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A framework for governance of projects: Governmentality, governance structure and projectification



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Abstract

This paper develops a general-purpose framework for the governance of projects. The framework is structured by the concepts of governmentality and governance of projects, in the context of different levels of projectification in organizations. It visualizes the organization-specific profiles for these concepts. The dimensions and scales underlying the three concepts derived mainly from the literature on governance, general management, and project management. Eight case studies in four industries in Scandinavia and China validated the dimensions and scales and identified a new dimension for the concept of governmentality. This dimension, called precept, addresses the predominant theme in governmentality as being either organizational values, process compliance, or project well-being. Theoretical implications are in the integration of so far separate concepts plus a new governmentality dimension into one overall framework and visualization of it. Practical implications are in the identification of organization specific profiles, which can be used to develop generic profiles for industries, geographies, or otherwise different governance regimes.

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1. Introduction

Governance is often defined as the means by which organizations are directed and their managers are held accountable for conduct and performance (OECD, 2001). Governance differs from management in that management runs the business, while governance makes sure that it runs efficiently and in the right direction (Tricker, 2012). Within organizations (such as corporations) the governance of projects is often perceived to exist within the corporate governance

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framework, comprising the "value system, responsibilities, processes and policies that allow projects to achieve organizational objectives and foster implementation that is in the best interest of all the stakeholders, internal and external, and the corporation itself." (Müller, 2009, p.4). Recent work on governance in the realm of projects uses Morris' (1997) distinction between project management and management of projects to distinguish between project governance as the governance of individual projects, often in line with the specific methodology used to manage a project, and governance of projects as the way to govern groups of projects in organizations, such as programs or portfolios of projects, or board level governance related to the entirety of projects in an organization (e.g. Badewi, 2016; Müller et al., 2014a, 2014b, 2015). The present paper takes the latter perspective to understand and frame the variety of approaches to governance

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of projects in organizations, thus the organizational-level governance structures within which individual projects are launched, governed and managed.

Governmentality, which is, the way governors present themselves to those they govern, sets the tone for the interaction between governing and governed individuals (Barthes, 2013; Lemke, 2007). Through that, it shows the attitude governors have toward the people they govern. Governmentality represents the human side of an otherwise more structure-oriented governance, just as leadership does in the realm of management. For example, while governance provides a particular project management methodology in an organization, it is governmentality that regulates how the use of this methodology is enforced. Together the two complementary concepts of governance and governmentality shape, but do not determine the actions of individuals in projects (Clegg et al., 2002).

The present study investigates the range of governance and governmentality approaches in organizations of different size, industry and level of projectification. Existing research has shown that governance approaches vary by context. These studies focused mainly on structural context variables at the project level, like specific project types or sizes (e.g. the governance framework for NASA in Shenhar et al., 2005), but not at the organizational level and the extent organizations are projectified, that is, the extent projects and project management are used as organizing principles in organizations (Midler, 1995). Accordingly, no research could be found on the interrelationship between 'projectification' and governance and governmentality approaches in organizations. However, we assume that the level of projectification is an important context variable for the understanding and development of governance structures, as organizations with little projectification will most likely be less concerned with (later described) governance dimensions like sovereignty of projects, number of institutions for the governance of projects etc. and more concerned with process and operational efficiency. Hence, we propose projectification of the organization as an important context variable for a framework of governance. The importance of projectification for governance approaches stems from corporate reality, which is rarely purely project-oriented or purely process-oriented, but most often uses a mix of different expressions of projectification in the different departments and business units. To that end, the paper addresses the following research question:

What are the underlying dimensions and scales for the concepts of governance and governmentality, with projectification as a context variable in a framework for governance in the realm of projects?

The unit of analysis is the organization. The study takes an epistemological stance of Critical Realism (described in Section 3) and uses eight in-depth case studies across two geographies, with four companies of comparable size and industry in both China and Scandinavia, to identify the widest possible range of governance approaches. The aim is to develop an assessment

tool that helps profiling governance and governmentality approaches of organizations.

We take the theoretical lens of agency theory and stewardship theory as two complementary perspectives toward governance. The former is often associated with control as the dominant governance mechanism as it assumes a 'homo economicus' attitude of actors with utility maximizing behavior by both the governor as principal (typically in form of a project sponsor) and the project manager as agent (Jensen and Meckling, 1994; Müller and Turner, 2005). Their relationship is characterized by information imbalance, which may entice utility maximizing behavior by the agent, unwanted by the principal. On the contrary, stewardship theory refers mainly to trust-based governance mechanisms, where principals assume pro-organizational, collectivistic behavior by the agent, thus project managers aligning their personal goals with those of the sponsoring organization. They prioritize the long term gains of the collaboration over the short term gains which are of issue in agency theory (Davis et al., 1997). Through their complementarity, the two theoretical perspectives cover a wide range of scales in the governance framework developed herein. The complementarity of these two theoretical lenses was proven as suitable in the context of projects through earlier studies by Müller et al. (2016) on the enablers for governance of projects.

The paper extends existing research, which merely identified the specific governance approaches for particular project types, by integrating governance and governmentality, with projectification as a context variable into one organizational framework for governance. Through that, it adds a relativistic perspective to a predominantly normative body of literature, which provides new perspectives for academics and theory development. Practitioners benefit from the results through a visualization of the range of possible governance approaches. This allows practicing managers to learn about their own approaches as well as to test and identify new approaches for the benefit of their project and organizational results.

The next section of the paper reviews relevant literature to identify the knowledge gap and describe the theoretical perspective. This is followed by sections on methodology, data collection, analysis and results. The paper ends with a conclusion and an answer to the research question.

2. Literature review

This section reviews the relevant literature on project governance, governmentality and projectification, and ends with the identification of a knowledge gap and the theoretical perspective taken for this study.

2.1. Governance in the realm of projects

Independent of its particular level in the organization, governance provides the approaches, authorities, accountabilities and processes to define the objectives of organizations/projects, provide the means to achieve those objectives, and control progress. (OECD, 2004; Turner, 2009). The scope is widest at the corporate level and subsequently narrows down

by functional organizations, groups of projects and individual projects. In its entirety, governance constitutes the overall framework for management decisions in an organization.

Empirical research on project related governance at the organizational level continues to grow (Biesenthal and Wilden, 2014). Of particular relevance for the present study is the stream on governance approaches in different industries or project types, which aims for understanding the idiosyncrasies of these approaches. Examples include studies on multi-project governance (e.g. Elonen and Artto, 2003; Müller et al., 2008; Too and Weaver, 2014), NASA projects (Shenhar et al., 2005), construction projects (Pryke, 2005; Winch, 2001), public projects (Klakegg et al., 2008), not-for-profit projects (Renz, 2007), or open source community development projects (O'Mahony and Ferraro, 2007). These studies showed a large variety in governance structures across the different project types. Examples include the suggestion for authoritarian and more process oriented approaches in large public projects in order to enforce profitability and plan adherence (Klakegg et al., 2008). This is contrary to the neo-liberal approaches in open source development projects, where people engage due to the congruency of the project's ideology with their own worldview (Müller et al., 2015; O'Mahony and Ferraro, 2007). To that end the studies provide an interesting 'patchwork' of different approaches, but do not join the findings into a wider framework which identifies their commonalities and differences across approaches. This will be addressed in the present paper.

To that end, we lift the perspective from the "nuts and bolts" of governance structures, as reported in the studies mentioned above, to the generic governance concepts addressed in the wider governance literature. We focus hereby on those concepts of governance that are established at the national or corporate level and reach through to the governance of projects. These are sovereignty, governance mechanisms, and governance institutions (Dean, 2010).

Sovereignty—one of the most basic tenets of governance is sovereignty, that is, the supreme power or authority in governance. Originally describing the rights for autonomy, mutual recognition and control of the member states in the "Peace of Westphalia" in 1648 (Krasner, 2001), it is nowadays often defined as internal control and external autonomy. In more practical terms it refers to authority, "the right to rule over a delimited territory and the population residing within it" (Ayoob, 2002, p. 82). By transcending this concept into the realm of projects we address sovereignty of individual projects as agents to bring about change (in the sense of Turner and Müller, 2003). Hence, the autonomy of standalone projects, and mutual recognition of projects within the organization, as well as mutual control through resource sharing, at governance levels such as program and portfolio management. Through this, the concept relates partly to the literature on project autonomy (e.g. Gemünden et al., 2005), but is broader in scope as it includes mutual recognition and external control.

We build and extend the recent work by Müller et al. (2016) who identified sovereignty of projects as a success factor for both the governance of project-based parts of organizations and the acceptance of governance structures by project managers.

We do that by looking at the totality of the role that the project manager is granted by the governance system. For that, we distinguish between the roles of employee, manager and entrepreneur. Employee roles refer to the fulfillment of tasks in a merely prescribed manner, such as in projects governed by the need for strong process compliance. Manager roles refer to those with some level of decision authority, in expectation of a merely risk averse behavior (Amihud and Lev, 1981), applying professional and predictable decisions making heuristics (Busenitz and Barney, 1997). The entrepreneur role relates to a wider scope of tolerated behavior, including risk taking behavior and rugged individuals (Begley and Boyd, 1987; McGrath et al., 1992), someone who is responsible for the project in its entirety as a business and free to decide on behalf of the project as long as it stays within the limitations set by the steering group or other governing bodies. Entrepreneurial roles may include autonomous decisions on which supplier to contract; negotiate resource priority with portfolio management etc. In summary, we approximate sovereignty at the level of project manager as the representative of the project and the related internal control and external autonomy granted to this role by the governance system.

2.1.1. Governance mechanisms

Many of the most influential publications refer to governance as a control function with the aim of balancing organizations' economic and social objectives and the individual and communal objectives. Examples include the Cadbury (1992) report or popular textbooks, like those by Larcker and Tayan (2011). Understanding of governance as mainly a control function is indicative of an underlying agency perspective, which aims to reduce the risk of hazards through formal control mechanism (Williamson, 1991), such as through process compliance, or "behavior control" as Ouchi (1980) termed it.

A parallel stream of literature has argued for trust and relationships as complementary governance mechanisms to control (Poppo and Zenger, 2002). However, the level of complementarity is still debated (Hoetker and Mellewigt, 2009). The Organization for Economic Co-operation and Development (OECD) defines governance as both a control function and a relationship between the managers and the shareholders of an organization (OECD, 2004). With relationships necessarily being linked to trust, albeit at varying levels, OECD implies an irreducibility of governance mechanisms to neither trust nor control alone. Hence, trust and control are not mutually exclusive, but are in a complex and non-linear relationship (Clases et al., 2003; Pinto et al., 2009). Trust as a governance mechanism is indicative of a stewardship perspective (Davis et al., 1997), which assumes a pro-organizational and collectivistic attitude of actors in their desire to accomplish the mutually accepted goals. For the purpose of this paper, we follow the OECD perspective and assume that in a given project both control and trust are present, but one will dominate as a governance mechanism. Hence, we adopt Poppo and Zenger's perspective and see control and trust as the endpoints of a continuum, with projects and their governing

organizations falling on either one side of the model or the other.

2.1.2. Institutions

This dimension of governance refers to the number of organizational institutions (or entities) involved in project governance. These include, but are not limited to, project management offices (PMOs) in their role of governing project management in an organization (e.g. Aubry et al., 2012), steering groups, program and portfolio management, or external governance bodies, such as national or industry standards etc., which have a bearing on the governance of the projects in an organization. The number of institutions is indicative of the complexity in governance, because of the need to reconcile different governance approaches at the project level and coordinate their activities. Moreover, every additional governance institution poses a further agency problem to the project, stemming from the need to agree and maintain performance that is in line with the terms of reference under which each of those institutions engage (Dixit, 2009). Examples include the pharmaceutical industry, where a number of governance bodies, internal and external to the organization, are to be synchronized for the overall governance of projects. In the realm of project governance Aubry et al. (2012) showed how several hundred PMOs are governed within larger organizations using network governance approaches and unit specific mission statements for synchronization. To that end, the number of institutions is indicative of the efforts in governing governance. With project governance mainly being executed by a limited number of institutions we use a scale of low (only one institution, e.g. a steering committee), medium (a further one or two), or high (more than three).

2.2. Governmentality

Governance is executed at different layers, such as individual, family and state (Foucault, 1991), or its organizational equivalent of project, program and boardroom in organizations (Turner, 1999). The link between the different governance layers is governmentality, which ensures a cohesive organization-wide approach. Foucault (1991) describes governmentality as the essential continuity of one layer with the other. Thus governance of projects should not be discussed without governmentality as its integrating mechanism (Müller et al., 2014a).

Governmentality (a combination of the words governance and mentality) describes what governors think about governing, its different rationalities or mentalities (Dean, 2010). The term was introduced by the French semiologist Roland Barthes in 1957, describing the ways governments present themselves to the public and the signals that stem from that (Barthes, 2013). Twenty years later the French philosopher Michel Foucault started to use the term in his studies on power in society and made it a popular subject (e.g. Foucault, 1991). Governmentality, in its original sense is a wide subject that spans all possible mentalities of governors or governance institutions, whereas Foucault's use of the term is limited to a power

perspective. The present study uses the concept in its original, wider sense.

The general management literature distinguishes between three approaches to governmentality: authoritarian, liberal and neo-liberal (e.g. Dean, 2010). These approaches represent three different rationalities. Authoritarian approaches indicate a rationality of reconcilability and totality of the various governance principles (Burchell, 1991), done through centralized decision making, paired with giving clear direction in organizations with significant power distance (Dean, 2010). Authoritarian governmentality "seek[s] to operate through obedient rather than free subjects, or, at a minimum, endeavor to neutralize any opposition to authority" (Dean, 2010, p. 155). Liberal approaches indicate a recognition of the heterogeneity and incompatibility of the different governance principles in a society or organization (Burchell, 1991), which is solved through decision making based on economic principles and a general market mindedness (Dean, 2010). Neo-liberal approaches address the collective interests among people and the consent which leads them to voluntarily obey the contextual frameworks, which shape, but do not necessarily determine people's behaviors (Clegg et al., 2002; Clegg, 1994). Neo-liberal approaches are indicative of a social rationality where individuals are not directly "steered" by their supervisors (e.g. state government), but through subtle forces within the society they live in. Thus, neo-liberal governmentality is less concerned with focusing on the individual in order to normalize their behaviors than to focus on their societal context to cultivate and optimize differences for the benefit of the governed system (Lemke, 2001).

These approaches are also found in the realm of projects:

- Authoritarian governmentality is often expressed in enforcing process compliance and rigid governance structures, such as in major public investment projects (Klakegg and Haavaldsen, 2011; Miller and Hobbs, 2005)
- Liberal governmentality, emphasizes outcome control within clearly defined, but when needed flexible governance structures, such as in customer delivery projects (Dinsmore and Rocha, 2012)
- Neo-liberal approaches, which aim for team members' congruency of values and ideologies with that of the project in order to foster self-control within rudimentary governance structures, such as in community-governed open source development projects (Franck and Jungwirth, 2003)

These three distinct dimensions will be used in the present paper for the assessment of the governmentality approach.

2.3. Projectification

The term *projectification* was coined by Christophe Midler when he described the organizational transition of the automobile manufacturer Renault from a bureaucratic, functional organization in the 1960s to a project-driven organization in the 1990s (Midler, 1995). He identified four phases in this transition, where Renault i) started as a functional organization

with informal project coordination, which then ii) established centralized project coordination and project coordinator roles, which was followed by iii) fostering the establishment of project management structures through empowerment and autonomy of project managers, leading to iv) a transformation of organizational processes, practices, incentive systems etc. into a balance between functional and project work. The process shows that projectification goes beyond changes in organization structures and management processes. It is a fundamental organizational transformation, where projects transcend from being a tool to implement organizational strategies to being an element of the organizational strategies (Aubry et al., 2012).

Projectification adds temporary organizations to existing permanent organizations, which are governed through certain governance institutions (Pitsis et al., 2014). The two organizational forms must fit together and serve the strategy of the organization. Hence, the permanent organization needs to carefully design the context for the temporary organizations, for example through appropriate project governance institutions and their approaches to governance and governmentality (Müller et al., 2014a).

Dimensions to assess projectification at the organizational level are broad in scope as they encompass a variety of perspectives toward an organization. Based on Midler (1995, 2015) we use the following dimensions in the present study, to assess projectification:

- Status of project management in the organization: the importance associated with project management in the organization.
- Career system for project managers: the definition and implementation of a career path and its supporting elements (e.g. training) in an organization
- *Projects as a business principle*: the relationships an organization has with its partners and/or customers. Are the relations based on joint projects, or merely handled as operations (such as outsourced services)?
- Percentage of business done in projects: the proportion of an organization's business based on projects
- Project mindset and culture: when talking about their work, do employees refer to the projects they work in or the company they work for?

These dimensions were used in the interviews to identify a low, medium or high level of projectification in the organizations we interviewed, in order to identify the context of the governance and governmentality approaches we identified.

The above literature review takes concepts of the *wider* governance and governmentality literature into the realm of governance of projects. It shows the underlying dimensions for assessing these concepts to profile organizations' project related governance and governmentality approaches and adds projectification as a context variable. The review indicates a gap in terms of an integrated framework which provides an

overview or helps profiling governance and governmentality in organizations. This study will address this gap.

2.4. Agency and stewardship theory as theoretical lenses

More than one theoretical perspective is required to span the wide range of possible approaches to governance and governmentality. We therefore adapt two complementary theoretical lenses, which are agency theory (Jensen and Meckling, 1976) and stewardship theory (Davis et al., 1997). Both theories relate to the behavior of individuals and their dyadic relationships with either their principal, agent or steward (Müller, 2009) These theories qualify more for the present study than transaction cost economics (Williamson, 1985), which takes a more institutional perspective.

Agency theory is based on Adam Smith's (1776) principle that managers cannot be expected to watch over their governor's money with the same anxious vigilance with which they watch over their own. Therefore the agency theory takes an economic perspective and defines the relationship between a principal (e.g. a project governor, such as a sponsor) and an agent (e.g. a project manager) as one in which the former engages the latter to perform some service on his or her behalf. This includes the delegation of some decision-making authority to the agent. While performing the task, the agent has typically more information about the task than the principal does. This leads to an information imbalance between the parties, which might be used by the agent to maximize his or her own utility. If both parties are utility maximizers, then a potential conflict of interest arises because there is good reason for the principal to assume that the agent will not always act in the principal's interest (Jensen and Meckling, 1976). Approaches to avoid this conflict include contracts between the parties that incentivize the agent for conforming behavior, as well as increased control structures to monitor agent behavior. Both are associated with increased costs. Governors taking an agency perspective assume an individualistic, opportunistic and self-serving behavior of their managers (Jensen and Meckling, 1994), which they typically govern through control-based governance mechanisms (Müller and Turner, 2005).

Stewardship theory, on the contrary, takes a psychological and sociological perspective, and defines situations in which stewards (managers) align their objectives with those of their principals (governors), because they assume that pro-organizational, collectivistic behavior yields higher utility than individual, self-serving behavior. Governors taking a stewardship perspective assume that the behavior of stewards is collective because they seek to attain the objectives of the organization, and govern this through merely trust-based governance mechanisms (Davis et al., 1997).

The relationship between the two theories can be seen as the polar endpoints of a continuum, with the particular governance approach of an organization falling somewhere on this continuum, indicating a generally more agency or more stewardship oriented governance structure, which carries expectations of more control or more trust-based governance mechanisms

(Hernandez, 2012). This theoretical lens is used in the present study.

3. Methodology

We followed Saunders et al. (2007) process for research design, which requires to subsequently decide on underlying philosophical stance, research approach, strategy, methodological choice, time horizons, and techniques and procedure. In doing that we choose Critical Realism (Archer et al., 1998; Bhaskar, 1975) as philosophical perspective. Critical Realism assumes that a mind independent reality exists and theory possibly captures partial aspects of it. Its underlying three layers of mechanism, events and experiences link an objective reality with the subjectivity of individuals in a given situation (Alvesson and Sköldberg, 2009; Bechara and Van de Ven, 2011), where mechanisms give rise to events, which in turn give raise to individuals experiences. It provides for a robust philosophical framework which allows to combine underlying objective facts (mechanisms) with the situations which individuals are exposed to (events) and their subjective experiences through that (experiences). Easton (2010) recommends this stance as especially suitable for case study research, a strategy also used in the present study. Abduction in the sense of Alvesson and Sköldberg (2009) was chosen as our research approach. This allows going back and forth between existing theoretical frameworks (theories), empirical data collected during the study, and the researchers' own experiences for the interpretation of phenomena. A multiple case study design was chosen as research strategy. This allows for in-depth analysis, together with a limited generalizability, which is appropriate for the identification of phenomena in their real life context (Yin, 2009). In line with that strategy a cross-sectional, qualitative, mono-method was chosen.

3.1. Sampling

Maximum variation sampling was used to achieve the widest possible number of dimensions and their scope (Teddlie and Yu, 2007). Eight case companies of four different sizes and industries were chosen in geographies as different as Scandinavia and China. To categorize the size we followed the EU Commission recommendation for the definition of small and medium size enterprises (European Union, 2003), which defines companies with up to 50 employees as small, and up to 250 employees as medium. Being aware of the structural differences between Scandinavia and China, we added two further categories for large enterprises with up to 10,000 employees and very large enterprises with more than 10,000 employees. This sampling approach allowed for capturing the widest range of approaches to governance and governmentality across size and industries and added a cultural difference aspect by sampling organizations of similar size and industry across the two geographies. The two small consulting organizations were both providing training services in project management to industry clients. The Chinese organization had in addition a website for information sharing about news and upcoming events in project management. The medium size organizations were both IT organizations, with the Scandinavian one developing and marketing complete systems, while the Chinese provided outsourcing services for their clients. The large companies were both from the construction industry. The Chinese organization specialized in building factories, and the Scandinavian in building shopping malls and private houses. The two very large organizations were both from the pharmaceutical industry, with the Chinese organization specializing in traditional Chinese medicine, whereas the Scandinavian specialized in a more mainstream drug development and production. Details on the characteristics of these organizations, together with the number and roles of the interviewees, are shown in Table 1 in the Appendix.

A total of 39 semi-structured interviews were held with senior managers and employees. The average interview lasted approximately 60–90 min. Theoretical sampling was used within each case study, allowing for identification of interviewees with the best possible knowledge of the subject and continuation of interviews until theoretical saturation was reached.

Interview questions addressed the areas of:

- a. General information: the company, the interviewee role in the organization and in governance
- b. Projectification: the extent project management, as a way of doing business, pervades the organization (both economically as well as in the mind of the people), the five dimensions of projectification listed above, and the pros and cons of this way of organizing
- c. Governance and governmentality: shareholder or stakeholder orientation of the firm, control by process compliance or outcome, degrees of freedom for managers to decide how to achieve their objectives, guiding principles in governance, internal and external monitoring, governance structures, methods, processes, institutions, scope of authority and expected role of project manager, career system, including certification, career path etc.

Interviews were held face-to-face and in groups of two researchers, where one researcher took notes, the other conducted the dialog with the interviewee. One company (Sweden large) was interviewed by one researcher only. All interviews were tape recorded for subsequent analysis and verification. All interviewees were informed about the scope of study, anonymity of the interviewee, their rights to abandon the interview at any time, and the non-traceability of research reporting to their organization or themselves.

3.2. Validity and reliability

Validity was ensured using suggestions from Yin (2009). Construct validity was addressed by asking for multiple sources of evidence, furthermore through discussion among the researchers to reach consensus about constructs. Internal validity was addressed through explanation building, which is further described in the analysis section below. External validity was addressed through replication logic with eight case studies. Reliability was approached by following Yin's (2009) suggestion for a case study protocol, which was developed upfront and

included the study description, its scope, aims, and interview questions. It guided the researchers during the case selection, interviews and analysis.

A non-traditional, reflexive analysis technique, known as mystery construction, developed by Alvesson and colleagues was used (Alvesson and Kärreman, 2007; Alvesson and Sköldberg, 2009). This method integrates the socially constructed empirical data from interviews with existing theoretical frameworks, along with the researchers' pre-understandings and vocabularies. The method is designed for the development of theory about unknown or little understood phenomena. It is executed in two steps. The first step identifies the mystery (i.e. unexplained empirical phenomenon), after which the researchers reflect on it using existing theoretical perspectives and their own existing background knowledge and experience. Step two aims for solving the mystery through reflexive reasoning, where reflection is the combination of a) a first reflection of each individual researcher on the mystery in light of existing theoretical frameworks, and b) then a joint reflection of all researchers on the individual first reflections (Alvesson and Kärreman, 2007; Alvesson and Sköldberg, 2009). Doing that, subjectivity "should be reflexively and self-critically cultivated and mobilized, reinforcing the ability to discover interesting research issues" (Alvesson and Kärreman, 2007, p. 1268). New, jointly developed theory emerges through the collaboration of multiple researchers (Alvesson and Kärreman, 2007). The process follows Foucault's (1972) four milestones for discourses: a) statements about emerging pattern (positivity), b) verification of the statements for knowledge development (epistemologization), c) assessing the knowledge for scientific validity (scientificity), and d) formulation of a theory (formalization). The technique became popular in project related studies in recent years (e.g. Jacobsson and Söderholm, 2011). A detailed description and application in a project related context can be found in Müller et al. (2013).

4. Analysis and results

The reflexive approach for analysis of interview data does not support the listing of quotations from interviewees, as all

interview data were first interpreted as a discourse in its particular context and then in the context of the wider study (following Alvesson and Karreman, 2000). This approach, however, helped in validating the measurement dimensions for governmentality, governance and projectification as listed in the literature review, and to identify one additional dimension of governmentality, which was not addressed yet in existing literature. Among the many ways to group the analysis findings (e.g. by industry, size, geography etc) we chose in the following to show profiles by size and industry of the organizations and their geographies. Other combinations are possible, but would go beyond the scope of this article. Figs. 1 to 4 show the main concepts (governmentality, governance, and projectification) on the left, and the respective dimensions next to it. The assessment results are shown along the scales within the respective boxes.

4.1. Dimensions of governmentality

The analysis validated the three dimensions of governmentality, which are, authoritative, liberal, and neo-liberal, as described above. All three of them were found in the sample. To that end the researchers found support for the dimension and the chosen scale in their existing theoretical framework (as developed in the literature review). Step 2 was then used to reflect on the appropriateness of the scale and the general "fit" of a dimension to the overall concept. The latter point led to a number of rival-opinions, such as the one described below.

By analyzing the interview data, a new dimension was identified, which we named "precept". This refers to the dominant concept or theme that governors (such as project owners) in their governmentality task refer to. It was identified by the researchers reflecting on the question "what is the essence of an interviewee's description of the governmentality in his or her project?". We identified three different themes (which we later named precepts) because of the frequency with which they were referred to and the importance that was associated with them: organizational values, process compliance, and project well-being. In each organization one of the three took a dominating role in the description of governance

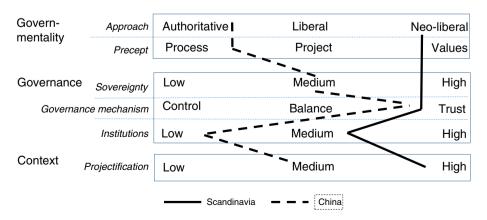


Fig. 1. Profiles of small consulting organizations.

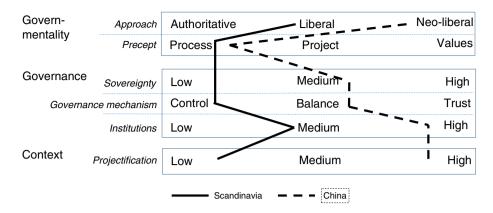


Fig. 2. Profiles of medium sized IT organizations.

and governmentality, and interviewees centered their description around it. Repetitive listening to the interview recordings showed that these precepts manifest themselves as the point of reference when governors present themselves and their governance to those they govern. As such precepts are independent from the governance approach.

A value precept dominates when governmentality refers mainly to the organizational values, and to a lesser extend to processes or results. An example is the small consulting company in Sweden with four organizational core values exceptional performance, insight, individual well-being, and participation - which dominates over the other two precepts, as was indicated by all interviewees. The CEO stated that "We want to be the company of choice for the clients and employees. We need a strong relationship with our employees, and they need to be able to rely on us. Well-being is about treating each other in a sensible way and setting up a workplace that is the best possible workplace for our employees. And then there is outstanding performance, which kind of balances well-being. So we want to feel like this [well-being], while performing like that [outstanding performance]". Decision making in the organization is driven by these values, such as that reported by a lead consultant, who said that the decision of taking on a new consulting engagement is made by the consultant on the basis of his or her well-being in executing the task. If the consultant does not feel well in taking on an assignment he or she is free to turn it down. Management will not intervene in this decision.

A process precept is found in the medium size organization in Sweden, where management refers to the organizational processes for deriving at decisions and fostering collaboration between the departments. Here the head of the PMO said "We realized that we need something, because we were a bunch of project managers who were [each] working in their own ways, doing the best we can. We realized if we are going to grow we need to work in the same way, so that we can help each other and be professional to our customers, and make sure we deliver with quality".

Project well-being is the third precept. Here the project and its viability, success etc. are at the center of governmentality, such as in the large pharmaceutical companies. Here the point of reference for governors interacting with project managers was the project in its wider sense (including stakeholders, markets, safety etc.), thus the precept that droves the decision

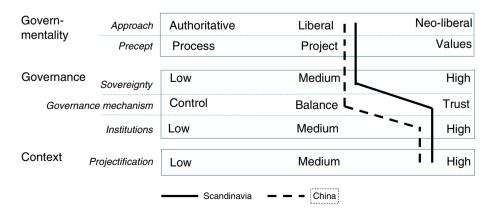


Fig. 3. Profiles of large construction organizations.

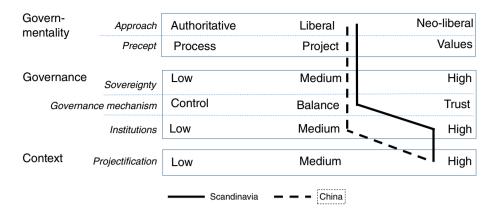


Fig. 4. Profiles of very large pharmaceutical organizations.

was the success of the project per se (including the success of its outcome), which was prioritized over process compliance and organizational values.

Examples for step 2 activities in the analysis were reflections and discussions on the fit of precepts to governance or governmentality. Rival opinions included a fit to governance, as it refers to an objective, while proponents of governmentality referred to the mental nature of the precepts. Finally, the researchers agreed that precepts are mainly an expression of the governor's attitude toward those that are governed, where organizational values (as described above) are indicative of a "human" attitude, whereas process compliance mirrors more of a "robot" attitude toward those who are governed. A project precept balances both and frames it in light of the market for both the organization and the project outcome.

4.2. Dimensions of governance

The abductive approach to analysis validated the theoretically derived dimensions of sovereignty, governance mechanism, governance institutions and their scales. A scale for sovereignty was developed along the lines of the role of the project manager (as representative of the project) as granted by the governance system. In line with the literature review above, we differentiated between: low sovereignty, which grants the project manager an "employee" like role, thus very little autonomy and scope to act; medium sovereignty, a role of a manager, with limited, rational, and predictable behavior; and high sovereignty, where the project manager is granted an entrepreneur like role, allowing for high autonomy, freedom in approaches, decisions, and behavior.

The scale for the dimension of governance mechanism, as found in the literature, was validated as being control, trust or a relative balance of both.

The number of governance institutions as a representative for complexity in governance implementation was also found in the data. The scale developed in the literature review was confirmed through the data as being appropriate with low (1 institution), medium (2-3) and high (4+).

4.3. Dimension for projectification

We consolidated the detail level information from the five dimensions listed above into a scale of low, medium and high projectification to provide an indicator of the organizational context of governance and governmentality. Through that we followed Midler's (1995) stages of projectification, from very little in terms of business as projects and culture of "project thinking" (low), to a transition stage from process to project orientation (medium), and to clearly project-oriented and project-dependent organizations (high).

In the following we provide examples for the use of the framework to develop organization specific profiles.

Fig. 1 shows the results for small consulting organizations. The Scandinavian organization uses a neo-liberal and value-based governmentality, whereas the Chinese organization prefers an authoritative approach, paired with process compliance. Governance differs with sovereignty being high in Scandinavia and medium in China, while trust dominates as a governance mechanism in both organizations, with a medium level of governance institutions in Scandinavia and a low level in China. Projectification is high in the Scandinavian, and medium in the Chinese organization. Trust is the only governance mechanism shared across Scandinavia and China in these small consulting companies.

Fig. 2 shows the profile for the medium size information technology (IT) organizations. Approaches to governmentality differ with the Scandinavian organization showing a liberal approach, and the Chinese organization a neo-liberal approach to governmentality. However, both organizations identify the process as the governmentality precept and thus as the common denominator for decision making and expected behavior. This indicates a common precept, with different means to accomplish it. Larger differences are also found in governance, with low sovereignty, control as governance mechanism, and a medium number of governance institutions in the Scandinavian organization, compared with medium levels of sovereignty, a balance between trust and control as governance mechanism and a medium number of governance

institutions in the Chinese organization. Projectification varies by being low in the Scandinavian and high in the Chinese organization.

Fig. 3 shows the profile for large construction organizations. It reveals lots of similarity across the two geographies. Differences are found in the governance mechanism where the Scandinavian organization uses merely trust while the Chinese organization uses a balance of trust and control. Both organizations use a liberal approach to governmentality and project well-being as precept, and show medium levels of sovereignty for their projects, as well as a high number of governance institutions and levels of projectification.

Fig. 4 shows the profiles for the very large organizations in the pharmaceutical industry. Again with lots of congruency. Both organizations use liberal approaches and project well-being as precept for governmentality. Sovereignty is medium and governance mechanisms are at a balance. Differences are found in the Chinese organization using less governance institutions than the Scandinavian organization. Both organizations use a high level of projectification.

5. Discussion and conclusion

This study aimed for the development of a framework and profiling tool for the governance and governmentality of projects, within different levels of projectification. In an attempt not to re-invent the wheel we built mainly on the large body of literature in general management and national and corporate governance, and to a minor extend project management, to develop dimensions and scales for governance, governmentality and projectification. Eight in-depth case studies were held, with four in China and four in Scandinavia, in small, medium, large and very large organizations in the consulting, IT, construction and pharmaceutical industry respectively. We conducted 39 interviews and used a technique known as "mystery construction" to analyze the data (Alvesson and Kärreman, 2007), validated existing dimensions and scales for governmentality, governance and projectification and developed new ones. As one of the first studies of its kind, this research spans from very small to very large organizations in an attempt to provide an overview of the range of operationalizations of these concepts.

We can now answer the research question: What are the underlying dimensions and scales for the concepts of governance and governmentality, with projectification as a context variable in a framework for governance in the realm of projects?

Through within-case and cross-case analyses we found support for the three concepts of governance, governmentality and projectification and their proposed dimensions. The empirical data showed that the scales developed for the dimensions are used in their entire scope.

The results show that governmentality can be broken down into two dimensions: a) governmentality approach, which is frequently used in the general management literature and its scale ranges from authoritarian, via liberal to neo-liberal approaches, and b) governmentality precepts, which represent the main theme that the approach to governmentality refers to. Main themes identified

are either organizational processes, organizational values, or the well-being of the project and/or its outcome.

Governance related sub-dimensions where found in c) sovereignty, a popular dimension of governance often found in the general management literature, which depicts the levels of external autonomy and internal control granted to projects by the governance system, d) governance mechanisms, as being predominantly control or trust oriented, or a balance of both, and e) the number of governance institutions, as an indicator of the complexity of governance implementation and external control of the project.

Projectification was operationalized along the dimensions identified from Midler's classic work (1995) and recent developments (2015), and operationalized into a scale of low, medium and high levels of projectification.

The profiling of the organizations shows heterogeneity in approaches in smaller organizations, which becomes more homogenous with growing organizational size. However, this finding is indicative only, as the sample size and composition do not allow for generalization of the results. To that end the profiles shown in Figs. 1 to 4 are exemplary for the use of the profiling tool, and not generalizable to any population except the companies themselves.

However, generalizations can be made to theories (in the sense of Yin, 2009), with the dimensions and their scales being developed from existing theories and their empirical support through the case studies allowing to generalize to existing theory.

5.1. Theoretical implications and further research

We used agency and stewardship theory as complementary theoretical lenses in this study. In line with earlier studies (e.g. Müller and Lecoeuvre, 2014), we associate the agency perspective with low sovereignty and mainly control oriented governance, as well as authoritative and process oriented governmentality structures. Hence, mainly the left side of Figs. 1 to 4. We associated a stewardship perspective with higher levels of sovereignty and more trustful governance, as well as (neo-)liberal and values-based governmentality approaches. This is predominantly the right side of the figures.

A newly identified theoretical dimension of governmentality precept reflects the general theme that governmentality refers to, a prioritized principle, which was either following the process, respecting organizational values, or acting in the best interest of the project and its outcome. Earlier studies on governmentality did not describe precept as a separate dimension, but included it in its overall description of governmentality. For example, Clegg et al. (2002, p. 325) described precepts when they reported how organizational values of on-time delivery and alliance-culture worked as the "a specific set of principles" for governmentality in building the infrastructure for Sydney Olympics. Staff briefing for these precepts happened through training, "walk the talk" by management, and constant formal and informal reference to it, such as through contracts or daily information in the hallways of the construction site. To that end, the precept provides for a

common denominator, a theme, in the interaction, which gives direction and provides for meaning in task execution. It complements the governmentality approach of authoritative. liberal, or neo-liberal (Dean, 2010) which "sets the tone" (Lemke, 2007). Both together provide for the way and the contents in the communication among and between governors and a governed society. A precept of process orientation is hereby indicative of an agency attitude of governors, whereas a value orientation indicates a stewardship orientation, and a project orientation indicates the balance of both. That opens new pathways for further research, like the nature of precepts and their association with different forms of governmentality, and their impact on project governance, project managers and project results. Further investigations into the nature of the link between precepts and agency and/or stewardship theory are needed, in order to extend the existing notions of both theories through more indirect measures in governing.

Even though the results of the differences in profiles are not generalizable, they may serve as starting points for further research. Such is the indication that management takes a merely agency perspective in organizations with low levels of projectification, compared to a merely stewardship perspective in organizations with medium to high levels of projectification or that smaller organizations tend to polarize at either agency or stewardship perspectives, while the larger organizations balance both perspectives in both their governance approaches with medium levels of sovereignty and a control-trust balance, together with liberal and project centered governmentality approaches. The latter is supported by Müller et al. (2016), who found that medium size organizations often surrender the governance of projects by subordinating the projects tasks to the operational processes in the organization. This is done to keep the transaction costs low, because projects can incur higher transaction costs than operations and is therefore especially of interest for organizations with projects of a repetitive nature.

The variance in approaches, as shown herein questions the validity of general purpose governance models and indicates the need for more diversified approaches to the governance of projects, taking into account the above dimensions and scales, as well as the respective agency or stewardship perspectives in order to derive at a contingency theory for project governance. Future research could build on the findings of the present study, for example, through larger sample sizes and more quantitative studies, identifying particular patterns in existing practice together with their enabling context characteristics.

5.2. Managerial implications

Notwithstanding the individual profiles shown above and the learning that can be drawn from them, the framework and visualization tool has several implications for practicing managers. For example, using the framework to assess organizational approaches to governance and governmentality at different levels of projectification will provide for a first awareness of the approaches in the organization. Doing this across several organizations and/or projects will help identify context contingencies and "good practices" for particular project types, sizes or cultures. Moreover, capturing the profiles of successful projects and comparing them with less successful projects may provide for new insights for the setup of successful governance structures in different contexts.

This has also implications for training, as project managers in more agency driven governance structures are exposed to different expectations by their managers (see Müller and Lecoeuvre, 2014) and face different ethical issues in projects, than those in governance structures built from a stewardship perspective (see Müller et al., 2014b). Here training should prepare the former for higher levels of control and associated ethical issues in transparency and reporting, whereas the latter should prepare managers for more trustful relationships with the emergence of optimization issues (i.e. the ethical question balancing risks and rewards in projects), as shown in Müller et al. (2014b).

5.3. Strengths, weaknesses and contribution to knowledge

As any study, this research has strengths and weaknesses. On the strengths side is the sampling approach which allowed to identify a wide variety in approaches. This provided a first insight into cultural differences in governance and governmentality and the wide span of approaches that needs to be covered by the intended framework. Another strength lies in the grounding of the framework dimensions and scales in existing literature from general management and corporate governance, and the empirical support found in the data, which contributes to the robustness of the framework. Weaknesses are in the generalizability from eight case studies. While limited generalizability could be claimed because of the replication logic in research design (Yin, 2009), we suggest careful interpretation of the differences in the profiles shown in Figs. 1 to 4. More studies, especially those with larger sample sizes and a wider geographical span are suggested for validation and possible expansion of the findings and subsequent generalizability.

The present study provides a first indication for a framework of governance, governmentality, and projectification, and the visualization of organization specific profiles of the implementation of these concepts. The contribution to knowledge lies in the development of dimensions and scales for the assessment of the three concepts, and its subsequent application to four industries, organizations of different sizes and two continents. To that end, the paper contributes to the emerging discourse on variance in governance approaches, while maintaining the complementarity of governance and governmentality as a representative of corporate reality.

Conflict of interest

The authors declare that there is no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

Appendix A

Case companies and interviews.	erviews.							
	Scandinavia				China			
Case	Sweden small	Sweden medium Norway large	Norway large	Sweden very large	China small	China medium	China large	China very large
Number of employees 10 Sector Co	10 50 Consulting project IT system management developme	50 IT system development	6400 Construction shopping malls and private housing	52,000 Pharmaceutical development and manufacturing	20 Training & Consulting Project management	300 IT software outsourcing, mainly for Japanese car manufacturers	3400 Construction factories	30,000 Pharmaceutical development and manufacturing
Operations	National	Europe	Scandinavia	Global	National	Global	National	Global
Number of interviews 5 Duration of interviews 60–90 min Role of persons CEO, project interviewed managemen consultants	5 60–90 min CEO, project management consultants	6 60–90 min CEO, head of PMO, project managers	3 60–90 min Project managers	5 45–90 min Portfolio manager, former head of PMO, IT project director, project coordinator	6 30–100 min General and vice general managers, head of marketing, manager of training, manager of educational and examination administration, manager of community	4 40–60 min Project manager, manager of development department, director of quality assurance, vice general, manager of the company	5 45–100 min Vice general manager, senior economic manager, project coordinator, project managers	5 60–90 min Directors of PMO and president's office, quality assurance, quality control, production, industrialization

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References

- Alvesson, M., Karreman, D., 2000. Varieties of discourse: on the study of organizations through discourse analysis. Hum. Relat. 53 (9), 1125–1149.
- Alvesson, M., Kärreman, D., 2007. Constructing mystery: empirical matters in theory development. Acad. Manag. Rev. 32 (4), 1265–1281.
- Alvesson, M., Sköldberg, K., 2009. Reflexive Methodology: New Vistas for Oualitative Research. SAGE Publications, London, England.
- Amihud, Y., Lev, B., 1981. Risk reduction as a managerial motive for conglomerate mergers. Bell J. Econ. 12 (2), 602–617.
- Archer, M.S., Bhaskar, R., Collier, A., Lawson, T., Norrie, A., 1998. Critical Realism: Essential Readings. Routledge, London, UK.
- Aubry, M., Müller, R., Glückler, J., 2012. Governance and Communities of PMOs. Project Management Institute, Newtown Square, PA, USA.
- Ayoob, M., 2002. Humanitarian intervention and state sovereignty. Int. J. Hum. Rights 6 (1), 81–102.
- Badewi, A., 2016. The impact of project management (PM) and benefits management (BM) practices on project success: towards developing a project benefits governance framework. Int. J. Proj. Manag. 34 (4), 761–778.
- Barthes, R., 2013. Mythologies. Hill & Wang, New York, NY.
- Bechara, J., Van de Ven, A.H., 2011. Triangulating philosophies of science to understand complex organizational and managerial problems. In: Tsoukas, H., Chia, R. (Eds.), Philosophy and Organization Theory. Emerald Books, Bingly, UK, pp. 312–342.
- Begley, T.M., Boyd, D.P., 1987. Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses. J. Bus. Ventur. 2 (1), 79–93.
- Bhaskar, R., 1975. A Realist Theory of Science. Leeds Books Ltd., Leeds, UK. Biesenthal, C., Wilden, R., 2014. Multi-level project governance: trends and opportunities. Int. J. Proj. Manag. 32 (8), 1291–1308.
- Burchell, G., 1991. Peculiar interests: civil society and governing "the system of natural liberty". In: Burchell, G., Gordon, C., Miller, P. (Eds.), The Foucault Effect. The University of Chicago Press, Chicago, USA, pp. 119–150.
- Busenitz, L.W., Barney, J.B., 1997. Biases and heuristics in strategic decision making: differences between entrepreneurs and managers in large organizations. J. Bus. Ventur. 12 (1), 9–30.
- Cadbury, 1992. The Financial Aspects of Corporate Governance. Gee (a division of Professional Publishing Ltd.), London, UK.
- Clases, C., Bachmann, R., Wehner, T., 2003. Studying Trust in Virtual Organizations. Int. Stud. Manag. Organ. 33 (3), 7–27.
- Clegg, S.R., 1994. Weber and Foucault: social theory for the study of organizations. Organization 1 (1), 149–178.
- Clegg, S.R., Pitsis, T.S., Rura-Polley, T., Marosszeky, M., 2002. Governmentality matters: designing an alliance culture of inter-organizational collaboration for managing projects. Organ. Stud. 23 (3), 317–337.
- Davis, J., Schoorman, F.D., Donaldson, L., 1997. Towards a stewardship theory of management. Acad. Manag. Rev. 22 (1), 20–47.
- Dean, M., 2010. Governmentality: Power and Rule in Modern Society. second ed. SAGE Publications Ltd., London, UK.
- Dinsmore, P.C., Rocha, L., 2012. Enterprise Project Governance. AMACOM, New York, NY, USA.
- Dixit, A., 2009. Governance institutions and economic activity. Am. Econ. Rev. 99 (1), 5–24 (Retrieved from http://www.princeton.edu/~dixitak/home/PresAd_F1.pdf).
- Easton, G., 2010. Critical realism in case study research. Ind. Mark. Manag. 39 (1), 118–128.
- Elonen, S., Artto, K., 2003. Problems in managing internal development projects in multi-project environments. Int. J. Proj. Manag. 21 (6), 395–402.

- European Union, 2003. Commission recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises. Off, J. Eur. Union (Retrieved March 12, 2014, from http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:124:0036:0041:EN:PDF).
- Foucault, M., 1972. The Archeology of Knowledge. Tavistock Publications Limited, London, UK.
- Foucault, M., 1991. Governmentality. In: Burchel, G., Gordon, C., Miller, P. (Eds.), The Foucault Effect. University of Chicago Press, Chicago, USA, pp. 87–104.
- Franck, E., Jungwirth, C., 2003. Reconciling rent-seekers and donators—the governance structure of open source. J. Manag. Gov. 7 (4), 401–421.
- Gemünden, H.G., Salomo, S., Krieger, A., 2005. The influence of project autonomy on project success. Int. J. Proj. Manag. 23 (5), 366–373.
- Hernandez, M., 2012. Toward an understanding of the psychology of stewardship. Acad. Manag. Rev. 37 (2), 172–193.
- Hoetker, G., Mellewigt, T., 2009. Choice and performance of governance mechanisms: matching alliance governance to asset type. Strateg. Manag. J. 30 (10), 1025–1044.
- Jacobsson, M., Söderholm, A., 2011. Breaking out of the straightjacket of project research: in search of contribution. Int. J. Manag. Proj. Bus. 4 (3), 378–388.
- Jensen, M., Meckling, W., 1976. Theory of the firm: managerial behavior, agency costs, and ownership structure. J. Financ. Econ. 3 (4), 305–360.
- Jensen, M.C., Meckling, W.H., 1994. The nature of man. J. Appl. Corp. Finance 7 (2), 4–19.
- Klakegg, O.J., Haavaldsen, T., 2011. Governance of major public investment projects: in pursuit of relevance and sustainability. Int. J. Manag. Proj. Bus. 4 (1), 157–167.
- Klakegg, O., Williams, T., Magnussen, O.M., 2008. Governance frameworks for public project development and estimation. Proj. Manag. J. 39 (1), 27–42.
- Krasner, S.D., 2001. Rethinking the sovereign state model. Rev. Int. Stud. 27 (05), 17–42.
- Larcker, D., Tayan, B., 2011. Corporate Governance Matters. Pearson Education Inc., Upper Saddle River, NJ, USA.
- Lemke, T., 2001. The birth of bio-politics: Michel Foucault's lecture at Collège de France on neo-liberal governmentality. Econ. Soc. 30 (2), 190–207.
- Lemke, T., 2007. An indigestible meal? Foucault, governmentality and state theory. Distinktion Scand. J. Soc. Theory 8 (2), 43–64.
- McGrath, R.G., MacMillan, I.C., Scheinberg, S., 1992. Elitists, risk-takers, and rugged individualists? An exploratory analysis of cultural differences between entrepreneurs and non-entrepreneurs. J. Bus. Ventur. 7 (2), 115–135.
- Midler, C., 1995. "Projectification" of the firm: the Renault case. Scand. J. Manag. 11 (4), 363–375.
- Midler, C., 2015. Dimensions of Projectification (Personal communication, 20 February 2015).
- Miller, R., Hobbs, B., 2005. Governance regimes for large projects. Proj. Manag. J. 36 (3), 42–51.
- Morris, P., 1997. The Management of Projects. Thomas Telford, London, UK. Müller, R., 2009. Project Governance. Gower Publishing, Aldershot, UK.
- Müller, R., Lecoeuvre, L., 2014. Operationalizing governance categories of projects. Int. J. Proj. Manag. 32 (8), 1346–1357.
- Müller, R., Turner, J., 2005. The impact of principal–agent relationship and contract type on communication between project owner and manager. Int. J. Proj. Manag. 23 (5), 398–403.
- Müller, R., Martinsuo, M., Blomquist, T., 2008. Project portfolio control and portfolio management in different contexts. Proj. Manag. J. 39 (3), 28–42.
- Müller, R., Andersen, E.S., Kvalnes, Ø., Shao, J., Sankaran, S., Turner, J.R., Biesenthal, R., Walker, D.H.T., Gudergan, S., 2013. The interrelationship of governance, trust, and ethics in temporary organizations. Proj. Manag. J. 44 (4), 26–44.

- Müller, R., Pemsel, S., Shao, J., 2014a. Organizational enablers for governance and governmentality of projects: a literature review. Int. J. Proj. Manag. 32 (8), 1309–1320.
- Müller, R., Turner, J.R., Andersen, E.S., Shao, J., Kvalnes, Ø., 2014b. Ethics, trust and governance in temporary organizations. Proj. Manag. J. 45 (4), 39–54
- Müller, R., Pemsel, S., Shao, J., 2015. Organizational enablers for project governance and governmentality in project-based organizations. Int. J. Proj. Manag. 33 (4), 839–851.
- Müller, R., Shao, J., Pemsel, S., 2016. Organizational Enablers for Project Governance. Project Management Institute, Newtown Square, PA, USA.
- O'Mahony, S., Ferraro, F., 2007. The emergence of governance in an open source community. Acad. Manag. J. 50 (5), 1079–1106.
- OECD, 2001. Governance in the 21st Century. (Paris, France. Retrieved 15 September 2015 from http://www.oecd.org/futures/17394484.pdf).
- OECD, 2004. OECD Principles of Corporate Governance 2004. OECD Publishing, Paris.
- Ouchi, W.G., 1980. Markets, bureaucracies and clans. Adm. Sci. Q. 25, 129-141.
- Pinto, J.K., Slevin, D.P., English, B., 2009. Trust in projects: an empirical assessment of owner/contractor relationships. Int. J. Proj. Manag. 27 (6), 638, 648
- Pitsis, T.S., Sankaran, S., Gudergan, S., Clegg, S.R., 2014. Governing projects under complexity: theory and practice in project management. Int. J. Proj. Manag. 32 (8), 1285–1290.
- Poppo, L., Zenger, T., 2002. Do formal contracts and relational governance function as substitutes or complements? Strateg. Manag. J. 23 (8), 707–725.
- Pryke, S.D., 2005. Towards a social network theory of project governance. Constr. Manag. Econ. 23 (9), 927–939.
- Renz, P.S., 2007. Project Governance: Implementing Corporate Governance and Business Ethics in Nonprofit Organizations. Physica-Verlag, Heidelberg, Germany
- Saunders, M., Lewis, P., Thornhill, A., 2007. Research Methods for Business Students. Pearson Education Limited, Harlow, England.
- Shenhar, A., Dvir, D., Milosevic, D., Mulenburg, J., Patanakul, P., Reilly, R., Ryan, M., Sage, A., Sauser, B., Srivannabon, S., Stefanovic, J., Thamhain, H., 2005. Toward a NASA-specific project management framework. Eng. Manag. J. 17 (4), 8–16.
- Smith, A., 1776. The wealth of nations. Bibliomania (Retrieved 15 September 2015 from http://www.bibliomania.com/2/1/65/112/frameset.html).
- Teddlie, C., Yu, F., 2007. Mixed methods sampling: a typology with examples. J. Mixed Methods Res. 1 (1), 77–100.
- Too, E.G., Weaver, P., 2014. The management of project management: a conceptual framework for project governance. Int. J. Proj. Manag. 32 (8), 1382–1394.
- Tricker, B., 2012. Corporate Governance: Principles, Policies, and Practices. second ed. Oxford University Press, UK, Oxford, UK.
- Turner, J.R., 1999. Handbook of Project-Based Management: Improving the Process for Achieving Strategic Objectives. McGraw-Hill, UK.
- Turner, J.R., 2009. Governance of project-based management. Handbook of Project-Based Management. McGraw Hill, UK, pp. 309–322.
- Turner, J.R., Müller, R., 2003. On the nature of the project as a temporary organization. Int. J. Proj. Manag. 21 (1), 1–7.
- Williamson, O.E., 1985. The Economic Institutions of Capitalism. The Free Press, New York, USA.
- Williamson, O.E., 1991. Comparative economic organization: the analysis of discrete structural alternatives. Adm. Sci. Q. 36, 269–296.
- Winch, G.M., 2001. Governing the project process: a conceptual framework. Constr. Manag. Econ. 19, 799–808.
- Yin, R.K., 2009. Case Study Research: Design and Methods. fourth ed. SAGE Publications, Thousand Oaks, CA, USA.