Chapter 6

Conclusion and discussion
CONCLUSION

In this dissertation, I have sought to further the understanding of the interdependence between project teams that perform public projects and their (inter)organizational and political environment. These kinds of project teams have to manage diverse interdependencies to gain public support and political approval, obtain task-related knowledge, expertise, and know-how, and to align project activities with overarching (organizational) objectives. Building on the compelling evidence of the consequences of resource dependencies for the relationships between organizations (Casciaro & Piskorski, 2005; Hillman et al., 2009; Jensen et al., 2006; Waterman & Meier, 1998), this research has aimed to fill the gap on the specific issue of how pressure from politically sensitive environments affects the realization of public projects. As such, this dissertation aims to answer the following research question:

How do the interdependencies between public projects and their (inter)organizational and political environment influence project realization?

The preceding chapters have demonstrated that interdependence within sensitive political environments can have more profound consequences for the way interdependencies are managed throughout project realization than prior research has recognized. This is partly due to the public scrutiny of public projects, which further complicates the interdependencies between public projects and their environment. The following section will briefly review the primary findings of each chapter. My research demonstrates the benefits (chapter 3) and the dilemmas (chapters 2, 4, & 5) of interdependence for (project) teams and involved organizations. Based on these results I will then further explain and justify the theoretical and practical contributions of my findings.

In chapter two, I analyzed how public projects are coordinated between temporary project teams and permanent departments in situations of time pressure. In our case, temporary project teams depended on the know-how and expertise from the asset management department to ensure that (re)constructed infrastructure objects would be sustainable in the long term. However, political leaders and higher governmental officials prioritized and pressured timely project completion, which amplified feelings of time pressure and increased the necessity for quick decision-making within project teams. Hence, project teams required the input from the asset management department in a timely manner. However, the asset management department did not have the capacity
to provide the required input on time due to a less developed transactive memory in their turn. This meant that project members and asset managers, who were involved in municipal infrastructure projects, were repeatedly unable to search for, access, and subsequently coordinate asset management’s knowledge in a timely manner, which inhibited the ability to provide input to project teams when this was required. Consequently, project teams often made decisions in favor of political objectives aimed at timely completion. This eventually led to a decrease in knowledge utilization from these permanent parts of the organization, prompting an important resource for the performance of high-quality, long-term sustainable infrastructure work to be negated. Conclusively, this chapter demonstrates that political prioritization and pressures on timely project completion can indeed align projects with the objectives of political stakeholders, as stipulated deadlines encourage and motivate project teams to complete projects in time. However, at the same time these positions harmed the interests of other involved subdepartments and the long-term strategy of involved public organizations where timely coordination was not established.

In chapter three, I further focused on the ways in which the functioning of a transactive memory can affect interdependent relations beyond team and departmental boundaries, and found that teams with a well-functioning transactive memory are better enabled to engage effectively in boundary spanning relations with other teams on which they depend in their daily work. Traditionally, a transactive memory is viewed as a within-group phenomenon and is defined as the ability of team members to recognize and utilize each other’s knowledge. My dissertation reveals that a well-functioning team’s transactive memory also enhances the external articulation and sharing of knowledge, which in turn strengthens the effectiveness of task performance, generation of new knowledge, and ways of performing in other teams. A well-functioning team-level transactive memory also increases the team’s influence on actions and decisions in other parts of the organization. As mentioned, literature on transactive memory has so far predominantly sought to explain internal team processes. However, as complex work, such as the performance of infrastructure projects, increasingly spans multiple teams and organizations, new challenges arise in relation to the functioning and performance effects of transactive memory across teams. Chapter three has shown how a transactive memory can enable teams to involve more effectively in their interdependent relations with other teams. Consequently, my research provides a solution for the utilization of mutual dependence between teams through boundary spanning relations, while the
effectiveness of these relations can be catalyzed by knowledge processes within teams.

Chapter four reveals that relations between project teams and stakeholders deteriorate when team identity is threatened and teams start to attribute project risks to stakeholders. In this case study, a project team responsible for a large renovation project was constantly inspected and had to cope with demands and interference from stakeholders. In the midst of performing a complex and tricky project, the project team felt threatened by their environment. First, within the team, external interference was framed as a project risk, because it complicated project planning and task completion. Besides, members of the project team felt they were in a vulnerable position, not only afraid that the project would fail, but also because their identity as a project team was endangered. The project team was constantly under inspection of a higher authority and risks were increasingly associated with their team, which made them feel as if the project was being under attack. Consequently, the project team shifted the attribution of responsibility for project risks to actors outside the team. By attributing risk to external actors, members of the project team strengthened their group identity by considering themselves as opposed to actors that they regarded being a risk. This stronger identity caused the team to develop into a tightly knit inward-looking group that started to withhold information from their environment. In turn, withholding information raised suspicions with stakeholders, and it aroused the level of conflict between the project team and stakeholders. Thus, efforts to shield off the project from the environment proved to be futile in the end, and jeopardized the project even further. By demonstrating how this social identity threat stimulated the project team to attribute responsibility for risks to outside stakeholders, this study provides a theoretical justification for the reason why teams construct risks in a certain way and explored the consequences of risk discourse for the relations between projects and stakeholders.

Chapter five shows how project teams continue to be burdened by a history of organizational failure in their host department's infrastructure projects. In the fragile period following failure, project teams have not yet had the opportunity to re-establish their trustworthiness. Therefore, among project stakeholders trust in the capacity to achieve the required project outcomes was low and anxiety about a possible re-occurrence of failure was still dominant. In our case, this increased the amount and detail of demands and consequently led to actual interference by stakeholders. The project team required the approval and support of political stakeholders. Logically, in their work they had to consider and adjust to stakeholders’ concerns and demands. However, the
Chapter 6

demands increasingly started to interfere with the tight schedule and heavy workload of the project team. Moreover, in the perception of the project team, stakeholders’ efforts directed towards publicly demonstrating control were counterproductive. The project members felt that stakeholders aimed to publicly convey that they were capable of getting a ‘malfunctioning’ project under control. The project team perceived this as a way for political stakeholders to avoid reputation loss through preemptively attribute blame to the project team. In doing so, trust relations and collaboration between supposedly cooperating partners were inhibited further. In turn, decreasing trust in stakeholders resulted in the perception among project members that it was necessary to protect themselves from external intrusion by warding off external control. Creating a buffer between the project and its environment temporarily facilitated the project team to maneuver more freely. However, subtle and open attempts to avert control by the project team increased the already existing negative attitude amongst stakeholders towards the project. This in turn led to a vicious cycle of decreasing trust and increasing control, resulting in major conflicts and nearly even caused the cancellation of the project.

Taken together, the empirical Chapters of my dissertation demonstrate that for (project) teams it is necessary to establish and maintain relations with external actors and groups that either affect or are affected by the development of projects. For example, projects need to align their activities with overarching objectives, acquire know-how and expertise, or gain political approval. However, project teams that perform public projects often struggle with simultaneously managing multiple interdependencies requiring both collaboration with several partners and coordination of activities and outcomes. Such engagements lead to complex interconnections between the actions and decisions of all parties inside and outside of projects. This is particularly troublesome when teams have to perform projects that are publicly visible in a politically sensitive or sometimes openly hostile environment. For project teams, it is difficult fully grasp such circumstances, which makes them vulnerable to fluctuating political pressures and imposed demands. Despite the deliberate attempts of project teams to ward off external interference, teams were not able to completely banish external efforts to interfere with project actions and decisions. The enforced adjustment of projects to political pressure and demands proved to be at the expense of the involvement with other supposedly collaborating departments and organizations. This caused dissatisfaction amongst these other stakeholder groups with vested interests in project outcomes. Moreover, projects eventually became derailed by the constant flux of unpredictable, external interference.
This illustrates that the interdependence between project teams and particularly their political context can have detrimental effects on project performance and the realization of overarching (organizational) objectives.

These insights together have important implications for theory and practice, which I will discuss in the following sections.

THEORETICAL CONTRIBUTIONS
The main contribution of this dissertation addresses the interdependence between public projects and their environment. The interdependence between public projects and particularly their political environment proved to have more profound effects on the realization of projects and the achievement of overarching organizational objectives than has been recognized by prior research. As a result, this dissertation advances theory in two ways.

First, I contribute to resource dependence theory (Pfeffer & Salancik, 1978, 2003). Prior research has addressed that the interdependence between teams and their environment can be beneficial, but also can become challenging when an environment is characterized by overload, ambiguity, and politics (Alvesson, 2004; Eisenhardt, 1989; Eisenhardt & Zbaracki, 1992; Haas, 2006). Despite compelling evidence of these benefits and challenges, prior research has underestimated to which extent the interdependence between projects and political stakeholders can harm the total equation of interdependent relations between projects and their environment. My research extends these insights by showing that the inconsistent and changing pressures and demands from political principals can cause fragmentation and disintegration between projects and other collaborative partners in their environment. Namely, the primary focus on the inconsistent interests of certain powerful political stakeholders proved to be at the expense of coordination and workable relations with involved departments or organizations. Consequently, the realization of overarching organizational objectives that are connected to project outcomes can be harmed.

In addition, my dissertation contributes to existing literature on the permeability of project boundaries by demonstrating that interference from a skeptical and sometimes hostile environment can become a threat to the viability of project teams and the continuation of public projects. Prior research has addressed several strategies that teams can adopt in relation to such circumstances. For example, when the environment
becomes a threat, teams can and will deliberately reinforce their boundaries in order

to ward off external interference (Beal et al., 2003; Faraj & Yan, 2009; Gully, 2000).
However, my findings reveal that project teams that perform publicly visible projects in
a politically sensitive environment can encounter situations in which they are neither
able to adjust to or avert excessive demands and pressure from their environment. In
our research, it became nearly impossible for project teams to comply with stakeholders’
demands as these constituted a threat to the continuation of projects. Their environment
did not accept the team to respond by reinforcing their boundaries, and in fact this
stance resulted in more excessive interference. Conclusively, this dissertation contributes
to prior research by showing that in politically complex environments, managing the
permeability of team boundaries is much more difficult and complex than prior research
has demonstrated.

In order to further explain and justify these contributions, the following two sections
will expand on both of them in more detail.

**Dependence on political approval and the disintegration of public networks**

Our first contribution to resource dependence theory addresses the dependence of
public projects on political stakeholders for approval. From a resource dependency
perspective (Hillman et al., 2009; Pfeffer & Salancik, 1978, 2003), organizations are not
autonomous, but depend on their organizational, political, and social environment for
resources required for the performance of complex work. Due to interdependence, the
survival and continued performance of organizations depend on external actors. This
requires organizations to engage in different kinds of partnerships, collaborations, or
coordinated efforts with external actors (Casciaro & Piskorski, 2005; Halebian et al.,
My research aims to expand the understanding of the complexity of these patterns of
interdependence within public networks that surround public projects.

In a similar fashion as organizations, that are central to the work of Pfeffer and
Salancik (1978), public projects also have to manage interdependencies in order to
acquire critical resources. Therefore, project teams that perform these kinds of projects
have to engage in external relations with actors and groups in their environment. This
can support teams in the utilization of task-related knowledge, know-how, and expertise,
which can be beneficial for both team and organizational performance. For example,
knowledge exchange across teams can lead to generation of new knowledge, ideas,
and ways of performing (Tsai, 2000; Tsai & Ghoshal, 1998). With this newly acquired knowledge, teams can make better-informed decisions that contribute to improved performance (Haas & Hansen, 2005).

As the utilization of external resources, and particularly information and knowledge, usually is regarded as desirable, much of the literature focuses on the social relations, organizational arrangements, or technological systems that enable resource exchange (Argote, 2012; Argote et al., 2003; Borgatti & Cross, 2003; Hansen, 1999; Hansen et al., 2005; Phelps et al., 2012). However, project teams that depend on external resources can also face challenges in environments that are characterized by overload and ambiguity (Haas, 2006; Zika-Viktorsson et al., 2006). In overloaded work environments, project teams with limited time and attention aim to arrive at quick, satisfactory solutions rather than taking time to gather all available information to make well-informed decisions (March & Simon, 1958). In other words, the more information and knowledge project teams have to gather, the more time and attention it takes to process these kinds of resources. Unfortunately, the required time and attention of project teams is limited, and therefore overload often leads to deviations from time schedules and high level of stress within project teams (Zika-Viktorsson et al., 2006). Due to the non-routine character of projects (Cohen & Bailey, 1997), moreover, project teams can experience considerable uncertainty about which of the many possible solutions to a problem is best, or which of the many problems should be prioritized in a given project (Alvesson, 2004). Thus, it may be problematic for project teams to decide which of the available resources they need to acquire for project implementation and where these resources can be found in a timely fashion.

Beyond these challenges, the interdependence between public projects and their environment can become even more complex when the issue of politics arises. This issue becomes particularly evident when multiple stakeholders have interests in project outcomes (Aaltonen & Sivonen, 2009; Blackburn, 2002; Söderholm, 2008; Winch, 2010). In addition to acquiring critical resources, resource dependence is then also related to the reliance of teams on approval and support from stakeholders that have authority to exercise influence over projects (Casciaro & Piskorski, 2005; Davis & Cobb, 2010; Pfeffer & Salancik, 2003). These kinds of interdependencies can be beneficial as they allow those controlling external sources to influence the actions and decisions of project teams, thereby counteracting sub-goal optimization (March & Simon, 1958). As interdependence creates the opportunities for mutual influence, this can prevent teams
from overly focusing on own goals, and thus can function as an important integration mechanism for organizations (Lawrence & Lorsch, 1967).

However, as demonstrated by this dissertation, these kinds of interdependencies between public projects and multiple influential stakeholders can also become challenging; in particular when stakeholders impose competing or incompatible demands on projects (Ancona & Caldwell, 1992; Bresman, 2010; Haas, 2006; Pettigrew, 2014). When demands are incompatible, it can be hard for project teams to simultaneously meet the objectives or gain support of all involved stakeholders. Moreover, stakeholders can impose demands that are not in accordance with primary project goals (Haas, 2010). This can create dilemmas for project teams regarding whether they should comply with the interests of stakeholders or focus on project activities and goals. Namely, imposed demands and pressure from stakeholders consume valuable time, which can be at the expense of other important project activities (Eisenhardt & Bourgeois, 1988).

Thus, so far research has addressed that in overloaded, ambiguous, and politicized environments, it can become challenging for project teams to manage interdependencies with multiple stakeholders. Despite compelling evidence of these challenges, prior research has failed to address how excessive demands and pressures from powerful stakeholders influence how the total equation of interdependencies between projects and their environment are managed throughout project realization. We extend prior research by focusing on this aspect, showing that the public scrutiny of public projects often generates political pressure and imposes demands on projects. In turn, this results in the fragmentation and disintegration between projects and their supposed collaborative partners. For example, chapter two shows how political pressures on stipulated deadlines ensure timely project completion, but at the same time harms the interests of other departments and the long-term strategy of the public works department. Chapter four reveals how political pressures and demands threaten the social identity of a project team, causing a reinforcement of project boundaries, and the deterioration of relationships between the project and multiple stakeholder groups. Both cases show that the forced compliance with the interests of political, or otherwise powerful stakeholders, can seriously deteriorate workable relationships between projects and other stakeholders groups in their environment, harming the realization of overarching organizational objectives that are connected to project outcomes.

As prior research has argued (Eggers & Goldsmith, 2004; Forrer et al., 2010; Pfeffer, 1992; Ring & Perry, 1985; Sutton & Galunic, 1995), within the public sector,
political stakeholders and public executives are vulnerable to public attentiveness and media coverage. This is particularly true when public attentiveness is directed towards underperforming public projects (Klijn & Teisman, 2003). In our case, failure in former infrastructure projects generated a lot of negative publicity and a public attentiveness to projects and involved stakeholders. In turn, to satisfy public opinion and reduce public pressure, political stakeholders increasingly imposed demands on project teams to finish projects in time and within budget. As the continuation of projects depended upon the approval of political stakeholders, project teams constantly had to adjust to their demands. In so doing, the project became a vehicle of more powerful political stakeholders. Dancing to the tune of political leaders came at the expense of the available time, energy, and attention spent on managing interdependencies with other involved actors, such as permanent departments from their host organization or the municipal service of construction inspection. For example, in chapter five, the project team responsible for the execution of project Underwater was eventually able to finish the renovation in time. However, much of the work during the tunnel renovation did not comply with safety regulations. Likewise, in chapter two, the development of the “red bridges” was completed within project deadlines (in favor of political stakeholders), but the bridge construction failed the requirements for a sustainable maintenance. In the public eye or the opinion of politicians, projects are performed effectively when they are finished in time, which reduces “disturbance” for citizens. However, the forced compliance with political objectives harmed the overarching interests of other subdepartments, their parent organization, and other legitimate stakeholder groups. Thus, the interdependence between public projects and their political environment caused the destabilization of carefully built relations between project teams and supposed collaborative partners within their environment.

Despite these issues, the dependence of projects on the authority and approval of (political) principals is logical. Political leaders are elected democratically to serve the public interest. Therefore, they have the authority to monitor and steer the behavior of bureaucratic agents that govern projects in such a way that agents will act in a manner consistent with the leaders’ preferences (Jensen et al., 2006; Waterman & Meier, 1998). As such, controls can enhance adherence to the public interest by holding public agents accountable to higher authorities including elected and appointed officials (Kearns, 1996). Such political accountability of a vertical nature has long been the principal method of controlling the acts of those that operate within public organizations (Forrer
et al., 2010). However, this does not apply for settings in which required resources and responsibilities for project outcomes are distributed over multiple actors in public networks (Agranoff & McGuire, 2003; Forrer et al., 2010; Lane, 2005; Provan & Milward, 2001; Waterman & Meier, 1998). In such settings, establishing who is the principal and who are agents is nearly impossible or very difficult at best. We extend these arguments by showing that in case politicians decide to impose too many demands when steering their agents, the interests of other involved actors and groups may be harmed, reducing the overall effectiveness of public networks. When project teams are forced to invest too much in the leaders’ objectives, this can lead to an unequal representation of interest during project implementation. In conclusion, measuring and enforcing public agents through formal authority may function in employment relationships within individual organizations, but are far from desirable in relation to complex public projects. This is particularly true where the implementation of these kinds of projects is a joint effort or shared responsibility of multiple teams, departments, and organizations with different but legitimate interests in project outcomes.

**Environmental threats and the permeability of project boundaries**

Our second contribution enhances our understanding of the vulnerability of teams to politically sensitive environments. In relation to public projects, project teams require public support and political approval for project implementation (Klijn et al., 2008; Klijn & Koppenjan, 2000; Klijn & Teisman, 2003). Where they fail to meet the objectives of their environment, projects can easily lose public or political support, resulting in a negative attitude towards projects (Clander & Landin, 2005). Logically, it is important for project teams to acknowledge public concerns and adjust to political stakeholders’ demands. Prior research has demonstrated that it can be increasingly difficult for project teams to comply with objectives and requirements of stakeholders, particularly when these are incompatible with team interests (Ancona & Caldwell, 1992; Bresman, 2010; Gibson & Dibble, 2013).

Despite compelling research on challenging team environments and problems of constraining external influence, so far research has insufficiently addressed the vulnerability of public projects to politically volatile environments. In such environments, public and political attitudes towards projects can be skeptical and sometimes even hostile. My research uncovers that interference from a skeptical and hostile environment is not only challenging to overcome, but may even grow into a serious threat to the
viability of project teams and the continuation of public projects. Prior research has predominantly sought to explain strategies of teams to either adjust to or buffer against the external environment (Faraj & Yan, 2009; Marrone et al., 2007; Yan & Louis, 1999). We contribute to existing literature by demonstrating how excessive political pressure on public projects can lead to a bend or break situation in which project teams can neither adjust to nor close themselves off from their environment, which evolves as following.

Chapter four and five demonstrate that the pressure on project teams to deliver voluminous amounts of information or to constantly modify project decisions in accordance with emerging stakeholders’ requirements endangered task completion and goal achievement. Moreover, the project team perceived stakeholders’ authority to postpone or reallocate the project as a threat. The project team perceived that stakeholders’ positions were at stake, and that stakeholders could use intrusion to safeguard their own position and avoid reputation loss while attributing blame for underperformance in a preemptive way to the project team. In the perception of the project team it became nearly impossible to comply with the increasing demands of stakeholders, as they became a direct threat to the team and their project.

As has been discussed in the literature, it is essential in these kinds of circumstances that teams deliberately manage the permeability of their boundaries (Beal et al., 2003; Beckky, 2003; Faraj & Yan, 2009; Gully, 2000). In our case, when the project team became excessively vulnerable to external threats, creating or reinforcing boundaries (Faraj & Yan, 2009) was a critical aspect in reaction to the existing circumstances. In other words, the project team became defensive and started to close itself off from “external intrusion”. This may in itself not be surprising, as excessive or incompatible demands can lead to the perception among team members that too much time is spent on external actors (Perlow, 1999). In these situations, the environment becomes a disturbance to or an interruption of other, more important project activities (Kouchaki, Okhuysen, Waller, & Tajeddin, 2012). Consequently, project teams are more likely to engage in self-protective strategies to deliberately close themselves off from external exposure. This can enable project teams to resist the interests and interference of outsiders, whose influence might harm the project (Haas, 2006). Furthermore, teams can create boundaries that are distinct enough to provide a team with a separate identity (Beal et al., 2003; Gully, 2000) or a clear distribution of tasks toward common goals (Faraj & Yan, 2009). In that sense, ignoring and disregarding the environment may feel or even be necessary to restore a team’s internal stability, enable productive internal operations, and reduce “disturbing interference”.

163
Chapter 6

Thus, prior research has addressed how (project) teams can create or reinforce boundaries and why and under what circumstances this might be necessary; for example when excessive demands from stakeholders become a threat to project implementation. However, my research demonstrates that in skeptical and hostile environments, imposing or reinforcing boundaries is much more difficult and complex than prior research has acknowledged. In such circumstances, teams can strive to be “left alone”, but will not succeed in warding off the environment where the credibility of stakeholders has been harmed (failure in prior projects) and is at risk (low trust in project outcomes). In fact, striving to work independently may lead to a vicious cycle, in which political stakeholders negatively perceive the reinforced boundaries, and impose more excessive demands and interferences. In these circumstances, projects may feel that it is necessary to shift their emphasis to even greater levels of boundary reinforcement; however, this remains impossible. My conclusion is that public projects are too intertwined with their (inter) organizational and political environment to strive to be “left alone”, which can leave them vulnerable to their environment. This does not imply that such projects are doomed to fail. Rather, by acknowledging the entangled nature of public projects, project teams and involved actors can deal better with the realities of their position within an intricate web of public, private, and political players. To support these actors in coping with the unique complexities that accompany the performance of public projects, in the following section I highlight several implications for project teams, public organizations, as well as for political stakeholders.

PRACTICAL IMPLICATIONS

Generalizing from my findings, it can be said that the large multitude and diversity of interdependencies between public projects and their environment generates challenges for project teams, involved organizations, and political stakeholders. It can be increasingly challenging for project teams to simultaneously adjust to various stakeholders with differentiated and sometimes contradictory interests in project outcomes. For political stakeholders it can become difficult to be held accountable for project outcomes, while they are not directly involved in these projects, and therefore lack the ability to unequivocally measure project performance. For involved (public) organizations, it can become difficult to ensure project actions and decisions to align with the goals of subdepartments and the strategic objectives of the organization. Given these challenges,
I propose several recommendations for project teams, public departments, and political stakeholders that are involved in public projects.

**Project teams: Develop a relational map of the project environment**

For project management, it can be of significant use to create more consciousness amongst project members about the interrelatedness between project decisions and the interests of different stakeholder groups in the environment of projects. As mentioned, throughout the duration of infrastructure projects, a multitude of interests and objectives will be affected by project decisions and outcomes. Representatives of these interests, i.e., stakeholders, will impose their demands, which often compete with each other or with project goals. Therefore, it is unlikely that the interests of all stakeholders will be granted. My findings suggest that project teams are insufficiently aware of the competing or overlapping needs, expectations, and requirements of different stakeholder groups. Project teams’ unawareness leads to unexpected actions and decisions by stakeholders, which can become problematic. To enable project teams to better anticipate on stakeholders in their environment, I propose a new stakeholder mapping strategy. Prior research has addressed several techniques to identify and map important stakeholders, their attributes, and impact on project outcomes (Bryson, 2004; Olander, 2007). For example, stakeholder maps should include the relative power and legitimacy of stakeholders, their interests in project outcomes, and the urgency of their demands. Given my findings, I propose an approach to analyze stakeholder relationships that enables project teams to include the interrelatedness between stakeholder groups and their interests in decision-making processes.

My findings indicate that in complex (inter)organizational and political environments, various actions and decisions of stakeholders often occur beyond the sight of project teams. This means that teams often perceive the requirements and actions of stakeholders as unpredictable. In order to make the environment more predictable and manageable, teams should not just focus on individual stakeholders and their impact on project outcomes in isolation. Rather, teams must consider the interrelatedness between the multiple stakeholders and their interests. The fact that the interests of stakeholders are partially interdependent means that teams must consider the complete equation in order to anticipate more accurately on their future expectations and actions.

The interrelatedness between stakeholders is not of the same nature. First, it is significant to determine how stakeholder groups can influence each other’s behavior
Chapter 6

through communication and mobilization. For example, specific stakeholder groups may have access to the media or to political leaders, which gives them the ability to mobilize social and political forces. In addition, it is important that maps include the partial overlap between the objectives of different stakeholder groups and the way in which stakeholders value each other’s objectives. Through developing such an overview, project teams may be better equipped to predict or anticipate on series of actions and decisions amongst stakeholders in case of changing project conditions or when important project decisions are made.

Developing a relational map is not sufficient in itself. The complete equation of stakeholder interests and their interrelatedness should be integrated in decision-making processes. This means that project teams should specifically connect different problems and solutions to the stakeholders’ objectives. Namely, it is important that project teams understand the causality between project decisions and potential series of consequential stakeholder actions. A key example is the upscaling of issues regarding the compliance with safety legislation to higher political levels within the municipality. A more comprehensive overview will help project teams to pre-empt on potential upscaling or escalations in their project’s context. In case project decisions have severe external consequences, project teams should have the chance to either modify the decision or timely inform or negotiate with different stakeholders about the mismatch between different objectives. This can be relevant when decisions harm the interests of stakeholders that have the authority to impose demands. Furthermore, this also enables project teams to consider the interests of unequally represented stakeholders with less immediate control, but with interests that cannot be ignored on the longer term.

**Political principals: Carefully control agents and be aware of public behavior**

As argued, public projects operate within public networks, which challenge the project teams to balance between the expectations and requirements of different stakeholder groups. Our findings imply that under such circumstances, it is undesirable for (political) principals to overly monitor and influence agents that perform these projects: this might have negative side effects for project implementation and the interest of involved organizations. However, for executive principals, it might feel necessary to monitor or steer projects. This is particularly true when public projects are underperforming. In such cases, project principals are more likely to install monitoring systems, impose new procedures and extra checks, revise decision-making authority, or replace project
management. Principals should be aware that these kinds of measures could derail projects or force projects in undesirable directions.

In addition, in case of underperforming or failed public projects, principals often tend to make public statements committing the involved teams and organizations to uphold new strategies to enhance their performance. For example, principals often announce some kind of diagnosis, evaluation, or audit in order to be transparent to the public about the specific causes of underperformance. Given my findings, I propose that political leaders should reconsider their strategies to cope with negative public opinions. They should be more cautious in their public statements and announcements. This is particularly evident for project teams that perform highly visible public projects. These kinds of teams are clearly exposed and vulnerable, which causes them to easily perceive public statements or announcements as a threat. Although political stakeholders are in most cases obliged to provide transparency of governmental work, much can be gained from the manner in which statements and publications are framed.

**Parent organizations: Complement relational and bureaucratic forms of organizing**

In the public sphere, strategies to decentralize and downsize the government (Campbell, 1993) have resulted in a reliance of governmental organizations on outside expertise. Similarly, in our case study one large governmental municipal organization (Public Works Service) was downsized and required expertise was distributed over a diversity of actors within and beyond the municipality. Logically, infrastructure projects can subsequently only be realized through the close collaboration between project teams and a large number of public and private actors, such as other (sub)departments, private engineers, and building companies. For their performance, it is therefore important that project teams can engage with external actors on behalf of their parent organization. This is also relevant when project teams have to coordinate their activities and decisions with a variety of stakeholders’ interests that are connected to project outcomes. For these reasons, project teams require a certain flexibility and adaptiveness in order to collaborate with and adjust decisions to various partners and stakeholders in their wider (inter)organizational environment.

Even though the success of project teams depends upon their decentralized and flexible way of working, they are installed by parent organizations and principals that are accountable for (parts of) project outcomes. In case of public projects, these “parents” are political and bureaucratic actors, such as politicians, high governmental officials, or
managers and executives from governmental organizations. For responsible political and bureaucratic actors, the decentralized nature of projects can result in an administrative apparatus in which rendering accountability is much more difficult and ambiguous (Romzek, 2000). On the other side, project teams that require flexibility may experience difficulties in being embedded in a bureaucratic context characterized by a vertical accountability structure. Generally, there are two characteristics of a bureaucracy that can create tensions between projects and bureaucratic parts of organizations.

First, bureaucracies are designed to divide organizational members into areas of functional specialization, shaping their communication into specific areas of expertise, in which knowledge moves within functional silos and is primarily integrated at the top (Fischer, 1994). As my findings reveal, such specializations and lack of horizontal integration can constrain timely coordination of knowledge between project teams and functional, more bureaucratic parts of organizations. Another characteristic of bureaucracy is the vertical nature of accountability that demands integration of project decisions within hierarchical control routines. These aspects of bureaucratic organizations can easily mismatch with the required flexibility and pace of working in project teams. As this dissertation shows, these mismatches can endanger project completion and can lead to disintegration between projects and more permanent departments.

I propose that governmental organizations should redesign some aspects of their bureaucratic structures, processes, and roles in order to create a better fit between projects and more bureaucratic parts of the organization. This is important as both forms of organizing can complement each other. Projects enable flexibility and timely responses within networks of interdependently operating actors and groups (Gittell & Douglass, 2012). Bureaucratic structures ensure accountability, reliability, and sustainability regarding the achievement of organizational objectives. There are several measures that organizations can adopt in order to create more alignment between both forms.

For example, one of the key merits of bureaucracy is its ability to maintain accountability of all organizational members through a hierarchical structure. Yet, this aspect need not be lost, should the hierarchical structure be made more flexible in order to better forestall the needs of projects that operate beyond organizational boundaries. Hierarchical structures show their weakness in them being almost inherently internally focused, while the functions they must fulfil in relation to projects require a more outward focused and holistic approach. Ideally then, organizations could preserve the accountability aspects of bureaucratic structures, while loosening up on the overly rigid
and time-consuming vertical structures. For example, if employees have to coordinate with project teams, organizations should allow them to maneuver independently, with less direct control from supervisors.

Another feature of bureaucracies is that they divide organizational members into areas of functional expertise, which allows for functional specialization and clear distribution of objectives, tasks, and resources. However, this also inhibits relations amongst independently operating “silos”. This problem is inherently part of bureaucratic structures, but can be counteracted by the development of transactive memories beyond functional and departmental boundaries. Organizations can achieve this by the implementation of flexible, cross-functional work roles and the encouragement of job rotation. These measures will enable organizational members to share experiences and will provide employees with opportunities to learn about other employees’ tasks and knowledge. This may help bureaucratic organizations to accelerate knowledge integration and coordination through horizontal relations within the existing bureaucratic structures.

FUTURE RESEARCH DIRECTIONS

Given the differential impact of the public scrutiny of public projects on the interdependence between project teams and their environment, future research should be directed to more fully emphasize the public and political dimensions of public projects. Within the public sector, political leaders and public agents are vulnerable to the attentiveness of society to the performance of public work (Dicke & Ott, 1999; Eggers & Goldsmith, 2004; Forrer et al., 2010; Ring & Perry, 1985). Although prior research has touched upon this topic (Arnaboldi et al., 2004; Olander & Landin, 2005; Susskind & Field, 1996), it remains unaddressed how the scrutiny of public projects complicates the relations among different kinds of public and political agents that are involved in projects. I suggest that future research should more comprehensively analyze the increased public attentiveness to and political involvement in public projects. For instance, studies could further explore the effects of public scrutiny on project performance. Given my findings, we now know that public scrutiny can generate political pressure and can impose demands on projects, resulting in their underperformance. For future research, it would be useful to consider to what extent and under what circumstances public and political pressure cause the underperformance of projects. Moreover, future research should further explore how the public scrutiny of public projects determines the involved actors’ strategies to
respond to increased pressures. Prior research has addressed how projects cope with their environment (Söderholm, 2008) or stakeholder pressures (Aaltonen & Sivonen, 2009), but so far has not deliberately sought to explain how public scrutiny of projects determines the manner in which involved actors behave towards each other.

A second future research direction could be the vulnerability of teams to sensitive, skeptical, or hostile environments. Prior research has addressed how teams can reinforce or establish their boundaries (Beckky, 2003; Faraj & Yan, 2009), and why and under what circumstances this might be necessary or beneficial (Choi, 2002; Gibson & Dibble, 2013). My research has exhibited that in environments where public and political attitudes towards projects are skeptical or hostile, teams cannot effectively establish or reinforce boundaries, which makes them vulnerable to their environment. It could be fruitful to further explore under what circumstances the environment turns into a threat and what consequences external threats have for teams and organizations that are to cope with them. Future research should also explore how teams in hostile or skeptical environments can deliberately manage the permeability of their boundaries so that they can strike an effective balance between compliance with and protection from their environment. My research demonstrates that such a balance is difficult to achieve, as voluminous pressure and demands can lead to situations in which teams are impeded in finding a middle ground between compliance with or shielding from the environment.

Lastly, future research should also consider more temporary and dynamic approaches to the contingencies between teams, organizations, and their environment. From a contingency perspective, the internal structure and processes of organizations must be aligned with the features of the external environment in order for organizations to function effectively (Lawrence & Lorsch, 1967). In that sense, the adaptation to specific characteristics of the external environment determines how organizations should be organized (Burns & Stalker, 1961). My findings indicate that in multi-layered public networks, governmental organizations may experience difficulties in creating alignment between differentiated parts of the organization and constantly shifting groups of stakeholders in changing environments. In such contexts, to achieve overarching (inter) organizational objectives or network level goals, constant (re)alignment is required between actors, groups, and organizations within and beyond the traditional boundaries (Gulati et al., 2012). However, the growing number and diversity of interdependencies can result in higher levels of environmental uncertainty, which in turn increases the likelihood of temporary misalignment (Gulati, Wohlgezogen, & Zhelyazkov, 2012), such as omissions
of crucial activities, spatial or temporary misallocation of resources, or incompatibility of activities (Varshney & Oppenheim, 2011). Future research should consider a more temporary and dynamic contingency approach to forward our understanding of the complex creation of fits between shifting projects, teams, departments, organizations, and stakeholders within ever-changing environments.

In sum, the various findings of this research have highlighted the unique complexities accompanying the performance of public projects, previously overlooked in literature to date. In particular, future research wishing to further understand these complexities could be directed towards the impact of the public and political context on public projects. In this regard, the entanglement of public projects in their webs of interdependent relations provides particularly interesting opportunities for future research.