



Cultural practices of governance in the Panama Canal Expansion Megaproject

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Abstract

The academic debate on governance in project management is dominated by research that looks at the structure of governance regimes, but there is very little research on the micro-practices of governance as it actually takes place. This paper fills this gap by focusing on the governance practices of project employees and looking at megaprojects as cultural phenomena. Therefore, a one-year ethnographic field study of the Panama Canal Expansion Megaproject was conducted to examine the cultural practices of governing. In the study, five cultural practices were found to influence the governance of this megaproject: (1) ritualizing the bid-winning ceremony, (2) changing teams, (3) struggling over governance structure, and labeling according to (4) national and (5) organizational cultures. This paper makes a contribution to the current debate by offering a cultural approach of megaprojects and by including a case that shows how ex post micro-processes of governing can start escalation in megaprojects.

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1. Introduction

In February 2014, *The Guardian*, *The New York Times*, and *El Mundo* all carried reports on conflicts in the Panama Canal Expansion Megaproject. The building consortium Grupo Unidos Por el Canal (GUPC) was in charge of the construction of a set of locks, often referred to as the “third set of locks” but had refused to continue the work. They were claiming an additional US \$1.6 bn for problems in the construction, an amount the owner of the megaproject, the Autoridad del Canal de Panamá (ACP), refused to pay. As a consequence, the work came to a standstill, causing a further delay in completion. After weeks of public wrangling, GUPC and the ACP agreed upon large cash injections by all partners to resume construction work. This dramatic event raises questions about the governance of this prestigious megaproject.

The debate on the governance of megaprojects has emerged only recently in project management studies (Müller, 2012; Pitsis

et al., 2014; Sanderson, 2012). The governance of megaprojects is designed to ensure a consistent and predictable delivery within the limitations set by a contract with external partners (Müller, 2012). In this way, governance structures are designed to ensure megaprojects run smoothly (Miller and Hobbs, 2005). Notwithstanding these strict governance regimes, the performance of megaprojects is often highly problematic (Flyvbjerg et al., 2003). For this problematic performance Sanderson (2012) identifies three possible explanations for this. The first explanation is that of “strategic rent seeking,” in which underperformance is caused by an optimism bias and strategic misrepresentation of costs by project supporters, which leads to the regular approval of non-viable projects (e.g., Flyvbjerg, 2012). The second explanation is that of governance arrangement where problems with performance are perceived to be the result of misaligned or underdeveloped governance mechanisms, with project actors being unable to provide a sufficiently flexible and robust response to inevitable turbulence in the project’s context (e.g., Miller and Hobbs, 2005; Miller and Lessard, 2000). The third explanation is a cultural one where performance problems are

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seen as an almost inevitable result of the organizational complexity, ambiguity, and conflict faced by project actors with diverse and competing project cultures and rationalities (e.g., Clegg et al., 2002; Van Marrewijk et al., 2008).

Sanderson (2012) concludes that in all three of these typologies accept that the actors involved behave with a degree of foresightedness, consciously trying to build into governance structures the capacity to deal with future events. According to Sanderson (2012), even studies of project culture focus too much on facilitating trust and collaboration in the face of uncertainty (e.g., Atkinson et al., 2006; Clegg et al., 2002) and ignore spontaneous micro-processes of governing, which emerge ex post. Except for a few studies (e.g., Tivonen and Tivonen, 2014), little is known about how governance provides contextual frameworks for shaping, but not necessarily determining, the actions of project employees (e.g., Müller, 2012). Therefore, in a recent special issue of *IJPM* Pitsis et al. (2014: 1290) suggested that in order to advance our knowledge and understanding of the governance of complex projects, it was important to “transcend disciplinary boundaries.”

In line with these calls, the goal of this paper is to further develop cultural understanding of ex post governing governance practices. Practices are here understood as the manifestations and representations of the project as a cultural phenomenon (Van Marrewijk, 2015). Cultural practices are viewed as dynamic, ongoing, everyday actions that produce social reality (Feldman and Orlikowski, 2011). Following Nicolini et al. (2003), practices are perceived as dynamic and provisional, and as activities that require some form of participation.

From the discussion above, the main question addressed in this paper is, *Which cultural practices are related to ex post governing in the Panama Canal Expansion Megaproject?* Given the focus on micro-processes of governing emerging ex post, we limited our study to a single case: the Panama Canal Expansion Megaproject (PCEM). A case study is an excellent in-depth research method for studying a cultural phenomenon within its real-life context (Gerring, 2007). We studied the PCEM using a one-year ethnographic field study. Winch (2013) specifically asked for a study of an ethnographic nature to understand escalation of costs and planning in large-scale projects. Such an ethnographic study describes, interprets, and explains behavior, meaning, and cultural products through direct data collection by researchers who are physically present over a substantial period of time (Barley, 1990). The PCEM is an interesting case as the incident described at the start of this paper illustrates the difficulties of governing a project of this size. The project owner, the ACP, wanted to expand and modernize the Panama Canal, with which the design and construction of the Atlantic and Pacific locks, the so-called “third set of locks,” being the main component. The ACP contracted GUPC (Grupo Unidos Por el Canal) consortium to carry out this part of the megaproject, and to design and build these locks.

Our study reveals five distinct cultural practices which influenced how the governance structures in the PCEM worked: (1) ritualizing the bid-winning ceremony, (2) changing teams, (3) struggling over governance structure, (4) labeling national cultures, and (5) labeling organizational cultures. As such this

paper makes two contributions to the growing debate on governance in project management studies. First, it suggests that looking at megaprojects as cultural phenomena can help to improve our understanding of ex post governance practices (Biesenthal and Wilder, 2014), thereby providing a completely new theoretical approach in this area. Second, the five cultural practices found in the PCEM case give an in-depth understanding of the ex post governing process as asked for by previous scholars (Pitsis et al., 2014; Sanderson, 2012).

This paper is structured as follows. First, the problematic governance of megaprojects is discussed by proving the need for explicit attention to cultural practices. We develop a cultural perspective in which megaprojects are looked at as cultural phenomena. Second, section 3 discusses our in-depth ethnographic study of the PCEM. We present the governance structure of the megaproject in the findings section. Section 4 shows the five cultural practices related to the governing of the Third Sets of Locks. Towards the end of this paper, we discuss the implications of our research findings. We conclude this paper by returning to our initial research question and providing some answers.

2. Megaprojects as cultural phenomena

Complex megaprojects are distinguished from other projects by the interaction and interdependency of project elements, and by a high level of uncertainty, resulting from a lack of clarity and agreement over project goals and how they are to be achieved (Williams, 2002). These projects generally require complex integration of construction and technical, resource, and materials management, involving a long time frame and numerous interfaces between multiple contractors and third parties (Greiman, 2013: 14). Furthermore, megaprojects are politically sensitive (Bresnen et al., 2005; Hodgson and Cicmil, 2006) and have more network relationships than are found in traditional buyer–seller relationships (Miller and Hobbs, 2005).

Contractually, these complex megaprojects are often defined in terms of a structural cooperation between principal and agent in order to deliver an agreed outcome (Koppenjan, 2005). This basic structure encourages actors to specify all the obligations of each party in advance, in preparation for possible future events (Ouchi, 1980; Sanderson, 2012). Such closed governance systems are based on behavioral and outcome control (Eisenhardt, 1989) in terms of budget, time, and scope (Söderlund, 2004) and central planning, knowledge management, and human resource development (Turner and Keegan, 2001). These pre-arranged contractual arrangements seek to address the many interests that are at stake (Müller, 2012) and include strict governance regimes (Miller and Hobbs, 2005), designed to ensure consistent and predictable delivery within the limitations set by the contract (Müller, 2012).

However, they do not fully capture the complexity of the multiple, fragmented subcultures at work in megaprojects (Clegg et al., 2002; Van Marrewijk et al., 2008). Large-scale global projects are potentially conflict-ridden contexts for project partners because they involve many different stakeholders, geographically dispersed and with often conflicting interests,

working across “institutional differences” between project partners – i.e., differences in regulations, political systems, and culture. (Scott et al., 2011). Project managers who come from diverse national and organizational cultures develop cultural practices to govern the agreed contracts (Clegg et al., 2002). Under such circumstances, project partners may be motivated to overcome differences and to establish firm informal relationships across institutional divides. Indeed, Orr and Scott (2008) show how project partners resolve differences by creating relational contracts. However, relational contracts are robust to volatility but not to ambiguity (Carson et al., 2006). Ambiguity causes project managers to differ in their perceptions of the same context and in their cultural practices (Carson et al., 2006). Therefore, explicit attention needs to be given to cultural practices in order for us to fully understand the complexity of governing during megaprojects.

Frequently, when culture research is undertaken in project management, researchers often do not consider culture from an ontological and epistemological position and simplistic approaches are used (Cicmil and Gaggiottia, 2014; Fellows and Liu, 2013). Fellows and Liu (2013) discuss the different philosophical bases of cultural studies and conclude that the concept of culture is regularly misused in construction research. Cicmil and Gaggiottia (2014) also discuss the loose interpretation of the concept of culture in project management studies and criticize the overuse of the integrative perspective of culture. Such a perspective understands culture to be the totality of socially transmitted behavior patterns, arts, beliefs, institutions, and all other products of human work and thought (Martin, 2002; PMI, 2000). This integrative perspective is popular in construction research (e.g., Chapman et al., 2006; Cheung et al., 2011; Hasting, 1995; Kendra and Taplin, 2004; Morris, 2013; Winch et al., 1997). From this point of view, culture is conceptualized as consistent, shared by all members, an objective entity, and a cohesive glue for integration processes. Ouchi (1980), for example, connects culture and governance by highlighting the role of a “clan” in the control of organizations. He defines a “clan” as a culturally homogeneous organization which has a shared set of values or objectives together with beliefs about how to coordinate the organization’s effort in order to reach common objectives (Ouchi, 1980). Hence, in project management studies, culture is generally perceived as a distinct aspect (e.g., Bredillet et al., 2010; Morris, 2013); this allows scholars to “measure” culture using quantitative methods in order to search for statistical correlations between organizational culture and project performance (Cicmil and Gaggiottia, 2014). Cheung et al. (2011), for example, use a seven-factor organizational culture framework to study construction contracting organizations in Hong Kong.

The integrative perspective of culture is too limited to provide a full understanding of the cultural practices of megaprojects (Van Marrewijk, 2015) because aspects such as ambiguity, subcultures, power, and the limited boundaries of rational behavior are not recognized (Alvesson, 1993, 2002). These are important because “to our despair, megaprojects often develop lives of their own and their lives sometimes defy control by us mere mortals” (Engesson 1982 quoted in Merrow

et al., 1988: 1). Therefore, a large body of literature suggests that organizational cultures have to be understood as heterogeneous living worlds where people construct their own cultural system (Alvesson, 2002; Frost et al., 1993; Hatch, 1993; Martin, 2002; Ouchi and Wilkins, 1985; Smircich, 1983). For an excellent overview of the development of the concept of culture in organization studies, see Yanow and Ybema (2011).

In the conceptualization of organizations as cultures (Alvesson, 2002), culture is defined as the result of the employees’ social construction when ascribing meaning to their organization and is reproduced through a process of meaning-making (Cicmil and Gaggiottia, 2014). Such an interpretative perspective focuses on processes of meaning, sense making, and social construction of culture by actors and on how they come to a *verstehen* of the constructed social reality (Czarniawska, 1992; Kunda, 1992). The concept of organizations as cultures recognizes rituals, myths, artifacts, ambiguities, power, subcultures, and spatial settings to be important to the performance of organizations (Martin, 2002). Examining multiple rationalities and subcultures, rather than seeing them as having a singular, shared rationality *per se*, or a single integrative culture, provides an alternative way of understanding cultural practices in the governing of megaprojects.

Based on this theoretical discussion, we perceive megaprojects to be the outcome of social interactions just like any other form of organizing within a multiple context of socially interdependent networks. Megaprojects bring together, under various contractual arrangements, competing partners with different interests, different national and organizational cultures, and different ways of doing and thinking (Van Marrewijk et al., 2008). As a result, this emphasizes the importance of acquiring a more in-depth understanding of cultural processes in megaprojects by observing the everyday practices of employees working together to get the tasks done. Geiger (2009) recognizes that organizational practice is not an individual cognitive resource but rather something that people do *together*. Moreover, he verifies that practicing is a process of continuous enactment, refinement, reproduction, and change, based on tacitly shared understandings within the practicing community. Such a focus studies project activities and how actors make sense of context and social settings in project organizations (Blomquist et al., 2010; Hällgren and Söderholm, 2011).

3. Methodology

Because the aim of this study is to understand the practices that emerge during the governance of projects, we have selected an ethnographic approach. Although the value of using ethnographic fieldwork in organization studies has often been recognized (Fine et al., 2008; Humphreys et al., 2003; Tivonen and Tivonen, 2014; Ybema et al., 2009), this is still an under-used approach (Moore, 2011). A case is a phenomenon observed at a single point of time or over some period of time (Gerring, 2007). This method is a research strategy used to describe, interpret, and explain behavior, meaning, and cultural products relating to actors involved in a limited field. This type of research takes place through direct data collection by researchers who are physically

present (Yanow and Schwartz-Shea, 2006). Packendorff (1995) criticized in-depth studies of single projects, in that it can be difficult to distinguish generally valid observations from case-specific ones. However, the epistemological position of megaprojects as cultures (Van Marrewijk, 2015) justifies the use of single case research. In this type of research the emphasis is on understanding the case itself and its unique features. It generates in-depth knowledge needed to capture the cultural practices of actors (Kenis et al., 2009: 265). Furthermore, the single case is an excellent design to provide a contextual understanding of the “actuality” of the PCEM, the lived experiences, and the daily practices of its participants (Cicmil et al., 2006). The second author studied the megaproject for a period of one year. From July 2009 to July 2010, she conducted ethnographic fieldwork to observe the actors’ daily practices and document their lived experiences. In 2011 and 2012 extra interviews were conducted with key informants.

3.1. Data collection

For a more in-depth understanding of the activities of participants in the PCEM and why they behave in particular ways, participant observation provides direct experiential and observational access to the insider’s world of meaning (Ritchie and Lewis, 2003). Daily work routines, workshops, celebrations, and meetings at all organizational levels were observed, as well as informal gatherings such as lunch and coffee breaks and hallway conversations. The interest in the lived experience of the actors in megaprojects led to the use of situated participant observation (Yanow, 2006), a method that provides data on how practices actually come about *in situ* – i.e., how they are produced, reproduced, and negotiated.

Apart from the observation and participant observation, the second author conducted 66 in-depth interviews in the GUPC consortium. This consortium consists of the Spanish construction firm Sacyr; the Italian firm Impregilo, one of the world’s top-ranking construction groups; the family-owned Belgium dredging group Jan de Nul, which has extensive experience of international dredging and land reclamation; and CUSA, Panama’s leading construction company (see Table 1). Interviews were conducted with project participants at all levels of the Third Set of Locks project. We spoke with workers, engineers, supervisors, administrative personnel, and senior managers in order to understand their daily practice and their roles. We also explored their ideas, feelings, experiences, and beliefs about collaboration, the project, and other issues they believed were important to

discuss. The advantage of interviews is that they allow systematic collection of people’s experience, interpretation, and feelings without loss of flexibility or spontaneity (Ritchie and Lewis, 2003). All interviews were taped with a voice recorder, to which three respondents made objections. These three interviews were captured in notes, and detailed transcriptions were made of all the audio recordings. All respondents were granted anonymity. Typically, the interviews had an open character, allowing respondents to give a spontaneous insider’s account. In line with the project’s official language, interviews were conducted in English.

A documentary study was carried out to collect contextual information on the PCEM. Information on the history of the Panama Canal construction, the canal’s role in global shipping networks, and the political transition of ownership to Panama in the 1990s provided us with knowledge of the contextual framework. We also studied official documents such as the Proposal for the Expansion of the Panama Canal, internal reports, policy documents, website material, newspaper articles, promotional material, speeches, and other documents produced by ACP and its partners. In this way, we avoided studying the megaproject in isolation (Lundin and Steinhórnsson, 2003).

3.2. Data analysis

Welch et al. (2011) distinguish four methods of theorizing: inductive theory-building, interpretive sense making, natural experiment, and contextualized explanation. In this paper, interpretative sense making is followed as a kind of “dwelling in one’s data” (Yanow and Schwartz-Shea, 2006). This type of interpretative analysis, in which data is understood within the context of the case, is designed to strengthen claims made about actors’ interpretations of events (Ybema et al., 2009). In the process of analyzing, an interpretive step method was used (Schwartzman, 1993). As a first step, interview data were uploaded into the qualitative software program Atlas.ti. To save time, observational notes and contextual documents were not uploaded but were analyzed separately. In the second step, this content analysis program was used to read and interpret text sequences in order to assign labels. Text labels emerged intuitively, and similarly they were constructed from the data. During this process, the researcher continuously went back and forth between documents, questioning which text label data should be placed under and comparing new data with material that already had a label. Two kinds of labels were used: those found directly in the material and those constructed from the material (Alvesson and Sköldbberg, 2010; Ritchie and Lewis, 2003). The labels used were “tender rituals,” “structure,” “organization culture,” and “national culture.” During the third step, the preliminary findings were checked with several key respondents to verify the labels. Taking written material back to the respondents is called “member checking” (Yanow and Schwartz-Shea, 2006; Ybema et al., 2009). This was not done in order to check quotes, but to make sure that we had fully grasped the insider’s perspective. The final step was the building of theory, which involved a final interpretive process of multiple readings and iterations between tentative assertions and data.

Table 1
Interviews per organization.

| Organization | Interviews |
|--------------------------|------------|
| ACP | 28 |
| Sacyr | 5 |
| Impregilo | 5 |
| Jan de Nul | 6 |
| CUSA | 3 |
| Temporary GUPC employees | 19 |
| Total | 66 |

4. The governance structure of the PCEM

In 1914, nearly 34 years after French attempts to build a canal in this region and after ten years of construction in very difficult circumstances, the gates of the Panama Canal opened to let the first vessels pass (Greene, 2009; McCullough, 1977; Parker, 2009). The Canal Zone remained under American administration until the ACP received full control over the waterway on December 31, 1999 (Greene, 2009). Since that date, the ACP has remained in sole charge of the operation, administration, management, maintenance, protection, and development of the Panama Canal. With nearly ten thousand employees, the ACP is financially autonomous and has ownership of the canal's assets and the right to oversee and control these (Llacer, 2005). The administrator is responsible for the administration and implementation of the strategies, regulations, and policies developed by the Board of Directors (see Fig. 1). Furthermore, the board elects business professionals to membership of an advisory board, which meets once a year to discuss the performance of the inter-oceanic waterway (Jaén Suárez, 2011).

The PCEM was established to maintain the Panama Canal's competitiveness, to increase its capacity, and to make it a more productive, safe, and efficient working environment. This megaproject involves the dry-land excavation of a massive amount of land and the deepening and widening of the Panama Canal as well as its navigation channels. Owners and operators of infrastructure devices such as dams, roads, and railways generally do not have the experience to execute infrastructure megaprojects (Winch, 2014), especially one of the size and scope of the Panama Canal Megaproject. Therefore, the ACP hired the US-based consultancy firm CH2M Hill to help them manage the construction of the Third Set of Locks (see Fig. 1).

The governance regime established at this point included a clear completion deadline and a bonus-malus system to ensure a consistent and predictable delivery of the megaproject. Furthermore, the contracting consortium GUPC had a clear governance structure, with the Works Management Team responsible for daily execution of the project and reporting to the Board of Directors of GUPC (see Fig. 1).

When studying the Third Sets of Locks megaproject, we found five distinct cultural practices that influenced the governance of the PCEM: (1) ritualizing the public announcement of the bid winner, (2) changing of teams during phase transition, (3) struggling over governance structure in the Works Management Team, (4) labeling national cultures, and (5) labeling organizational cultures. These will be discussed below.

4.1. Ritualizing the public announcement of the bid winner

On March 3, 2009, three consortiums handed in their final proposal for the work on the Third Set of Locks project. A public ceremony was held to mark the fact that the ACP had received the tender documents from the participating consortiums. The symbolic character was reflected by each consortium presenting its price proposal in a closed envelope. Sergio, one of GUPC's representatives, vividly remembered:

We rapidly designed a logo to print on our documents. We weren't ready yet. But that day, just before the closing hour, we carried 27 boxes of drawings and paper work into the ACP building. (Interview, August 2011).

The ACP reviewed the technical proposals in a hermetically sealed building on its compound. All reviewers were obliged to

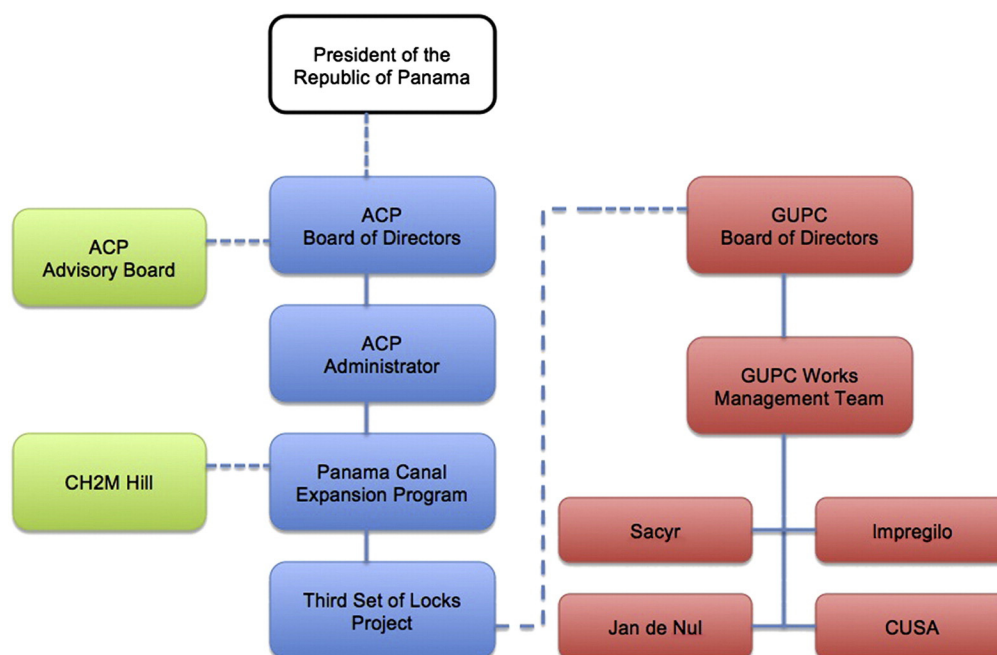


Fig. 1. The governance structure of the PCEM.

register before entering or leaving the building, and it was strictly prohibited to carry any electronic devices inside the building according to respondent Omar (interview September 2009). The ACP had taken these measures to ensure that no information would be leaked to the public. After this intense period of review, the winner of the tender procedure was made public in a ceremony attended by the press. Our interpretation of this ceremony is that of an organizational ritual. Rituals are here understood as events that have a dual significance. On the one hand, they have a symbolic character, expressed in terms of meanings and values; on the other hand, they have a more tangible character in that they can be used strategically to achieve or establish something (Alvesson, 2002; Van den Ende and Van Marrewijk, 2014).

The ACP contracting officer was in charge of the ceremony, and representatives from each consortium joined him under police escort on a visit to Banco National where the envelopes were safely stored in an underground vault. After being greeted by the bank's general manager, the group was guided through the building to the vault. Before entering the concealed room, the contracting officer had to sign a registration book while pictures were taken. Then with help of a Bank employee, the contracting officer opened the vault. He used his key to open the secured box and took out a transparent glass box from within it. Numerous pictures were taken, and all consortium representatives posed for a photo with the glass box.

When the group returned to the meeting room, the glass box was placed in the centre of the stage for the contracting officer to open. The consortium representatives watched as, one by one, the envelopes containing the bid proposals were taken out of the box. Apart from the three price proposals, the ACP also had placed another envelope in this box containing the ACP budget for the project. "This price is really important, because if your proposal is 15% over the calculated price, it is disqualified from the tender procedure" (Interview, August 2011). As the contracting officer opened the first envelope, he glanced at the silent audience: this was an exciting moment. He then read out the proposal, which was presented directly on to the big screen so that everybody could read the first consortium's price proposal. Eventually, he announced the two other proposals: the GUPC consortium had gained the highest score in the tender process for the Third Set of Locks project.

The video of the event shows how the GUPC representatives shook hands and were congratulated by the people around them. Supporters of the consortium stood up to congratulate the winners; there were hugs and handshakes all around the room. The proposals differed enormously; GUPC had requested US\$ 3.1 billion, a much lower figure than its competitors had asked for. Furthermore, this price appeared to be US\$ 300 million lower than the budget ACP had reserved. The competitors indicated that GUPC had "left money on the table" (Fieldnotes, 2009). In the infrastructural sector, proposed prices are frequently higher than budgeted prices (Flyvbjerg et al., 2002). GUPC was eager to win the tender, as the Panama Canal is one of the great symbols of engineering.

A member of the consortium remembered celebrating their victory:

I think we were with about ten people, and we had champagne. When I arrived home that night, I cried. That evening, two years of hard work, the excitement of the day and all emotions that came with it put tears on my cheeks. However, there was no time for further reflection on the tender process, as the project organization had to start up quickly. (Interview with Sergio, August 2011).

On July 15, 2009, GUPC received an official letter of acceptance, asking them to commence work on the Third Set of Locks project. Several official procedures had to be completed before the ACP issued the final order to proceed. The green light was given on August 25, 2009; from that date, GUPC had 1,883 days to complete the works. In order to put pressure on GUPC to complete by the date set, the contract specified that a fine of US\$ 300,000 would be imposed for each extra day of over-run. If GUPC were to complete the Third Set of Locks Project in less time; however, they would receive a bonus of US\$ 250,000 per day (Fieldnotes, September 2009).

4.2. *Changing teams during phase transition*

A few days after the award ceremony, all of GUPC's representatives flew from Panama to Italy for a steering committee meeting. This meeting in Italy was organized to define the governance structure and to decide how collaboration between the GUPC partners would work from that point. Within GUPC, Sacyr operates as the consortium leader. Both Sacyr and Impregilo have a 48% share in the project organization, while Jan de Nul has a 3% share and CUSA a 1% share. The management positions in the project organization were arranged according to the stakeholder positions allocated. The Works Management Team (WMT) was responsible for daily execution of the project and reported to the Board of Directors, which was based in Europe and represented by an executive committee. Sacyr was allowed two high-ranking positions in the WMT: program leader and Atlantic project manager. The positions of financial manager and Pacific project manager were given to Impregilo. Two positions were created for Jan de Nul and CUSA so that these companies would also be represented in the WMT. It was agreed that managers from the headquarters of each project partner would be represented on the executive committee: two from Sacyr, two from Impregilo, two from Jan de Nul, and one from CUSA. The share distribution was also used as the basis for how profit and costs should be divided and for the number of employees that each company could bring to the project sites.

At the start of the project, there was anger and disappointment among project partners over the unfavorable financial contract and by tense discussions about how the profit and costs within the endeavor should be divided. Some partners claimed they did not know the final price proposed until it was

publically announced (Fieldnotes, September 2009). One project participant remembered:

The top management of the European companies had not been entirely involved in the final stage of the tender process. Only after we won, they heard about the price we had proposed, and that is when the shit hit the fan. (Interview, August 2011).

Because of the price that had been set so low GUPC had a tight budget. Various respondents explained that conflicting ideas about how the project organization should be set up, the number of people that each partner could contribute, and how authority should be allocated created more difficulties with GUPC. Respondents admitted that in the transition from the tender to the execution phase, the “love between the partners died” (Interview, June 2010). The Contracts Officer said,

Working for joint ventures is like a marriage. At the beginning everything is okay. We are going to get married forever and it is very easy. We understand each other very well. We are in love... And then, you have problems. Often a divorce [follows]. But this marriage cannot be terminated until the end of the project. [...] Projects are like arranged marriages. [...] After the end of this project, we can divorce. (Interview, April 2010).

For most of the participants in the tender process, the task was considered to be finished when the final tender was handed over to the ACP. Only a very few people were appointed to the new project organization. Luis explained,

There was a big organization up to the, I would say, award time. That organization dissolved after July 8 and everybody went back to his or her normal tasks in their different companies. A new organization had to be created for the project execution. (Interview, May 2010).

In this way, background information on the consortium’s viewpoints, plans, and negotiations on the proposal disappeared. Moreover, the project philosophy vanished and the collaborative partnership that had evolved among the partners began to break down. This is illustrated in remarks from one of the employees from the tender period:

So, the people who are here now don’t really know. I think most of them haven’t taken the initiative to sit down, take all the paperwork, read it, understand what we planned and how we envisioned this project. Most of the people have not even read the contract; they don’t know the specs that we promised to the client... (Interview, March 2010).

Indeed, numerous respondents indicated they had not read the tender documents or the contract. It seemed as if the tender document was stored on a shelf and was only consulted when clashes with the client occurred, for legal purposes (Fieldnotes, April 2010). Project participants were too busy starting the

execution phase and did not dedicate any time to gaining an in-depth understanding of the tender documents and the contract. In the hustle and bustle of commencing the field activities, employees leaped into tasks that had to be completed sooner rather than later, so activities relating to sharing of knowledge and reflecting on the tender phase were pushed to the background.

4.3. *Struggling over governance structure in the Works Management Team*

Early on in the execution phase, respondents refer to a tense situation between the GUPC partners. In this phase, the project partners discussed the final price proposal and debated how the project organization should be set up. The heated discussions were described as a “battlefield”:

It’s like a battlefield. [...] You either shoot or you are dead. [...] In this organization it’s like a war in the sense that it’s strategy, it’s logistics, it’s tactics, it’s...(sigh) politics. You need politics in order to back up your action in the field. [It is] a twenty-first century war. (Interview, December 2009).

From this moment on, the project partners were “at war.” Ben, an Impregilo engineer, stated that the complexity of the situation did not lend itself to social activities or reflection on the process of collaboration. He explained,

At the starting point, it is like in the war. You don’t have time to socialize or you have, but you don’t do it. You are so embedded in the work and you won’t adjust to each other. [...] Like in a war, you have to get there, everybody is running and you have no time. (Interview, June 2010).

The goal of GUPC was to form a Works Management Team that would operate in a unified way. “It should try to find unanimity on certain subjects, the organization chart, the set-up of projects and investment. You understand?” (Interview, June 2010). However, observations showed that project participants were searching for confirmation of a certain organizational structure. Finally, a chart was sent to the ACP but GUPC informants denied the existence of a confirmed organizational structure. In June 2010, a document containing an organizational chart was marked as “not approved” by GUPC management. The lack of a clear and agreed organizational structure portrayed disarray at the higher management level, which was reflected on the shop floor. What became apparent from the statements by project participants was that any form of trust within the project organization was out of the question. Motivation to work together was low, and project participants felt that there was no real collaborative relationship.

Consequently, numerous employees stated that GUPC’s project organization affected their emotional well-being. One employee said,

I sleep badly, I worry all the time. At first I thought it would be over soon, and I had hopes that issues would stay on the management level, but they don’t. We need over a year to

find our way of working together, and that is far too long for this project. (Informal conversation, June 2010).

The continuous conflicts over governance structure without reaching a consensus showed an unstructured project organization.

4.4. Labeling national cultures

Respondents related national identities to the companies involved: Sacyr has its headquarters in Spain, Impregilo is based in Italy, Jan de Nul in Belgium, and Cusa is a Panamanian company. The concept of label is here defined as “a classifying phrase or name applied to a person or a thing, especially one that is inaccurate or restrictive” (Oxford Dictionary). Project participants used stereotypical images in order to refer to a certain cultural group. The Belgians were perceived to be straightforward and rigid, the Panamanians to have a poor work attitude, the Italians to be go-getters, and Spanish to be devious, closed, and full of themselves. While expressing a negative trait – or at least a trait that is perceived negatively – about “the other,” project participants implied, though subtly, that their own group would act differently or better. Hence, invoking the national culture label articulates distinctions and results in the inclusion and exclusion of participants.

Participants were falling back on national stereotypes and failing to consider people as individuals – lumping them into groups based on nationality alone, and assuming that whatever characteristics were thought to apply to that particular group were common right across the group. As a consequence, “the Spanish” and “the Italians” were labeled as one category, set apart from “the Belgians” and “the Panamanians.” Among other aspects, perceptions of time, hierarchy, and communication style were experienced to be similar for both “the Spanish” and “the Italians” and were therefore generalized into one group. Project participants highlighted these contrasts, as shown in a comment by Ruben, an Atlantic Engineer working for Jan de Nul:

I have worked in many joint ventures before, but here you can clearly see a difference: the Italians and the Spaniards work a lot different than the Belgians. They are less efficient. Yes, they work more hours a day, but they lose a lot of time chatting with each other. Also, they communicate with drama, it's like a play in a theatre, and they take long breaks. That kind of stuff... (Interview, May 2010).

When referring to “the Spanish,” “the Italians,” or “the Belgians,” project participants labeled these national cultural groups as either “the southerners” and “the northerners.” These labels are based on the location of the home organizations in Europe: Sacyr and Impregilo are in the south of Europe, and Jan de Nul is in the north. Tom, who identified himself as a “northerner,” stated the difference between the two labels,

Personally, I prefer to deal with the northerners where a boss is almost as equal as an employee. In my world we can call our boss by the first name, drink a beer together and discuss

difficulties or different opinions we have. For them, that is rather impossible: they call their boss *Don* or *Jefe*, it's much more hierarchical. (Interview, May 2010).

Tom described the southerners' in negative terms, particularly their style of communication and hierarchical relationships while the southerners themselves portrayed these traits in a more positive manner. For example, Luis explained, “We southerners are more expressive; those northerners are rather cold and closed” (Informal conversation, May 2010). With this comment, Luis expressed how he pictured himself and the colleagues he assigned to the same group. At the same time, he illustrated how he perceived the other project participants; he saw them as “cold” and “closed,” demonstrating that he did not trust this group.

What is striking in the data presented here is that the Panamanian participants were often left out; they were labeled as a separate group. Even though the Panamanians defined themselves as “Latin,” and others subscribed to them similar characteristics as used to describe Spanish and Italian employees, they were perceived to be in a different category. One respondent said that Panamanians did not belong to ... because “they are from the wrong side of the pond” (Interview, June 2010). Hence, the use of labels reflected and affected power relationships within the project organization. The “Latin” group was comprised of Impregilo and Sacyr, the largest GUPC partners. If the Panamanians were included under these labels, then they could be viewed as equal, but while they remained a separate, small group, their status would remain limited.

4.5. Labeling organizational cultures

GUPC employees frequently referred to their home organization, Sacyr, Impregilo, Jan de Nul, or CUSA, and to the “market people.” This last group consists of people who were hired by GUPC, so they were not related to any of the four partners. All employees who were affiliated with one of the four partners had a contract with their home organization and received a salary and benefits from that company. Because the “market people” were hired by GUPC, they had contracts based on the local Panamanian labor law, or as an external consultant. Thus, influenced by big differences in salaries and benefits, those engaged in the project used national culture and organizational culture labels as a way of translating, distinguishing between, and explaining cultural groups within the project organization. The cultural values and work practices of the participants' own companies influenced their subjective interpretation of what was happening in the project and of the different groups they encountered in it. Annabelle, who described Jan de Nul and Impregilo both during and after the tender process, saw how the partners' work practices differed and how this created difficulties in the daily collaboration: while Impregilo took a silent role in the tender phase, they dominated in the execution phase.

Impregilo is a big company that is used to work only in foreign and international projects outside from Italy. So they

have a core in Milan and people abroad and it seems that they were not taking too much steps in doing the tender, you know. It seems that they were doing nothing. And then when they started, [all of a sudden] it was like a big machine in the field. Jan de Nul did it step by step. So this was creating some difficulties, you know, because each had a different way to work. (Interview, April 2010).

Participants tended to favor the approaches used by their home organization and attached importance to establishing their position within the project organization. Jan de Nul worked hard to gain a position in the Works Management Team (WMT) of the project organization. However, a year after work began on the project, a job description for this position had still not been finalized because partners continued to discuss the nature and extent of the authority of the Jan de Nul representative in the project organization (Fieldnotes, June 2010). Referring to Impregilo's dominance in daily practices, a Jan de Nul employee expressed how he felt obliged to follow the bigger, and more powerful, partner in the project organization.

Their [Impregilo] procurement process is super slow! Everything needs to go via their home organization; it takes ages! And their payment procedure... Really, they make things much more difficult than needed. However, I have to be careful to make a remark about it. They are the bigger partner in GUPC, so we just have to follow their rules... (Informal conversation, April 2010).

CUSA was barely mentioned in distinctions between cultural groups. Even though the organization was a full

partner in the project, it did not feel treated as such. CUSA's deputy suffered from not being heard. Decision making within GUPC was organized in a way that when there is no unanimity between the Works Management Team, matters were taken to a higher level, namely, to the executive committee. However, this committee needed to investigate the matter, which meant that it took longer before a final decision could be reached. Under both time and budgetary pressures, it was to GUPC's advantage to make quick decisions, and for that reason, CUSA often fell in line with the decisions taken.

After discussing the five cultural practices that developed in the governing of the PCEM, we can now summarize them in Table 2.

5. Discussion

When analyzing the research findings through a cultural lens, we have distinguished different practices of ex post governing in the PCEM. To begin with, we understood the public announcement of the bid winner as a transitional ritual. In this ritual, the ACP expressed certain values through the use of symbols, which were meaningful to both the ACP and the GUPC team: transparency (glass box) and confidentiality (National Bank, closed envelopes). Transition rituals have proven to be important in the progress of a project (Van den Ende and Van Marrewijk, 2014), and based on our findings, we suggest that the ACP's public announcement of the bid winner ceremony can be understood as a cultural practice of governing. This ritual marks an important transition point, namely, the mutual commitment of client (ACP) and agent (GUPC) to execute the project. The ACP used the ritual to achieve the full

Table 2
Cultural practices in the governing of the PCEM.

| Cultural practice | Key characteristics | Power issues | Governance issues |
|---|--|--|--|
| Ritualizing the public announcement of the bid winner | Time pressure on tender team Independently operating tender team Eagerness to win the tender Public gathering Transparent glass box with envelopes | ACP contracting officer host Symbols of power: police, national bank, lock and key Public announcement of price | Fine for project delay GUPC left money on the table GUPC top not fully involved Extra work claims in future |
| Changing teams during transition of phases | Complete new team for execution GUPC execution team had no knowledge of governance philosophy Dissolving of personal networks between ACP and GUPC tender team | Unfavorable financial contract Project only starts when execution team arrives Conflicts about PMO Allocation of authority Differing strategic positions | Disagreement about financial risks Different interpretations of contract Contract only consulted when clashes occur Minimal knowledge of contract and tender philosophy in execution team |
| Struggling over governance structure in the WMT | No approved organizational structure Chaotic structure Emotional distress among employees "War" among partners Lack of trust among GUPC employees | Board of Directors represented by executive committee Struggle for positions in WMT Fights over hierarchy | Works Management Team fails to govern the project Ongoing struggle among partners Top management issues felt/enacted on work floor |
| Labeling national cultures | Referring to national stereotypes of "the Spanish," "the Italian," "the Belgian" and "the Panamanian" Southerners versus Northerners | Articulating distinction Excluding Panamanian participants Strategic use of national stereotypes | Differing management styles and governance regimes between Southerners and Northerners High level of distrust |
| Labeling organizational cultures | Referring to organizational stereotypes Different work practices in each organization Emotional affiliation to partner | Safeguarding interests Competition among partners Superior (Impregilo and Sacyr) versus inferior (de Nul and CUSA) groups | Different governance practices Labels used in the political arena |

commitment of the GUPC consortium to execute the mega-project for the agreed-upon very competitive price.

Second, the findings in the case show that the GUPC tender team had developed informal networks with ACP employees and was sensitive to the ACP's governance needs. Over time, the team developed a subculture in which the philosophy of close collaboration with ACP was central. This subculture was not a project (sub)culture designed to support governmentality as discussed by Clegg et al. (2002), but one which emerge when employees working together in a team (Alvesson, 2002). In our case, we see the replacement of the tender team by an execution team as a cultural practice. Replacing teams in projects in this way has previously been observed to cause conflicts between old and new teams (Van Marrewijk, 2007). The GUPC execution team had minimal knowledge of the contract requirements and the project's philosophy. This affected the governing of the PCEM as the roles and hierarchical relations of the GUPC execution team conflicted with those of ACP.

Third, after the initial elation of winning, feelings of anger and disappointment arose among the GUPC consortium partners. The scapegoating of the contractor (Winch, 2013) and the offering of unrealistically low prices (Ioannou and Leu, 1993) often result in disputes, increased costs, and schedule delay. In our case, the very competitive bid was the start of a struggle among the partners over financial risks, power, and positions in the Works Management Team. GUPC employees experienced a high level of distrust among the consortium partners and used culturally loaded metaphors such as “war” and “battlefield” when referring to their struggle over governance structure in the Works Management Team. Within GUPC, there was little shared understanding over how to execute the governance structure, which resulted in a low level of motivation to work together in the Works Management Team.

Finally, the managers of the GUPC partner organizations came from a variety of national and organizational cultures and developed different views on the contracts that had been agreed. The findings show the heterogeneous character of the GUPC culture in which employees of the consortium distinguished themselves and others based on national stereotypes. They socially constructed groups of “Italians,” “Spanish,” “Belgians,” and “Panamanians” as a way of dealing with the high degree of complexity, tensions, and uncertainty in the consortium. “Northerners” were said to govern in a straightforward, efficient, and rigid manner, while “southerners” were said to be more expressive and flexible. These multiple rationalities and subcultures are in line with earlier observations in other complex projects (Clegg et al., 2002). Furthermore, employees used organizational labeling to identify themselves more with their permanent “home” organization than with GUPC. In sum, the cultural practices of labeling made the execution of the governance structure in GUPC difficult.

Although our study did not cover the period leading up to the conflict between GUPC and ACP described in the opening of this paper, it helps us to understand better this dramatic event. The roots of this conflict lie not only in the governance structure itself – as suggested by Miller and Hobbs (2005) – but also in the micro-practices that emerged during the start and

execution of the project (Sanderson, 2012). The five cultural practices found interacted to iteratively generate project escalation (Winch, 2013), thus helping us to better understand the often problematic performance of megaprojects (Flyvbjerg et al., 2003).

6. Conclusions

The governance of megaprojects is extremely complex, given the characteristics of this type of project: complex financing schemes, innovative contracting, high public profile, technologies that are unproven, sensitive political context, and many stakeholders with conflicting interests (Müller, 2012). Strict contractual arrangements, governance structures, and governance regimes are needed to prevent megaprojects from running into problems (Miller and Hobbs, 2005). However, these are all organized ex ante and give little insight into the micro-processes of governing (Sanderson, 2012). Therefore, in this paper, we addressed the question of which cultural practices were related to ex post governing in the PCEM. In our one-year ethnographic study, we found there to be five distinct cultural practices in this megaproject: (1) ritualizing the public announcement of the bid winner, (2) changing teams during phase transition, (3) struggling over governance structure in the Works Management Team, (4) labeling national cultures, and (5) labeling organizational cultures. These five cultural practices hindered the successful execution of the PCEM governance structures and finally resulted in the project coming to an abrupt and dramatic temporary halt in February 2014. Partly as a consequence of the governance practices we have discussed, the Third Set of Locks was not finished by the scheduled date of August 15, 2014, but is now expected to be operational in April 2016.

This paper makes two key contributions to the project management field. First, we have developed an alternative conceptualization of culture in project management studies. We suggest that (mega)projects need to be understood as living worlds with their own subcultures, history, rituals, symbols, and practices. A cultural perspective of this kind includes multiple cultures, sense making, and power relationships, which is well developed in organization studies (Alvesson, 1993; Hatch, 1993; Martin, 2002). Second, we provided an in-depth understanding of the ex post governing process as called for by previous authors (Pitsis et al., 2014; Sanderson, 2012). The paper includes an empirical case study to show how the context influenced the governance practices during the execution of megaprojects (Sanderson, 2012), which helps in understanding the complexity of megaproject governance (Müller, 2012; Winch, 2013).

Our findings have several important implications for practitioners. First, at the start and during the execution of a megaproject project, managers need to reflect upon their (differing) management styles and governance regimes. Second, project rituals during phase transitions can be organized to offer a particular way to include all project partners and stakeholders and getting to a shared understanding. Third, team sessions should be used to discuss governance practices during the project to support

collaboration and the solving of conflicts. Project start-ups are seldom followed by workshops to discuss project culture, collaboration, contract philosophy, and conflicts during the execution of the contract. Workshops of this kind would, however, be very beneficial in helping to focus on the cultural practices of governing so that the micro-processes of organizing can be connected to macro-organizational governance structures. This ex post attention to the micro-processes of project organization is required to enhance collaboration and improve project results.

Conflict of interest

There is no conflict of interest in this study.

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