.7. Institutional Conflict Escalation and Deinstitutionalization

In this section, we build on the above conceptualizations and our case narrative to address the intra- and inter-group dynamics between incumbents and challengers. Figure 7.E. maps how the overarching themes - actor types and their respective institutional work - temporally unfolded (see Corley & Gioia, 2004, for a similar approach). It visualizes when each of the four types of actors and their institutional work was particularly implicated in the two institutional conflict episodes that each led to a considerable erosion of the banking secrecy institution. While our analysis acknowledges other types of interactions, it foregrounds those contributions by the four actor types that were particularly consequential in both conflict episodes.

On this basis, we developed a theoretical model of how institutional conflict episodes contribute to the deinstitutionalization of a contested institution (Figure 8.E.). The model highlights that institutional conflict escalation is necessary for institutional erosion and eventual deinstitutionalization to occur. Hereby, we define institutional conflict escalation as the process through which the interactions between opposing parties grow in oppositional intensity (c.f. Collins, 2012). Oppositional intensity refers to the “degree of strength, force, or energy with which opposition” to incumbents was conveyed (c.f. Weingart, Behfar, Bendersky, Todorova, & Jehn, 2014: 13). In both episodes, institutional conflict escalation reduced and weakened guardians’ institutional fortification work and paved the way for institutional erosion and the eventual deinstitutionalization of this contested institution.
Figure 7.E. Implication of Actors in Institutional Conflict Episodes

| Guardians | Fortification |
| Incumbents | Circumvention |
| Radical Challengers | Pressuring |
| Reformative Challengers | Problematizing |


| Guardians | Fortification |
| Incumbents | Circumvention |
| Radical Challengers | Pressuring |
| Reformative Challengers | Problematizing |

| 2009 | 2010 | 2011 | 2012 | 2013 |

Figure 8 E. Theoretical Model

1. Incumbents
   - Circumvention of conflicting institutional demands
   - Legitimizes (+)
2. Radical Challengers
   - Pressuring institutional transgressions
   - Breaches (-)
3. Guardians of the Incumbent Institution
   - Institutional fortification
   - Intensifies (+)
4. Reformatory Challengers
   - Institutional problematizing
   - Overrides (-)

Deinstitutionalization

(1) provides safety (+)
(2) legitimizes (+)
(3) breaches (-)
(4) intensifies (+)
(5) overrides (-)
E.7.1. Triggers of Institutional Conflict Escalation

Our account emphasizes guardians’ institutional fortification work as an important trigger of the ‘escalation spiral’ of institutional conflict (c.f. Pruitt et al., 2003). The escalation is comprised of two distinct and reinforcing escalation cycles: The first cycle involves guardians and radical challengers. The second cycle takes place between guardians and reformative challengers. In this section, we elaborate on the six mechanisms that we identified and through which the four types of actors involved in the institutional conflict over the banking secrecy contributed to the deinstitutionalization of this contested institution.

In both institutional conflict episodes, guardians’ institutional fortification work in response to reformative challengers’ problematizations constitutes a first trigger for the ‘escalation spiral’ of institutional conflict. Guardians’ institutional fortification of banking secrecy was particularly prevalent and energetic in the periods 1998 to 2008 and 2009 to 2011, that is, at the beginning of each institutional conflict episode. During these phases, they engaged in particularly intense polarizations and defiance of opposing demands. Such vehement and static defensive institutional work, in both episodes, enabled guardians to protect the superiority of banking secrecy. It led to a fortification of banking secrecy that was “supposedly impregnable” (c.f. Kotler & Singh, 1981: 39) to external challenges.

Such fortification work was a sign of guardians’ strong ‘non-adaptability’ to contradicting institutional demands. As Seo and Creed (2002: 235) emphasize, in the short-run, such non-adaptability prevents actors, “from behaving outside the prescriptions of [their] existing institutional order… However, in, the long run, strong non-adaptability renders institutional arrangements increasingly, vulnerable”. In our case, it sowed the seeds in both episodes for two cycles of escalation of the institutional conflict that led to the banking secrecy’s eventual deinstitutionalization.

Guardians’ institutional fortification work fueled perceptions of safety among incumbents, which led several incumbents to circumvent conflicting institutional demands in their international business activities (Mechanism 1): Guardians’ vehement institutional defense created an institutional order that many banks considered ‘safe’ despite the ongoing institutional conflict. In retrospective interviews, incumbents emphasized that they had ‘relied’ on the Swiss government authorities as ‘strong partners’ who would defend them against foreign challenges and that they took their protection as a given under the hospices of the Swiss jurisdiction. Akin to Oliver and Dhallá’s (2013) finding that Canadian banks’ dismissal of conflicting demands were closely tied to the industry’s identity, our case highlights that incumbents’
circumvention of conflicting demands was closely tied to the felt safety under the protective shield of sovereign law on Swiss territory. The following statement by a bank executive in a retrospective interview offers an illustration in this respect:

“In reality, there was a rapid globalization of legal standards, which had still been underestimated. Humans are always misled by some beliefs. In my case it was the belief in the territoriality of Switzerland, the belief in a sovereign state governed by the rule of law on its own territory.”

This perception of safety similarly motivated several incumbents to increase risk-taking and to pursue international business activities with heightened aggressiveness. These activities were risky in that they circumvented foreign institutional orders that conflicted with the banking secrecy institution (e.g. Regner & Edman, 2014). The following letter, sent by Bank Y to U.S. clients concerning their Swiss accounts, offers a case in point:

“Dear client: From our recent conversations we understand that you are concerned that [Bank Y]’s stance on keeping its U.S. customers’ information strictly confidential may have changed […]. We are writing to reassure you that your fear is unjustified and wish to outline only some of the reasons why the protection of client data cannot possibly be compromised upon: The sharing of customer data with a [Bank Y] unit/affiliate located abroad without sufficient customer consent constitutes a violation of Swiss banking secrecy provisions and exposes the bank employee concerned to severe criminal sanctions. Further, we should like to underscore that a Swiss bank which runs afoul of Swiss privacy laws will face sanctions by its Swiss regulator […] up to the revocation of the bank’s charter. Already against this background, it must be clear that information relative to your Swiss banking relationship is as safe as ever and that the possibility of putting pressure on our units does not change anything…” (cited in a 2008 U.S. Senate report)

In both episodes, a first cycle of institutional conflict escalation takes place, when the U.S. authorities drew into the institutional conflict as radical challengers after they had netted incumbent banks who had transgressed U.S. institutional requirements. These transgressions and the evidence thereof provided the U.S. authorities with the necessary legitimacy to act as radical challengers in the conflict (Mechanism 2), and to pressure incumbents’ institutional transgressions. In this respect, radical challengers may gain legitimacy when acting against perceived illegitimate transgressors. We define a transgression as a behavior that “a social-control agent judges to [infringe] a line separating right from wrong” (Greve, Palmer, & Pozner, 2010: 56). With legitimacy we mean stakeholders’ generalized perception that acting as a radical challenger is appropriate (c.f. Suchman, 1995). In particular, the escalation occurs as radical challengers perceive transgressions, which may trigger important retaliations (Collins, 2012; Pruitt et al., 2003). By this, they sought to counteract transgressions, to enforce the sovereignty of the U.S. institutional order (c.f.
Beetham, 1991) while collecting funds that were urgently needed after the financial crisis.

With the aim to punish the incumbent banks’ transgressions, the U.S. authorities met guardians’ fortification. Together, incumbents’ transgressions and guardians’ fortification led U.S. authorities to the perception that incumbents had been severely aversive and illegitimate - Collins’ (2012) refers to ‘perceived atrocities’. This is visible in the U.S. Senate’s extremely emotional and aggressive descriptions of the Swiss banks and government, highlighted in the following statement:

“One cannot rely on Switzerland. Switzerland uses its banking secrecy as a, protective shield, even when the bank already admitted misconduct and an offence, under US law. [...] Is it not absurd to earn money through the active assistance to, tax evasion at the costs of a befriended state like the USA: how can a country support such behavior?”

Perceived atrocities frequently lead to ‘counter-atrocities’ (Collins, 2012). Akin to a ‘counter-strike’, the U.S. authorities sought to radically enforce the sovereignty of the U.S. institutional order. They did so by enforcing U.S. law not only on U.S. territory but also with U.S. citizens on an extraterritorial basis. This involved the vigorous and ruthless mobilization of resources at their disposal in order to put pressure on and to create a break in guardians’ fortification (c.f. Lawrence, Winn, & Jennings, 2001). In both episodes, U.S. authorities’ attacks effected ‘breaches’ (c.f. Zietsma & Lawrence, 2010) in guardians’ institutional fortification, which we define as, forced exceptions to governance units’ general institutional rules (Mechanism 3). In both, episodes, in 2009 and 2012, Swiss authorities saw themselves forced to lift banking secrecy and to provide radical challengers with the information needed to internationally enforce U.S. law and to penalize and fine incumbents. As a member of the Swiss authorities, emphasizes in retrospect, “Switzerland did not have another choice”.

In both institutional conflict episodes, a second cycle of institutional conflict escalation occurred immediately thereafter. Compared to earlier phases, the breaches in guardians’ institutional fortification led to drastic increases in the oppositional intensity of reformative challengers’ institutional problematization work (c.f. Collins, 2012; Weingart et al., 2014). In other words, reformative challengers intensified their problematization work (Mechanism 4), as radical challengers created the opportunity for reformative challengers to advance their goals (c.f. Haines, 1984). Radical challengers did so by weakening guardians’ fortification work, and by providing reformative challengers with the political and discursive resources necessary to mobilize problematizations of banking secrecy and to propagate alternative,
transnational institutional arrangements (i.e. OECD standards). In the final phase of each institutional conflict episode, the increased intensity is evident in the strength and the emotional tone of the appeals to Switzerland’s ideals that reformative challengers mobilized, as well as in the fact that they complemented these appeals with strong and consequential stigmatizations of the banking secrecy, of Switzerland and the Swiss financial sector. Such stigmatization is a form of ‘unofficial, punishment’ that challengers levy if they do not have the authority to assign penalties (Pfarrer, Decelles, Smith, & Taylor, 2008: 739).

Moreover, breaches in the banking secrecy also undermined guardians’ commitment to the banking secrecy (cf. Collins, 2012) and weakened their defensive institutional work. This created a situation where reformative challengers’ institutional problematization work was not only more energetic and powerful but where guardians were also more receptive to the problematization claims. Akin to the finding in inter-group conflict research, that “most casualties happen after an organization has broken down” (Collins, 2012: 11), these breaches by radical challengers paved the way for reformative challengers to more generally override guardians’ institutional fortification (Mechanism 5). Eventually, toward the end of the two conflict episodes (in 2009 and in 2013) reformative challengers of banking secrecy then succeeded in committing the Swiss authorities to adopt the OECD standards for mutual administrative assistance (end of episode 1) and for AIE in tax matters (end of episode 2). These two instances of institutional erosion constituted important episodic outcomes that contributed to the overall deinstitutionalization of the banking secrecy institution (Mechanism 6).

E.8. Discussion

To uncover how intra-group and inter-group dynamics among incumbents and challengers involved in an institutional conflict contributed to the deinstitutionalization of a contested institution, we uncovered an empirically grounded process model of the deinstitutionalization of the contested institution of Swiss banking secrecy. Specifically, we developed an empirically grounded typology of the incumbent and challenging actor types involved in both institutional conflict episodes. The typology yields four actor types: two insider types (guardians, incumbents) and two challenger types (radical challengers, reformative challengers). The conceptualization of these four actor types is based on the types of purposive action or institutional work these actors engaged in during both episodes. These categories and actor types include
important refinements and extensions of concepts that had been touched upon in prior research on deinstitutionalization and on institutional conflicts.

We then built on the conceptualization of actors to develop a theoretical model that seeks to explain the dynamics involved in institutional conflict escalation that led to the institutional erosion and eventual deinstitutionalization of a contested institution. In both episodes of the escalating institutional conflict, guardians’ institutional defense and incumbents’ circumvention of conflicting institutional demands contributed important triggers to institutional conflict escalation. These triggers motivated radical and reformative challengers to attack institutional incumbents with increased oppositional intensity, thereby effecting breaches of the contested institution that subsequently led to a more general erosion and to the eventual deinstitutionalization of this contested institution. This focus on mechanisms and relationships helps refine our understanding of the intra- and inter-group dynamics of the above-identified actor types.

E.8.1. Implications for Research on Institutional Conflicts

Our study makes important contributions to research on institutional conflicts (e.g. Fligstein & MacAdam, 2012). As a first contribution, it adds complexity to this line of research by providing a more differentiated and conceptually refined picture of the actor types involved in conflicts over contested institutions. While prior research differentiated these actors into insiders, who are motivated to defend a contested institution and challengers, who are motivated to problematize it and seek institutional change (e.g. Fligstein & McAdam, 2012), we have further differentiated these actor groups and the motivations that may guide their actions (c.f. Mahoney & Thelen, 2010). Specifically, by drawing from social movement scholars’ insights on radical and reformative challengers (c.f. Den Hond & De Bakker, 2007; Haines, 1984; Zald & McCarthy, 1980), we could uncover a more nuanced understanding of the challenger types and their interactions involved in an institutional conflict. Our study greatly expands the conceptual toolkit and the combinational possibilities for scholars interested in institutional conflicts. It also points to unexpected ruptures and nonlinearities as these groups act and interact in contested institutional fields.

As a second contribution, our study also answers recent calls to provide a more fine-grained conceptualization of institutional conflict dynamics (Den Hond & De Bakker, 2007). Importantly, while prior research has predominantly focused on the inter-group dynamics between insiders and challengers (e.g. Fligstein & MacAdam, 2012), our perspective complements this work by shedding light on some of the in-group dynamics among different types of (1) insiders and (2) challengers during
institutional conflicts: For the former, our findings highlight the effect of governance units’ defensive institutional work (Fligstein & MacAdam, 2012; Maguire & Hardy, 2009) on actions by incumbents that contributed to institutional conflict escalation and subsequent destabilization of the extant institutional order. Our evidence suggests that, when faced with institutional conflict, institutional fortification by governance units (i.e. Swiss government representatives) contributed to Swiss banks’ transgressions of other institutional systems. This finding is not dissimilar to Mahoney and Thelen’s (2010: 29) argument that “institutional supporters may turn a blind eye to those who willfully convert institutions for their own purposes so long as they do not oppose outright the institutional rules.” Counterfactually, the question arises what would have happened if Swiss government authorities (as governance units) had taken not only a facilitative stance (cf. Fligstein & MacAdam, 2012) but also a more “regulative” stance (e.g. Edelman & Suchman, 1997) concerning the Swiss banking sector. Could banking secrecy (and Swiss private banks’ profit levels) have been maintained at higher levels if Swiss governance units had more strongly controlled Swiss banks’ activities and if they had ensured that banks’ international business activities complied with banking secrecy in a way that does not conflict with foreign institutional orders?

Accordingly, future research may follow these lines to deepen the current understanding of what such governance units (Fligstein & MacAdam, 2012) actually do, what their roles are vis-à-vis organizations (c.f. Edelman & Suchman, 1997), and how this can contribute to institutional conflict prevention, escalation, de-escalation, or stalemates. While some research points to more direct influence strategies through which firms seek to influence regulators, e.g. via regulatory capture, or oligopoly power (c.f. Allen, 1983), more recent research points to more indirect aspects such as exploiting regulatory ambiguity (e.g. Funk & Hirschman, 2014) or industry identity (e.g. Dhall & Oliver, 2013) as factors enabling the circumvention of conflicting demands. For instance, Dhal & Oliver uncover how firms’ motivation to maintain a distinctive industry identity leads them to dismiss conflicting demands. Our case findings may complement this line of research by suggesting that such motives for circumvention are not only rooted in industry-level identity, but also importantly shaped by national, state-level aspects (c.f. Fligstein, 1996; Pearce, Dibble, & Klein, 2009), such as conflicts between the governing law and transnational developments.

Our study also provides a more refined and dynamic picture of what challengers do during institutional conflicts (Fligstein & MacAdam, 2012). Fligstein and McAdam (2011: 6) argue that challengers need to “await new opportunities to challenge the structure and logic of the system.” In this regard, we add the insight that reformatory
challengers – i.e. the challenger type institutional conflict research has predominantly focused on – may actually require radical challengers who forcefully lay the ground for reformative challengers’ institutional transformation attempts to succeed. Our data suggested that, with their attacks, radical challengers effected institutional breaches, that is, forced exceptions to institutional rules. These breaches weakened institutional guardians’ morale (Collins, 2012) while providing reformative challengers with further resources they could mobilize to problematize the contested institution more powerfully and overcome guardians’ resistance to institutional change. Our insights thus open significant avenues for future research to fine-tune the in-group dynamics of challengers even further.

E.8.2. Implications for the Study of Deinstitutionalization

Our study also contains core insights that have important implications for the study of deinstitutionalization (e.g. Oliver, 1992): First, our emerging theory offers a process model of deinstitutionalization. It conceptualizes deinstitutionalization as occurring gradually and as necessitating repeated institutional conflict episodes that lead to institutional erosion. Instances of institutional erosion thus constitute intermediate outcomes through which an institution is progressively eroded and through which deinstitutionalization unfolds. While corroborating several themes advanced separately in prior explanations of deinstitutionalization, such as discourse, force, resistance, or transgressions (e.g. Covaleski & Dirsmith, 1988; Jonsson et al., 2009; Lawrence et al., 2001; Maguire & Hardy, 2009; Zietsma & Lawrence, 2010), our study refines several of these themes and offers dynamic connections between them.

Our study also adds to a recently growing number of studies that highlight conflict as a key driver of deinstitutionalization (e.g. Den Hond & De Bakker, 2007; Zietsma & Lawrence, 2010). These scholars primarily emphasize the role of challengers for deinstitutionalization to occur (e.g. Maguire & Hardy, 2009). Our study complements these studies by pointing to the significance of actions by institutional insiders in triggering the deinstitutionalization of a contested institution. Institutional guardians, through “static fortlike defense” (c.f. Kotler & Singh, 1981: 39) of a contested institution, can sow the seeds for an escalation of the institutional conflict that eventually requires them to submit to challengers’ demands and erodes the institution they were committed to. This is an important complement to the predominantly challenger-driven and outsider-driven explanations of deinstitutionalization advanced in prior literature (e.g. Maguire & Hardy, 2009).

It is also an important complement to uncovering the sources of institutional change more generally (Clemens & Cook, 1999). Our study highlights that although
there have been important changes in the institution’s external environment, e.g. EU formation, financial crisis, etc. These external changes did not provoke the deinstitutionalization of the incumbent institution per se. Rather, these external changes altered the motivations or interests of actors to engage in institutional work, for instance to fortify their own institution (possibly in reaction to external developments), or to problematize institutions that stand in way of transnational developments. Our case findings suggest that different types of actors’ institutional work eventually drives deinstitutionalization – a specific form of institutional change (Oliver, 1992).

Our findings suggest that “defensive institutional work” (Maguire & Hardy, 2009) may have unintended consequences that contribute to deinstitutionalization rather than institutional maintenance. Future research may build on this finding to better disentangle the different types of defensive institutional work and their potential effects on institutional maintenance vs. deinstitutionalization While our study points to the potentially negative effects of vehement institutional defense or, as we refer to it, institutional fortification, other studies suggest that more skillful “domain defense” may succeed in deflecting challenging forces’ attention (Dunbar & Wasilewski, 1985). They may also engage in “strategic withdrawal” when insiders face challengers that are far superior (c.f. Kotler & Singh, 1981: 41). In our case, when we asked insiders for lessons learnt from this conflict, many Swiss actors wished they had engaged in “strategic withdrawal” in the sense of more extensive and earlier concessions to challengers’ demands. But as this may not be the appropriate strategy for other institutional conflict types, investigating constellations of defensive institutional work and institutional conflict types may fruitfully be explored in future research.

E.8.3. Implications for Transnational Institutionalism

Our findings also have implications for institutional research in transnational institutional settings. First, our study answers the call to conceptualize and investigate the deinstitutionalization of an incumbent institution in response to novel transnational institutional demands (Djelic & Quack, 2008). With a predominant focus on the development and adoption of transnational institutional standards (e.g. Ansari et al., 2013; Helms, Oliver, & Webb, 2012), prior research in this area has largely taken for granted the role of deinstitutionalization of local institutional standards and has relegated this process to an “invisible hand” (Djelic & Sahlin-Andersson, 2006) or “black box”. Our study counters this trend by theorizing some of the processes necessary for the deinstitutionalization of local institutions to occur.
Specifically, our study suggests that, in some conditions, bilateral force may be necessary for the local adoption of transnational institutional standards. The existing literature points to the distinctiveness of transnational challengers’ problematization practices that rely on ‘soft’ rules such as legally non-binding guidelines, in contrast to the more traditional, coercive, ‘hard’ power of sovereign nation-states, typically associated with a Westphalian world (e.g. Dobbin et al., 2007). Our findings point to the need to conceive of force and influence less as exclusive categories, but to tap into their interrelationships. Under some conditions, transnational institutions’ problematization (influence) strategies may be ineffective in the absence of bilateral force.

Additionally, a comparative analysis between Switzerland and the two EU states with banking secrecy – Austria and Luxembourg – points to the need to shed further light on the nesting of institutions in their supra-institutional environment. The literature shows that standalone states (independent sovereign nation-states such as Switzerland) are more likely to resist the adoption of transnational institutional standards than states that are connected through their membership in transnational organizations (e.g. Austria and Luxembourg, as EU members) (see also Ingram & Torfason, 2010 - "network weaver"). Future research may build on this insight to understand whether the deinstitutionalization of local institutions involves a different set of mechanisms when the focal state is a standalone one, compared to one that is a member of a supranational alliance.

Future research may also continue to uncover the key relationships between these actors in order to provide further nuances on how institutional conflicts shape deinstitutionalization processes and contribute to radical transformations for companies, industries, and/or countries.
References


APPENDIX 1:
Table 8.E. Representative Data for Theoretical Categories and Dimensions

THEORETICAL CATEGORIES: Representative quotes, events, and archival entries

GUARDIANS // INSTITUTIONAL FORTIFICATION

Polarizing institutional ideals

**EPISODE 1:**
- "Tax evasion ... happens also in countries without banking secrecy. We choose another path. We try to establish a relationship of trust with our citizens, and a price-quality ratio, which conveys the impression that the state deserves its price. We target a moderate tax level; this is the best prevention against tax evasion" [FC; TAI; 2000]
- "Privacy plays an important role in our liberal social system, which may contrast with other systems" [FC; PAI; 2000]
- "Tax evasion can best be avoided with a reasonable taxation. Banking secrecy is in some sense a "good" that is anchored in the nation's soul to protect privacy. In this respect, even though Switzerland and Singapore are geographically distant, they are sitting to some extent in the same boat. It can be meaningful in some cases to seek for fellows sharing the same credo and interests at a distance", [FC; PAI; 2001]
- "The FC's attitude with respect to the banking secrecy is based on our traditional privacy protection. [FC; TAI; 2001]

**EPISODE 2:**
- [Withholding tax] is "charming" as it promises real tax income while the AIE only leads to bureaucracy and insecure incomes. [FC; TAI; 2009]
- With the expanded withholding tax, banking clients can maintain their privacy while tax evasion may be avoided [AFB; MR; 2009]
- Contrary to the automatic information exchange this withholding tax model would be promising, as it would really lead to real money flows into foreign countries. [SPBA; MR; 2009]
- With the "withholding tax instead of banking data" concept, Switzerland aims to uphold the protection of the privacy of banking clients. [FC; MR; 2010]

Devaluating demands as inferior, wrong

**EPISODE 1:**
- "Some states use the banking secrecy as an excuse to deflect attention from their own incompetence to handle their own fiscal resources in a responsible manner. When everything turns out to go bad, they claim, that Switzerland plunders resources. This is admission of incompetence... There is no reason to feel at fault." [FC; AI; 2001]
- "The call for tax harmonization is a gentle circumscription for developing a world-wide tax cartel." [FC; PAI; 2002]
- In reaction to the claim at the OECD minister conference that banking secrecy hinders the combat against financial crime and terror financing, the FC qualified this statement as "incorrect" and offended that [the UK secretary of finance] puts banking secrecy, money laundering, terror financing and fiscality matters into one basket. [FC; PAI; 2002]

**EPISODE 2:**
- With the automatic information exchange, the money would only flow to "other, uncontrolled regions" [SPBA; MR; 2009]
- "The AIE will only lead to bureaucracy and insecure incomes." [SBA; PAI; 2009]
- Any automated exchange of banking data is "questionable", since it would emanate from an understanding that an "almighty state" is able and empowered to impose everything. Switzerland would rather uphold an understanding of the state that does not unnecessarily intrude into its citizens“ private sphere [FA; PAI; 2010]
- FATCA is a "lose-lose situation" as the extra costs of implementing the new system could drive away foreign investment. [SPBA; PAI; 2011]
Defying conflicting institutional demands

Avoiding a commitment to information exchange

**EPISODE 1:**
- With the adoption of an "invitee" role, the OECD report was not binding for Switzerland. [Para. 24; Art. 26 OECD Model Convention; 1994]
- "The Swiss delegation has only committed itself to examine whether analog clauses [compared to the information exchange in the QI agreement] should be integrated into the bilateral agreements with other countries. This is a political not a legal obligation." [FC; TAI; 2000]
- "Switzerland reserves its position on this Article. It will propose to limit the scope of this Article to information necessary for carrying out the provisions of the Convention. This reservation shall not apply in cases involving acts of fraud subject to imprisonment according to the laws of both Contracting States." [Commentaries to Art. 26 OECD Model Convention; July 15th 2005]
- An internal unpublished report states that Switzerland should not make further claims – so that in return it does not receive claims. [FA; PAI; 2009].

**EPISODE 2:**
- "Bank Y is still a single case; the bank has been forced to deliver data, because it committed tax fraud. Banking secrecy remains in place" [FC; PAI; 2009]
- After the adoption of OECD Art. 26, the FC remarked that the banking secrecy remains intact inside Switzerland. The FC clarified that the distinction between tax evasion and fraud is not lifted, and recognizes the "wish for an adequate privacy protection of the citizens". For him, it would not constitute a "funeral day". In the context of globalization and the financial crisis, the international cooperation increased in importance and the FC wishes to support such endeavors. Switzerland will "never ever" agree to an automated information exchange, it would constitute the end of the banking secrecy. [FC; PAI; 2009]
- "Switzerland will not be responsive to the EU demand for automatic information exchange. Maintaining the privacy of – Swiss and foreign – banking clients is non-negotiable. Any requests for abolishing the legal distinction between tax fraud and tax evasion also within Switzerland are totally out of place". [FC; TAI; 2010]

Proposing substitutes to information exchange

**EPISODE 1:**
- The FC interprets the demand for an "equivalent measure" in such a way that third countries' banking secrecy coexists with information exchange. The gap would be closed with an additional tax retention of around 20% on foreign capital. This substitute measure extends the already existing tax [FC; PAI; 2000].
- To save negotiations between the EU and Switzerland, a majority of the FCs propose to extend the legal aid to EU member states. The Swiss banking secrecy should be loosened in the area of indirect taxes, e.g. value added tax and customs. With this concession in the area of indirect taxes, the starting position for defending the banking secrecy’s "core" with the income tax should be improved. "Without concessions from our side, there is probably nothing to achieve anymore on this issue." [FA; PAI; 2002]
- "The discussions with the EU in this area [withholding tax model in area of indirect taxes] do not threaten the banking secrecy's hard core." [SBA; TAI; 2002]

**EPISODE 2:**
- A withholding tax on foreign accounts is proposed to save the non-fiscal components of the banking secrecy. With this tax, the tax duties of the foreign clients would be fulfilled while the Swiss banking secrecy vis-a-vis foreign authorities could be maintained. [FC; TAI; 2009]
  "In the struggle around banking secrecy, Switzerland aims with the concept of withholding tax instead of bank data" to make a concession towards foreign fiscal interests. With the expanded withholding tax, tax evaders may legalize their untaxed money with a one-time levy of withholding tax while staying anonymous. [FC; MR; 2010]
- "Switzerland will offer solutions to "regularize" untaxed money within Swiss banking accounts" [FC; TAI; 2010]
- Swiss government principally agreed to guarantee a minimum withholding tax to foreign countries which banks would offer in advance. [FC; MR; 2011]
INCUMBENTS // CIRCUMVENTION OF CONFLICTING INSTITUTIONAL DEMANDS

Avoiding conflicting institutional demands

Articulating strategies for avoiding U.S. tax laws and tax payments

EPISODE 1:

- A memorandum is published which provides guidelines to Swiss banks’ offshore private wealth management business with US costumers in light of the new Qualified Intermediary (QI) agreement. The following note describes that with the introduction of a foreign legal entity between a US client and his bank, the client is no more considered as a tax liable client in the US: "Note: The fact that a non-U.S. company is "passive" and wholly or partially owned by a U.S. person should not prevent the non-U.S. company from being treated as a non-U.S. person for U.S. withholding tax and information reporting purposes." [IC; A; 2000]
- The new tax could be evaded easily, because it only encompasses interest income. Dividends, derivatives and certificates, life insurances, foundations or gains from the stock market are not included and remain tax-free. Furthermore, all European banks develop products, which invest into bonds, issued before March 2001. Also this interest income is not covered by the tax. [SBA; PAI; 2001]
- "Only the dumb ones, who are not informed, pay the interest tax in the end". [B; MR; 2004]
- The banks could imagine the transfer of assets from the EU beyond the application scope/ sphere of problematize of the Agreement. [IA; MR; 2004]

EPISODE 2:

- [After the US announced the development of FATCA]"Some banks fundamentally reconsider their situation towards the US." [PPB; PAI; 2009]
- "Many banking institutions will turn their backs on the American financial system just at the time that the country faces an enormous demand for financing" [SPBA; MR; 2011]
Exploiting institutional differences

Engaging in legal arbitrage/exploiting „grey zones“ between U.S. and Swiss law

**EPISODE 1:**
- Bank Y admitted offences, on the one hand, servicing American clients on US state territory without valid license, on the other hand, assisting tax fraud at the costs of the American state. [GB; A; 2009]
- "We found out that the bank in effect committed violations... The bank violated Swiss supervision law and international law. [FINMA; TAI; 2009]
- "Accordingly the application case is about American clients, who created offshore-companies which were induced to provide misleading information. Wrong because, it has been manifestly stated on tax-relevant forms and in the American tax law sense, that the offshore-companies would be the authorized recipients of the revenues. As a matter of fact, the tax liable clients still disposed of the assets, in such a way that they would be their own. Not the offshore-companies were effectively authorized, but the American people behind the companies." [FA; TAI; 2009]

**EPISODE 2:**
- "We engaged in legal arbitrage." [PPB; TAI; 2013]
- "Many competitors now face the task of having to overhaul the very core of their business models. Thanks to the strict implementation of the "truly Swiss, truly private, truly compliant" maxim, our clients were not exposed to any unforeseeable legal risks. (...) Our position as a purely Swiss private bank, with no branches abroad, was certainly one reason why we were never directly exposed to international pressure from the OECD to reveal personal client data." [PPB; A; 2009]
- "Rules are in theory the same for everyone. So, in principle, BankB and BankC could share the same legal opinion on cross-border business. In practice, there are different possible interpretations of that regulatory framework. At the end of the day, BankB will act one way within that perceived legal framework, and BankC will act the other way. Because it’s not as strict, as one thinks. (...) A lot of people believe that their interpretation gives them a commercial edge. And therefore, they can position themselves better than ..., and therefore that’s a commercial advantage." [PPB; I; 2013]
- "Many competitors now face the task of having to overhaul the very core of their business models and making long overdue adjustments. Thanks to the strict implementation of the “truly Swiss, truly private, truly compliant” maxim, our clients are not exposed to any unforeseeable legal risks. [...] Our position as a purely Swiss private bank, with no branches abroad, was certainly one reason why we were never directly exposed to international pressure from the OECD to reveal personal client data." [PPB; A; 2013]
- "In 2008 and 2009, [Bank Z] opened and serviced dozens of new undeclared accounts for taxpayers in an effort to capture clients lost by [Bank Y] in the wake of widespread news reports of the Tax Division’s criminal investigation of [Bank Y]. [Bank Z]’s senior management affirmatively decided to capitalize on the business opportunity presented by Bank Y’s exit from the undeclared offshore banking business to increase [Bank Z]’s assets under management and the corresponding fees." [US, Department of Justice, 2013]
- "BankZ’s managing partner ... entered the guilty plea for the bank. He admitted in open court that "[f]rom about 2002 through about 2010, BankZ agreed with certain U.S. taxpayers to evade the U.S. tax obligations of these U.S. taxpayer clients, who, among other things, filed false tax returns with the IRS." ... He also admitted that, while "BankZ was aware that this conduct was wrong," it nevertheless believed that as a practical matter, it would not be prosecuted in the U.S. for this conduct because it had no branches or offices in the U.S. and because of its understanding that it acted in accordance with, and not in violation of, Swiss law and that such conduct was common in the Swiss banking industry." [US; A; 2014]
RADICAL CHALLENGERS // PRESSURING INSTITUTIONAL TRANSGRESSIONS

Threatening with institutional force

EPISODE 1:
- "US authorities should pressure tax haven banks that impede U.S. tax enforcement or fail to disclose accounts held directly or indirectly by U.S. clients" [US-DoJ; A; 2008]
- "Today’s indictment of a senior Swiss banker for conspiracy to evade U.S. taxes sends an overdue message that the U.S. will no longer tolerate tax haven banks helping U.S. clients hide money from the US tax authorities." [US-G; A; 2008]
- "On December 12th 2008, the US starts to set deadlines after having waited for 200 days to obtain client names and threatened to indict Bank Y." [FINMA; A; 2013]

EPISODE 2:
- The American government advanced that it would take sharper actions against structures that serve tax evasion purposes. This would also apply abroad, according to the US state secretary of finance in a hearing of the parliamentary committee. [USP; MR; 2009]
- The US authorities announced that their eventual target was to reach a „global solution“ with the Swiss banking industry. The purpose was to cover as many cases of US citizens who held untaxed Swiss accounts and to fine every Swiss bank that committed “conspiracy” thus having an active role in helping US citizens avoiding tax payment. The US announced that it eventually expected to collect fines from the Swiss banks in the range of 10 billion US Dollars [US; MR; 2014]
- In 2011, the US authorities announced that they were investigating into 10 further banks ... for similar transgressions than those of Bank Y. Later, this number increased to 12 banks. The US authorities announced that they would only stop their investigation after they had pressured every transgressing Swiss banks and after they had collected at least 10 billion US Dollars in fines. [US; MR; 2014]
- "Not satisfied with the scope of the Swiss offers for administrative assistance..., in July 2011, the US escalated and announced that it considered indictment of BankA." [US; MR; 2014]
- US authorities found BankD had been taking on American clients even after the tax evasion activities of Bank Y clients became widely known... The investigation into BankD's activities showed that the bank had increased the number of its American clients by 300% between March 2009 and February 2012. As of September 2012, 44% of the institution’s managed assets came from American clients. BankD is the second bank after BankZ to cease its activities after being investigated by the Americans. [US; MR; 2013]
- Senator Levin, referring to subpoenas and court summonses: "If we are not going to get cooperation from the Swiss then we are going to use our own means" [US; A; 2014]
Authorizing punitive efforts

Taking legal action against incumbent employees

**EPISODE 1:**
- The US DoJ indicted a prominent top-manager of Bank Y. He was arrested in Florida and held under house arrest until he testified against his bank. He was then released and allowed to return to Switzerland. [US-DoJ; MR; 2008]
- In 2008, the US DoJ also indicted a senior manager of Bank Y. He was declared a fugitive the following year, after failing to respond to the indictment. If extradited to the US, he would face up to five years in prison if convicted. [US; MR; 2013]

**EPISODE 2:**
- "In autumn 2011, the US Department of Justice indicts several bankers, among them 3 bankers of BankZ." [US; MR; 2013]
- Two bankers and one former employee of the K Cantonalbank were charged by the US, accused of helping US clients avoid taxes. [US, MR, 2013]
- The fugitive top manager of Bank Y was arrested in Italy and extradited to the US. Charged five years ago with helping about 17,000 Americans conceal $20 billion (CHF18.1 billion) in secret accounts at the bank, he is free on a $10.5 million bail. [US; MR; 2014]

Taking legal action against incumbent organizations

**EPISODE 1:**
- On February 19th 2009, the US tax authorities initiates civil action against Bank Y: The tax authorities requests 52.000 data of clients who are suspected to have committed tax evasion. The indictment includes the retroactive treatment of tax evasion. The IRS requires the data to be delivered within 10 days [US-IRS; A; 2009]

**EPISODE 2:**
- "On February 2, 2012, a grand jury ... indicted BankZ for conspiring with the U.S.’ taxpayers to defraud the US tax authorities, evade taxes, and file false returns from 2000 through 2011." [US-DJS; MR; 2013]
- "BankZ was sentenced on March 4, 2013. The district court’s sentence largely followed the recommendations of the parties in the plea agreement, making the total recovery to the U.S. amount to USD 74 million." [US-DJS; MR; 2013]
- In June 2013, the US and Swiss governments signed a pressuring system for the Swiss banks - the "global solution". The system categorizes the 300 Swiss banks into four groups. Fourteen banks are in program – two more than previously known – are in group 1. They are excluded from the program as they continue to be under criminal investigation. Two of these, BankZ and BankD, closed down in the course of the investigations. The remaining banks will be divided into three groups. The fines they face range from 20 to 50 per cent of the total amount of hidden US assets in Swiss accounts - thus involving an exponential increase in fines compared to the approx. 8 per cent in the Bank Y case. [US; A; 2013]
REFORMATIVE CHALLENGERS // INSTITUTIONAL PROBLEMATIZING

Appealing to institutional ideals

Calling for social justice

**EPISODE 1:**
- The German Minister of Finance remarked that an automatic information exchange, as practiced already between Germany and France, would only be "fair". There would be no reason to undermine a befriended country with such a process, but Switzerland needs to realize that Germany's sovereignty is undermined, when the German tax basis is at stake with the invitation to evade taxes. [DE - G; PAI; 2009]
- "The openness of the global economy can only be maintained, if all constituents act responsibly. An excessive the banking secrecy and a refusal to exchange information no more belong to the current zeitgeist." [OECD; A; 2008]
- A proposed report revision targets third states "including some tax havens, which in general deny any information request". "A state cannot deny a request by using the banking secrecy as an argument". [OECD; AI; 2009]

**EPISODE 2:**
- Luxembourg’s secretary of finance declared that “banking secrecy, as we have known it, is passé anyway”. One would rather need to find a model that combines tax honesty and privacy. [EU; PAI; 2012]
- One needs to know who one would like to do business with. It is unreasonable to act only out of one’s defense, rather, one needs to open out to the current development towards more collaboration between the tax authorities and to contribute to shaping the future together. [EU; MR; 2012]
- An EU secretary remarks that the era of the banking secrecy has ended. Countering the international trend towards automatic information exchange would be useless. [EU; MR; 2013]

Calling for equal treatment

**EPISODE 1:**
- One would expect "that a similar request from a EU member state would not be treated differently". All measures to improve transparency in tax matters are welcome. [EU; PAI; 2009]
- "Banking secrecy does not have any future anymore. The pressure from the US increases and it is time to think about how to approach the transition period." [EU; TAI; 2009]
- An EU secretary: While Switzerland would be bound to renegotiations of the interest income agreement only by 2013, the EU claims equal support for the prosecution of tax crimes compared to the US. [EU, MR; 2009]

**EPISODE 2:**
- New EU regulation become binding. They include a most-favored-treatment clause, meaning that if a EU country offers a more extensive collaboration to a "third state", it needs to offer a similar collaboration also to its EU peers. FATCA agreements thus serve the large EU states another political argument in favor of the automatic information exchange. Although Switzerland does not have to comply with the new EU clause, as a neighbor and partner with special access to the single EU market, the EU would expect Switzerland to show a "similar openness towards EU as towards the US". [EU; MR; 2013]
- Luxembourg's prime minister: "FATCA requires automatic information exchange. If one declines FATCA, one cannot do any financial transactions with the US - something that an international financial center like Luxembourg cannot afford. And one cannot deny to Europeans what one is forced to grant to the Americans." [EU; MR; 2014]
Institutional stigmatizing

Dishonoring the banking secrecy implications

EPISODE 1:
- "We want to fight tax havens in Europe." The German Minister of Finance and his French colleague raise concerns about Switzerland's attitude towards information exchange and propose to the G-20 countries to cancel the bilateral agreements with states, which do not accept the OECD standards: "We would need to use not only carrots, but also sticks." [EU; PAI; 2008; 2009]
- Swiss banks objectively aid tax evasion for German citizens; tax evasion is quasi part of the banks" business model. [EU; PAI; 2008]
- The UK Prime Minister’s speech at the US congress was intensively applauded, when he advanced the necessity to combat tax havens. He announced that he would direct this combat against Switzerland and that he hoped to have made significant progress by the next G-20 meeting [EU; MR; 2009].
- "One could also move the seventh cavalry before Yuma". If only the mentioning of a black list leads to nervosity, then the "draft increases in the chimney". [EU; PAI; 2008; 2009]

EPISODE 2:
- In the EU parliament, Switzerland was referred to as key destination for untaxed EU money. EU countries would miss over a fourth of their tax income due to tax evasion. [EU; MR; 2012]
- The German parliamentary opposition blocked the expanded withholding tax model that Switzerland had proposed. The critique was that it would give fraudsters a discount on their tax duties. The treaty would do injustice to honest tax payers. [EU; MR; 2012].
- According to Austrian politicians, the Swiss proposal of an expanded withholding tax constitutes "sale of indulgences" which would be intolerable [EU; MR; 2012].
- Agreeing to the AIE would be valuable for Switzerland as it would help raise its international reputation and acceptance. [EU; PAI; 2013]

Threatening with “black list”

EPISODE 1:
- Switzerland would belong to an OECD list of uncooperative countries in tax-related matters. [EU; PAI; 2008; 2009]
- On October 22nd 2008, 17 OECD countries draw up a new blacklist with 40 tax havens. [OECD; A; 2008]
- According to the German secretary of finance, Switzerland would belong to an OECD list of uncooperative countries in tax-related matters. [EU; MR; 2009]

EPISODE 2:
- The EU commission published a report on capital transfers into tax oases (“Offshore leaks”). It confirms the urgency of more and better measures against tax evasion. The EU commission calls upon its member countries to urgently comply with its proposals. The action plan calls for stronger and more unitary actions against third countries which had been identified as tax oases. [EU; A; 2013]
Annex to the Table 8.E.

For confidentiality reasons, names and exact positions are not referenced in this document.
Direct Quotations are marked in “ “; Paraphrased statements are referred to in regular text.
If applicable, statements are translated from their original language (German and French) into English language by the authors.
The references to the data sources include the following the [AUTHOR OF THE STATEMENT; DATA SOURCE; DATE] logic, and the following abbreviations:

List of Abbreviations of Author of Statement:
* Incumbents:
* Guardians:
  [FC] representatives of the Swiss Federal Council; [FA] Representatives of the Federal Administration, such as the Federal Tax Administration; Federal Department of Finance, Federal Administrative Court; [P] Parliament
* Challengers:
  [OECD] representatives of the Organization Organization for Economic Cooperation and Development; [EU] representatives of the member states of the European Union, including ministers, and representatives of the Ecofin; [US] the United States of America, including representatives from the Internal Revenue Service [IRS], the Department of Justice [DoJ]

List of Abbreviations of Data Sources:
[A] Any archival document, including legal texts, banks annual reports, historical reports, etc.; [TAI] Transcribed Archival Interviews that are publically available; [PAI] Paraphrased Archival Interviews in media texts; [MR] Media Reports about events, press releases, etc.; [I] Interviews retrospectively conducted by the authors
APPENDIX 2: Sample Interview Guide

1) Events and milestones in the institutional conflict:
What were the most import events and milestones during the progressive loosening and abandonment of the Swiss banking secrecy?

- overall?
- events/milestones that led to the adoption of the OECD article 26 (2009)?
- events/milestones that led to the adoption of the OECD automatic information exchange (2013)?

4 Groups of Actors:
According to our analyses, 4 groups of actors played crucial roles in this process: (1) Swiss government (Bundesrat, institutions, FINMA), (2) Swiss Banks, (3) U.S. authorities, (4) representatives of the OECD and of large EU countries: How would you characterize the behavior of these 4 groups of actors during the progressive loosening of the Swiss banking secrecy?

Group 1: Swiss government:
According to our analyses, representatives of Swiss government have tried vehemently to maintain and defend the banking secrecy: This involved, for instance, (1) polarizations, (2) punishing banks“ transgressions of the banking secrecy law, (3) defying conflicting foreign demands, and (4) proposing substitute solutions to foreign demands that are in line with banking secrecy laws:

- What were the reasons for Swiss governments’ defensive behavior?
- Why was this defensive stance maintained also during/ after the Bank Y case?

Group 2: Swiss banks:
According to our analyses, some banks have tried (1) to opportunistically exploit the institutional and legal differences between Switzerland and other countries and (2) to actively help foreign clients evade taxes.

- Why did these banks continue such behavior during the crisis?
- What was the influence (impact) of Swiss government’s defense?

Group 3: U.S. authorities:
According to our analyses, U.S. acted in a relatively strategic but also in a very determined way against Swiss banks?

- Why did the U.S. authorities act this way?
- What gave them the power to do so?
- How did Swiss authorities’ protective influence (impact) shape the U.S. authorities?
- How did Swiss banks’ strategic behavior influence (impact) the behavior of U.S. authorities?

Group 4: Representatives of OECD and EU countries
Having criticized the banking secrecy for years without success, the OECD and EU countries eventually succeeded twice in eroding the banking secrecy (2009 and 2013).

- What eventually enabled them to erode the banking secrecy?
- In how far did they benefit from the U.S. authorities?
F. DISCUSSION AND CONCLUSIONS

Abstract. This chapter offers a discussion of the main findings. It concludes the dissertation by putting these findings in perspective of the dissertation’s larger research program (as developed in the Introduction section in Chapter A). This chapter starts with a brief review of the theoretical background and assumptions that the dissertation has built on. This section is followed by a summary of how the three preceding chapters have addressed this dissertation’s three research foci. Subsequently, I will lay out the dissertation’s core contribution – the development of perspectives on how influences from the organization’s internal and external contexts shape the particular dynamics with which decision-makers overcome the cognitive constraints involved in strategic adaptation to discontinuities – and will outline implications for related literatures.
F.1. Background and Motivation of the Dissertation

Chapter A introduced the dissertation’s broader theoretical background, underlying assumptions, and core constructs: strategic adaptation to discontinuities, cognitive constraints, and social and structural influences by an organization’s internal and external context. I started with an overview of the existing literature concerned with decision-makers’ strategic adaptation to discontinuities, which requires top decision-makers to continuously align their attention to and understanding of the de facto changing circumstances. This overview identified three cognitive constraints – attention capacity limitations, reasoning routines, and institutional prescriptions – with their largely negative implications for strategic adaptation. With the original research emphasis on the nature and largely negative implications of decision-makers’ cognitive constraints to strategic adaptation, existing research appears to have primarily emphasized simplification mechanisms as a remedy to cognitive constraints.

This dissertation sought to improve our understanding of the processes through which organizational decision-makers overcome cognitive constraints. I further wished to shed light on the nature and dynamics of influences from the organization’s internal and external contexts on shaping these processes. With this emphasis, the dissertation sought to move the conversation in the literature away from using cognitive constraints as a largely “given” and unmalleable assumption, and towards uncovering the influences of the internal and external contexts in shaping whether and how decision-makers overcome the cognitive constraints involved in the strategic adaptation process. Therefore, I asked the questions (1) whether and how decision-makers successfully overcome the cognitive constraints involved in strategic adaptation to discontinuities; and (2) what the nature and dynamics of the influences by the organization’s context are that shape decision-makers’ cognitive constraints involved in strategic adaptation to discontinuities.

These questions are of high practical and theoretical importance: First, discontinuous environments often are complex unfamiliar to decision-makers, so that decision-makers face high attention load and lack familiar experience. Second, decision-makers’ cognition is not only shaped by experience trajectories but also closely connected to the structural and social context, in which it operates. This suggests that organizations dispose of other vehicles than experience-based simplification for shaping decision-makers’ strategic adaptation. Third, it suggests that, in some circumstances, decision-makers’ cognitive constraints may be more malleable than typically assumed.
**Figure 9.F.** displays the concepts, relationships and findings advanced in this dissertation. The three main findings uncover linkages between decision-makers’ cognitive constraints, strategic adaptation to discontinuities, and influences by the organization’s internal and external context. Each of the three research findings and their implications for the dissertation’s overall research gaps will be addressed in greater detail next.

**Figure 9.F. Dissertation Findings**

| Influence by the Organization’s/ Institution’s Internal and External Context |
| RESEARCH FOCUS 1 (RF1): CEOs’ External Advisors’ Social Influences on CEOs’ Attention Load Dynamics |
| RESEARCH FOCUS 2 (RF2): Influences by the Top Management Team and Shareholder Structures on CEOs’ Cognitive Motivation |
| RESEARCH FOCUS 3 (RF3): Incumbents, Radical and Reformative Challengers’ Influences on Escalation of the Institutional Conflict |

| Decision-makers’ Cognitive Constraints |
| RF1: Limited Attention Capacity |
| RF2: Reasoning Routines |
| RF3: Institutional Prescriptions |

| Strategic Adaptation to Discontinuities |
| RF1: Complexity of CEOs’ Strategic Frame |
| RF2: CEOs’ Strategic Flexibility Development |
| RF3: Institutional Fortification vs. Deinstitutionalization |

**Main Findings of the Dissertation**

*Research Focus 1 - Finding 1:* Overcoming attention capacity limitations through germane attention load dynamics and facilitated by external advisors’ social influence behaviors

*Research Focus 2 - Finding 2:* Overcoming reasoning routines through strategic flexibility development and facilitated by top management teams and shareholders’ structural influences

*Research Focus 3 - Finding 3:* Overcoming institutional prescriptions through conflict escalation and the combined influences of intra- and inter-group dynamics
F.2. Findings of the Dissertation

In this section, I detail the major findings of the three distinct research foci, with their implications for theory and practice.

F.2.1. Finding 1: Overcoming Attention Capacity Limitations through Germaine Attention Load and Social Influence

ARTICLE I addressed Research Focus 1: How social influences from the organization’s external context shape decision-makers’ uses of limited attention capacity. In turn, attention capacity is necessary for decision-makers to build a complex strategic frame of a discontinuous environment. A core finding of the conceptual model is that the cognitive, affective, multimodal, and collaborative dimensions of external advisors’ social influence behaviors moderate the effectiveness with which CEOs use and sometimes expand the available attention capacity for developing a complex strategic frame. They do so by affecting the types of attention load dynamics that compete for the available attention capacity.

This article’s findings highlight that it is not only the attention load amount, but the attention load dynamic type – germaine (enabling) or extrinsic (constraining) attention load – that explains variation in the effectiveness with which decision-makers use the available attention capacity. Furthermore, external advisors’ social influences not only shape the content of what CEOs see, but also how, as well as the effectiveness with which CEOs spend attention capacity to address the complexities of a discontinuous environment. Rather than emphasizing the roles of advisor attributes and structural characteristics for priming existing frames in targets, this article uncovered advisors’ social influence behaviors – their use of cognitive, affective, multimodal, and collaborative influence behaviors and their linkages to CEOs’ attention load dynamics. This article focused on how external advisors do social influences and impact CEOs’ strategy frame development.

Finding 1: Overcoming attention capacity limitations (how much?) through germaine attention load and facilitated by advisors’ social influences. The cognitive, affective, multimodal, and collaborative dimensions of external advisors’ social influence behaviors not only shape the content of what CEOs see, they also facilitate how and the effectiveness with which CEOs use attention capacity to build a complex strategic frame.
F.2.2. Finding 2: Overcoming Reasoning Routines through Strategic Flexibility Development and Structural Influence

ARTICLE II addressed Research Focus 2: How structural influences from an organization’s internal and external context shape decision-makers’ use of reasoning routines. A core finding of the conceptual model is that, over time, individual decision-makers can progress toward greater strategic flexibility through reflective reasoning. Depending on the cognitive motivational state that the CEO is in – absolutist miser, absolutist tactician, reflective miser, and reflective tactician – these development trajectories can vary. These cognitive motivational states motivate a CEO to either reason more automatically (System I) or more reflectively (System II) about the relationships between a discontinuity and an organization, as well as about the own reasoning strategies employed. Furthermore, critical aspects of the organization’s internal and external structural contexts – the task-related diversity of the top management team and the share of active shareholders – shape whether and how CEOs progress towards higher cognitive motivation to learn to reason reflectively.

This article’s findings highlight that not only CEOs’ traits and attributes affect the beliefs they form about the relationships between discontinuities and the organization’s strategy and about their own reasoning. Rather, CEOs can learn to become more flexible in their reasoning through repeated use of reflective reasoning over time. The organization’s structural context plays an important role in shaping these dynamics. Strategic flexibility is not only a company capability, but has at least some roots at the level of the CEO’s reasoning and reasoning development, which significantly shaped by the internal and external structural contexts. The conceptual model further emphasizes the crucial role of cognitive motivation and its connections to reasoning.

Finding 2: Overcoming reasoning routines (how?) through strategic flexibility development and influenced by top management team and shareholder structures. A CEO’s cognitive motivation - absolutist miser, absolutist tactician, reflective miser, and reflective tactician - predicts whether and how he or she learns to reason more flexibly. Progressions among cognitive motivational states are influenced by the organization’s internal and external context – task-related diversity of top management team and share or active shareholders.
F.2.3. Finding 3: Overcoming Institutional Prescriptions through Conflict Escalation and Social Influence

ARTICLE III addressed Research Focus 3: How social influences from the institution’s external and internal contexts shape decision-makers’ use of institutional prescriptions. It inductively built theory based on an extensive longitudinal case study of the deinstitutionalization of a contested incumbent institution (Swiss banking secrecy). In this case, incumbents were increasingly challenged to adapt to an environmental discontinuity (the global trend towards “tax transparency”). The case develops a process model through which guardians’ fortification work is gradually breached and the institution eroded as a result of the unintended consequence of the fortification work. The findings highlight how decision-makers’ use of institutional prescriptions, as manifest in their fortification work to protect the incumbent institution, can fuel an institutional conflict. The institutional conflict escalated over several reinforcing cycles which eventually led to the erosion of the contested institution.

A major implication of this case’s findings concerns the twofold unintended consequences of guardians’ fortification work. It unintentionally fueled the escalation of the initial institutional conflict between incumbents and challengers though the intra- and inter-group dynamics that it unleashed. In terms of intra-group dynamics, as a result of guardians’ fortification work, incumbents felt the safety to circumvent challengers’ conflicting demands. In terms of inter-group dynamics, radical challengers (the U.S.), having netted incumbents, seized the opportunity to legitimately force a break in the incumbent fortification work and institution. This created another in-group dynamic among challengers. Reformative challengers seized the opportunity of weakened guardians to further intensify their opposing demands towards the guardians. These escalation cycles of the institutional conflict eventually lead to the incumbent institution’s erosion on a larger scale. With these findings, the theory uncovers at a general level how incumbent decision-makers’ institutional prescriptions effectively erode through the social influence practices involved in institutional conflicts.

Finding 3: Overcoming institutional prescriptions through conflict escalation and the combined role of intra- and inter-group dynamics. Guardians’ fortification work bears twofold unintended consequences at the level of intra- and inter-group dynamics, which fuel the institutional conflict’s escalation and the institution’s eventual erosion.
F.3. Implications for Theory of the Dissertation

By drawing from interdisciplinary literatures, this dissertation advanced theory around the process dynamics through which decision-makers’ cognitive constraints to strategic adaptation – attention capacity limitations, reasoning routines, and institutional prescriptions – can be overcome. I have argued that, first, attention load, cognitive motivation, and conflict escalation significantly shape whether and how decision-makers overcome cognitive constraints to strategic adaptation. Second, I have argued that the social and structural influences by an organization’s internal and external contexts significantly shape how these process dynamics unfold.

Taken together, this dissertation makes two core contributions to the literatures that are explicitly or implicitly concerned with decision-makers’ cognitive constraints and with influences by the organizational context. First, I will address implications from this dissertation’s findings on the process dynamics with which decision-makers overcome cognitive constraints to strategic adaptation. Second, I will discuss the implications for the larger influence literature.

F.3.1. Implication 1: Dynamic Perspectives on How Cognitive Constraints to Strategic Adaptation are Overcome

While a multitude of opportunities may exist for decision-makers to overcome cognitive constraints, a first implication of this dissertation has been to uncover the dynamic perspectives of how decision-makers’ cognitive constraints are overcome. Cognitive constraints have to a large extent been taken-for-granted in prior research. I suggest that variation in strategic adaptation to discontinuities may largely be explained by whether and how decision-makers succeed in overcoming cognitive constraints. Therefore, I developed process perspectives that are grounded each in a distinct and multidisciplinary theoretical perspective. I advanced that decision-makers’ attention capacity (how much?) differentially unfolds as a result of its interactions with attention load dynamics. Reasoning routines (how?) differentially unfold as a result of decision-makers’ cognitive motivation to learn to reason reflectively. Decision-makers’ institutional prescriptions (what?) differentially unfold as a result of social conflict dynamics.

An important overall finding of the dissertation’s theorizing is that cognitive constraints may be more malleable than is typically assumed. With this finding, the literature may be moved forward to conceptualize cognitive constraints less as inherently “given”, fixed, and unmalleable states (see "Apologetic" perspective, Stanovich, 2011). Such Apologetic views have been widespread across streams of
management and organization literatures, suggesting that actors cannot but fail given the complexities of the discontinuities they face (for recent critiques, see (c.f. for "recent critiques": Gavetti, Greve, Levinthal, & Ocasio, 2012; Hambrick & Mason, 1984; Ingram & Clay, 2000). Research attention then focused on understanding simplification to compensate for individual decision-makers’ cognitive constraints.

This dissertation argued that, in some circumstances, decision-makers’ cognitive constraints can be overcome (c.f. Simon, 1997 [1947]). Rather than taking cognitive constraints for granted, the dissertation advances that they constitute important concepts that merit intensive theoretical and empirical study. Accordingly, it focused on variation in the process dynamics through which cognitive constraints unfold (Simon, 1978) in ways that help decision-makers become better at or ameliorate their strategic adaptation endeavors to discontinuities (see "Meliorist" perspective, Stanovich, 2011).

Along these lines, this dissertation’s three research foci have uncovered sources of variation in the dynamics with which attention capacity limitations, reasoning routines, and institutional prescriptions unfold. For the first research focus, ARTICLE I advances differences in CEOs’ attention capacity use. Specifically, CEOs’ attention load dynamics explain variation in the effectiveness with which they use the available attention capacity for developing a strategic frame of the complexities in a discontinuous environment. For the second research focus, ARTICLE II advances individual differences within CEOs’ strategic flexibility development. In particular, CEOs’ cognitive motivational states explain variations in the effectiveness with which they use their reasoning systems for forming beliefs about the relationships between discontinuities and the organization’s strategic alternatives. For the third research focus, ARTICLE III advances variation in institutional decision-makers’ use of institutional prescriptions over time. Specifically, it highlights the unintended consequences of institutional decision-makers’ (guardians’) fortification work and the resulting conflict escalation. As such, all three articles specified endogenous sources of variation in the process dynamics of decision-makers’ cognitive constraints.

First, an important implication of this theorizing is the emphasis on process dynamics, which may complement the primary emphasis of prior research on variance-theoretical accounts. At the individual decision-maker level, the dominant emphasis of strategic leadership research has been on individual CEO traits or attributes (Hambrick, 2007), for instance, on personality traits (e.g. Nadkarni & Herrmann, 2010), or experience backgrounds (e.g. Hambrick, Geletkanycz, & Fredrickson, 1993), etc. An important addition to the existing research emphasis on
strategic leadership attributes and traits is the finding that CEOs’ attention capacity and the cognitive motivation to understand their strategic environment, as well as decision-makers’ institutional prescriptions, undergo situational variation. In this respect, the conceptual models advanced in ARTICLES I and II specified that attention capacity and cognitive motivation are not fixed, but are likely to unfold differently under the situational influences from the organizational context. Future research may thus more extensively incorporate situational variables, in order to further refine upper echelon predictions on the relative impact of CEOs on strategic adaptation. For instance, CEO job load has been advanced as a critical moderator of upper echelon predictions on organizational outcomes (c.f. Hambrick, 2007). Because understanding the surrounding strategic environment is part of a CEO’s daily job, conceptualizing the CEO’s attention capacity to develop a frame from the perspective of attention load dynamics may have important implications for uncovering the more fine-grained dynamics that underlie a CEO’s job load experience (Ganster, 2005; Hambrick, Finkelstein, & Mooney, 2005).

Similarly, there exists a recent surge in interest in the nature of managerial cognitive capabilities (Helfat & Peteraf, 2014; Laamanen & Wallin, 2009). The conceptual models advanced here may help flesh out some of the origins of decision-makers’ capabilities and how they develop over time. Specifically, decision-makers’ attention capacity, strategic flexibility in reasoning and in conflict resolution may explain important differences in the capability to act strategically, to understand the strategic environment, to envision strategic action alternatives for the organization, and to negotiate with challenging counterparties. Furthermore, the models point to the need to incorporate situational factors to explain how such capabilities may unfold differently over time.

Despite the conceptual nature of the first two articles, each of the proposed relationships has been illustrated with case findings from prior research. Both conceptual articles may open further avenues for future research that test the proposed relationships. The nature and dynamics of the proposed relationships may be further refined, for instance, through rich qualitative studies or through laboratory studies. Both educational and cognitive psychology insights may be particularly helpful in the conceptualization of research designs and construct measurements.

Second, an important implication of the theorizing in this dissertation concerns the emphasis on “flexibility-injecting” mechanisms (Dane, 2010; Eisenhardt, Furr, & Bingham, 2010: 1267) as pathways for overcoming cognitive constraints and their largely negative implications for strategic adaptation. By doing so, we may
complement the primary emphasis of existing research on *simplification mechanisms* (c.f. Schwenk, 1984), as developed in the introduction section of this dissertation (Chapter A). Notwithstanding the importance of simplification mechanisms for decision-makers to maintain stability, and to take advantage of exploitation benefits, they tend to have largely negative implications in times of discontinuous change. Decision-makers are then required to be flexible – to make “real-time adjustment of actions in response to actual events” (Eisenhardt et al., 2010: 1265).

At the individual decision-maker level, a core barrier to flexibility in discontinuous environments is organizational decision-makers’ *cognitive inertia* (Hodgkinson, 1997) – the tendency remain committed to status quo beliefs (e.g. Geletkanycz & Black, 2001; Porac, Thomas, & Baden-Fuller, 1989; Starbuck, 2009; Tripsas & Gavetti, 2000). In turn, decision-makers who are alert to changing circumstances (e.g. Eggers & Kaplan, 2009), who integrate the discontinuities in their thinking (e.g. Barr & Huff, 1997; Barr, Stimpert, & Huff, 1992), and who develop novel and broad beliefs about the environment and its relationships to the organization’s strategy (e.g. Gavetti, Levinthal, & Rivkin, 2005; Nadkarni & Narayanan, 2007) tend to be more flexible and therefore more adaptive in the choices they make for their organization. In this respect, ARTICLE II conceptualizes strategic flexibility as a skill of individual CEOs to reason reflectively. This finding suggests that decision-makers are not necessarily subject to belief bias, or tied to the status quo as their domain experience grows (Dane, 2010; Hambrick et al., 1993). ARTICLE II emphasizes that cognitive motivation predicts variation in the extent to which decision-makers tend to use automatic reasoning routines on the one hand, or tend to use fairly reflective reasoning on the other hand. Most importantly, if set in the right contexts, decision-makers’ cognitive motivations can unfold differently over time. As such, the article builds theory on the roles of cognitive motivation and organizational context for shaping individual development. Maintenance of the status quo or cognitive inertia will be more pronounced with decision-makers who are motivated to use largely automatic reasoning strategies (based on System I), than with decision-makers who are motivated to the use more reflective reasoning strategies (based on System II) (c.f. Bartunek, Gordon, & Weathersby, 1983).

On a related note, while prior research has emphasized the benefits of the activation or priming of existing cognitive structures for circumventing attention capacity limitations, ARTICLE I advanced the particular roles of advisors’ social influences for better managing attention capacity limitations. This finding implies that
decision-makers who undergo effective social influences may be less prone to remain
drawn from the existing cognitive structures that promote stability and inertia.

At the level of institutional decision-makers, a core barrier to adaptation in
discontinuous environments is institutional decision-makers’ institutional inertia (c.f. Mahoney & Thelen, 2009; Seo & Creed, 2002; Zucker, 1977) – the tendency to remain
committed to existing institutional prescriptions. Little general research, and little
institutional and transnational institutional research in particular, has explored how
commitment to existing institutional prescriptions (Mahoney & Thelen, 2010) and
related forms of defensive work (Kotler & Singh, 1981; Maguire & Hardy, 2009), or
resistance (Lawrence, 2008) are actually overcome.

In this respect, ARTICLE III’s findings find evidence for the fact that
institutional inertia is tied to decision-makers’ mobilization of cognitive structures to
which they are committed (e.g. belief in ideological superiority, beliefs in the safety of
the incumbent institutional context) and associated fortification work vis-à-vis external
challengers to “vehemently” defend their position, for instance, by polarizing
institutional superiority, policing the incumbent institution, or defying conflicting
demands. In this respect, it is generally accepted that deeply ingrained forms of
cultural prescriptions act as templates that limit the alternatives under consideration in
a given setting and define the superiority of some ways of thinking and acting over
others.

Importantly, the findings extend existing research by highlighting how
guardians’ fortification work (an active form of institutional inertia) has important
unintended consequences. It escalates the initial institutional conflict, since it
unleashes intra- and inter-group dynamics within the incumbent institution and outside
of it: It provides the safety for incumbents to circumvent conflict demands. This, in
turn, leads radical challengers to legitimately pressure the incumbent institution,
which creates a break in it. Eventually, the weakened incumbent position and through
the discursive opportunities opened by radical challengers, reformatory challengers
raise the oppositional intensity of their claim and succeed in provoking the erosion of
the incumbent institution on a broader scale. In this respect, ARTICLE III points to the
endogenous nature of conflict escalation (c.f. Collins, 2012) and of
deinstitutionalization or institutional change more generally (c.f. Clemens & Cook,
1999; Lawrence & Suddaby, 2006). That is, the findings imply that environmental
discontinuities do not impose change per se. Rather, discontinuities trigger changes in
motivations, cognitions, actions, and resources, which have the potential to provoke
adaptation through the work of the actors involved.
Third, the cross-disciplinary fertilization of previously unconnected research streams has the potential to make important contributions to both management research as well as cognitive, educational, and social psychology research:

For the management literature, cognitive, educational, and social psychology insights offer a finer-grained understanding of the nature of the cognitive and social dynamics – attention, reasoning, and conflict dynamics – involved in strategic adaptation to discontinuities. For instance, by drawing from cognitive and educational psychology, this dissertation contributes to the attention-based view of organizational decision-making by advancing the types of constitutive attention load dynamics (Cohen, March, & Olsen, 1972; Ocasio, 1997, 2011). ARTICLE I disentangled the multidimensional nature of the attention load construct, including both its constraining and enabling – extrinsic and germane – dynamics. Similarly, the dissertation findings have implications for managerial cognition research in the Carnegie tradition (c.f. Kaplan, 2011; Narayanan, Zane, & Kemmerer, 2011) and for the micro-foundations of strategy (c.f. Felin, Foss, & Ployhart, 2015; Powell, Lovallo, & Fox, 2011), for instance by opening new avenues for studying the intersections between reasoning processes and cognitive structures or between managerial cognition and motivation – to date, less well researched aspects in strategy and organization research.

For cognitive, educational, and social psychology literatures, the argumentative chains advanced in this dissertation have a number of implications by contextualizing the load dynamics within real-world organizational settings and theorizing their linkages to influence behaviors that are frequently employed in organizations. By doing so, ARTICLE I specifically responds to recent calls for better understanding the context factors that shape the ways in which attention load unfolds (c.f. Janssen, Kirschner, Erkens, Kirschner, & Paas, 2010).

Along the same lines, ARTICLES II and III may add to the dominant focus by cultural theorists on cognitive structures. Both articles uncovered the links of cognitive structures to the underlying interests, motives, and practices of actors’ mobilization of cognitive structures. These dynamics have important implications for not only for how cultural “toolkits” are mobilized in social settings (c.f. Giorgi, Lockwood, & Glynn, 2015; Vaisey, 2009; Weber & Glynn, 2006), but for understanding their implications for decision-makers and their social relationships.
F.3.2. Implication 2: The Impacts of Social Influences by the Internal and External Context on Cognitive Constraints

Numerous factors in organizations may shape whether and how decision-makers overcome cognitive constraints. This dissertation concentrated on the impacts of social influences that decision-makers experience in the internal and external organizational context - by external advisors, top management team, shareholder structure, radical and reformative challengers – on decision-makers’ cognitive constraints.

As developed in the introduction of this dissertation, prior research tended to primarily emphasize simplification mechanisms for circumventing cognitive constraints (with a particular emphasis on the activation or priming of existing cognitive structures). The three articles in this dissertation uncovered the crucial roles of social influences that decision-makers (as targets) receive from senders in the internal and external organizational contexts. I will now discuss implications of the dissertation’s findings for theory and research on social influences in organizational settings and on social influence research more generally.

**First,** concerning research on social influences from the organizational context, the dissertation sought to identify the specific nature and dynamics of influences from the organizational context that affect decision-makers’ cognitive constraints (c.f. March & Simon, 1993 [1958]; Simon, 1997 [1947]). It particularly highlighted the influences of the organization’s structural context, and of the social influence behaviors that decision-makers experience in the organizational context.

An important implication of this theorizing is that the emphasis on variation in process dynamics may complement prior research’s primary emphasis on variance-theoretical accounts on decision-makers’ structural positions in network or field arrangements. For instance, prior research largely emphasized decision-makers’ embeddedness within a larger advisor network structure (e.g. Haunschild, 1994; Haunschild & Beckman, 1998; McDonald, Khanna, & Westphal, 2008; McDonald & Westphal, 2003), in a given shareholder structure (Davis & Thompson, 1994), in a top management team structure (e.g. Cho & Hambrick, 2006; Hambrick, Cho, & Chen, 1996), or in a field’s structure (e.g. Fligstein & McAdam, 2012) to explain influence effects on strategic adaptation and adaptation more generally. With this dissertation’s emphasis on process dynamics, the findings shed light on the underlying mechanisms with which influence behaviors impact the target within these structures.

In this vein, ARTICLE II emphasized the nature of and the dynamics how the social influences that CEOs receive from top management team and shareholder
structures impact their cognitive motivation. Prior research largely emphasized CEOs’ structural position in top management team or board structures, highlighting the priming effects on CEOs’ use of reasoning routines. For instance, it has been suggested that heterogeneous top management teams tend to make strategic decisions about competitive moves that are of greater magnitude than their homogeneous counterparts (Hambrick et al., 1996). ARTICLE II, in turn, highlighted the mechanism through which a diverse top management team affects a CEO’s cognitive motivation to reason more reflectively about novel and diverse strategic alternatives. Because CEOs tend to seek advice from people who share their own views on an issue (McDonald et al., 2008), diverse top management teams and active shareholders sometimes help “motivate” CEOs for viewpoints that are different from their own. Top management teams may motivate the CEO and “unfreeze” his or her beliefs, by bringing in greater diversity of inputs. However, it may bring with it the downsides of heightened coordination needs between divergent viewpoints. Also, shareholders motivate a CEO by calling for greater accountability. While in some circumstances accountability may be a good thing, research also pointed to the downsides of accountability (Morris & Moore, 2000). Future research may further disentangle the conditions in which these factors are either positive or negative and the specific ways in which they can be managed.

Along similar lines, ARTICLE I tapped into the nature and dynamics of the social influences that CEOs receive from external advisors. Prior research appeared to largely emphasize the priming effects of external advisors on CEOs’ use of reasoning routines or cognitive constraints (c.f. Haunschild, 1994; Haunschild & Beckman, 1998; McDonald & Westphal, 2003). ARTICLE I highlighted a different mechanism, namely the effects of social influence behaviors by their advisors, on the effectiveness with which CEOs use the available attention capacity. If simplification is a remedy for the experience of attention capacity limitations, then a better management of attention capacity limitations through external advisors’ social influences may prevent CEOs from simplifying in the first place, e.g. imitating network partners’ strategic decisions. An important practical implication of these findings is that for CEOs to make adaptive decisions in discontinuous environments, they need to be highly cognitively motivated and need to carefully manage their attention load to develop novel and broad beliefs about strategic alternatives.

In a related vein, ARTICLE III uncovered the types of challenging actors and the dynamics with which they influence decision-makers, as well as the types of incumbent actors and the dynamics with which they are influenced. Prior research
Discussion and Conclusions

appeared to largely emphasize inter-group dynamics between incumbents and challengers in an institutional conflict (Fligstein & McAdam, 2012). ARTICLE III offered a more fine-grained conceptualization of both inter- and intra-group dynamics among incumbents and challengers in an institutional conflict. The findings imply that it is important to incorporate the unintended consequences of guardians’ fortification work. They influenced incumbents’ perception of safety when circumventing conflicting demands, which has important consequences for the conflict’s escalation.

Along similar lines, this dissertation also provided insights into sources of effective influence behavior. In this respect, the Blackwell Encyclopedia of Sociology Online suggests that influence behavior is effective to the extent that it affected a change in targets’ thinking, feeling, attitude, or behavior.

ARTICLE III extends our current knowledge on the effectiveness of social influences to provoke deinstitutionalization at an institutional level. The empirical case highlights that different types of challenging actors – namely, radical and reformative challengers (c.f. Den Hond & De Bakker, 2007; Haines, 1984; Zald & McCarthy, 1980) - involved in an institutional conflict draw on different forms of institutional work with different underlying power (c.f. Djelic & Sahlin-Andersson, 2006; Lawrence, 2008). Whereas radical challengers are more inclined to damage incumbents to provoke deinstitutionalization of the incumbent model, reformative challengers rather mobilize awareness for specific definitions of the problem and invest effort at reinstitutionalization (Den Hond & De Bakker, 2007). More importantly, their interaction is crucial for understanding reformative challengers’ success in provoking the erosion of the incumbent model (c.f. Haines, 1984). Specifically, our case findings suggest that radical challengers’ breach in guardians’ fortification work was necessary for reformative challengers to succeed with their influence work (intensified problematization) and provoke institutional erosion on a wider scale. In this respect, the study points us to studying influence-based power not in isolation, but in interaction with force-based power (c.f. Lawrence, 2008) to provoke change and adaptation in the target (c.f. Lawrence, Mauws, Dyck, & Kleysen, 2005).

Taken together, a primary implication of the three articles is a more fine-grained understanding of the micro-level dynamics, behaviors and practices of how senders actually do influence their targets’ cognitive constraints. Another implication of the three articles concerns a refined understanding of the effectiveness of senders’ social influence behaviors vis-à-vis their targets. To showcase the widespread occurrence of social influence behaviors on targets’ cognitive constraints, this
dissertation uncovered the different influence types from various senders in organizations: external advisors, top management team, shareholders, and transnational institutional actors.

While the focus here has been on uncovering different influence behavior types, an avenue for future research may consist in further investigating the sender-target constellation types. In this respect, social influence research highlights that the extent to which senders are perceived to be legitimate, expert, referent, rewarding, or coercive may be particularly influential factors for shaping an influence attempt’s effectiveness (c.f. French & Raven, 1959). For instance, one might ask under which dyadic constellations some influence behavior types are more likely to occur than others. How do senders’ influence strategies differ with sender characteristics? What sender characteristics are most effective for influencing the target to overcome cognitive constraints? How do multiple influences interact - are there additive, substitutive effects on the target?

Second, concerning general social influence research, an important implication of this dissertation is its identification of partly novel mechanisms with which senders influence their targets. These insights have been derived from asking the question how the internal and external organization contexts influence decision-makers’ cognitive constraints. These mechanisms could be derived by blending previously unconnected research streams.

Concerning the influence effects on organizational decision-makers’ attention load, this mechanism may advance existing social influence literatures. Social influence literatures tend to primarily emphasize the nature and the effectiveness of senders’ social influence strategies concerned with belief or attitude content (what?), for instance through persuasion. On the target side, it primarily emphasized influence strategies’ effects on attitude or belief change (what?) and the reasons why targets comply with or conform to a sender’s message (what?) (for recent reviews, see (see for recent reviews: Cialdini & Goldstein, 2004; Petty, Wegener, & Fabrigar, 1997; Wood, 2000). Others uncovered the likelihood that a target elaborates either heuristically or more systematically on a message (Chaiken, 1980). Notwithstanding the tremendous insights, these lines of research did focus less on the effectiveness with which attention capacity is spent.

ARTICLE I drew from educational and cognitive psychology insights to build theory on a different mechanism type that may further our understanding of social influence effects on cognitive dynamics (c.f. Denrell, 2008). We specifically linked senders’ social influence behaviors to the effectiveness with which targets use
attention capacity for different attention load dynamics involved in frame-building. While in educational psychology, the identity of instructors is set, a translation to the organization context required a more thoughtful mapping of the analogy. In organizational settings, attention load is particularly likely to be affected by social influences that decision-makers receive in their day-to-day work (c.f. Kipnis, Schmidt, & Wilkinson, 1980; Yukl & Falbe, 1990). As such fruitful avenues for future research may open at the intersection of educational psychology and social influence research. Furthermore, ARTICLE I highlighted that the cognitive, affective, multimodal, and collaborative forms of influence behavior shape the target’s attention load dynamics to develop a complex frame. This article showcases that the blending of cross-disciplinary literatures may open avenues for future social influence research.

Taken together, this dissertation’s findings imply that the influences from the organization’s internal and external context importantly shape whether and how decision-makers can overcome their cognitive constraints involved in strategic adaptation to discontinuities. The findings highlight that beyond simplification mechanisms, the influences from the organization’s internal and external contexts may constitute an important vehicle for injecting the flexibility that is necessary for firms (c.f. Dane, 2010; Eisenhardt et al., 2010; Nadkarni & Herrmann, 2010) and for institutions in discontinuous environments (c.f. Clemens & Cook, 1999; Ingram & Clay, 2000). Through three different lenses, the dissertation uncovered the underlying dynamics through which the influences from the organization’s internal and external contexts help organizational decision-makers to overcome the cognitive constraints in strategic adaptation to discontinuities.
F.4. Implications for Practice of the Dissertation

Beyond implications for theory, this dissertation advances a number of critical insights for management practice and education. A key motivation of the research in this dissertation has been to extend existing trait-based accounts of strategic leadership (Finkelstein & Hambrick, 1996) to incorporate more dynamic and situated accounts of the strategic competences involved in strategy-making. Scholars have noted that strategic management constitutes a quasi-profession, because it lacks a consensual understanding of the actual competences of strategists (Mantere & Whittington, 2007). Instead of focusing on particular knowledge-based dispositions, I concentrated on the actual performance of mental and social activities within typical episodes of strategic adaptation or change processes.

This dissertation identified two critical competences that are critical for top decision-makers to be able to understand a strategic environment: **Making use of the available attention capacity**, and **making use of reflective reasoning strategies**. While strategists often confront situations that are complex and unfamiliar, most literatures – both in psychology (e.g. Erpenbeck & von Rosenstiel, 2007) and in organization research (e.g. Floyd & Wooldridge, 1999) – conceptualize professional competence in terms of the required knowledge basis to perform a particular task or job. In turn, by highlighting how mental activities such as attention capacity develop within a strategy-making process, this dissertation contributes to uncovering the micro-level cognitive dynamics as a basis for strategic competence.

In ARTICLE I, I conceptualized CEOs’ attention capacity as a process that can unfold differently as a result of a CEO’s interactions with his or her advisors. Similar dynamics may exist between a CEO and his or her functional support staff. It suggests that by managing the interactions with a CEO (whether advisors or other support), one can make a big difference in his or her decisions. It also suggests that external advisors differ greatly in the effectiveness with which they consult their CEOs. CEOs may need to be aware of the match between their advice goals and the effectiveness of advisors’ processes and practices for reaching these goals. Specifically, CEOs who wish to maintain unique or non-imitable strategies should seek advisors who support them in developing a more complex strategy frame than advisors who fuel imitation across firms (c.f. Haunschild, 1994).

In ARTICLE II, I conceptualized CEOs’ strategic flexibility as a reasoning skill that can develop in adults. This competence is critical for decision-makers to develop complicated understandings (Bartunek et al., 1983) and “unfreeze” or “deframe” existing beliefs (c.f. Barr et al., 1992; Dunbar, Garud, & Raghuram, 1996; Garud &
Rappa, 1994). An individual’s strategic flexibility development may be an important constituent for management education programs. While education formats exist for teaching so-called critical thinking skills in children, much may be done to advance our knowledge on the components of critical thinking in the strategic management context.

Furthermore, the findings imply that top management teams may be purposefully structured, so as to foster a CEO’s strategic flexibility development. It suggests that similar perspectives on an issue may not necessarily be a good thing (c.f. McDonald et al., 2008; McDonald & Westphal, 2003). Even if diversity in a process takes more time, and it may require load management practices, the eventual performance benefits from strategic actions that are of greater magnitude and that differ from the industry average (c.f. Hambrick et al., 1996). Companies should incorporate enough diversity into their strategy development processes. “Reverse mentoring” programs are one vehicle for increasing diversity in viewpoints on a temporary basis.

The empirical study points to yet another critical strategic competence that is critical for top decision-makers to successfully respond to conflicting demands in the external strategic environment: Accommodating conflicting demands in strategic change. ARTICLE III points to the possible negative consequences of maintaining a “vehement” defensive posture (Kotler & Singh, 1981). In contrast, existing strategic change research points to the need to negotiate and accommodate sometimes conflicting interests as key component of strategic change (c.f. Murray, 1978). An important practical implication is that, in conflict situations, accommodating conflicting demands may be an important practical negotiation skill. Our interviewees suggested that the eventual losses for incumbents may have been reduced from backing down somewhat earlier from the strong commitment to the incumbent model. As such, accommodating conflicting demands may prevent conflict escalation that, in turn, has the potential to erode the committed position.
F.5. Conclusion

In summary, in this dissertation, I have theorized about how decision-makers overcome cognitive constraints to strategic adaptation, and highlighted the impact of the organizational context’s influences therein. Connecting research strands, I proposed that external advisors and transnational challengers, as well as top management teams and shareholders’ influences, significantly shape the dynamics with which decision-makers can overcome their cognitive constraints – attention load (how much?), reasoning routines (how?), and institutional prescriptions (what?). These contributions can be used to reconceptualize and guide the study of strategic adaptation to discontinuities.
References


G. CURRICULUM VITAE
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Education

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2009  University of Ljubljana, Ljubljana, Slovenia
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2008  Grenoble Graduate School of Business
Master’s degree in International Business (MIB)

2007  Institut National Polytechnique de Grenoble and University of Montréal
Master’s degree in Cognitive Sciences (M.Sc.)

Grants

2014  Grant for organizing a Management Classics workshop, by the Society for the Advancement of Management Studies (with K. Dittrich & K. Bader)

2013  Grant for a Science Peer Group, by the University of St Gallen (with 7 peers)

2011  Scholarship for Doctoral Studies in Management granted by the Fonds National de la Recherche, Luxembourg

2007  Scholarship for Excellence granted by the French Ministry of Education

2006  Scholarship for Mobility granted by Rhône-Alpes Region, France

Awards

2013  Outstanding Reviewer Award - Academy of Management, MOC division

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Further Professional Experience

2008-14  Project management and associate in private and organizations: These include consulting projects with various Swiss tourism organizations, a major Swiss consulting company, a major Finnish ICT provider in different strategy-related areas, e.g. strategy process, strategy implementation, market research, industry studies.

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