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## The bright side of hierarchies

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# The Bright Side of Hierarchies

The Origins and Consequences of Social Stratification in Organizations

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# **The Bright Side of Hierarchies**

The Origins and Consequences of Social Stratification in Organizations

## **PhD Thesis**

to obtain the degree of PhD at the  
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on the authority of the  
Rector Magnificus Prof. E. Sterken  
and in accordance with  
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by

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*To my mother Özge with endless love and gratitude*



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## CHAPTER 1

### GENERAL INTRODUCTION

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*“We each appear to hold within ourselves a range of divergent views as to our native qualities... And amid such uncertainty, we typically turn to the wider world to settle the question of our significance... We seem beholden to affections of others to endure ourselves.”*

– Alain de Botton, *Status Anxiety*

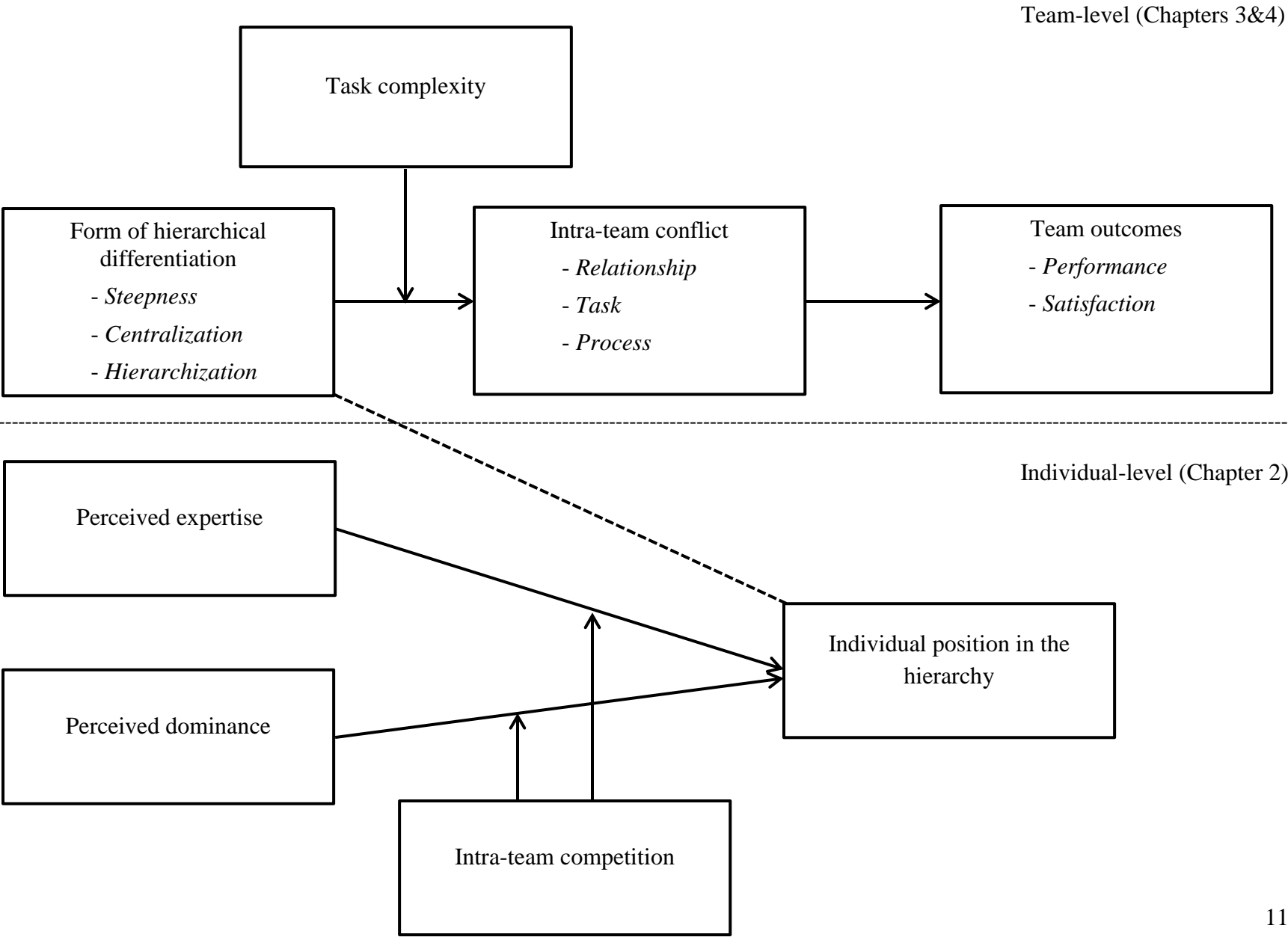
The pursuit of status or influence is inherent to human nature. We all strive to stand out in aspects that society, or the groups to which we belong, deem valuable; let it be wealth, educational attainment, a prestigious job, or affiliation with favored groups (e.g., based on ethnic groups or gender). Yet, despite this intrinsic desire to outrank others, individual status is rather socially-constructed than self-constructed. This means that the status value of an individual is not determined by personal judgment of worthiness, but by the extent to which an individual’s qualities are consensually valued by peers (Berger, Cohen, & Zelditch, 1972). Just like beauty, an individual’s standing within a social system is in the eye of the beholder; it is meaningful to the degree that others collectively acknowledge it.

Differences in influence develop organically from informal interactions and are said to emerge even when groups deliberately strive to ascribe everyone equal status from the outset (Magee & Galinsky, 2008; Berger, Ridgeway, Fisek, & Norman, 1998). Yet taking into account the considerable amount of time people spend at work during their life span, the quest for status or influence is expected to be even more pronounced in organizational settings. It is therefore pretty common that, in organizational work teams, some members have more influence than others. These highly influential members tend to control team decisions (Bales, 1950; Buzaglo & Wheelan, 1999; Johnson, Funk, & Clay-Warner, 1998; Keltner, Gruenfeld, & Anderson, 2003) and enjoy superior access to valued resources (Thibaut & Kelley, 1959).

Despite the ubiquity of influence hierarchies in work teams (i.e., implicit or explicit rank order of individuals on the basis of their influence levels; Magee & Galinsky, 2008, p. 354), how individuals successfully gain status or influence in the eyes of others is poorly grasped and requires broader examination. Relatedly, the impact of hierarchies on both collective and individual outcomes in work teams remains an important research agenda among organizational scholars (for a review, see Anderson & Brown, 2010; Christie & Barling, 2010; Greer, Schouten, De Jong, & Dannals, 2014). Hence, this dissertation is dedicated to understanding the antecedents and consequences of hierarchical differentiation in organizational work teams.

Figure 1.1 illustrates the conceptual model that presents the relationships I examined in this dissertation. This conceptual model draws on different streams of literature (from organizational behavior, sociology, psychology, and ethology) and increases our knowledge on *when* certain types of behaviors will enhance the influence of an individual work team member. Moreover, the model specifies *when* team-level influence hierarchies will have performance-enhancing effects on work teams and *why* this is the case. More specifically, the first chapter in this dissertation adopts an individual level of analysis (employing both scenario studies and a field study) and the latter chapters address a team level of analysis (employing field studies). I consider this multi-level and multi-method approach an important strength of the present dissertation that enables me to confidently examine both the specific mechanisms and circumstances leading to asymmetries in team members' influence levels as well as the overall effect of these hierarchical differences on team processes and performance.

Figure 1.1 *The overall conceptual model*



## **Clarification of Hierarchy-Related Concepts**

Before I will describe the main goals of my dissertation, it is important to explain the two dimensions on which I base hierarchy in my research; status and influence. Although these concepts may entail certain similarities, they are not identical. I therefore consider it necessary to clarify what these concepts tap into and to distinguish influence from status as well as from another hierarchy-related concept; power.

In its most basic and technical form, social influence is defined as the socially induced change in a person's cognition, attitude, or behavior (Raven, 1965). In organizational settings, social influence can be considered as one's substantial impact and control over sociopolitical processes and outcomes at work (Janssen & Van der Vegt, 2011, see also Ashforth, 1989; Spreitzer, 1995). Yet, despite efforts to treat it as clearly distinct from other hierarchy-related concepts, influence has often been confounded or conflated with status and power. Status is defined as the influence, prominence, and respect that an individual informally enjoys in the eyes of peers (Anderson, John, Keltner, & Kring, 2001; Bales, Strodtbeck, Mills, & Roseborough, 1951; Bourdieu, 1984). Power, described as relative control over another's valued outcomes (Fiske & Berdahl, 2007, p. 679), is generally viewed as stemming from one's formal position in a social structure (Emerson, 1972; Pfeffer, 2009) and as involving positive and negative sanctions (i.e., rewards and punishments) to get others to do what one wants (Keltner et al., 2003).

Although the above definitions explicitly or implicitly conceptualize influence as a key component of status and power, past literature has argued that these conceptions can also occur in relative isolation from each other (for a review, see Willer, Lovaglia, & Markovsky, 1997). For example, individuals with little influence can still be widely respected (Anderson, Willer, Kilduff, & Brown, 2012). Similarly, individuals who have a great deal of influence do not necessarily have power that entails institutional control over others' reward and punishment

outcomes (cf. Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013). Furthermore, a dominant view prevailing in the hierarchical differentiation literature advocates that social influence is the primary behavioral consequence of status and power (e.g., Magee & Frasier, 2014; Magee & Galinsky, 2008) and attempts to explicate status or power as influence (and vice versa) are problematic as these would be equivalent to explaining a construct by its effect (see Fiske & Berdahl, 2007; Srivastava & Anderson, 2011).

In this dissertation, I acknowledge that, despite their overlapping aspects, status and influence are distinct concepts and there might be differences in the way that status and influence hierarchies affect organizational processes and outcomes. My research began with an interest in examining the consequences of status hierarchy steepness in organizational work teams, considering differences in status and influence as interchangeable. In time, however, progressive insight into the individual-level antecedents and team-level consequences of hierarchies tempted me to focus on the more overarching concept of social influence, also allowing me to rely my arguments on a broader spectrum of theory and findings, ranging from status to power and leadership literatures. Although this shift was not pre-planned, each development in this research program was a natural consequence of the recent scholarly effort to disentangle hierarchy-related concepts (e.g., Fiske & Berdahl, 2007; Lucas & Baxter, 2012; Magee & Frasier, 2014) and of the evolution of my thinking about hierarchical differentiation in organizational work teams.

### **Dissertation Goals and Research Contributions**

As can be seen from the conceptual model (Figure 1.1), an important first goal of this dissertation is to identify the role of individuals' expertise and dominance levels in influence attainment in organizational work teams. Scholars have put considerable effort into understanding how individuals gain influence in social groups. The allocation of greater influence has been linked to a number of individual attributes and behaviors such as pro-social behavior

(reflected in group commitment, selflessness, and generosity; see Flynn, Reagans, Amanatullah, & Ames, 2006; Hardy & Van Vugt, 2006; Willer, 2009) and personality traits (e.g., extraversion and conscientiousness; Anderson, Spataro, & Flynn, 2008; see also Judge, Bono, Ilies, & Gerhardt, 2002). However, as organizational work teams need to perform their tasks efficiently and preferably with high quality, perceptions of expertise emerged as the most eminent source of influence in such groups, more so than social skills (Lord, Phillips, & Rush, 1980). There is indeed evidence suggesting that members with high levels of task expertise are granted influence because they can help work teams to reach collective goals with their superior cognitive resources (Berger, Rosenholtz, & Zelditch, 1980; Ridgeway & Diekema, 1989).

Management research has largely neglected the pervasiveness of behavioral dominance that higher-ranked individuals display in organizational settings (see Chen, Peterson, Phillips, Podolny, & Ridgeway, 2012). Yet, from a sociobiological and evolutionary perspective, dominant behaviors may well represent an equally viable route to influence (Henrich & Gil-White, 2001; Mazur, 1985). Scholars in this domain suggest that dominance displays, expressed in terms of psychological intimidation and coercion, resemble nonhuman species' agonistic battles for material resources and hence, may equivalently result in the dominant's "victory" (Henrich & Gil-White, 2001; Cheng, Tracy, & Henrich, 2010). I therefore consider it a worthy contribution of this dissertation to investigate not only the effectiveness of expertise perceptions in predicting influence in organizational work teams, but also the effectiveness of behavioral dominance perceptions.

I aim to contribute to the current literature on influence in work teams by demonstrating *when* perceptions of expertise and perceptions of dominance more strongly predict the attainment of social influence. To date, no study examined the essentially relevant role of the external environment in determining the effectiveness of expertise and dominance in predicting influence

(for a similar view, see Anderson & Kennedy, 2012; Cheng et al., 2010). This is remarkable because work teams do not operate in isolated settings, but rather, are embedded in a social context. Particularly in organizational settings where behavior is regulated by social rules and standards, the team's social context may have an impact on the degree to which certain behavior will be seen as normative and, thus, can lead to influence attainment. In this dissertation, I introduce intra-team competition as a crucial contextual factor that can affect whether perceptions of expertise or dominance will be prioritized in the allocation of influence. Competing for scarce resources (e.g., bonus-based compensation, promotions, or favorable task assignments) is a prevalent phenomenon in organizational work teams. Because competition can strongly shape interpersonal behavior, or more specifically, can set norms for appropriate and expected behavior among the team members (Tjosvold, 1988), I argue that it can also effectively determine which influence route will impose greater benefits than costs for influence attainment.

The second goal of this dissertation is to examine how different structural properties of a hierarchy affect team processes, team outcomes, and member satisfaction. Given the pervasiveness of hierarchy in organizational life, scholars have claimed that hierarchies must have adaptive functional value for work teams (Halevy, Chou, & Galinsky, 2011). Many organizations indeed promote the emergence of hierarchies (Pfeffer, 1998) because a clear deference order and voluntary compliance mechanisms tend to enhance team cooperation and coordination (De Kwaadsteniet & van Dijk, 2010; Halevy et al., 2011; Halevy, Chou, Galinsky, & Murnighan, 2012; Magee & Galinsky, 2008). Furthermore, hierarchies can also facilitate performance by improving the efficiency and quality of team decision making (Cartwright & Zander, 1953; Berger et al., 1980; Ridgeway & Diekema, 1989). Nevertheless, other scholars have proposed that hierarchies can also be detrimental for teams because they tend to instigate conflict among the team members (Bloom, 1999) and hamper knowledge exchange, resulting in



fewer opportunities for team learning (Bunderson & Reagans, 2011; Edmondson, 2002; for a review of mixed results, see Anderson & Brown, 2010; Greer et al., 2014). So, there remains considerable debate in the management and organization literatures about whether a hierarchy truly promotes collective outcomes in work teams.

I suggest that progress in this debate has been hampered by a lack of clarity about what exactly is meant with hierarchy. To date, management theory and research on informal social hierarchies has particularly focused on one form of social stratification, namely steepness (i.e., the overall degree of asymmetries in members' status and influence; see Anderson & Brown, 2010). This literature stream has extensively overseen other forms of stratification such as centralization (i.e., the concentration of influence in one member or in a small subset of the full membership of a group) and hierarchization (i.e., transitive or cascaded ordering of dyadic influence relations) that has been suggested by sociological and ethological research (e.g., Chase, 1980). This theory development by scholars in different domains reflects the topic's relevance across different fields, but the foci on different structural properties of hierarchies may account for some of the disparate findings on the functions of hierarchy in work teams. I therefore believe that my examination of all three forms of stratification in this dissertation will help the literature to move forward.

The third goal of this dissertation is to investigate whether the performance effects of hierarchies are context-dependent (Halevy et al., 2011). With this goal, I aim to further clarify the inconsistent results that past research obtained on the effects of hierarchies on group performance. Scholars increasingly argue that the benefits of a strong hierarchy in work teams may only occur in certain work environments. In line with this contingency argument (see Anderson & Brown, 2010), I deem task complexity as a vital factor determining the direction of this relationship in organizational work teams. The members of work teams interact in a task-

focused manner and hence, the nature of the task is likely to have an impact on how their hierarchical structures affect their functioning. Previous research provided preliminary evidence that organizations may benefit from hierarchical structures when they work on simple tasks that do not require the pooling of diverse viewpoints (e.g., Carzo & Yanouzas, 1969; Shaw, 1964). In this dissertation, I propose that, by preventing task misinterpretations and time-consuming information processing, steeper status hierarchies conduce to better team performance when teams perform less complex tasks. By casting task complexity as a key factor determining the direction of the relationship between hierarchy steepness and team performance, I respond to the fundamental question of *when* hierarchies facilitate effective team functioning.

Finally, my fourth goal is to explain the *mechanism* through which hierarchies influence collective outcomes in work teams. There is extant theory on *why* hierarchies conduce to enhanced or poorer group performance (see Anderson & Brown, 2010; Halevy et al., 2011; Magee & Galinsky, 2008; Simpson, Willer, & Ridgeway, 2012), but as of yet, there is no agreement on which possible mechanism explains hierarchy effects best. Some scholars have argued and found that hierarchy enhances performance because it reduces conflict (Ronay, Greenaway, Anicich, & Galinsky, 2012) and increases coordination and cooperation (Halevy et al., 2012). However, although previous literature has widely underscored the conflict-attenuating effects of hierarchies (e.g., Halevy et al., 2011), these effects have been explicated in rather general terms, not distinguishing among the distinct types of conflict that might be affected. Traditionally, previous work distinguished three forms of intra-team conflict: relationship, task, and process conflicts (Jehn, Northcraft, & Neale, 1999). Relationship conflicts refer to interpersonal tension and friction among the members of a group (Jehn & Mannix, 2001). Task conflicts are disputes about the content of a group task and process conflicts are controversies about the means to and strategies for task accomplishment (Jehn & Bendersky, 2003). Only

recently a fourth type of conflict emerged, namely status conflicts, which pertain to disputes over people's relative status positions in their group's social hierarchy (Bendersky & Hays, 2012, p.323). Given that current hierarchy literature lacks a clear conception of what exact type of conflict is most affected by hierarchy, I aim to examine the relationship between hierarchy and these distinct conflict types in more detail in this dissertation.

Although, at first sight, it may sound logical to expect that status conflicts will be most affected by the hierarchy, I consider this unlikely because such conflicts mostly derive or rarely happen in isolation from other types of conflict (see Bendersky & Hays, 2012) and are therefore often considered as secondary to and indistinguishable from other conflict types. It is a team's primary goal to perform and accomplish tasks. I therefore argue that task-related conflicts (in particular, process conflicts) are the most relevant when examining hierarchies because conflicts about the control over resources and delegation of responsibilities are most closely tied to the disputes over influence and fairness that one would associate with hierarchy (see Greer & Jehn, 2007). Because hierarchical structures establish a clear-cut division of labor with respect to who does what, when, and how (Halevy et al., 2011; Magee & Galinsky, 2008), their immediate effects would be naturally reflected on this type of conflict. In sum, I cast process conflict as the key explanatory mechanism through which hierarchy relates to better team performance. By examining which mediating mechanism is most central in explaining this relationship, I also help to answer the question *why* hierarchies can facilitate effective team functioning.

## **Overview of the Present Dissertation**

### *Chapter 2*

Using a multi-method approach, Chapter 2 strives to examine the routes through which individuals gain social influence in organizational work teams. In two sets of scenario studies, I examine whether dominance and expertise represent independent routes to influence in work

teams and test the moderating role of intra-team competition. I propose that expertise more strongly relates to influence when intra-team competition is lower and dominance more strongly predicts influence when intra-team competition is higher. In the final study, I test the proposed relationships using field data from 351 employees in 54 work teams in the Netherlands.

### *Chapter 3*

Chapter 3 aims to test a contingency theory of the relationship between status hierarchy steepness and team performance in organizational work teams. In this chapter, I switch to the team level of analysis and investigate *when* and *why* status hierarchy steepness improves team performance using multi-source data from 438 employees and their immediate supervisors in 72 work teams from Dutch and German organizations. I examine whether task complexity is indeed an important moderator of the relationship between hierarchy steepness and performance. I propose that when teams carry out tasks of lower complexity, steeper status hierarchies will be negatively related to intra-team conflict, which will, in turn, increase team performance. However, hierarchy steepness is not expected to yield such clear conflict and performance effects in work teams executing complex tasks.

### *Chapter 4*

Chapter 4 builds on ethological and social network traditions to compare the functional benefits of different structural properties of a hierarchy (i.e., centralization versus hierarchization). I propose that hierarchization is more likely to capture the functional benefits of hierarchy whereas hierarchy as centralized influence is more likely to be dysfunctional, particularly in work teams that perform complex tasks. In a study of 457 employees and their immediate supervisors in 75 teams drawn from a wide range of industries in the Netherlands, I examine whether hierarchization reduces intra-team conflict and thereby increases both team

performance and member satisfaction, and whether centralization indeed has opposite effects.

*Chapter 5*

In Chapter 5, I summarize and integrate the results of the different studies that are reported in this dissertation. Furthermore, I provide theoretical and practical implications of the overall findings, discuss the strengths and the weaknesses of the studies, and identify avenues for further research.

Finally, I would like to note that each chapter in this dissertation is written as an independent article and can therefore be read independently of the rest of the chapters in this dissertation. As a result, the reader may encounter some commonalities among the chapters of this dissertation.