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'Filling the mattress': Trust development in the governance of infrastructure megaprojects

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ABSTRACT

The development of trust is a major challenge for the governance of public private infrastructure megaprojects. Contractual pre-arrangements should provide a blueprint for collaborative behavior and trust development but the characters of megaprojects challenge such arrangements. This longitudinal study explores practices of trust development in the collaboration of commissioner and contractor consortia in the Dutch road infrastructure megaproject 'Schiphol, Amsterdam and Almere' (SAA). The findings show that six different types of workshops have been used to intervene in the collaboration of project partners in order to develop trust. The study contributes to the debate on governance in megaprojects showing how governance arrangement are enacted in the daily practice in megaprojects. To buffer the potential loss of trust through conflicts, project partners negotiated for a balanced reciprocal relationship, which is the simultaneous exchange of equivalent resources without delay.

1. Introduction

The governance of megaprojects has received growing academic attention over recent decades (Ahola, Russka & Artto, 2014; Müller, 2012; Pitsis, Sankaran & Gudergan, 2014; Sanderson, 2012). Megaprojects are characterized by their size, budget, structural complexity, uncertainty, environmental impact and the involvement of a large number of public and private partners with diverse interests and sometimes conflicting goals. As megaprojects are frequently conflict-ridden (Van Marrewijk et al., 2016), they require specific governance arrangements (Brunet & Aubry, 2016; Clegg, Pitsis & Rura-Polley, 2002; Miller & Hobbs, 2005). Project governance is here defined as tailored arrangements defining a shared set of coordination, procedures and rules, which together has to align the conflicting goals of participating organizations towards a joint goal (Ahola et al., 2014). These governance arrangements have to ensure smooth collaboration of public and private partners in megaprojects (Miller & Hobbs, 2005).

The development of trust is a major challenge for the governance of megaprojects (Maurer, 2010). Trust in a project context is here defined as "the willingness of a party to be vulnerable to the actions of another party based on the expectations that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control the other party" (Mayer, Davis & Schoorman, 1995: 712). Trust implies that actors are willing to proceed without defending, buffering, or protecting themselves against risks and that they accept uncertainty (Latusk & Vlaar, 2018). Project partners consider relational norms, values and social rules, informally shared by project coalition members, as crucial for maintaining their commitment in a long term contract (Benitez-Avila, Hartmann, & Dewulf, 2018). Acting on trust thus becomes an 'organizing principle' of governing the interactions between organizations, which is constituted by a set of practices that (re)produce trust as a meaningful pattern of interaction (Sydow, 1998). Practices in projects are here understood as dynamic and provisional activities that require some form of participation (Blomquist, Hällgren & Nilsson, 2010).

However, this process of trust development for governing megaprojects is not yet well understood (Lau & Rowlinson, 2009; Maurer, 2010; Swärd, 2016). The limited duration and predefined end of megaprojects affect the trust development process, highlighting the development of swift trust (Meyerson, Weick & Kramer, 1996). The development of trust is understood as a process that changes over time (Swärd, 2016), in which cooperation between project members is anticipated upon due to trust, which is then reciprocated with further cooperation validating that trust (Munns, 1995). Swärd (2016) focuses on events of trust development in inter-organizational projects, but fails to make clear how this works out at the work floor. Therefore, in-depth qualitative approaches

are needed to explore the development of trust in projects and the experiences of participants (Benitez-Avila, Hartmann, & Dewulf, 2018; Latusk & Vlaar, 2018; Maurer, 2010). Möllering and Sydow (2019) confirm the need for longitudinal research on the dynamics of trust in general and especially across organizational boundaries.

Therefore, the aim of this paper is to investigate the practices of trust development used to enhance the collaboration between public and private partners in the governance of an infrastructure megaproject. To fulfill this aim, we executed a longitudinal study (2014 to 2019) on trust development in the road infrastructure megaproject 'Schiphol, Amsterdam and Almere' (SAA). With a budget of € 4.5 billion, SAA is at the time of study the largest infrastructure project in the Netherlands, covering 63 km of very busy highways. Our unit of analysis are infrastructure megaprojects. Data was collected by means of an auto-ethnographic field study (Anderson, 2006) and included interviews. Autoethnography is relatively uncommon in project studies, but an excellent method for obtaining a longitudinal in-depth understanding of trust development in a megaproject.

The study contributes to the debate on governance in megaprojects (Benitez-Avila, Hartmann, & Dewulf, 2018; Brunet & Aubry, 2016; Müller, 2012) showing how normative governance arrangement are enacted in the daily practice in megaprojects. Furthermore, the study contributes to the debate on trust building in megaprojects (Kadefors, 2004; Munns, 1995; Swärd, 2016; Wong, Then & Skitmore, 2000) with the notion that workshops have transformational potential to build trust in the collaboration between commissioner and contractors. To buffer the potential loss of trust through conflicts, these organizations negotiated for a balanced reciprocal relationship, which the simultaneous exchange of equivalent resources without delay (Sahlins, 1973).

The structure of the paper is as follows. First, we discuss the theoretical debate on project governance and its relation with trust development between public and private partners in megaprojects. We do not develop a conceptual model of causal relations, but of trust development in public private collaboration in megaprojects. In the method section we highlight the applying an auto-ethnographic methodology, unique in project studies, and discuss the measures that we took to mitigate its related risks. In the findings, the workshops related to four stages of trust development in the governance of the studied megaproject are presented and their effectiveness discussed. In the discussion section the implication of the findings for the debate on trust development and governance are discussed. And finally, in the conclusions we indicate the importance of organizing joint reflection between commissioner and contractor consortia on the governance of megaprojects.

2. Governance, collaboration and trust in megaprojects

2.1. Governance and collaboration in megaprojects

The debate on project governance has been dominated by literature on governance systems based upon behavioral and outcome control in terms of budget, time and scope, on project partner roles (Turner & Keegan, 2001), and on contracting (Müller, 2012). In their study, Ahola et al. (2014) distinguish two streams of literature. In the first stream project governance is understood as externally imposed by the organization on the project to define and monitor standards, procedures and rules. This is what Latusk and Vlaar (2018) call the calculative approach, which understands rational actors undertaking actions to reduce risks. Governance is then defined in contractual terms of externally imposed inter-organizational collaboration between public and private partners to ensure a consistent and predictable delivery by contractors within contractual limitations (Müller, 2012). Such an approach is expected to provide a blueprint for collaborative behavior, and encourages actors to specify all the obligations of each party in advance, in preparation for possible future events (Benitez-Avila, Hartmann, & Dewulf, 2018). These contractual pre-arrangements seek to address the many interests that are at stake (Müller, 2012). However, such contracts are

robust to unpredictability of change in an environment over time but not to uncertainty and ambiguity in perceptions of the environmental (Carson, Madhok & Wu, 2006).

In the second stream project governance is tailored through arrangements that define shared sets of coordination, procedures and rules which are expected to be followed. This is called the relational approach (Latusk & Vlaar, 2018), which assumes that actors cannot mitigate or anticipate all risks, but nonetheless maintain collaborative relationships. Although contracts should provide a blueprint for collaborative behavior (Benitez-Avila, Hartmann, & Dewulf, 2018), when project partners work together relations become complex and challenging. As the relationship forms and unfolds over time assumptions about shared goals, responsibilities and action can become increasingly vexing (Sanderson, 2012; Van Marrewijk et al., 2016). Therefore, relational aspects mediate the effect of contracts (Benitez-Avila, Hartmann, & Dewulf, 2018).

Sanderson (2012) criticizes the strict governance regimes (Miller & Hobbs, 2005) of both approaches. According to him, they create an illusion of foresightedness, in which the commissioner consciously tries to build a capacity to deal with future events into governance structures. However, historical relations between project partners, the so-called 'shadows of the past' (Poppo, Zheng Zhou & Ryu, 2008), influence daily governance practices. Sanderson (2012) identifies these governance practices as causes for the problematic collaboration in megaprojects. Project actors are often unable to respond flexible to inevitable turbulence of inter-organizational complexity, ambiguity, uncertainty and conflicts faced by megaproject actors with diverse and competing project rationalities (Miller & Hobbs, 2005). The micro-processes can help to better understand how practices of governance shape the actions of project employees and vice versa (e.g. Müller, 2012). Therefore, Brunet (2019: 294) suggests to concern over "what people do in relation to project governance and how this is influenced by and influences their organization and institution context".

2.2. Stages of trust development

The complex concept of trust has slowly attracted attention from project scholars (Kadefors, 2004; Müller, Andersen & Kvalnes, 2013; Munns, 1995; Pinto, Slevin & English, 2009; Swärd, 2016; Wong et al., 2000; Wong, Cheung & Yui, 2008). For example, Pinto et al. (2009) provide a rather simple framework which understands positive owner and contractor trust to result in satisfaction over collaboration and project outcome. Interesting and aligned with the calculative and relational approach of governance, Rosseau et al. (1998) distinguish between calculative and normative trust. Calculative trust is impersonal and based on a structure of rewards and penalties Rousseau et al. (1998). This is what Wong et al. (2008) call system based trust, assuming trust to be based upon financial agreements and legal systems. Finally, Das and Teng (2001) names this competence trust, which is the trust in the technical competence of partners. These interpretations of calculative trust can be related to the calculative governance approach.

Normative trust is related to personal relations and based upon past behavior and shared identity Rousseau et al. (1998). Wong et al. (2008) call this affect based trust, which is based on the emotional bond between persons. Das and Teng (2001) names tis goodwill trust, which is the trust in someone's loyalty, good intentions and integrity. Normative trust is frequently named as a requirement for but also as a result of collaboration (e.g. Smets, Wels & van Loon, 1999). When normative trust is missing, perceived discrepancies between expectations and actual behavior can result in power struggles and loss of trust (Van Marrewijk et al., 2016). Furthermore, Maurer (2010) found that when team members know each other from prior collaboration and when secured benefits and clear and measurable reward criteria existed, the development of trust was fostered. These understandings of normative can be related to the relational governance approach.

Calculative and normative trust should be understood not in isolation but as an entangled development over time following different stages (Latusk & Vlaar, 2018; Swärd, 2016). Although they do not distinguish calculative and normative trust, Schilke and Cook (2013) suggest that the development of trust relations coevolves with partnership stages. The first stage is initiation, an exploration phase in which partners are identified, evaluated, and selected and clues are gathered about trustworthiness. Second is the negotiation stage where negotiations among prospective partners take place and partners becoming acquainted during interpersonal interactions. The third stage, formation, involves setting up the partnership by committing various types of resources by transferring trust. The fourth and final stage is operations, in which partner organizations collaborate and implement the agreement in the operation stage resulting in institutionalizing trust. In these early stages of partnership, institutional based trust has been found to be important (Bachmann & Inkpen, 2011). In the case of our study, the Dutch public and private partners have a long history of collaboration which in which conflicts, mutual stereotyping and collusion have weakened institutional trust in the Dutch infrastructure sector (Priemus, 2004; Sminia, 2011). Swärd (2016) shows that in later stages of an interorganizational project deeper forms of trust are needed due to increased interdependency. In each of the stages different governance arrangement can be used (Lowndes & Skelcher, 1998).

2.3. Trust and reciprocity

Within project literature the concepts of trust and reciprocity have been used sparsely (cf. Kadefors, 2004; Maurer, 2010). Kadefors (2004) adopts the concept of reciprocity to explain how actions of trust elicit co-operative behavior while actions of distrust elicit self-serving behavior. When turning to organization studies literature we see that trust is understood to be developed in a reciprocal interaction between partners (Smets et al., 1999; Swärd, 2016) to reduce social complexity (Poppo et al., 2008) and uncertainty (Latusk & Vlaar, 2018). For example, demonstrating vulnerability by taking a large risk builds trust in projects, while taking small risks may be interpreted as a sign of distrust (Murnighan, Malhotra, & Weber, 2004). In his famous study of trade among Trobriand islanders, anthropologist Malinowski (1922) showed that an important condition for reciprocal action is that it is not performed because it is dictated by formal rules or role expectancies, but as a repayment for benefits received. Reciprocity thus deepens the collaboration between project partners over time as "we owe others certain things because of what they have previously done for us, because of history of previous interaction we have had with them" (Gouldner, 1960: 172).

Three types of reciprocal exchange are important for our study of trust development (Sahlins, 1973). The first type is generalized reciprocity which refers to putatively altruistic transactions, where exchange takes place over an indefinite reimbursement period, with undefined equivalency of return and with a low self-interest. With generalized reciprocity the flow of resources is sustained by prevailing social relations and not stipulated by quality, quantity or time (Sahlins, 1973). An example of this is reciprocity between long-time partners in a project alliance. The second type is balanced or symmetrical reciprocity, which is a simultaneous exchange of equivalent resources without delay in which both parties mutually benefit. That is, recipients must reimburse their benefactors with something of roughly equivalent value within a finite timeframe. We think this type of reciprocity to exist within a contractor consortium or a project team. The third type is negative reciprocity, characterised by timely, equivalent returns and high self-interest. Actors in this form seek to maximise utility at the expense of others. This is the most impersonal form of exchange when a contractor tries to maximise their profit with additional payments. Reciprocity is not stable but negotiated in practice, and failure to reciprocate in inter-organizational settings is likely to generate negative reciprocity (Van Marrewijk & Dessing, 2019). We agree with Swärd (2016) who

states that reciprocity might be the real glue that binds partners in inter-organizational projects.

Our theoretical lens (for a visualization see Fig. 1) thus understands the relational and contractual governance of a megaproject to be a tailored arrangement consisting of a set of shared rules and procedures, which have to be enacted in daily governance practices. In a circular process, these practices influence the collaboration, which in turn stimulates reciprocity, to further develop normative trust. Calculative trust influence early phases of partnership development while normative trust is developed through a reciprocal relationship and collaboration in later phases.

3. Methods

For obtaining an in-depth understanding of the practices of trust development to govern a megaproject the first author, who is the SAA project director, used an auto-ethnographic field study (Ellis, 2004; Hayano, 1979; Reed-Danahay, 1997). This approach helps to uncover the sensitive, emotional and difficult to grasp practices of trust development in megaprojects, which has been asked for by project scholars (Benitez-Avila, Hartmann, & Dewulf, 2018; Maurer, 2010; Möllering & Sydow, 2019). Autoethnography results in a very rich practitioner perspective, which is arguably, except for a few examples (Campbell, 2016; Thomas, 2019), missing in project studies (Van Marrewijk & Dessing, 2019). Although project management studies are traditionally close to practice, most project scholars agree that overcoming the knowledge gap between academics and practitioners is challenging (Söderlund & Maylor, 2012). Combining the roles of practitioner and researcher in an autoethnography can help to bridge this gap. With others (Söderlund & Maylor, 2012; Van Marrewijk & Dessing, 2019), we encourage this form of engaged scholarship in which academic findings can be relevant to practitioners. However, the use of autoethnography brings along a number of methodological topics which will be discussed below.

3.1. Autoethnography

Autoethnography aims to systematically describe and analyze personal experiences to improve the understanding of experiences in organizations over a longer period of time (Ellis, 2004). Autoethnography brings together the 'self' (*auto*), the culture (*ethno*) and the research process (*graphy*) (Helps, 2017; Reed-Danahay, 1997). Based on his or her own experience and knowledge of the context, the researcher can give meaning to the cultural phenomenon under study (Reed-Danahay, 1997; Van Maanen, 1995). Therefore, autoethnography is generally seen as more 'authentic' than 'normal' ethnography and enables the writer to present a personal narrative and perspective (Reed-Danahay, 1997). Such an autobiographical account produces a rich understanding of interpretations and personal judgements concerning the leading of megaprojects (Drouin, Shankaran, Van Marrewijk, & Müller, 2020).

Obviously, the auto-ethnographic approach takes some methodological risks on the reliability, criticality, and integrity of the research findings (Anderson, 2006). The double role of researcher/practitioner (Helps, 2017) could result in self-absorption, in the development of a tunnel vision or 'cultural nearsightedness' (Schwartz-Shea & Yanow, 2012). We took divers measures to mitigate these risks. First, is the triangulation of research findings, which is the combining of documents, interviews, observations so that data can be compared (Denzin, 1997). Second, the triangulation of researchers (Denzin, 1997) increased the trustworthiness of the study and mitigated the risk of biased observations. The fourth author, as a researcher, observed diverse workshops and executed interviews with SAA respondents. Furthermore, the third and fourth author supervised, through regular meetings, the execution of the field study by the first author. This made it possible to critically discuss field findings, to question biased observations, and to reflect upon the first author's frame of reference (Helps, 2017;
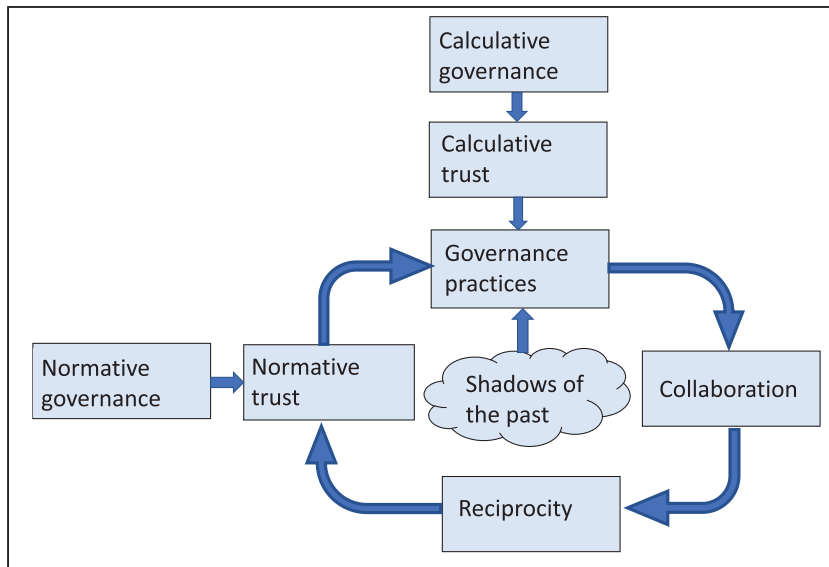
Schwartz-Shea & Yanow, 2012). The third and fourth author asked for collegial reflection of the second author at three different times during the research process, while the second author was actively involved in the critical writing of the findings.

3.2. Data collection

The data for the study was collected through participant observation of the first author in his simultaneous role of researcher and project director (Ruijter, 2019). The double role of researcher and practitioner is not unique in organizational research (Helps, 2017). Participant observation involves investigating, experiencing and representing social life occurring in a particular setting on a relatively long-term basis (Cohen, 2000). The first author participated in all, but one, of the 28 workshops, which were organized for employees of the commissioner, the SAA program, and the contractor consortia (see Table 1 for an overview). Almost all of the workshops, which lasted between three and four hours, were recorded and transcribed in minutes.

To validate the findings from participant observation, the first author conducted 12 interviews with key representatives of the SAA board and constructor consortia (respondents 1 to 12 in Table 2). The interviews were typically organized in a neutral setting outside the office and lasted 1 to 1,5 h. In these interviews, the first author reflected upon the findings and thus mitigated risks of possible biased perspective (Anderson, 2006). To further increase the reliability of the study, the fourth author independently executed 21 interviews in 2017/2018 to collect the opinions of key actors over dilemmas of commissioner and contractor in the SAA megaproject (respondents 13 to 32 in Table 2). In the findings section we use quotes from the two sets of interviews, from the workshop minutes and from project documentation. The interplay between these diverse sources strengthen the rich perspective on daily trust development practices not earlier presented in project studies.

3.3. Data analysis

The collected data was analyzed by using an interpretative approach in which data is understood within the context of the case (LeCompte & Schensul, 2013). Such analysis strengthens claims made about actors' interpretations (Schwartz-Shea & Yanow, 2012). A four-round interpretive method was engaged for this analysis (LeCompte & Schensul, 2013). In the first round, the researcher/project director went through all collected data and selected narratives on trust development and resilient

partnership and gave, in consultation with other SAA managers, meaning to these narratives. This helped to increase reflexivity and to prevented sympathetic interpretation (Schwartz-Shea & Yanow, 2012). In the second round, we went through these narratives to find how trust development was central and what workshops were used. We then categorized six types of workshops dealing with trust development; (1) shared values, (2) dealing with dilemmas, (3) story-telling, (4) fishbowl, (5) the chair and (6) role-playing. In the third round we analyzed the relation of these workshops with the trust development stages of initiation, negotiation, formation and operation (Schilke & Cook, 2013). Based upon this analysis we could connect the found workshops to the stages (see Table 1). Furthermore, we analyzed how each of the workshops contributed to the trust development process in the studied project. In the fourth and final round, all authors jointly debated, questioned and clarified uncertainties, and further contextualized the case descriptions to refine the final written text.

4. The governance of the SAA megaproject

The SAA infrastructure project, for which plans were already being made back in the 1960s, involves a large-scale re-infrastructure and advancement of the main road network between Schiphol, Amsterdam and Almere, with the aim of improving the accessibility and quality of life in this densely populated region of the Netherlands. It includes the infrastructure of the longest land tunnel in the Netherland (3 km), and Europe's largest aqueduct. After years of planning and discussion, a final decision was made in 2012, after which the realization started, projected to deliver in 2020. The impact of all this infrastructure work is enormous, especially on residents in close proximity and on road users. With regard to the latter, it is important that the region would not be 'locked in' during the implementation of the program. The accessibility of this densely populated and economically important part of the Netherlands has to be safeguarded during infrastructure. For this reason, and for manageability, the megaproject was therefore divided into five separate projects, here called 1 to 5. Project 1 (A10 realized in 2014) and 5 (A9 Badhoevedorp-Holendrecht postponed to 2019–2026) fall outside the time span of the study. Projects 2 (A1/A6), 3 (A9 Gaasperdammerweg or 'GDW') and 4 (A6 Almere) were respectively realized by the contractors' consortia SAAone, IXAS and Parkway6 (see Fig. 2). The five projects were planned to be realized in 'roof-tile' fashion, which is in succession and partly overlapping in time. Consequently, at the time of this study the projects were at various stages of completion: project

Table 1
Workshops to develop trust in the SAA megaproject.

Stage	#	Date	Participants	No. of part.	Workshop	Time in hours
Initiation	1.	Mar 12, 2014	SAA Contract Managers	8	Defining values	4
	2.	May 7, 2014	SAA Contract Managers	8	Defining values	4
	3.	Oct 29, 2014	SAA program management, Project Managers and Contract Managers	16	Defining values	4
	4.	Dec 4, 2014	SAA program management, Project Managers and Contract Managers	12	Defining values	4
	5.	Feb 3, 2015	SAA project teams + A9B	14	Defining values	3
	6.	Feb 11, 2015	SAA project teams + A9G	14	Defining values	3
	7.	Feb 11, 2015	SAA project teams + A1A6	14	Defining values	3
	8.	Feb 12, 2015	SAA project teams + A6A	14	Defining values	3
	9.	Apr 9, 2015	SAA employees half yearly meetings	85	Defining values	4
Negotiation	10.	May 13, 2015	SAAone (A1/A6) commissioner and contractor	18	Dealing with dilemma's	3,5
	11.	Jun 15, 2015	IXAS (A9 GDW) commissioner and contractor	18	Dealing with dilemma's	4
	12.	Jun 17, 2015	Witteveen+Bos (A9 BAHO) comm authority and contractor	16	Dealing with dilemma's	4
	13.	Jun 18, 2015	SAA program management & Project Managers	11	Discussion of cases	3
Formation	14.	Oct 1, 2015	SAA program management & Project Managers	7	Storytelling: development of storytelling	3
	15.	Oct 15, 2015	SAA employees half yearly meetings	100	'The Chair'	4
	16.	Feb 2, 2016	SAA program management and SAAone	15	Fish bowl setup	2
	17.	Apr 5, 2016	SAAone (A1/A6) commissioner and contractor	18	Storytelling	3
	18.	Apr 14, 2016	Witteveen+Bos (A9 BAHO) comm authority and contractor	17	Storytelling	3
	19.	Apr 21, 2016	SAA employees half yearly meetings	110	'The Chair' + presentation of stories	4
	20.	May 25, 2016	IXAS (A9 GDW) commissioner and contractor	16	Storytelling	3
	21.	Sept 29, 2016	SAA employees half yearly meetings	100	Exchange of experiences with partnership	4
Operation	22.	Mar 6, 2017	SAA program management and Project Managers	9	Role-playing practicing	3
	23.	Apr 20, 2017	SAA employees half yearly meetings	120	Role-playing	4
	24.	May 16, 2017	Parkway6 (A6 Almere) comm authority and contractor	20	Storytelling	2
	25.	May 17, 2017	IXAS (A9 GDW) commissioner and contractor	18	Role-playing	3
	26.	Aug 23, 2017	Young professionals of Commissioner and Volker Wessels	40	Role-playing	3
	27.	Nov 14, 2018	Parkway 6, Almere municipality comm authority and contractor	15	Dealing with dilemma's	2
	28.	Nov 21, 2018	IXAS (A9 GDW) commissioner and contractor	20	Dealing with dilemma's	3
		Total		**877**		**92,5**

Table 2
List of interview respondents in the SAA megaproject.

| Resp.	Team	Organization	Date
1.	Chief Procurement Officer	Commissioner	21–12–2017
2.	Manager implementation market strategy	Commissioner	21–12–2017
3.	Director (board member SAAone)	Volker Infra	6–12–2017
4.	General director (board member SAAone)	Boskalis Nederland	13–12–2017
5.	Contract manager A1/A6	Commissioner	27–11–2017
6.	EPCM project director	SAAone BV	27–11–2017
7	Project managerA9GDW	Commissioner	20–12–2017
8.	Contract manager A9GDW	Commissioner	20–12–2017
9	EPCM project director	IXAS	20–12–2017
10.	Contract manager A6 Almere	Commissioner	19–12–2017
11.	SPC project director A6 Almere	Parkway6	19–12–2017
12.	EPCM project director A6 Almere	Parkway6	19–12–2017
13.	Contract manager A1/A6	Commissioner	6–3–2017
14.	Operational manager	SAAone BV	22–2–2017
15	Traffic manager	SAA	17–2–2017
16.	Technical manager A1/A6	Commissioner	23–3–2017
17.	Stakeholder mngr A9GDW	Commissioner	7–4–2017
18.	Manager A1/A6	Commissioner	6–4–2017
19.	Manager A6 Almere	Parkway6	7–6–2017
20	Asset manager A9GDW	IXAS	12–6–2017
21	Contract manager A6 Almere	Commissioner	5–6–2017
22.	Manager	Parkway6	16–5–2017
23.	Contract manager A9GDW	Commissioner	6–7–2017
24.	Project director A6 Almere	Parkway6	29–6–2017
25.	Manager A1/A6	Commissioner	24–7–2017
26.	Manager A6 Almere	Parkway6	24–8–2017
27.	Stakeholder mngr A9GDW	IXAS	20–9–2017
28.	Manager A9GDW	Commissioner	25–9–2017
29.	Manager A1/A6	SAAone	2–11–2017
30.	Manager A1/A6	SAAone	3–11–2017
31.	Project manager A9GDW	Commissioner	5–2–2018
32.	Project manager A6 Almere	Commissioner	19–2–2018
33.	Operational manager A1/A6	SAAone	22–2–2018
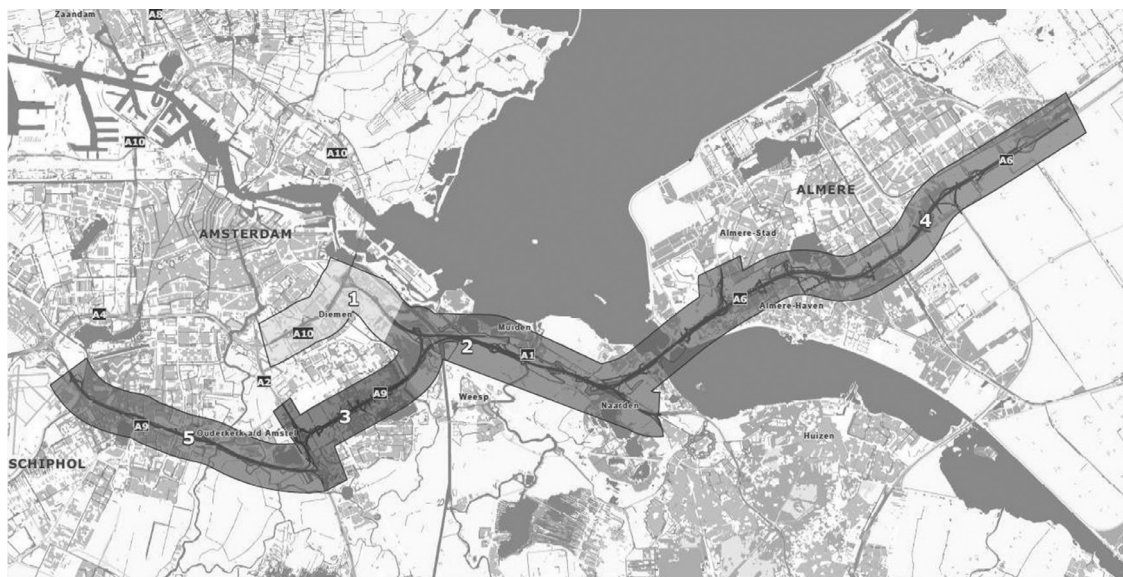
Fig. 2. The infrastructure program Schiphol-Amsterdam-Almere (SAA).

2 (delivered in 2017) and project 4 (in 2019) are completed one year ahead on schedule, while project 3 is on time (2020).

The bulk of the SAA program has been contracted through DBFM (Design, Build, Finance and Maintain) contracts. In these contracts the contractor is responsible for the design, construction, and maintenance of the project for a period of approximately 20 years and for the pre-financing of the whole. The Department for Public Works and Water Management, locally known as *Rijkswaterstaat* but here further called the Commissioner, is a Dutch governmental agency which manages

transport and water infrastructure in the Netherlands. During the design, construction and maintenance phase they pay for the availability of (a piece of) infrastructure for the road user. The contractors are expected to conclude an agreement with a financier for the pre-financing, which will be repaid with the Commissioner's periodic payments. Due to this repayment regime, the contractors will do everything possible to comply with the tight planning so they can meet their obligations to the financier. The decisive factor here is the one-off payment that the contractors receive at the end of the construction phase.

At the time of the data collection, the SAA program organization consisted of approximately 130 employees, of which about half were employed by the Commissioner and the other half from the private sector. The five project teams were responsible for the megaproject's preparation and management of the implementation by the various contractors and operated under the auspices of the central program management and a central planning control unit (see Appendix A). All teams had the same structure in which the Contract Manager is responsible for managing the contracting parties. The Stakeholder Manager is responsible for the coordination with municipalities, provinces, road users, local residents and companies and agencies in the vicinity that are affected directly (e.g. noise nuisance) or indirectly (e.g. road traffic). The Technical Manager is responsible for formulating the substantive specifications for the contractor and assessing whether the specifications have actually been realized, while the Planning & Control Manager is responsible for the operational management of the project and for identifying and controlling the various risks that can occur during the course of the project. Finally, the Project Director is responsible for the entire project reporting to the Director General of the Commissioner.

5. Practices of trust development in the SAA megaproject

The task of the SAA project management is to prepare and to manage the implementation of the five projects in close collaboration with the contractor consortia. The financial agreements and legal systems, defined in the five DBFM contracts, helped to develop calculative trust (Rousseau et al., 1998) between the Commissioner and the contractors. "You have to really understand what the project is about, because if you feel insecure about this you can fall back on the security of the contract" (interview respondent 8). However, the SAA management realizes that these contracts will never be able to account for all conceivable situations that might occur during the implementation of the project. According to the SAA management, there will always be passages in a contract that are unclear or are open to multiple interpretations. To prevent the falling back on calculative trust (Rousseau et al., 1998), the SAA project management expressed the ambition to develop normative trust (Rousseau et al., 1998) by shifting the role of the commissioning authority with respect to the contractor from controlling to more facilitating. In return, the contractor is expected to see the (political) project responsibilities from the perspective of the commissioning authority. This is what SAA management called resilient partnership; "an effective way to attain this balance, based on risk assessment and mutual trust, which you need to realize a project. This is not blind faith, but trust that is based on transparency and the ability to explain" (interview member SAA Board).

The SAA project management used six different types of workshops to intervene in the traditional collaboration between commissioner and contractor and thus develop normative trust; (1) shared values, (2) dealing with dilemmas, (3) story-telling, (4) fishbowl, (5) the chair, and (6) role-playing. Workshops are frequently being used as interventions (Alvesson & Sveningsson, 2016; Mirvis, 2019; Schein & Bennis, 1965). For example, Mirvis (2019: 62) uses the workshop of 'mask-making' in to learn managers to reflect upon their and each other's identity. Minahan (2019) uses the 'Argument of Obviousness' workshop to explore and discuss differences between partners in inter-organizational collaboration. He encourages partners to give voice to the generalization and stereotypes that each side holds out the other. Workshops can be very helpful in reflecting upon collaborative behavior of public and private partners in infrastructure projects (Van Marrewijk, Veenswijk & Clegg, 2014), to explore and discuss differences between partners in inter-organizational collaboration Minahan (2019), or to debrief on the experiences with collaboration, thus prompting reflection and learning (Wagenheim, 2019). In the following sections we explain each workshop and their relation with the trust development stages of initiation, negotiation, formation and operation (Schilke & Cook, 2013). We further present their impact on the trust building process, their relation with

the other workshops, and their advantages and disadvantages. Finally, for each workshop we come with supporting quotes from participants of these workshops.

5.1. Initiation stage: the defining values workshops

In the tender process, pre-collaboration dialogues between commissioning authority, contractor and participating and licensing authority, such as municipalities, already started. "During the dialogue, the parties were allowed to say anything that they wished without legal commitment" (interview respondent 13). According to respondents, ensuring an open discussion and the involvement of stakeholders, such as municipalities, during the dialogue phase, helped to learn each other's goals and interests at an early stage; "the contract is primarily a means, highly relevant of course, but not an objective in itself" (interview respondent 12). These first dialogues set the agenda for further exploration and development of the resilient partnership between the Commissioner and the contractor consortia through workshops.

The SAA managers organized four internal workshops to explore the competences and values needed for the governance of the megaproject, realizing that a resilient partnership is not a panacea. They referred to the importance of bringing up doubts and dilemmas for discussion, and to the courage and the space that employees need to do this; "we can set a good example, but we can't tell employees how they should do this" (minutes, 4 December 2014). Consultants helped to collect the viewpoints of contractors in order to define a set of important competences and core values for the partnership; empathy, predictability, flexibility, timely, and supportiveness.

The impact of this intervention on the trust building process is in the providing of a set of competences and related core values. We criticize the overvaluing of such sets, as Alvesson and Sveningsson (2016) call these the 'cloud of goodness', values that one can't oppose to. More impact had the openly discussing of goals, values, and risks, meaning, in which both Commissioner and contractor consortia must be vulnerable; "generally, we work opposed to each other, which asks for a lot of effort. It is a choice to go for an attitude that, at first side, appears to be vulnerable. But at the end this is much better for the progress of the megaproject." (interview respondent 14). The advantages of the initial workshops are in the setting of the stage for fertile collaboration during the execution of the project. Such workshops have been mentioned earlier in literature, for example, to create an alliance culture (Clegg, 2003). The disadvantages are found in the dominant role of the Commissioner in this initial stage, with risks of contractors adapting without really being convinced. For more supporting quotes for the exploring collaboration workshops in the initial stage see Table 3.

5.2. Negotiation stage: dealing with dilemmas workshops

In the negotiation stage, roughly between May and June 2015, the SAA management organized three 'dealing with dilemmas' workshops. These workshops were held separate from the day-to-day project life to focus on dilemmas in finding a balance between following the contract or focusing on the relation. "It was interesting and fascinating to get away from our day-to-day work and talk about different perspectives with each other" (observations during workshop May 16, 2017). Such reflections are perceived to be important for changing work routines (Yanow & Tsoukas, 2009). In the workshops, examples from the project work floor, such as the dilemma on shared versus separated responsibilities, were discussed by representatives of the Commissioner and the contractor consortium. The Commissioner supported the workshops as "the [resilient partnership] approach should not imply a subordinate position with respect to the contractor; instead, it should be about equality and partnership, I firmly believe in that" (minutes, June 17, 2015). Effort was needed to get people to reflect openly on their experiences and dilemmas, and sometimes specific arrangements were needed. For example, the Commissioner helped contractors to gain trust of external

Table 3
Supporting quotes for the defining values workshops in the initiation stage.

Supporting quotes	Sources
"As dialogue team we conducted open and transparent discussions with the candidates. We did not avoid any questions. If we did not know how something works, then we said so. We were vulnerable, but not naïve."	Interview Respondent 13
"It [resilient partnership] should not become an ideology; things can still go wrong during projects"	Minutes, 4 December 2014
"By communicating during the dialogue – and not avoiding difficult matters – the project objectives acquire depth and clarity."	Interview Respondent 21
"Would it not be better for Commissioner to take a facilitating role, to enable this contractor to implement its plans as efficiently as possible?"	Personal notes project director March 2014
"Soon after the contract was awarded, we asked: 'When are we going to sit down together?' The reaction of the contractor was somewhat reluctant: 'Let's do our own thing now, we will get together later on'."	Interview Respondent 10
"This [resilient partnership] is an effective way to attain this balance, based on risk assessment and mutual trust, which you need to realize a project. This is not blind faith, but trust that is based on transparency and the ability to explain"	Interview Respondent 3

Table 4
Supporting quotes for the dealing with dilemmas workshops in the negotiation stage.

Supporting quotes	Source
"Although everybody's intentions are good, we frequently work fragmented, to such an extent that out of frustration we sometimes conflict. If you then understand that it is an illusion that we understand each other, that is a good starting point."	Interview Respondent 14
"We often see behavior that is intended to ensure that the risk is borne as long as possible by another party. Instead of shifting the risks, we should focus more on jointly reducing the risks."	Contract Manager, minutes 12 March 2014
"He didn't have to do this. He could have said; 'time delay is not my problem', On the other side, if we have financial loss, we used to claim extra work. But we did not do this now"	Interview Respondent 20
"If the parties trust each other and you look for a solution together, then you will find one"	Personal notes project director March 2014
"Discussion doesn't always result in a solution; we can also agree to disagree"	Interview Respondent 26
"Although we encountered setbacks on this project, the most important gain was that we were able to prevent delays and inefficiencies by working together. The decisive factor was how we dealt with the setbacks. This requires something from both sides, in a technical sense, in a financial sense and also in a social sense."	Interview Respondent 6
"In this way you reduce ambiguity. Just openly discuss your worries, then the other would do the same and then you can try to make a connection."	Interview Respondent 23

stakeholders; "trust makes things possible that were undiscussable earlier" (interview respondent 15). Furthermore, we saw recurring struggles among employees of both the Commissioner and the contractors concerning the search for a balance between the development of calculative trust by focusing on the contract or the development of normative trust by prioritizing personal relations; "deploying this partnership in practice is still a struggle because it also concerns fundamental interests of people and organizations" (minutes, June 17, 2015). The tensions over interests were clearly noticeable as actors were hesitating to focus upon the relational partnership.

The dilemmas workshops supported reciprocal acts of helping each other; "we can help the contractor by allowing them to use an extra lane for the infrastructure of the tunnel" (interview respondent 21). This was met with a surprise; "it was remarkable that the commissioning authority accommodated us, not in a financial sense, but by giving us permission to close the reversible lane and modify the plan. They were not obligated to do so in any way (interview respondent 20). In return, the constructors did their best to understand the societal and political pressures that the Commissioner found themselves in this large project. "There are many opportunities when we really start thinking based on the underlying mandate of the project; from the beginning of the project you can then become more involved with the social benefits" (observation workshop June 17, 2015).

This intervention helped partners to make a first careful step in the development of resilient partnership as the collaboration philosophy now had to be enacted in practice. The workshops helped to develop a common language on which project partners could openly and transparently discuss dilemmas related to the work in "the right atmosphere" (interview respondent 10). The dealing with dilemma's workshops helped to reflect upon conflicts and make conscious and shared decisions over dilemmas, supported by project partners. This is in line with Swärd (2016), who reports that after a tunnel blast accident commissioner and contractor openly discussed how to respond to future incidents. In effect, the discussions in the dealing with dilemmas workshops focused on finding joint solutions; "I think that our people prefer to work in this way, it helps us all to achieve our objectives more effectively" (interview respondent 11). The disadvantage was found in the lack of a clear structure, which failed to uncover the diverse meaning

of incidents. For more supporting quotes for the exploring collaboration workshops in the initial stage see Table 4.

5.3. Formation stage: storytelling workshops

In the formation stage, storytelling workshops with employees of both commissioner and constructors were used in the trust development. Therefore, the concept of storytelling was introduced to the SAA management in a workshop on the 1st of October 2015. "Narratives provide more space to clarify the experience from multiple perspectives; it is more interactive. This is a way to incorporate reflection, not only for yourself, but also collectively." (interview respondent 9). The workshops offered structural frames for checking how participants have interpreted collaboration by jointly developing narratives over experiences, events and incidents. "Unfortunately, it is often an illusion that various participants really understand each other immediately" (Respondent 5, observation February 2, 2016). These different interpretations frequently happen when dealing with (small) changes during the execution phase when the Commissioner thinks that all is settled, but the contractor thinks 'let's wait and see, a real decision has not yet been made'. Changes come frequently in infrastructure megaprojects: "then we think we've made an agreement, and then for the umpteenth time it changes again" (interview respondent 27). In such a situation, people go home with a different interpretation of the discussion. Others state that "when you realize that it is an illusion that you understand each other, that's a good start" (interview respondent 6). For the contractor, every change costs money, so they prefer to have a formal change of plan in which everything is specified and calculated before anything is done. At a certain point, everyone is waiting for the other, leading to delays and higher costs.

Stories over events and incidents function almost in the same way as Swärd (2016) discussed the events causing to develop trust. Examples of

Table 5

Supporting quotes for the storytelling workshops in the formation stage.

Supporting quotes	Sources
"One can best reflect upon your own behavior instead of blaming the other, because you can't change the but you can change yourself."	Interview Respondent 14
"Narratives provide more space to clarify the experience from multiple perspectives: it is more interactive"	Interview Respondent 8
"Trust facilitates discussing issues that earlier were taboo"	Interview Respondent 15
"The narratives make it easy to start conversations with others, but they also touch on many aspects about which you say 'I 'm doing that already'."	Interview Respondent 5
"We planned solid precautionary measures, but when I saw that huge structure [assembled railroad bridge] alongside the road, ready for transport, I still became a little nervous".	Personal notes project director 2016
"The awareness-building process is crucial, and by writing the narratives you are really engaged; this compels people to think much more deliberately about what they are doing."	Interview Respondent 7
"The narratives make it easy to start conversations with others, but they also touch on many aspects about which you say 'I'm doing that already.' "	Interview Respondent 5

Table 6

Supporting quotes for fish bowl setting in the formation stage.

Supporting quotes	Resources
"They know they can call us, for example when a contractor anticipates on a difficult meeting with the local municipality"	Interview Respondent 15
"We are helped by others; 'he shouldn't you forget this', or 'you have to do that'. We know each other's roles by heart now."	Interview Respondent 16
"I have the feeling that resilient partnership, and the way in which we have dealt with each other in this project, have brought the worlds of the commissioning authority and of the contractor closer together, and I think this is a very significant added value."	Interview Respondent 4

organizations. This compels participants to communicate more clearly with each other and determine whether the message has really arrived.

The impact of the fishbowl setup on the trust development process was limited as this was used only once. The advantage of this intervention is that involved actors are observed by their colleagues, who thus are trained in observation and reflection. These are competences that need to be trained in the construction sector (Van Marrewijk et al., 2014). This workshop can be used independently of other workshops in different stages of the trust development process. The disadvantage is in the rational focus of actors, especially with technical experts (Alvesson & Sveningsson, 2016), trying to convince others with arguments. Although these type of workshops include a debriefing on participants' experience, which is supposed to prompt reflection and learning (Wagenheim, 2019), the effect was, according to participants, low. For more supporting quotes for the exploring collaboration workshops in the initial stage see Table 6.

5.5. Formation stage: the chair workshops

A specific type of storytelling workshop was 'The Chair' workshop, introduced at a SAA employee meeting. This workshop was based on the Dutch television program 'De Stoel' [The Chair] symbolizing an open discussion of lifestyles. In the same way, SAA employees were encouraged to share their stories, fears and dilemmas with their colleagues; "we had noticed that people were shy at the beginning and afraid to be vulnerable. By creating a relaxed, living room-like atmosphere, we thought that it would be easier for people to share their dilemmas openly with others" (interview member SAA board). To help get this process started, several experienced speakers among the employees were asked to tell their stories, but during subsequent meetings it became easier for people to join. Nervously, one of the speakers started discussing the interplay between the auditors working for the Commissioner and the superintendents of the contractors. His statement 'empathetic but firm' was popular with the SAA employees; that you are empathetic but firm with each other; "fairness is a key to trust and transparency" (interview respondent 27). Another speaker stressed the importance to first have an open conversation over bottlenecks before referring to specifications in the contract. Being transparent and open over one's interests is very uncommon in the infrastructure sector (Van Marrewijk et al., 2014). In a final example, a speaker used the metaphor of kiting; "You can fly a kite with only a single string, but to steer it you need two". He argued that this is also true for the relationship between the Commissioner and contractor: one string for steering the relationship according to the contract, calculative trust, and one string for steering the relation towards cooperation, normative trust.

The Chair workshops impacted the trust building process by providing SAA project employees a safe environment to share their dilemmas with their colleagues. This helped them to learn from each other's experiences, much in the same way as Mirvis (2019: 59) describes the CEO of Novo Nordisk sitting on a chair in front of a group sharing his story

such narratives were over the transport of the assembled railroad bridge to the final location by special transport wagons in which the contractual risk of transport by the contractor would become a political risk for the Commissioner of closing down the highway when the transport failed. Therefore, a second opinion of university professors was asked for by the commission; "Don't you trust us? …. of course, I understood that the commissioning authority stuck his neck out with that second opinion." (interview respondent 3). In the storytelling workshop, "it is important to really understand each other's world: what do you actually hear in our message, how do you interpret it? (interview respondent 5).

The storytelling workshops facilitate the uncovering of multiple, and sometimes opposed, understandings of experiences with collaboration. Openly discussing sensitive (contract) issues and tensions in collaboration were earlier observed to be problematic in the execution of Dutch infrastructure megaprojects (Sminia, 2011). Storytelling workshops have been used earlier to increase managers' self-awareness (Mirvis, 2019). The disadvantage of the storytelling workshops was that participants had little or no experience with reflection and tended to react judgmentally. Therefore, a process consultant was needed to coach the writing of narratives in the workshops. For more supporting quotes for the exploring collaboration workshops in the initial stage see Table 5.

5.4. Formation stage: discussing in a fishbowl setup

The formation stage to develop trust in the resilient partnership was continued with the program component: discussing in a 'fishbowl setup'. The spatial setting is a joint session in which participants from both the Commissioner and contractors sit in the center of a room, while their reflections over mutual cooperation are observed by other participants who sit around in a circle. Participants learned in this session how they communicated from very different perspectives, which frequently resulted in 'trench warfare'; "getting into the trenches is simple but getting out of them is a different task entirely as everyone has to realize that the other party did not push you into the trenches, you got into them yourself". This awareness did not immediately result in a solution and a follow-up session was needed to tackle the impasse by taking a different approach by asking for joint clarification from within their respective

Table 7

Supporting quotes for the storytelling workshops in the formation stage.

Supporting quotes	Source
"Trust facilitates discussing issues that earlier were taboo"	Interview Respondent 15
"For the employee meeting in October 2015, I had to coax employees to tell their stories. But for the subsequent meeting in April 2016, employees spontaneously volunteered!"	Personal notes project director May 2016
"If the other party listens to you, and you know that the commissioning authority is aware of your problems and interests, this makes a big difference. This is especially the case if you can subsequently discuss the situation with each other	Interview Respondent 14
"it is important that we, as Project Managers, provide a safe environment for employees and also ensure broader support within the organization"	SAA project manager, minutes, October 2015
"Dare to make decisions, not only as a dialogue team, but also in the back-office organization"	Chair session, 15 October 2015

Table 8

Supporting quotes for role playing in the operations stage.

Supporting quotes	Source
"The commissioner has played a mediating role; they really did help to sell the idea of specification by the contractor to the CIV".	Interview Respondent 20
"I was surprised that the contractor was not at all negative about Commissioner. I became especially aware that you should sometimes be even more explicit about the background and reasons for our actions."	Commissioner employee during role play Aug 2017
"You also have to give each other something, and that happens far too little because it is in conflict with the contract. If we had adhered strictly to the contract for this project, we would have been worse off, because the contract stipulated severe penalties for infractions."	Interview Respondent 4
"It was good to stand in each other's shoes with this role-play. Only then do you understand what is involved. "	Commissioner employee during role play Aug 2017
"In practice, you sometimes work together in the interest of the commissioning authority and sometimes in the interest of the contractor."	Interview Respondent 6

with younger managers. Furthermore, it helped employees to increase their capabilities to reflect, before engaging with contractors. However, the impact of the Chair workshops was low as the constructors were not involved. For more supporting quotes for the exploring collaboration workshops in the initial stage see Table 7.

5.6. Operation stage: negotiating over balanced reciprocity through role-playing

In the operation stage, reflecting upon negotiations over the 'endgame' through role-playing was used to further develop trust in the SAA megaproject. Early in 2017, the management of SAA decided to practice the impending completion of the first major DBFM project, the A1/A6, and reflect upon the 'endgame' between the Commissioner and contractor by simulating it in a role-play; "a well experienced preparation helps to focus when time has come (interview respondent 16). Because the members of the project team had sufficient experience, they could quickly put themselves into the position of the other party. This resulted in fruitful discussions, and it was interesting to see how people responded to the behavior that was displayed. For example, when one party used the term 'trust' ("you can trust me"), this was likely to be interpreted by the other party as 'distrust' ("yeah, sure"). It was concluded that one cannot build trust by just using words; one has to show trust. Due to the way in which issues that had arisen during the implementation period were dealt with jointly, mutual trust was developed in the relationship.

Due to the success of this game situation, it was decided to continue this in a broader context. Specifically, for this purpose, a role-play was developed with a number of settings that had actually occurred in practice and was first played during an employee meeting at SAA in April 2017. For the role-play, the participants were assigned to roles different than their own, and events were introduced while participants were given a 'secret' personal agenda. Afterwards the teams shared their experiences in order to learn and acquire insight into mutual concerns. Later on, the role-playing was used together with one of the contractors (IXAS). We observed that the players, probably because they were placed in unaccustomed roles, exaggerated their positions more than they would have done in reality. As a result, the various interests of parties could be expressed more effectively, and due to the exaggeration of the behavior in a game situation the insight of the participants could be amplified into action/ reaction principles.

The impact of this intervention on the trust building process was found in the uncovering the patterns of collaboration by putting oneself in the position of the other. By doing so, empathy and normative trust

were created. Much in the same way as roles were trained in workshops on public private collaboration observed by Van Marrewijk et al. (2014). These SAA workshops were organized for the 'endgame' but can also be used as interventions in earlier project stages. The advantage of such role play workshop is closely related to its disadvantage; these are fictive situations that are played by others. On the one hand, it affords actors to experiment with new behavior (Yanow & Tsoukas, 2009), while at the other hand, role play can be interpreted as fictive. There is a risk of an instrumental performance with little meaning to those involved, as was the case a workshop with junior middle managers observed by Alvesson and Sveningsson (2016). For more supporting quotes for the exploring collaboration workshops in the initial stage see Table 8.

To summarize the findings of the workshops' contribution to the trust building process in the SAA megaproject, we present Table 9 here.

6. Discussion

This paper aimed to investigate the practices of trust development used to enhance the collaboration between public and private partners in the governance of the SAA infrastructure megaproject. The study found that calculative trust (Rousseau et al., 1998) between the Commissioner and the contractors was developed through financial agreements and legal systems, defined in five DBMF contracts. However, given the history of laborious collaboration and weak institutional trust in the Dutch infrastructure sector (Priemus, 2004; Sminia, 2011), the Commissioner made great effort to develop normative trust (Rousseau et al., 1998) through the establishing of a resilient partnership with the contractors. The findings showed that six different types of workshops have been used to do so; (1) shared values, (2) dealing with dilemmas, (3) story-telling, (4) fishbowl, (5) the chair, and (6) role-playing. These workshops were implemented during four stages of partnership development. These insights contribute to the megaproject debate on governance, trust development, and public-private collaboration.

6.1. Practices of governing

The first contribution is to the debate on the governance of megaprojects (Brunet & Aubry, 2016; Müller, 2012; Pitsis et al., 2014; Van Marrewijk et al., 2016). The findings in our study indicate that, according to the Commissioner, pre-arranged contractual agreements, DBFM in the SAA case, insufficiently provide blueprints for successful collaboration.

Table 9

The contribution of workshops to the trust development process in the SAA megaproject.

Workshops	Practice	Contribution to trust development
Initiation stage: defining values for partnership		
Defining values	Reflecting on the needed partnership Exploring competences and values needed for the governance	Partners showed willingness to collaborate Openly discussing of goals, values, and risks A set of competences and related core values Sharing of core values with contractors Partners showed vulnerability
Negotiation stage: discussing micro dilemmas		
Dealing with dilemma's	Openly discussing dilemmas caused by the governance arrangement Reciprocal acts of helping each other	Sharing personal doubts and dilemmas Partners developed a common language Joint opportunities Shared decision making over dilemmas Balanced reciprocal relationship
Formation stage: reflection on incidents, experiences and events		
Storytelling	Jointly construction of narratives over collaboration incidents, experiences and events Structural frames for checking how participants come to interpretation	Uncovering of multiple, and sometimes opposed, understandings Openly discussing sensitive (contract) issues Understanding each other's interests Coming to shared interpretations of incidents, experiences and events
Discussing in a fishbowl setup	Joint sharing of experiences on the collaboration between commissioner and contractor	Preventing the start of a 'trench warfare' Learning to observe and reflect Tackle of impasses Coming to shared interpretations Breaking through impasses
The Chair	Expressing of personal viewpoints on issues by SAA employees of all levels	Creating a safe environment Showing vulnerability to colleagues Personal viewpoints and dilemma's
Operation stage: negotiating balanced reciprocity		
Role-playing	Preparing for expected difficult situations, resulting from the governance arrangement	Uncovering patterns of collaboration Empathy over each other's position Jointly anticipating project's ending Enlarging of predictability of employees

Although contractual governance shapes relational norms oriented to encourage mutual reliable attitudes based on trust (Benitez-Avila, Hartmann, & Dewulf, 2018), our findings show that an enormous effort, both in time and effort, had to be paid for enacting the resilient partnership philosophy into practices. Therefore, given these efforts and the temporal, dynamic, and complex character of infrastructure megaprojects, it is no surprise that the enactment of partnership philosophies frequently fails (e.g. Van Marrewijk et al., 2016).

Indeed, normative governance arrangements, such as the resilient partnership philosophy, run the risk of becoming a hyperreality (Alvesson & Sveningsson, 2016), disconnected from daily practice of project employees. To enact the resilient partnership, employees of Commissioner and contractors had to develop a common language over cultural values. Frequently, 'cultural talk' is alien to employees in technology oriented organizations (Alvesson & Sveningsson, 2016). Therefore, the SAA management organized a series of workshops to further explore the partnership model and the practical dilemmas related to the governance arrangement and come to a shared understanding of this model. This is in line with Carson et al. (2006) who stated that relational contracts are not robust to ambiguity in perceptions of the environmental context. Furthermore, the findings show that in order to enact governance arrangements, Commissioner and contractors' employees had to openly discuss dilemmas, joint reflect upon incidents, tell personal stories, practice vulnerability, and to engage in role-playing. This quest for much more effort than writing down tailored arrangements in which shared sets of coordination, procedures and rules are defined (Ahola et al., 2014). These found practices of governing meet Sanderson's (2012) critics of commissioners' illusion of foresightedness to deal with future unexpected events. Contractual agreements, even those with a partnership philosophy, can't ensure smooth collaboration in megaprojects. The findings of our study show that micro-processes of

governing are not emerging spontaneously (Sanderson, 2012), but are managed carefully through workshops.

6.2. Stages of trust development

The second contribution of our study is to the debate on the development of trust in (mega)projects (Kadefors, 2004; Munns, 1995; Swärd, 2016; Wong et al., 2000). Our findings show that the SAA megaproject went through the four stages of trust development, as indicated by Schilke and Cook (2013), in which both calculative and normative trust were established sequentially and simultaneously. The megaproject started with contractual specifications, detailed monitoring, and rewards and penalties for availability of the road, all agreed upon in the DBFM contract, to develop calculative trust. Infrastructure megaprojects frequently start with little institutional trust (Sminia, 2011). Therefore they start with contractual specifications and detailed monitoring to prevent opportunistic behavior (Müller et al., 2013; Van Marrewijk et al., 2016). This finding is in line with scholars assuming that contractual control diminish non-calculative trust (Lumineau, 2017), or with scholars thinking that contractual arrangements are needed when trust is missing between partners in interorganizational relationships (Klein Woolthuis, Hillebrand & Nooteboom, 2005).

In the initial stage, workshops were organized in which normative trust was developed through agreeing upon a shared set of project values. In the negotiation stage, these values were then enacted through joint workshops on dealing with dilemmas caused by governance arrangements and thus helped to strengthen the calculative trust between commissioner and contractors. In the formation stage the development of normative trust dominated the agenda, while in the operation stage the calculative trust was built through the role-playing workshops fo-

cused upon the preparing of commissioner and contractors for the delivery of the contract. Swärd (2016) suggests that deeper forms of trust can be found in later stages. However, based upon the findings, we think it is difficult to speak of deep and shallow trust; we rather see a temporary entangled process of calculative and normative trust development over time, which is named swift trust by Meyerson et al. (1996). These findings support scholars assuming calculative and normative trust are to be developed simultaneously (e.g. Camén, Gottfridsson & Rundh, 2011). We have shown that trust development is not just developed through coincidental events as Swärd (2016) found, but through a laborious process of improving employees' capability to reflect, of jointly reflecting upon dilemmas, and of negotiating balanced reciprocity when solving problems.

6.3. Trust and reciprocity in megaprojects

The third contribution is to the debate on trust development in interorganizational relations (Latusk & Vlaar, 2018; Sydow, 1998). The found practices of trust development show that they were organized to support a balanced reciprocal relationship (Sahlins, 1973) between commissioner and contractor consortia. This sounds obvious, but keeping a balanced reciprocal relationship is actually very difficult (Van Marrewijk & Dessing, 2019), especially given the shadows of the past (Poppo et al., 2008), which is in the Dutch infrastructure sector a lack of institutional trust (Priemus, 2004; Sminia, 2011). Balanced reciprocity was maintained, for example, through securing the exchanges of viewpoints and interests, and allowing for solutions that helped constructors in exchange for societal issues taken into account. As reciprocal relations are not stable but change over time (Van Marrewijk & Dessing, 2019), balanced reciprocity needed to be negotiated in practice during the different stages of the partnership development. For example, this was done in the dealing with dilemmas workshops, the role-playing workshops and in the case of the risky transport of the rail bridge by negotiating a second opinion in exchange for security. Mechanisms that threaten balanced reciprocity are the drifting apart of partners, the claiming of more work by contractors, of the pushing of risks to the contractors. This can turn balanced reciprocity into negative reciprocity. We agree with others (Munns, 1995; Swärd, 2016) that shown trust will be reciprocated with behavior that validates trust. The SAA metaphor was that of a mattress that was filled with trust in times of prosperity, and when you fall together, your fall is broken by the mattress. Balanced reciprocity thus buffer to overcome failures.

6.4. Workshops as change interventions in the collaboration of public and private partners

Finally, the findings in the SAA study show the potential of organizing workshops as interventions in the collaboration of commissioner and contractors in infrastructure megaprojects. In many countries, programs have been undertaken to radically change this difficult collaboration, affording greater efficiency, transparency and accountability (e.g. Adamson & Pollington, 2006; Sminia, 2011). Construction megaprojects can be powerful means to evoking changes (Bresnen, Goussevskaia & Swan, 2005) as they can be understood as autonomous, temporary trading zones (Lenfle & Söderlund, 2018). In these zones, project partners negotiate over work practices, narratives, values, norms and perspectives (Van Marrewijk et al., 2014) to explore collaboration (Minahan, 2019). For example, the first workshop specifically focused upon the core values for the partnership; empathy, predictability, flexibility, timely, and supportiveness. All six found workshops were supportive in establishing a resilient partnership, aimed to change collaborative behavior between the Commissioner and contractors. Already in the 1965's Schein and Bennis (1965) stated that laboratory training, which is the putting together of employees in reflective experience-based learning sessions, is directed towards intervention and change, trying to influence professional and organizational roles.

The six workshops were organized in close relation to the daily working practices of project employees. This bottom-up approach is supported by Tsoukas and Chia (2002) who perceive organizational change as an on-going change, something that occurs in the everyday interaction of employees. In the workshops, employees reflected on personal experiences with dilemma's, incidents and events and thus prompting reflection and learning (Wagenheim, 2019). Frequently, change workshop turn out to be an instrumental performance with little meaning to those involved (Alvesson & Sveningsson, 2016). This was the case with the Fishbowl workshop. Therefore, discussions in the workshops can be either develop into a generative dialogue (Thomas, Sargent & Hardy, 2011), supporting change actions, or in a degenerative dialog (Thomas et al., 2011), obstructing change, depending the way in which meaning is constructed over time. In sum, workshops can thus be understood as transformational, involving a sense of non-hierarchical equality, togetherness, and common purpose when the cathartic liminal state is collectively experienced.

7. Conclusions

This paper investigated the practices of trust development through workshops to enhance the collaboration between public and private partners in the governance of the SAA infrastructure megaproject. The study has been executed through an auto-ethnographic research approach (Anderson, 2006), which helped to uncover in-depth practices of trust development across public-private boundaries, as has been asked for by scholars (Latusk & Vlaar, 2018; Maurer, 2010; Möllering & Sydow, 2019). The study contributes to the debate on governance in megaprojects (Benitez-Avila, Hartmann, & Dewulf, 2018; Brunet & Aubry, 2016; Müller, 2012), showing how to make a normative governance arrangement robust. Furthermore, the study contributes to the debate on trust building in megaprojects (Kadefors, 2004; Munns, 1995; Swärd, 2016; Wong et al., 2000) with Schilke & Cook's (2013) four stages of trust development, which helped the exploration of trust development over time. In these stages, balanced reciprocity (Sahlins, 1973) was negotiated in practice, thus buffering the potential loss of trust through conflicts between megaproject partners. Finally, the study contributes to the debate on change of public-private collaboration in megaprojects (Bresnen et al., 2005; Van Marrewijk et al., 2014). Workshops can have, when seriously organized, transformational potential to change collaborative behavior of project partners.

The limitations of the study are found in the risks of the autoethnography method (Anderson, 2006). This method, in which the researcher is also practitioner, has risks of self-absorption, tunnel vision and bias (Schwartz-Shea & Yanow, 2012). To mitigate these risks, we took measurements to guarantee academic rigor by organizing data- and researcher-triangulation (Denzin, 1997). Are the findings on the Dutch SAA case limited by their cultural context? We think that role-playing, openly discussing your personal dilemmas, showing vulnerability and story-telling can be translated to a different national context. We understand reciprocity and trust to be global phenomena (Malinowski, 1922) and do think that the stages of trust development and the efforts of partners in megaprojects to develop both calculative and normative trust through meaningful workshops are universal. However, as trust is based upon emotional bonds (Wong et al., 2008) and acts of giving back can take many forms, both material and immaterial (Gouldner, 1960), we understand trust development to be culturally influenced.

Future research should focus on the multi-levelness of trust development as the building of institutional trust from positive project experiences is not well understood. We see successful trust development in individual megaprojects (e.g. Clegg et al., 2002), but after termination, these projects leave little or no traces at organizational and institutional levels. Future studies could investigate what mechanism hinder developed trust in the governance of megaprojects to be institutionalized.

The findings from our study inform practitioners that trust building in a public-private partnership is a laborious process. The conditions

for a successful process include different enablers. At the front end of a megaproject, the right atmosphere between the public private collaboration in the tendering phase is needed to discuss each other's interests. After selection, partners then explore a joint philosophy of collaboration and related set of values. The right framing is here important, is there a societal or national trend, such as for example 'rethinking project management' in the UK (Cicmil, Williams & Thomas, 2006), to connect to? Following this, the impact of the initiator, which frequently is the public commissioner, must be strong. The initiator needs to increase the reflective capability of their employees, in order to organize workshops to reflect upon issues and dilemmas in the collaboration between commissioner and contractor. Intervention instruments such as storytelling, role-playing and observing are used to reflect upon daily collaboration. Paradoxically, trust development should always be on the agenda of the project board, while at the same time trust should not be discussed too often, risking the loss of trust. The involvement of process experts to guarantee quality and progress is necessary. During execution, a balanced reciprocal relation should be strived for, something that is not stable but should be negotiated over time (Van Marrewijk & Dessing, 2019).

Appendix A. Organizational chart of the SAA program organization
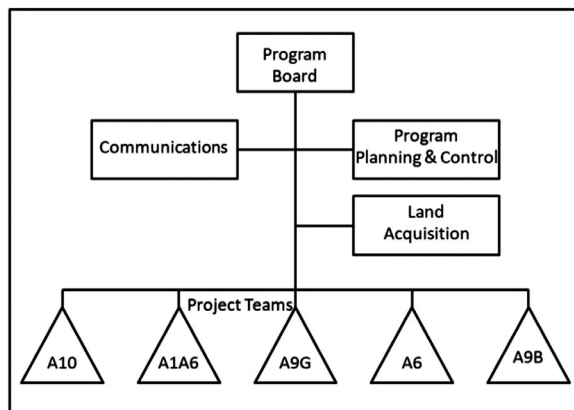
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