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The governance of horizontal leadership in projects

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Abstract

Using the framework of balanced leadership in projects, we explore how horizontal leadership is governed. Previous research in project governance has focused on control and trust as the main mechanisms of governance. We apply this approach to the leadership field and investigate the nature of governance of temporary horizontal leaders in projects through contextual enablers, mechanisms, structures, practices and process. We argue that control and trust unfolds in particular combinations of the above items. Based on a study of different projects in Lithuania, we provide insights and discuss characteristics of trust and control, as exercised in the governance of horizontal leadership.
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1. Introduction

There is no doubt about the significance of leadership in projects (Clarke, 2012a). The concept of leadership has developed intensively over the years, whereby traditional leadership perspectives of assigned leaders (a.k.a. vertical leader) exercising power over team members, were complemented by notions of shared and distributed leadership, where leadership emerges from team members. Most recently the concept of balanced leadership bridged these two streams by identifying dynamic, temporary and alternating transitions between vertical and horizontal leadership (i.e. their balance) for the accomplishment of project results (Müller et al., 2017). Balanced leadership is conceptualized as a cycle of five events, namely nomination, identification of possible horizontal leaders, selection of horizontal leaders, horizontal leadership and its governance, and transition (Müller et al., 2018b).

The present study contributes to the stream of studies that empirically validate the recently published Theory Framework for Balanced Leadership (Müller et al., 2018b) by focusing on event four listed above. This is, when a formally appointed vertical leader (i.e. typically the project manager) temporarily delegates leadership authority to one or more team member(s) and governs this leader during the execution of the leadership task. We refer to this temporary and governed leadership by the team member as horizontal leadership and its governance by the project manager as horizontal leadership governance (HLG). Governance is hereby defined as a system to direct and control managers and hold them accountable for their performance (OECD Publishing, 2001). This is applied to the governance role of a vertical leader during the leadership by a horizontal leader. Much has been written about governance, but the governance of horizontal leaders has yet to be researched. Hence our research question is:

How is horizontal leadership governed in balanced leadership?

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The present paper explores this particular form of governance by revealing governance context, governance mechanisms (trust and control), governance practices and governance processes.

The Unit of Analysis is the governance exercised by the vertical leader. The study takes the ontological stance of Critical Realism, aiming for explaining the phenomenon, but not claiming that this explanation is the only possible one (Bhaskar, 2016). An abductive qualitative study (following Alvesson and Sköldberg, 2009), based on thirty interviews with project leaders and team members, was conducted in project-based companies in Lithuania. Project-based companies are hereby understood in the sense of Turner (2018) as those where a majority of products or services are delivered against bespoke designs for customers.

The study provides academics and practitioners with an enhanced understanding of HLG and the dimensions that influence the choice of control or trust as governance mechanisms in balanced leadership. The results described herein allow practitioners to identify the specific conditions when control or trust or both might be chosen as governance mechanisms in order to achieve better project results. In that sense the study will increase project managers' leadership competences, which are key for project success (Turner and Müller, 2005).

The rest of the paper is structured in the following way: the literature review addresses governance through governance context, mechanisms, practices and processes. Then the methodology is described, followed by an analysis section. The last parts of the paper are dedicated to the discussion and conclusions of the study.

2. Literature review

This chapter starts with defining leadership in projects. It reveals how balanced leadership differs from other leadership approaches. It also identifies the HLG event in balanced leadership as empirically under-researched. It describes agency and stewardship theory as the theoretical lens of the study.

2.1. Leadership in projects

The significance and complexity of leadership in projects is emphasized by Turner et al. (2009) and others. As Clarke (2012a) noticed, the analysis of leadership in projects falls in one of the following categories: research on leadership style, leadership behaviors and roles, and leadership traits (competences, characteristics and personality).

One stream of leadership research focuses on the project manager as a vertical leader, which is the leadership by the formally appointed leader. We find this, for example, in managerial and psychological literature where individuals are subject of investigation. Another stream emphasizes the leadership exercised by project team members. Related concepts are known as shared and distributed leadership. Shared leadership means leadership exercised by one team member, agreed upon in the team, rather than a vertical leader. For example, Clarke (2012b) proposed that shared leadership is more effective than vertical leadership in terms of project outcomes in projects with greater complexity, greater ambiguity in project goals, when time pressure is high, during the execution phase of the project, and in projects with a propensity for high levels of political behavior. Distributed leadership, on the other hand, refers to leadership that emerges through the interaction of the team members, and is distributed among them (Lindgren and Packendorff, 2009; Feng et al., 2017). It is often proposed as being superior to individual or vertical leadership in cases of emergency situations or task ambiguity (Feng et al., 2017). However, neither shared nor distributed leadership explains the relationship between team members in leadership roles and vertical leaders. Most recently balanced leadership emerged to overcome this weakness by explaining phenomena not addressed by vertical and shared/distributed leadership. Examples include the how and why of the cyclic shift of leadership between vertical and horizontal leaders. Balanced leadership addresses the dynamics of temporary shifts in leadership between project manager and team member, and describes leadership in a cyclical way (i.e. as a series of events), understood as a "sociological phenomenon" in the sense of Archer's (1995) Realist Social Theory. The cyclical events unfold the following way (Müller et al., 2018b):

(1) Nomination of members to the project team. If allowed to do, the vertical leader oversees the need for particular expertise in the project and plans for potential project team members, especially if they have had previous experience with them (Sankaran et al., 2018).
(2) Identification of potential horizontal leaders. Here the appropriate fit between the project task requirements and a potential horizontal leader is defined. A vertical leader demonstrates intent to become a horizontal leader – to accept the role upon empowerment (Müller et al., 2018c)
(3) Selection of horizontal leaders. A vertical leader selects one or several temporary horizontal leaders by empowering them (Yu et al., 2018)
(4) Horizontal leadership and its governance. Horizontal leadership by a team member is executed at this stage. A vertical leader uses trust or control or both to govern the horizontal leader, that is, for HLG. This is the subject of the present study.
(5) Transition of leadership authority back to the vertical leader. Here the horizontal leadership comes to an end. Depending on the circumstances it can be repeated (starting the cycle over again) or not.

The conceptual study by Müller et al. (2018b) provided the theoretical framework for balanced leadership, while subsequent studies, like those in the list above, aim for empirical validation of the individual events of the framework. This paper investigates the fourth event, that is, HLG.

A new form of leadership emerges in balanced leadership, namely horizontal leadership. It emerges when a vertical leader, typically a project manager, enables one or a few project team members to become a temporary leader within the boundaries

of the project, while being steered or governed by the vertical leader (Pretorius et al., 2017). Table 1 shows the differences between the leadership types addressed above.

The work on horizontal leadership is scarce and conceptual only, whereby Pretorius et al. (2017) conceptualized the contextual factors that influence horizontal leadership and related leadership styles, while the studies by Müller and colleagues conceptualized the existence of horizontal leadership as a phenomenon within balanced leadership (Drouin et al., 2018; Müller et al., 2017). There is a lack of empirical validation of horizontal leadership and how it is governed by the vertical leader. This is addressed through this paper and its research question.

2.2. Theoretical lens

Governance is a framework for managers to execute and held accountable for their task (OECD Publishing, 2004), sometimes referred to as the management of management (Too and Weaver, 2014). It sets the structures for a) defining the objectives of an organization (or temporary organization, like a project), b) providing the resources to achieve those objectives, and c) controlling progress. Project governance is a subset of corporate governance, which contains the value system, responsibilities, accountabilities, ethical principles, and policies (Müller, 2009; OECD Publishing, 2004).

To our understanding, the governance of leadership in projects has not been defined yet. We perceive governance as a process corresponding to the governance of other processes in an organization (Zyngier et al., 2006; Schroeder et al., 2012). Therefore, we approach HLG as a process of interaction, unfolding through mechanisms, structures and methods established in a project team formally or informally in order to achieve project goals.

Generally agreed upon mechanisms through which governance is implemented are control and trust. While many other mechanisms are mentioned in the literature, these two remain stable over time (e.g. Bosch-Sijtsema and Postma, 2009; Hoetker and Mellewigt, 2009; Müller, 2017). We follow the same approach when analyzing the governance mechanisms in projects.

Table 1
Types of leadership.

Type of leadership	Definition	Source (examples)
Vertical	Leadership by an appointed or formal leader	Pearce and Sims (2002, p. 172)
Shared/ distributed	A group process in which leadership is distributed among, and stems from, team members	
Balanced	The dynamic, temporary and alternating transitions between vertical and horizontal leadership for the accomplishment of desired states in, for example, a task outcome, or the entire project	Müller et al. (2018b)
Horizontal	Executed by a team member upon nomination by the project manager (vertical leader), and governed by the vertical leader for the time of the nomination.	Pretorius et al. (2017)

To depict the relationships between project stakeholders and issues in project governance, agency and stewardship theories are used (Toivonen and Toivonen, 2014; Müller and Kvalnes, 2017). Agency theory assumes individual utility maximization and asymmetric information in the relationship of a principal and an agent (Jensen and Meckling, 1976). The principal depends on the agent who is chosen to act on the principal's behalf. If both are driven by a desire for individual utility maximization the principal-agent problem exists (Eisenhardt, 1985). In the case of balanced leadership in projects, a vertical leader is a principal and a horizontal leader is an agent. To overcome the principal-agent problem, a vertical leader typically relies on control measures, extrinsic incentives and contracts (Müller, 2017).

Stewardship theory explains the behavior of stakeholders in terms of collectivistic and trustworthy approaches (Davis et al., 1997). As opposed to agency theory, stewards (horizontal leaders in our case) are driven by intrinsic motivation and striving for project goal achievement rather than maximizing their own utility in the short term. We follow Müller (2017), and Caers et al. (2006) on the need to balance both theories for better understanding of HLG.

To depict a broader picture, we also involve other aspects of HLG, such as HLG mechanisms (Müller, 2017), context (e.g. Mayer et al., 1995), practices (e.g. Bourne and Walker, 2005) and process (e.g. Jagd, 2010).

2.3. HLG mechanisms

HLG unfolds through mechanisms, which are typically defined das trust and control (e.g. Bosch-Sijtsema and Postma, 2009; Hoetker and Mellewigt, 2009; Müller, 2017). Costa and Bijlsma-Frankema (2007) define the *control* in the project team context as a process that regulates behaviors of project team members in favor of the achievement of project goals. Control is often described by its levers: diagnostic, interactive, beliefs and boundary (Simons, 1995); or levels: result, process and cultural control (Efferin and Hartono, 2015).

Project managers are supposed to keep their project under control. Thus traditional approaches to governance tend to relate more to control than trust (e.g. Cross and Brohman, 2015). However, due to the changing conditions and increasing uncertainty, control alone might not be sufficient to achieve project success (Long and Sitkin, 2006; Dekker, 2004; Jagd, 2010). Here trust comes into play.

We follow the definition of *trust* proposed by Mayer, Davis and Schoorman (1995, p.712): trust "is the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party". Trust as HLG mechanism is revealed in the research of Drouin et al. (2017) who describe balanced leadership being coordinated by the concept of the socio-cognitive space, which is the point of interaction and shared understanding between project manager and team. According

to their findings, a shared cognitive understanding emerges along three dimensions: a) empowerment: who is empowered to be horizontal leader, b) self-management: is the horizontal leader able to do the task, and c) shared mental models: the skills distribution among the team members and their availability. They revealed that empowerment depends on the competence of team members and is enabled by project management methods and practices implemented in the companies. Self-management depends on the self-efficacy of potential horizontal leaders. It is the trust in themselves to be able to manage and to organize their tasks, which is enhanced by delegating specific tasks to them. This, in turn, influences the level of trust received from team members. Shared mental models are said to have a positive impact on team performance (Mathieu et al., 2000) and team processes (Mathieu et al., 2000). Project level studies support this quantitatively by showing strong and significant relationships between the elements of the socio-cognitive space and project success (Müller et al., 2018a).

The review above has highlighted some of the many perspectives and contradictory findings, but did not provide an answer to the question of the specific implementation of trust and control when governing horizontal leaders in projects. We seek to explore that in the present empirical research.

2.4. The context of HLG

The choice of trust or control in HLG is contingent on context factors: external (outside the project), internal (inside the project) and individuals-related, in respect of the vertical and horizontal leaders.

The *external factors* of governance include organizational strategy (Morris and Jamieson, 2005), organizational structures (Miller and Hobbs, 2005), organizational culture (Khalfan et al., 2007), and the governance of projects in organizations in general (Miller and Hobbs, 2005; Klakegg and Haavaldsen, 2011). The *internal factors* are often related to uncertainty, risk and project type. The effect of uncertainty on HLG mechanisms is not clear as findings are contradictory. For instance, Geraldi (2007) believes that higher levels of control are implemented if projects are perceived to be "out of control". Das and Teng (1998) suggest the opposite: a higher level of trust is inevitable if one party (trustor) does not have enough control over the other one (trustee). De Man and Roijakkers (2009) explain the choice of trust versus control by the level of different types of risks. Other researchers claim that the project type defines the choice between control and trust. For instance, construction, defense and engineering projects typically show clear hierarchies, command and control structures (Bourne and Walker, 2005). Less control is demonstrated in information technology (IT) and agile projects (Augustine, 2005). In terms of project size, it is easier to develop trust in smaller rather than in larger projects (Khalfan et al., 2007).

Individuals-related factors refer to the characteristics of vertical and horizontal leaders. Based on Fiedler's (1971) contingency model, a vertical task-oriented leader tends to control more than a participative leader (Turner and Müller, 2005). A traditional project manager, especially in the military, is described as a command and control type (Cross and Brohman, 2015), which implies their choice of control over trust.

The choice of control or trust applied by vertical leaders is influenced by the characteristics of horizontal leaders, especially their professionality, personality and benevolence. Here professionality is defined as the ability, competence, or expertise that relates to the choice of trust (Drouin et al., 2017; Mayer et al., 1995). Personality can relate to both, trust and control. Furumo et al. (2009) claim agreeableness, conscientiousness and extraversion relate to trust. Wei et al. (2013) argue that project teams should include members of particular personalities in order to be successful. In the context of balanced leadership personality includes the horizontal leader's emotional and social skills to "fit" to a leadership situation (Müller et al., 2018b). If the vertical leader sees a mismatch in personality of horizontal leadership situation more control might be applied. Benevolence is defined as *the extent to which a trustee is believed to want to do good to the trustor* (Mayer et al., 1995, p.718), hence the extent a horizontal leader is expected by the vertical leader to do good to the project.

The above review shows that related literature indicates the importance of context for governing horizontal leaders, but nothing could be found on the impact of context on horizontal leadership and its governance. This gap is covered in the present empirical research.

2.5. HLG practices

Governance is implemented through structures and methods based on the governing party's underlying preference for trust and/or control. In practice, this is complemented by governance roles and top management support (Müller et al., 2016).

Structures of control and trust. The level of control and trust in projects links to the structures employed: formal or informal. The formal structure is defined by the organizational structure, roles and responsibilities, and presence of various committees (De Haes and Van Grembergen, 2004). Studies show that formal structures (Rubino et al., 2017) and traditional organizational structures (Bourne and Walker, 2005) are related to control.

Informal structures involve friendships, alliances (Bourne and Walker, 2005), and belonging to clubs or other informal groups. If a vertical leader knows a horizontal leader through a relationship outside work it might determine the former's trust or control depending on that experience (Müller et al., 2013).

Methods of control and trust. Examples of control methods include analytical techniques, such as root cause analysis, control charts, Gantt charts and others (Hamza, 2009; Jugdev et al., 2013), as well as live and virtual meetings (Jugdev et al., 2013). Some of the methods might be used for both, trust and control. For instance, meetings or feedback might be used to control, to build trust or do both at the same time.

Table 2
Summary of the analysis on HLG, and framework for analysis.

Governance context	2nd order	**External factors (outside project)**	**Internal factors (within project)**	**VL factors**	**Perceived HL factors**
	1st order	Org. culture Org. structures Org. strategy Governance of projects in the organization	Uncertainty Risks Project type Project size Project complexity	Leadership style Role perception	Professionality Personality Benevolence
Governance mechanisms	2nd order	**Trust**		**Control**	
	1st order	Trust through socio-cognitive space (empowerment, self-management, and shared mental models) Trust levels		Levers of control (diagnostic, interactive, belief, boundary) Types of control (result, process and cultural)	
Governance practices	2nd order	**Trust-oriented**		**Control-oriented**	
	1st order	Organizational structures Methods x,y,z Top management support		Organizational structures Methods a,b,c Governance roles	
Governance process	2nd order	**Choosing**		**Balancing**	
	1st order	Control choice (intensity, depth, frequency) Trust choice (intensity, depth, level)		Balancing trust and control	

2.6. HLG as a process of balancing trust and control

The process of HLG involves choosing between two mechanisms – trust and control, and balancing them. The *choice* of control versus trust is determined by the factors mentioned previously, that is, organizational culture, structure, uncertainty, risk, leadership style, etc. These factors influence which of the HLG mechanisms is chosen and their intensity, depth, and frequency. If both HLG mechanisms are chosen, the *balancing of trust and control* comes into play.

The findings on the relationship between trust and control are diverse:

- Trust and control are independent (Jagd, 2010; Long and Sitkin, 2006). According to the above definition of trust by Mayer et al. (1995), trust occurs irrespective of the ability to control.
- Trust and control are substitutes (Jagd, 2010; Long and Sitkin, 2006). Some studies explain control and trust as opposing extremes, like in Herbert (2009) who juxtaposes trust versus management control involvement. Dekker (2004) explains a substitution perspective by trust and control being inversely related.
- Trust and control are related, but in a non-linear, complex relationship, which depends on the governance paradigm. Müller (2017) and Müller et al. (2014) show that trust and control vary depending on the shareholder or stakeholder orientation of the organization, hence the dominance of either trust or control depends on the corporate governance paradigm and its manifestation in project governance. Trust is significantly higher in stakeholder oriented than in shareholder oriented companies.
- Trust and control are complements (Jagd, 2010; Long and Sitkin, 2006). Poppo and Zenger (2002) argue that trust and control together lead to greater performance compared to isolated effect of each.

Trust and control are bound by process relationships. In Jagd (2010) the control, trust(ing) and their interrelationship are explained as processes.

The findings from the above review are structured and summarized in Table 2 as first order findings, which are then collapsed into second order constructs for a higher level overall structure for further study. This literature review presented HLG as unfolding of the mechanisms of trust and control. It described the governance context, mechanisms, practices and process. However, the particular way trust and control unfolds for the governance of temporarily appointed horizontal leaders remains a knowledge gap. This is addressed in the rest of the paper. The framework presented in Table 2 serves hereby as a lens for interpretation of the empirical findings.

3. Methodology

The study design follows the process by Saunders et al. (2007). It starts by defining the underlying ontology, which is that of Critical Realism in the sense of Bhaskar (2016). Here researchers agree on the existence of a phenomenon, and claim that the findings identified through the study are one possible, but not necessarily the only possible explanation of the phenomenon. This philosophical underpinning is in line with the overall theory framework that guides this study (Müller et al., 2018b). A case study approach is used to form explanatory hypotheses (Yin, 2009) from the qualitative data collected through six case studies, in a mono-method, cross-sectional research setting. Aim is to understand the Unit of Analysis from the perspective of the above model, in order to answer the research question.

Table 3
The case companies, the project roles that were interviewed, and the number of interviews.

Case no.	Organization type	No. of employees	No. of interviews	Roles interviewed			
				CEO	PMO	PM	TM
1	IT	50–249	6	1	–	2	3
2	Government	>250	4	–	1	1	2
3	Government	<50	2	–	1	1	
4	IT consulting	<50	6	1	–	2	3
5	Financial services	>250	6	–	1	2	3
6	Energy	50–249	6	–	1	2	3

CEO = Chief Executive Officer, PMO = Project Management Office member, PM = Project Manager, PT = Project team member.

A holistic multiple-case design with a single unit of analysis was chosen (Yin, 2009). Within-case and across-case analyses were used to identify the commonalities across cases. The context of the case studies is Lithuania. The sampling approach aimed for maximizing variety in cases to identify underlying commonalities of general nature. Interviews were held until theoretical saturation was reached. Thirty interviews were conducted, seeking for a variety of industries, sizes, project types and roles in the projects. Three of the organizations: financial, IT and IT consulting have a broad international experience. The case details are shown in Table 3.

The main focus of Organization 1 is the implementation of ERP solutions. Here software from international vendors is customized and implemented at predominantly local Lithuanian customer sites. Organizations 2 a Ministry-level organization, while organization 3 is a smaller organization under the supervision of one of the Ministries. Organization 4 is a local IT consulting organization with multiple business lines and both local and international customers. Organization 5 is a large international financial corporation. Organization 6 is a government-owned organization in the energy sector with local Lithuanian customers.

In two cases, CEO's were interviewed, in four cases PMOs were interviewed. In addition to that, ten project managers and 14 project team members were interviewed.

Reliability was pursued by following Yin's (2009) suggestion of an upfront developed case study protocol, covering:

(1) General questions about the organization and projects, methodologies, and decision making process
(2) Questions about exercising balanced leadership within the project
(3) Factors that facilitate or impede the establishment of horizontal and vertical leadership
(4) Questions on control in projects, with different sets of questions used for different roles

The protocol was back and forth translated (Maneesriwongul and Dixon, 2004) from English to Lithuanian and the questions tested for validity using a team of researchers and a focus group.

Validity of the data was pursued through several means suggested by Yin (2009), like asking for multiple sources of evidence and having key informants reviewing the case study report for construct validity; using pattern matching and explanation building for internal validity; and replication logic through multiple case design for external validity.

The interviews were pre-agreed with a contact person per case, who identified the further interviewees. Informed consent was pursued by informing the interviewees upfront about the study, and, after their acceptance by providing them with a list of potential questions. The interviews were carried out in a semi-structured manner, face-to-face. The permission to record interviews was obtained from each participant. On average, the interviews lasted approximately one hour each, they were recorded and subsequently transcribed for analysis. Following the ethics requirements within qualitative research (Mauthner and Birch, 2002), confidentiality was guaranteed to each informant.

4. Analysis and findings

Coding followed Miles and Huberman (1994) to identify and validate the first order concepts (Table 2), which were structured in accordance with earlier related studies on balanced leadership events (e.g. Müller et al., 2018c) into context, mechanisms, practices and processes. First order constructs were deductively tested against the empirical interview data.

For example, a leader in interview 6, case 1, provided an example of interactive control "Controlling is just ... talking in which stage a task is, how it is progressing". Another team leader in interview 8 case 1 made an example of diagnostic control "You just come and check the status". The second order construct Control is then developed from the first order constructs, like *Interactive* control, *Diagnostic* control and *Belief* control. The first order constructs were subsequently organized into 2nd order constructs as depicted in Table 2. The literature review results presented in Table 1 are elaborated by our research findings in most of the cases.

4.1. The context of HLG

The way HLG is performed depends on several context elements: external factors, internal factors, factors of the vertical leader and factors of the horizontal leader.

External factors are related to the environment outside the project, namely organizational culture, organizational structure and general governance of the projects in the organization. Internal factors within the project are mostly described by uncertainty and risks. A project leader in interview 26 case 2 made it very clear: "*For the leaders, as you say, it is hard to live and work here ... They really do not control the finances and the resources are stretched thin... it is very difficult. Their decision-making is more related to risks*". Although previous research proposes other internal factors, such as project type, size or complexity, our data emphasized the notion of risk.

The human side of the project teams also plays a role in HLG. The choice of governance is influenced by the vertical

leader's own leadership style and role perception, as well as the characteristics of the horizontal leader and his/her situation. Trust as a governance mechanism is strongly influenced by the ability, benevolence and integrity of the horizontal leader (Mayer et al., 1995).

One example of ability is in the interview 16 case 1. The project manager puts it: "*Of course, expertise is key. In general, at work I try to lead and to all my colleagues and team I say that personal trustworthiness is unreliable. You can stay after work, and there are professional things at work, and I appreciate precisely experience, expertise*."

The role of benevolence is ambiguously expressed and indirectly addressed. There were cases when it was rationalized with the performance of the horizontal leader, as mentioned in interview 7 case 1: "*Again, he is probably the one great initiator who motivates, triggers the team. If he is fun, charismatic*".

Integrity was found in situations where a person "takes a strong position" instead of trying to please the manager, as the senior specialist in interview 11 case 5 expressed it: "*Personal qualities are undoubtedly important. Because, perhaps, one must have that opinion and express that opinion in that sense. And to try it, you know, try to support and maintain it if you think it's important and necessary*".

4.2. HLG mechanisms

Vertical leaders typically choose between trust and control as governance mechanisms. When trust is employed, empowerment, self-management and shared mental models can be identified in interviews as described by Müller et al. (2018b). Like the senior specialist in interview 6 case 1: "*Well, for example, on how do you finish one job or another: you talk to your colleague and not to the project manager*".

Self-management is also mentioned several times, as another senior specialist in interview 2 case 6 explained: "*As for me, I get a job and I am obligated to do it, it is a responsibility to do it, and I have to do it well – but that is who I am*".

Shared mental models are described in the literature to improve team performance if team members have a shared understanding of the task to be performed and the work relates clearly to the goal of the project (Jonker et al., 2011). One example was provided by the project manager in interview 15 case 1: "*But that's exactly how high this level is, there's already such cooperation, we don't just work according to our official positions, but it's very cooperative. You realize that you understand and think like that person. When you trust so much that you know that this other person will come to ask your opinion at the right time. This is the case when you have been working together well for many years*".

Control as governance mechanism can be observed in different forms: diagnostic, interactive, belief and boundary (Simons, 1995). One example of diagnostic or formal control is provided in interview 2 case 6: "*We usually have some timetables set up until some date when something has to be done. That's the kind of system, that we try to finish the work by a certain date. There are timetables... Of course, there may be some times when we get off track, but we usually stay on schedule*".

Interactive control takes place, too, as pointed in the example from interview 6 case 1: "*Control, it's just watching, probably talking, finding out what stage they're at, where we can change something to make it better*".

A belief system is expressed in values that are important to participants, and sometimes mentioned as an opposition to fact-based control, like it was in interview 1 case 6: "*It [control] is not described and it is, so to say, in a free form. Still, everybody is struggling to win, and so there is no need to go for much control. Everyone feels that he is responsible for his part, knows when deadline is, and everyone does their job. You do not need much control anymore, just go and ask: have you succeeded, did you get the price, are you going to count those quantities on time so that I'll have enough time to count my share*".

It is difficult to clearly separate boundary control, which is based on ethical behavior, from belief control. The quote of the senior specialist in interview 2 case 6: "*For me it's like this, I get a job and I'm obligated to do it, it's a mandate to do it and I have to do it well - at least that's how it is for me*" can be attributed to both types of control.

4.3. HLG practices

There are different governance practices when talking about trust and control. Governance practices are described by organizational structures, methods, governance roles and top management support (Müller et al., 2016).

Structures described by Bourne and Walker (2005) are formal and informal. The project manager in interview 14 case 1 gave an example of the formal structure with defined roles and responsibilities as discussed by De Haes and Van Grembergen (2004): "*According to the contract, in decision-making projects the project manager makes decisions. At present, in a particularly large project, we have two distinct roles, that is, the project manager and the project director, who is essentially the decision maker within the scope of the contract*". In the case of trust more flexible structures are prevalent.

There are various methods used in control and trust. First of all, meetings, physical or virtual. As the project manager in interview 22 case 6 said: "*We have meetings every Monday*"; "*I am more regularly meeting with some in person, so we talk, I say, well, if you have some observations about what can be improved, let me know*".

Group meetings for consensus finding can be seen as a separate trust method, an example is provided by the senior specialist in interview 12 case 2: "*We are also specialists in our field and find a compromise by co-decision*". Similar to group meetings, a trust method, where "no objections" agreement shall be reached in semi-autonomous circles, was mentioned by the project manager in interview 30 case 3: "*I really enjoyed such a sociocratic circle in which we try to listen to everyone, and then we can say that we've found consensus. Because I'm trying hard to make people talk, we agree that there is now a*

circle in which everyone will speak and then there are no unheard parties, and then it will be easier for me to make a decision if I have to make it. Or maybe I just need to summarize it and say whether we agree on that mediation".

E-mail, phone calls and virtual meetings are also used: "*There are people from the project with whom I have not met in person, because everything is going smoothly in our communication: by e-mail, by calling, by instant messaging. So we talk by phone just to ask how it's going, or is everything OK. I try to keep in touch and thank people for their work, or ask for something, or, as appropriate, to comment on what was done poorly*".

4.4. HLG process

The HLG process consists of choosing control and trust and balancing them. Leaders make their choices regarding intensity, depth and frequency of the control. In some cases, they choose very tight control. For example, in interview 15 case 1 "*When we talk about deadlines […] it is planned in very small details and there is a control for each task. Because […] you have to control all the deadlines*". In other cases, leaders chose less rigid control, like in interview 1, case 6 "*There is no description of control and it happens in 'free form'. Anyway everybody strives to make their best and there is no need to control so much*". Similar choices of intensity, depth and level are demonstrated in making trust choices. For example, interview 23 case 5 leader put it "*Team makes choices. You don't need to participate*".

Finally, leaders have to achieve a balance between trust and control. They understand that proper balance reaps benefits of better team engagement. As in interview 11, case 5 one team leader stated "*If one gets decision power, one gets accountability along*".

In the process of balancing between trust and control leaders take into account a number of different parameters so that this balance is different even within the same team, as interview 3, case 5 shows "*For one specialist a task has to be described in more details, while for another specialist more freedom can be left regarding the details because of the trust in that specialist*".

5. Discussion

The study takes the ontological stance of Critical Realism and the theoretical lens of agency and stewardship theory to reveal the context, mechanisms, practices and processes of HLG, as shown in in Table 2 as second order constructs.

Governance context. Empirical evidence supports the influence of (external towards the project) factors, such as organizational structure, culture, and internal factors, such as uncertainty and risks, on overall leadership governance in the company. The role and leadership style of vertical leaders are also important. According to Turner and Müller (2005), vertical task-oriented leaders tend to emphasize control, compared with participative leaders. Thus, vertical leaders choose to control and/or trust, and in case of prevailing trust, exhibit overall more supportive attitudes towards developing horizontal leaders and enabling horizontal leadership. The level of trust depends on certain characteristics of horizontal leaders, too, lying in the realm of trustworthiness (Mayer et al., 1995), such as professionalism, personality and benevolence. Both structural as well as agency findings are supported by Seers et al. (2002), and their framework of facilitators for shared leadership. This emphasizes a notion of supportive culture and supportive attitudes of project managers.

Governance mechanisms. Trust and control are frequently referred to as the major mechanisms for executing governance in organizations. The main theoretical basis for it may be found in agency and stewardship theories, which are referred to above. Trust and control are the main mechanisms of HLG, too. On the one side, the interaction between vertical leader trust and contextual factors, such as structure, motivates the vertical leader to use the structure in the future, if it leaves a sufficient amount of room to maneuver for the vertical leader. This is in line with De Man and Roijakkers (2009) findings of substitution and complementarity of trust and control. On the other hand, in the process of interaction between vertical leader and horizontal leader at the micro level, trust unfolds through the development of the socio-cognitive space. Empirical evidence for the socio cognitive space was hereby organized in the main elements: empowerment, self-management and shared mental models. The findings of our research correspond to those of Müller, Sankaran et al. (2018).

Control as governance mechanism varies at the micro and macro levels. The macro level of control is affected by contextual factors within the project, such as uncertainty and risks. The ambiguous findings are regarding uncertainty inside the project. It may both stimulate more control or, on the contrary, more trust. The macro level emphasizes diagnostic and interactive control. This is partly supported by Simons (1995). An unexpected finding is the implicit and ambiguous nature of a few other control types, such as belief and ethical behavior control, which should be further explored in future studies.

Governance practices. Although trust and control are defined as distinctive governance mechanisms they might be related when we take a more granular view and explore governance practices. Based on our findings, we organize them as trust-oriented practices and control-oriented practices. The formal practices (e.g. reporting) in our research are related to control orientations, while the informal practices, such as friendship, alliance, etc., relate to trust orientations. The above practices were also found by Bourne and Walker (2005). Practices rely strongly on the type of support from top management, and interplay with contextual enablers, such as structures and organizational culture. In case top management nurtures trust, more trust-oriented practices are likely to be adopted by vertical leaders in projects. Contrarily, the control-oriented practices address different aspects, such as strict roles, low flexibility and little space to maneuver for both vertical and horizontal leaders. The support of top management is expressed as trust-oriented practice, while well-defined governance roles links to control-orientated practices. Some methods, however, are applied in both –control and trust, (e.g. the feedback in meetings).

Table 4
Criteria for choice of trust and control.

	Trust	Control
Personality	Interview 21, case 6, Project Manager: Most important person's quality for rising up to horizontal leader whom I trust decision power is personal initiative. Interview 11, case 5, Team Leader: Personal qualities are very important (in order to gain trust).	This "Trust, but" expression actually shows the lack of trust and application of control mechanisms exercised through deadlines so that "You trust him as a specialist" becomes an empty polite phrase. As in interview 15, case 1, Project Manager: You trust him as a specialist, but you control deadlines anyway. As in interview 15, case 1, Project Manager: There is a control about deadline for each task. … However, you have an intuition based on personality about which team member you have to control more and which one takes initiative to communicate with others proactively. In the second situation you see and you trust, and you don't ask him. But you see others that will not communicate to others and then you look for ways to transfer needed information from such person.
Professionality	Interview 11, case 5, Team Leader: There are always several key specialists who have deep knowledge indeed, and whom the team trusts. They make the biggest influence. Team trusts them because of their experience. Interview 12, case 2, Team Leader: Level of expertise defines if I trust a person. I always say that we can leave personal traits to after work, and at work there are business competences that I value – and these are expertise. Interview 16, case 4, Project Manager: I trusted him more because he is an expert.	Interview 12, case 2, Team Leader: If once, twice or third time trust is reduced by their [failed] actions, then trust becomes more important than expertise. Interview 28, case 2, Project Manager: There were cases when I reduced level of trust for some of team members. We thought he is very competent, but it appeared it is not so. Afterwards, his decisions were checked and verified against external sources.
Benevolence	Interview 1, case 6, Team Leader: There is no control procedure described. Everybody strives to contribute to the victory anyway, so there is no need for tight control. Interview 12, case 2, Team Leader: You control yourself. You don't need an external control.	Interview 15, case 1, Project Manager: Level of control depends not on competence but from person's understanding about importance of deadlines. Sometimes there is a junior specialist to whom you don't need to control deadlines and senior one who has problems with deadlines. … With some I talk about deadlines more often than with others.

Governance process. The HLG process regulates the interaction between vertical leaders and horizontal leaders. The governance process starts by choosing the mechanisms of trust and control, and then defining the intensity, frequency and depth of each. While choosing the level of trust, managers start developing horizontal leadership. The development often takes place in the form of assigning additional tasks, and then assessing their performance. This leads to the decision in the transition event to further develop a potential horizontal leader. A crucial role is played by trustworthiness of horizontal leaders. Our empirical findings are in line with Mayer et al. (1995). Trustworthiness is a combination of ability of the horizontal leader (such as skills, competencies, characteristics to perform), his benevolence (the extent to which the horizontal leader wants to do good to the vertical leader and/or project) and personality or integrity (the horizontal leader's adherence to a set of principles as judged by the vertical leader).

Modelling HLG. The choice of trust or control depending on the state of personality, professionality and benevolence is shown in Table 4, with the quotations indicating the particular circumstances leading to either a more trust or more control orientation in governance. Trust is hereby chosen in cases of personality traits like initiation, professionality traits like experience, expertise and competence, and benevolence traits like self-initiated striving for project success. Control as a governance mechanism is chosen in cases of "trust, but verify" cultures in organizations, personality traits like lack of trustworthiness or communicative behavior, professionality traits like repeated failure to meet deadlines, and benevolence traits like putting low priority on otherwise high prioritized objectives, such as meeting deadlines.

Process as the interplay of control and trust. Certain patterns can be visible from the cases. Empirical data have not supported the strict choice between control or trust. It is not an either-or approach, but a complex interplay and combination of them. The choice of mechanism to govern horizontal leaders may be partly determined by the horizontal leaders 'professionalism, ranging from low to high, the fit of his/her personality to the leadership situation, from unclear to clear, and his/her benevolence, ranging from low to high. Meaning, in its simplest form, that lower levels relate to a dominance of control as a governance mechanism, and higher levels to a dominance of trust as a governance mechanism. However, this does not mean that control is always applied at the lower levels of these dimensions. Similarly, high professionalism, for example, does not automatically call for a high level of trust. It should be supported by personality fit and benevolence. The expression of all three dimensions will indicate the level of balance between trust and control. Other contingency factors, such as structure, risk etc., may also play an important role when deciding how to achieve the balance in governance mechanisms (De Man and Roijakkers, 2009; Jagd, 2010). The above process and dimensionality, in combination with Table 4, are depicted in the model in Fig. 1.

We elaborate further on (Mayer et al., 1995), as in parallel, the team members go through a process of development, which starts by accepting the horizontal leader role, then developing the role, demonstrating their interest (to be promoted and to

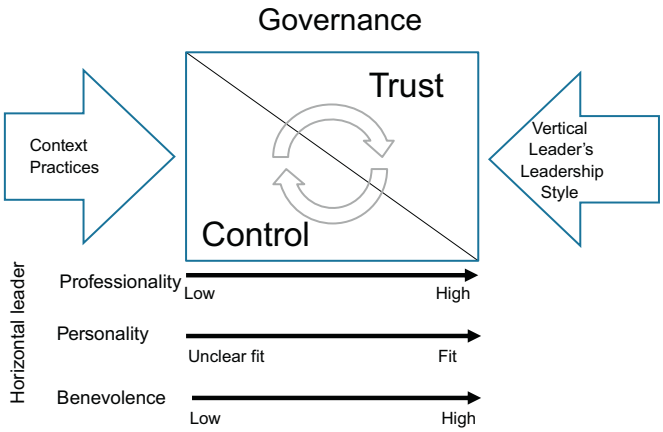

Fig. 1. The governance choices and their influences.

perform), benevolence, as well as looking for different levels of encouragement and guidance when they do their task as horizontal leader.

6. Conclusions

In this study we analyzed the governance of horizontal leadership as a significant part of balanced leadership theory. This theory describes leadership in projects as an event-driven cyclic transition between vertical and horizontal leadership. Six case studies with 30 interviews were conducted to understand how vertical leaders govern team members during their temporary empowerment as horizontal leaders. The data were analyzed following a case study approach and process outlined by Yin (2009) in order to derive a theoretically developed and empirically supported taxonomy of governance context, mechanism, practices and processes. This was then further developed into a model that outlines the dimensions of influence in the choice of governance mechanisms. Thus, the influential dimensions that determine the equilibrium point in the balance of trust and control when vertical leaders govern horizontal leaders.

We can now answer the research question: *How is horizontal leadership governed in project-based organizations?* Horizontal leadership is governed through the traditional mechanisms of trust and control. Their particular expression, or balance, is contingent on a project's particular combination of context, mechanisms, practices (structures and methods) and process.

Contextual enablers, external to the project, such as organizational structure, culture and governance of projects interact with governance mechanisms, applied by the vertical leader. Internal factors within the project, such as uncertainty and risks, are important to the prevailing governance mechanism, too. In addition, the vertical leader's leadership style and role perception shape the approach to the predominant mechanism – trust or control, in use.

Horizontal leader's personality, professionality, and benevolence affect the choice of mix of mix of trust and control as governance mechanisms. From that standpoint, we claim that trust and control are not substitutes of one another, but are carefully chosen or mixed in situational contingency.

The strength of the study is in its use of established and credible constructs from corporate and project governance, such as those for trust and control. Results show that they are well recognized as playing a major role in micro-level governance in the dynamic settings of balanced leadership situations. Hence, the choice of constructs used, was supported by the results. A further strength is in the identification of context variables that impact the choice of governance mechanism from a macro-level perspective. At the same time, there are some weaknesses, such as the small sample size, 30 interviews, taken from one country. This does not allow the findings to be generalized to a population, however, it allows to generalize to a theory (Yin, 2009). Thereby we have contributed a further study to the generalization of balanced leadership theory (Müller et al., 2018b). Anyway, more research is indicated to refine and strengthen this theory.

Theoretical implications. The results of the study support prior findings, which related trust and control mechanisms to stewardship and agency theory. Here the former was linked to more trustful governance settings (Müller and Kvalnes, 2017), which also links to the intrinsic motivation and collectivistic behavior of leaders, (such as horizontal leaders) who strive for the achievement of project goals rather than their own utility (Davis et al., 1997). Thereby the study extends stewardship theory into the realm of horizontal leaders, who now can be said to possess similar characteristics to leaders at higher management levels. The present study adds the dimensions of professionality, personality and benevolence of the horizontal leader as additional items in the trust building process for governing balanced leadership. In a similar vein, do the results from the present study add to agency theory, by showing the presence of control as one form of governance, which is also described by Müller (2017), but now refined through the three above mentioned dimensions, which impact the presence and/or level of control, and with it the strength of agency thinking by the governing vertical leader. Both theoretical perspectives are embedded in the context, practices and leadership styles of the vertical leader (Fig. 1).

Managerial implications include the use of the three dimensions of professionality, personality and benevolence in training and development programs for managers, so that they can consciously influence the governance that they are exposed to, and thereby contribute to balancing the interaction with their vertical leader. Through that, the horizontal leaders develop themselves as leaders, for the benefit of the project and the wider organization, as well as their human capital. This includes direct benefits for the project in repetitions of cycles of horizontal leadership. Implications for vertical leaders include the awareness of these dimensions in order to reflect on the personal style and the interaction with the horizontal leader, as well as the potential further development of them. For the vertical leader, as the authority who decides on the governance approach, it is of vital importance to understand the process and the criteria for governing horizontal leaders through trust and control, in order to minimize friction between leadership levels and to maximize smoothness in the flow of work for the benefit of the project. The vertical leader is charged with finding the equilibrium point between trust and control for the governance of the horizontal leader. This point is fluid, and needs to be continuously adjusted to the circumstances of the project. In other words, the three dimensions of professionality, personality and benevolence provide the input for finding the equilibrium point in governance.

Future research: Our study used the *Theory Framework for Balanced Leadership in Projects*. It shall be noted that the nature of vertical and horizontal leadership is transitive in projects. Further research may look to the transfer of leadership at different project-related levels. Understanding the transitive nature of project-related leadership would open the opportunities for analyzing the balanced leadership and its governance in a broader organizational context, providing for integration of operational (task-level and project-level) and strategic (portfolio-level) leadership issues. Other opportunities are in more quantitative studies to test the above model for generalizability to wider populations.

The study's contribution to knowledge lies in the deepening of understanding how horizontal leaders are governed during balanced leadership in projects by identification of the nature and influencing factors of this form of governance. This contributes to further studies and related theory building. Future formalization of this event in balanced leadership can possibly contribute largely to better project results.

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.

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