

# Governance in megaprojects: A pragmatic perspective

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Megaprojects are a growing species in the project environment, often used to transform the face of suburbs, cities or entire regions. Megaprojects have specific challenges and are different to ‘normal’ projects. One challenge of megaproject is the high number of stakeholders that have different – often conflicting – agendas and objectives, something which amplifies the inherent technical complexity and turbulence of such large undertakings. Project governance is a concept that helps to align different objectives and is thus an important factor to delivering megaproject successfully. This paper introduces a pragmatic model of governance in megaprojects, which is based on democratic principles that promotes collaboration of all stakeholders to develop working, context-dependent practices to manage megaprojects successfully.

Keywords: megaprojects, governance, practices, pragmatism, democracy

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*“Democracy is the faith that the process of experience is more important than any special result attained, so that special results achieved are of ultimate value only as they are used to enrich and order the ongoing process. Since the process of experience is capable of being educative, faith in democracy is all one with faith in experience and education. All ends and values that are cut off from the ongoing process become arrests, fixations. They strive to fixate what has been gained instead of using it to open the road and point the way to new and better experiences.”*

—John Dewey

## Introduction

Human beings are creatures that look for clear answers, and definite, true answers are most preferred. This indicates our natural strive for certainty, for regularity that enables us to plan and predict the future based on our past experiences. However, the story of projects in general and megaprojects in particular is a story of uncertainty, ambiguity and complexity (e.g. Flyvbjerg et al., 2003; Sanderson, 2012; van Marrewijk et al., 2008). Megaprojects are large, transformational and complex undertakings with a long duration in regards to building and development of the project; a large number of influential and critical stakeholders, of both public and private nature; a great impact on the society (i.e. millions of people); and have an estimated cost of more than US\$1 billion (Aaltonen and Kujala, 2010; Flyvbjerg, 2014). The size and dimensions of megaprojects, especially in regards to their impact and the amount of resources dedicated to their delivery, means that megaprojects are not simply “*magnified versions of smaller projects*” (Flyvbjerg, 2014, p. 6), they are a different type of project with different problems, power dynamics and structures.

More precisely, the following characteristics emphasise some aspects of the unique nature of megaprojects and indicate their complexity as well as the challenges associated with the delivery of such big ventures (Flyvbjerg, 2014). First, due to the longevity and complexity of individual deliverables, planning becomes extremely difficult which makes megaprojects fundamentally uncertain and risky (Flyvbjerg, 2006a). Second, megaprojects are inherently multilevel structures where multiple influential stakeholders with (often) conflicting interests influence the delivery of the megaproject in all phases of the project lifecycle (Aaltonen and Kujala, 2010). Third, megaprojects often involve mega-money, which represents a fertile ground for unethical and exploitative behaviour, such as optimism bias (Flyvbjerg et al., 2009) or the principal-agent problem (Eisenhardt, 1989). Fourth, due to the inherent complexity of megaprojects and the associated difficulties and risks in the planning stage, megaprojects are fertile grounds for unexpected events, so called black swans (Taleb, 2011), that have a great negative impact on the outcome of the project. Lastly, the aforementioned characteristics, especially in regards to the multiplicity of stakeholders involved, the complexity of megaprojects and the (potential) exploitative behaviour of (some) stakeholders, lead to issues of miscommunication or false communication where important information about cost, schedule, risks, scope and objectives are not clearly articulated throughout the project lifecycle. If not addressed appropriately, these challenges result in major project blowouts, especially in regards

to the hard performance objectives, such as time, cost and scope (Flyvbjerg, 2014).

Due to the *mega-cost* associated with megaproject in combination with the budget cuts in government spending, an increasing number of megaprojects relies on private investments from banks, private investors or capital funds. Every investor has their own objectives, which may not be entirely aligned with the overall objectives of the project *per se*, making the megaproject area an even more complex battleground. In addition, due to the historically low success rate of megaprojects investors take a high risks when investing their money in such endeavours, and it is not uncommon that investors (e.g. banks) create their own financial forecasts, due diligence and risk assessments (Flyvbjerg, 2013). However, not the additional forecasts, reports to submit or business cases to develop are the real problem for successfully delivering a megaproject. Such external involvement of private money is only one example of a powerful stakeholder group that needs to be considered when making important decision throughout the project lifecycle. Other examples of powerful stakeholders in megaprojects include the community, environmentalists, or the government (Rothengatter, 2008). This variety of highly influential stakeholders that can negatively impact the project dramatically changes the power dynamics and social aspects that drive negotiations and decision-making processes in megaprojects (Flyvbjerg 2008). In other words, megaprojects face major social, political and cultural challenges, especially in the context of multiple stakeholders with unaligned objectives, goals and strategies.

The field of megaproject management is yet to establish a coherent theoretical framework that can help to address this stakeholder diversity, while maintaining a certain level of structure and control of the project. The intensified need for aligning of objectives across different stakeholder groups, including all underlying power dynamics calls for the establishment of good governance structures, something that is gaining interest in the field of managing megaprojects (e.g. Sanderson, 2012). This paper aims to contribute to this discussion by proposing a pragmatic model of governance in megaprojects, which is based on democratic principles that promotes collaboration of all stakeholders to develop working, context-dependent practices to manage megaprojects successfully.

In the remainder of the paper, this paper will first provide an overview of governance in project management, arguing for a socially driven form of project governance that enables flexibility and context-dependent practices, while simultaneously providing enough certainty for project actors. The paper will then move on to introduce classical pragmatism and its underlying ideas of democracy, which are important and relevant concepts in developing flexible governance structures for megaprojects. This is followed by a more detailed application and explanation of how the pragmatic principles can be applied and used in megaproject governance. Finally, the paper concludes summarising our ideas and arguments.

## **Governance in Project Management**

Generally, project governance is concerned with the alignment of the project with stakeholders' needs or objectives, making it a crucial factor to achieve organisational objectives. Project governance is thus a form of managing the influences different stakeholder groups exert over the project, its deliverables, and the project team (PMI, 2013). It provides a framework in which the project team and the project manager (the term project team will be used synonymously with the term project manager in this papers as it simplifies the argument without compromising accuracy or correctness)

can make decisions that considers the objectives, goals and strategies of the multiple stakeholders involved in the project to satisfy their needs and expectations. As such, project governance not only supports a megaproject and its stakeholder in aligning the strategic objectives, it also describes means for attaining such objectives (PMI, 2013; Turner, 2009, p. 311), as it represents and overarching business function that acts across different stakeholder levels (Biesenthal and Wilden, 2014).

Governance in megaprojects has the primary goal to provide certainty in a turbulent (i.e. complex, ambiguous and uncertain) context, with adequate management processes that provide transparency, accountability and defined roles (Abednego and Ogunlana, 2006; Müller, 2009), while allowing for flexibility to adapt to occurring changes (Clegg et al. 2002). Often governance structures fail to allow for enough flexibility, as they are built around a model that purely focuses on monitoring and control mechanisms, mainly influenced by traditional forms of corporate governance such as promoted by the Principal-Agency Theory (Donaldson and Davis, 1991; Eisenhardt, 1989; Hillman and Dalziel, 2003). However, the context of megaprojects and configurations of governance structures should be aligned to create value and enable the underlying practices to adapt over time (Miller and Lessard, 2001). A good governance structure in megaprojects must therefore allow the design of project structures that will trigger emergent practices to face the changing context, something that has been labeled “*governmentality*” (Clegg et al., 2002). But what exactly is governmentality?

Governmentality has its roots in a combination of government and rationality, first introduced by Michael Foucault in a series of lectures (Clegg et al., 2002). In this context government goes beyond the mere political institutions and describes “*the conduct of conduct: a form of activity aiming to shape, guide or affect the conduct of some person or persons*” (Gordon, 1991, p. 2). Rationality describes the notion that something can be governed or managed, as long as its known (Townley, 1993). Governmentality, therefore, is a reference to a system that is shaped by self-regulating relationships among the forces within a society (i.e. all stakeholder), and describes a “*contextual framework which shapes, but does not necessarily determine every action of the members of a society*” (Müller, 2009, p. 1). Such a system provides a project-wide sense of accountability and transparency to help ensure project success by defining and communicating reliable, repeatable project practices (i.e. reports, meetings), something that is particularly important in a multi-stakeholder context. In addition, project governance must provide a set of rules that help the project team to manage stakeholders, their relationships, the systems and processes throughout the project lifecycle in a contextual and flexible fashion something that is particularly relevant when managing stakeholder with conflicting agendas. Since aligning stakeholder expectations and objectives is crucial when managing megaprojects, the stakeholder theory of project governance provides a good starting point to investigate governance in megaprojects in more detail.

Stakeholder theory is based on a socially-oriented perspective and argues that a company (i.e. megaprojects) should be managed in the best interest of all its stakeholders, including all external and internal stakeholders across different levels (i.e. micro to macro level) (Blair, 1995; Jones and Wicks, 1999). Stakeholders are any “*identifiable group or individual who can affect the achievement of an organization's objectives, or who is affected by the achievement of an organization's objectives*” (Freeman and Reed, 1983, p. 91). Hence, a central point of governing megaproject from a stakeholder perspective is that conflicting interests and objectives of different

organisational stakeholders need to be balanced (Donaldson and Preston, 1995). Stakeholder interests in megaprojects can range from purely financial objectives (e.g. return on investment) over political objectives (e.g. keeping a campaign promise) to purely social objectives (e.g. reputation).

The underlying governance mechanisms of stakeholder theory must address the diversity of actual stakeholder and objectives, and find a way to balance the different expectations in an effective way. It is therefore extremely important for the managing project team to clearly understand what outcomes and benefits the different stakeholders expect from the project so that performance drivers can be put in place (Biesenthal and Wilden, 2014). This clarity and certainty of objectives is however particularly difficult to achieve for several reasons; not only do power dynamics contribute to this (e.g. information asymmetry), but objectives also evolve in the course of a project, and it requires strong communication and leadership skills and tremendous awareness of the project team to keep all stakeholders satisfied. In addition, expectations, outcomes and performance criteria for projects can be conflicting or even opposing (Zwickael and Smyrk 2011), something that needs to be identified and managed appropriately. Due to this specific focus on power dynamics, stakeholder theory uses a relational approach to project governance, which aims to explain how organisations can prioritise and manage relations with identified stakeholders, and built trust amongst them (Mason et al., 2007).

However, stakeholder theory – similar to most other governance theories – portrays project governance as a processual concept that be “*consciously designed ex ante*” (Sanderson, 2012, p. 440), representing an organisational structure in which all stakeholder can be managed and controlled through rigid processes. For instance, the underlying belief is that good project governance is putting solid, comprehensive and sophisticated project governance mechanism in place (e.g. weekly meetings, monthly reports) to manage stakeholders and underlying power relations, which will result in good project performance. Reversely, misaligned or underdeveloped governance mechanisms lead to negative project outcomes. Put simply, project governance is traditionally researched using a top-down approach, which fails to sufficiently address the underlying practices that might be needed (or that might already be practiced) to achieve good governance and project success. An emerging stream of researchers therefore calls for more practice-oriented studies in the field of project management (e.g. Cicmil and Hodgson, 2006; Cicmil et al., 2006; Lalonde et al., 2010, 2012; Pitsis et al., 2003), in which the concept is researched in regards to its spontaneous micro-practices that unfold ex post in the course of the project (Sanderson, 2012). These spontaneous micro-practices play in fact a major role of governing megaprojects, as in its purest form project governance fosters self-regulation within a greater context, without determining every action of organizational actors (Clegg et al., 2002). Hence, “*governance is ultimately concerned with creating the conditions for ordered rule and collective action*” (Stoker, 1998, p. 155).

Giving greater attention to the underlying practices of project governance does not replace existing perspectives and governance theories. It simply extends the bigger picture of project governance and how to deal with different stakeholder from the bottom up, something particularly useful and important in a megaproject context. Underlying practices can provide an invaluable source of knowledge, especially when best megaproject practices are yet to be fully established (Flyvbjerg, 2014). Following Klein et al. (2014), this paper will introduce a pragmatic lens to philosophically

position practice-oriented research in the field of megaproject governance, since pragmatism “*does not define a good result from an abstract or objective vantage point [i.e. processes], but rather in terms of the deliberations and negotiations among the people working toward those goals [i.e. practices]*” (Brendel, 2006, p. 142).

## **Classical pragmatism at a glance**

Why is classical pragmatism so valuable in the pursuit to establish the pragmatic nature of project governance in megaprojects? Pragmatism is experimental by nature which aligns with the currently used “*Break-Fix Model*” (Flyvbjerg, 2014, p. 11) of how megaprojects operate. The Break-Fix Model essentially refers to a type of work where the project team does not know whether their practices work or not but keep using them until they fail to deliver a satisfactory outcome. Those “broken” practices are then “fixed” as soon as they occur. Pragmatism fundamentally operates based on this break-fix idea and is specifically concerned with how one can apply what we already know (i.e. existing practices or theories) to make it work in our context through a process of meaningful inquiry (Lalonde et al., 2012). Classical pragmatists believe that purposeful human inquiry is both provisional and grounded in a problematic situation. The applicability of the “problematic situation” to a megaproject context is very clear; in a context of uncertainty, complexity and ambiguity problematic situations (i.e. delays, variations, defects) arise on a daily basis, which requires the project team and the governance structure to react in a flexible and spontaneous manner. The problematic situation as a focal point is sophisticated enough to capture the complexity of daily practices in megaprojects practitioners from the bottom up, and large enough to allow sophisticated theories, methods and frameworks to describe project governance from a top-down perspective (Hildebrand, 2008).

Pragmatism contrasts between inquiry and habits. Habits are practices that have evolved over time and that have solved a problematic situation in the past (Mead, 1934). In other words, habits can be described as best practices or common knowledge that is manifested in our daily practices, yet not necessarily context dependent (Lau, 2004). In a project context, habits reflect the routinized processes in place, which – supposedly – enable project teams to finish the project successfully, as proposed by established project management methodologies (i.e. PMBOK, PRINCE2). However, seeing the complex and uncertain nature of megaprojects, habits might no longer provide a working solution for the arising problems. The concept of inquiry is therefore more aligned with practices in flux, where existing practices, frameworks and methods need to be changed in accordance to the problem at hand (Dewey, 1938). The process of inquiry recognises the qualitative nature of human experience and that good and working practices involve critical reasoning, experimental testing or application in the particular context and the final practices that are assessed in regards to the outcome they produce in the particular context. The acceptance of experimental testing, and potential failure of tested practices, helps to reduce uncertainty for practitioners, which is an important mindset that facilitates the process of inquiry (Shields, 2003). The basis for experimental testing is however the recognition of a plurality of practices; the fact that multiple practices, frameworks or methods can lead to a successful outcome.

Project management in general, and managing megaprojects in particular, possesses a large number of practices, frameworks and methods that can (and have to be) used to address the inherent complexity of megaprojects in regards to technical, economic or social challenges, including the number of key stakeholders, different agendas, or

multitude of task and deadlines. Hence, it is naïve to say that project management can be explained or approached in a linear, rational and single-minded manner (Brendel, 2006).

In the centre of pragmatism remains the problematic situation, and the ultimate goal is to deliver a satisfactory outcome for all stakeholders (Biesenthal, 2014). This goal is used as a stimulus for good practices, or pragmatically, for the process of scientific inquiry (Shields, 2003). While the projected scope initially determines the habitual application of known practices, occurring problems trigger altering these static processes, we believe that it is equally important to adjust existing practices when needed. More specifically, governance structures in megaprojects should evolve through a process of inquiry, in which existing practices are tested and applied, evaluated and ultimately adjusted to meet the expectations of all stakeholders. Existing practices, then, become mere tools that one can use and adjust as needed in a spontaneous and context-dependent fashion (Klein et al., 2014).

Giovanni Papini, an early Italian Pragmatist uses the Hotel Corridor metaphor to describe the pragmatic use of theory. Different theories are to be found in the different rooms of the corridor all of which serve a specific purpose and help the practitioner to address the problematic situation (Hickman, 2004; Shields, 2006). Hence, the above-described ways types of knowledge represent different rooms, which can be entered based on the specific requirements of a project as well as the larger organizational setting. Each room has multiple methods to offer as well, so that the project team has nearly an infinite number to tools available. The ‘correctness’ of the chosen tool is determined by its usefulness to address the practical problem at hand. Ultimately, the success is judged by practical outcome and whether it is satisfactory or not; put simply, whether the project performed well or not.

The more practices, frameworks and methods one knows, the more tools one possesses to successfully act in problematic situations. For instance, certain stakeholders might want weekly reports, others want monthly reports; some stakeholders want face-to-face updates, others only want short, written summaries; or some stakeholders reply immediately the variation claims, others want to take their time to evaluate such a proposal. Hence, the level of engagement and the practices used to fulfil this part of the job (i.e. communication strategies) have to be constantly evaluated whether they help to achieve a satisfactory outcome, and adjusted in accordance to the stakeholders involved in the project. The satisfaction of stakeholder provides the basis for assessing the workability of the practices in a contextually objective (or context-objective) way, something that has been labelled pragmatic objectivity (Hildebrand, 2008).

### **Pragmatic democracy**

Pragmatic objectivity, or context-objectivity, is manifested in a democratic mindset, where solutions are being developed to satisfy stakeholders democratically. The term democracy is primarily associated with a political context, but its underlying meaning is ‘government by the people’ (*Merriam-Webster Dictionary*), which symbolises a form of governance where power is exercised (equally) by the people elected representatives of the people. Dewey argues that democracy has a much broader and wider meaning that which transcends the political context, and can thus be applied in other situations, where governance is being exercised (Dewey, 1976-83). In particular, Dewey states that two complementary parts form democracy: first, democracy is communal. It is based on shared laws, policies and institutions, put in

place by the society and its people (normative). Second, democracy is epistemic, meaning that problems are being solved through a collaborative process of inquiry. During this process of inquiry, problems are collectively identified, prioritised and ultimately solved in the best interest of the greater community. Using democracy as an underlying mindset, governance becomes a “*mode of associated living, of conjoint communicated experience*” (Dewey, 1976-83, 9:93), where project problems are identified and solved collectively with all stakeholder involved. In the following, we will discuss the two components of democracy, community of inquiry and the process of inquiry, in more detail.

### **Community of inquiry**

Problems always occur within a certain context that has unique characteristics. In fact, the context – and particularly the people within the context – defines the problems, evaluates and develops solutions. In other words, an event is recognised as a problem due to the pre-existing perspectives of the people involved and their values, expectations or beliefs. Such beliefs are based on existing experiences, but might change in the course of the experience. Communities are therefore living and evolving forces that “*create and create and conserve values that the techniques and bureaucratic structures of government are of secondary importance*” (Hildebrand, 2008, p. 223). As a consequence, communities are a major component of a democratic government, where underlying values of the community drive governance structure, practices and methods. The existing governance structures then becomes a mirror of collaboratively created and implemented rules and practices that reflect the values of the community, following the principle of governance being a mode of self-regulation (Clegg et al., 2002).

However, how can a community objectively determine whether the implemented rules and practices are meaningful and good, especially when the respective community has conflicting agendas (or values)? In a pragmatic world, objectivity is not achieved by separating means (i.e. practices and rules established) and ends (i.e. outcomes, final solutions to the problems identified). Pragmatism is built on a non-dualist mindset that does not distinguish between those two aspects of the work life that are in fact inseparable (Farjoun, 2010). Objectivity in the management and governance of megaprojects can only be objective if the democratically chosen practices, rules and methods are based on the values, expectations or beliefs of the communities served rather than some one-size-fits-all methodology, framework or practice (Dewey, 1981-90, 7:337; Klein et al., 2014), making the development process of practices a vital component of pragmatic objectivity. This is what pragmatists call the process of inquiry.

### **Process of inquiry**

The process of inquiry – as aforementioned – is the process with which communities identify, prioritise and ultimately solve problems (Dewey, 1938; Shields, 2003). Pragmatic inquiry is concerned with establishing practical answers for the problem at hand that provide satisfactory results for the community (Shields, 2003). This process becomes meaningful when past experiences are adequately altered in the present to address a problem situated in the future (Alexander, 1990). “*Experience is ‘where we start’ when we encounter a problem, ‘what we do’ when we reason out possible solutions and ‘what we go’ through to test those solutions to our intellectual and emotional satisfaction*” (Hildebrand, 2005, p. 350).



As there is no complete certainty that any chosen action will lead to a satisfactory outcome, scientific inquiry is fundamentally experimental. Experiments represent context dependent practices, either existing or altered, used to achieve the projected results for the problem at hand. Hence, the process of inquiry is not necessarily the act of doing something fundamentally new, it is much rather a sequential, reciprocal and active process of constant testing, verifying and re-shaping of existing experiences. *“Experience is the result, the sign and the reward of the interaction of organism and environment which, when it is carried to the full, is transformation of interaction into participation and communication”* (Dewey, 2005, 1958, p. 22), making the process of inquiry an arena where past experiences (whether theoretical in form of project management methodologies or practical in form of tacit knowledge of a particular practice) are used to solve a particular problem in conjunction with the community.

In summary, the process of pragmatic inquiry has three characteristics: First, inquiry is a dynamic problem solving process that is fundamentally experimental, and thus involves behavioural aspects such as feeling, observing, analysing and sensemaking. Second, the practices (and experiences) that emerge from the process of inquiry are contextual, meaning specific to the particular problem at hand, and are therefore provisional (Shields, 2008). Practices might be reliable or perfectly applicable to a particular situation or problem, but can never be unconditionally ‘true’. And finally, inquiry is a reciprocal process of continuous evaluation on the basis of meaningful and satisfactory workability. Established practices therefore evolve in accordance with the changing environment and the degree to which it helps to solve the identified problem. Since the future is uncertain and the context changes, one can never fully predict how well and how long the established practices work. The process of inquiry therefore highlights the social character of using a democratic mindset when solving particular problems:

*“In our reasonably well functioning social system something happens and doubts and conflicts arise. Recognition of this trouble results in the development of a self-conscious public and the formulation of the problem. In its attempts to address the problem, the public then proceeds in some organized fashion through a process of social inquiry, hypothesizing and testing. The results of this inquiry, some proposed institutional change involving new laws or modified regulations, are then hypothetically introduced and socially evaluated. And, if all goes well, this hypothetical solution is adopted and works as a solution to the problem.”* (Campbell, 1995, p. 148)

Binding together the pragmatic nature of pragmatic governance, we can conclude that the community provides us with the resources we need to make good choices and informed decisions, based on communicated and shared experiences to create working practices. The democratic process of inquiry relies on the ability and experience of the community—not an abstract or external authority—to identify, prioritise and ultimately solved problems in their context through pragmatic objectivity. This self-belief and form of self-governance exhibits ‘critical optimism’, and thus represent a modern form of governance that features empowerment and trust in all stakeholders.

## **Megaprojects, governance and pragmatism**

How can pragmatism help to successfully execute megaprojects despite their unique and complex challenges? The previously outlined challenges in megaprojects are

primarily concerned with two different areas: First, megaprojects are uncertain, due to complexity and length of the endeavour, especially in regards to performance evaluation and planning (Flyvbjerg, 2006b). Second, megaprojects are pluralistic; they evolve over time, as stakeholders, interests and agendas change (Flyvbjerg, 2014), and are thus a fertile ground for changing practices. Traditional project management theories fail to provide the philosophical underpinning needed to address such challenges, as they are often based on a normative and positivist mindset that advocates absolute truth and certainty, and does not account for context dependent actions (Cicmil et al., 2006; Hodgson and Cicmil, 2008; Lalonde et al., 2010). Moreover, Flyvbjerg (2014) states that the managing of megaprojects is a different beast altogether that requires different kind of skills, especially in regards to the outlined challenges. In the following paragraphs, we will therefore explore how pragmatism can help us to address those challenges, and potentially overcome them.

### **Certainty in pragmatism**

Certainty is what we strive for? No one likes uncertainty. Pragmatism is a philosophy that leaves certainty at bay, while providing enough of it to make people comfortable. More precisely, pragmatists address the issue of certainty by systematically bridging existing knowledge or practices with the current situation. Truth (or certainty) is merely determined by the problem solving ability of practices in a particular context. Practices are therefore merely tools that become true through successfully solving a particular problematic situation, and satisfying the community of stakeholders. This process is inherently rigorous, as practices evolve through the process of inquiry that is based on a collaborative act of iteratively finding the best solution using existing knowledge of the community of inquiry. One can never know for certain whether a specific practice solves a certain problem, even though it has been verified multiple times in different, yet similar situations. Practices are therefore constantly tested, verified, and falsified by a practical community of inquiry and the particular context.

Developing a pragmatic theory of project governance provides a sense of certainty, not through control and rationality but by accepting that there is no certainty except the one that we create for ourselves based on our experiences and imaginations (Alexander, 1990), in which we act with the available tools in a context dependent, situational fashion. A pragmatic governance structure provides organisational actors (i.e. the project team) with enough certainty and structure (i.e. existing practices, knowledge and processes) to make them feel comfortable, while providing enough flexibility to adjust existing practices to align them with the particular context. Since the context can be quite uncertain, structure can provide a mental bridge that helps the project team to find guidance and stability if necessary. At the least, structure provides a starting point (i.e. existing practices) for the process of inquiry, in which these practices can be tested and evaluated in the particular situation.

Classical pragmatism – and especially Dewey (1929) – brings both a diagnosis and a cure to the conflict of striving for certainty and achieving certainty. The aim of the pragmatic project management process of scientific inquiry must be to find provisional truth, truth that is relevant in a particular context. As Patterson outlines:

*“The pragmatic conception of truth is therefore not a perversion of honesty and objective-mindedness but a recognition of fallibility and an incentive to better methods of fact-finding” (Patterson, 1953, p. 480).*

In summary, the project team doubts existing forms of knowledge and their universal applicability. Instead, existing practices and experiences are seen as tools of practice

that come to life through reflective thinking in the pursuit of finding the best possible solution for the problem at hand (Dewey, 1997, 1910). This process that can be described as scientific inquiry. Since this process is necessarily democratic, exchanging thoughts, ideas and experiences provide the best chance to successfully solve a problem, and a sense of certainty that all options have been taken into consideration.

### **Pluralism in pragmatism**

Pluralism has to be addressed in two different ways: first, in regards to the involvement of the community, and secondly, in regards to the processes that can lead to a satisfactory solution. Regarding the first way, John Dewey's (1916) theory of democracy necessitates the participation of the community, represented by the megaprojects' key stakeholders (Westbrook, 1993). This form of democracy is particularly concerned with open communication and collaboration that enables a multiplicity of human experiences to be considered in the process of inquiry. Open collaboration with equal rights for each voice of a community of practice defines participatory (or social) democracy and helps to achieve the best possible solution. Applied to the field megaprojects, Dewey's democracy argues for an active and open engagement of key stakeholder as the basis for democratic governance. Not the way the project is officially set up on paper, in terms of its structure and proposed activities, such as stakeholder meetings, confines democracy in projects. Instead, the social processes and interaction, the way the responsible project actor engage with each other must be the benchmark to conclude a project's democracy.

Managing megaprojects is a social process where underlying practices form our social life within the project. For Dewey, social life is "*the extent in which the interests of a group are shared by all its members, and the fullness and freedom with which it interacts with other groups*" (Dewey, 1916, p. 49). Hence, democracy is a trait of practice, that when applied correctly bears great powers to deliver a project successfully. Democratic governance requires total trust and faith in the community of inquiry, which arguably makes it an ideal scenario. Nonetheless, these ideals are fruitful starting points to understand and improve the field of managing megaprojects. Democratic governance implies contextually driven practices that focus on communication, individual experience and teamwork, and as such represent important features of our modern work life.

Secondly, pluralism in megaprojects can be viewed from an evolutionary perspective of practices, in which there is not only one right way to solve a problem (Klein et al., 2014). The pragmatic governance structure accepts (and even embraces) change and the ongoing nature of problematic situations. When managing megaprojects, so called, best practices are only as good as their last successful application. Seeing that megaproject management often adopts a "*Break-Fix Model*" (Flyvbjerg, 2014, p. 11), in which problems are being addressed as soon as they occur, it helps to being open-minded and aware of the provisional nature of practices and structures put in place. For instance, the requirements are sometimes greater than the available resources; yet, the project team has to find a way to solve the problem. This can either happen on the scope side of the variation, or the resource side. Nevertheless, a problem solving process is required, which links back to process of inquiry in which the community of practice collaboratively decides on a way forward.

In summary, pragmatism is about practices and actions that solve a practical problem. Hence, the discussions around a certain issue cannot be endless. A compromise, in

form of a chosen way to go forward has to be agreed upon. The chosen (or developed) practices might not be the ideal way, but due to several constraints (e.g. time, money, resources) the best practice in the current situation. In other words, it is the working hypothesis that emerged from sharing reflective experiences in a community of practice. Again, the chosen path might turn out to be a dead end, but “*the falsification component of experimental inquiry is the basis of the provisional nature of pragmatism*” (Webb, 2007, in Shields, 2008, p. 215). These processes constantly interact in their evolution with the persisting ambiguity in the context of flux and change (Maylor et al., 2008), which means that for Cicmil and Marshall (2005) “*projects involve complex communicative and power relations among actors, ambiguity, and equivocality of performance criteria, and change over time*” (in Maylor et al., 2008, p. S17).

## **Conclusion**

Following the pathway of practice-oriented research in project management (e.g. Cicmil and Hodgson, 2006; Cicmil et al., 2006; Lalonde et al., 2010, 2012; Pitsis et al., 2003), this paper aims to contribute to the field of megaproject management and governance in a similar fashion by applying the principles of classical pragmatism (Dewey, 1916, 1929, 1938) to propose a pragmatic model of governance in megaprojects, which is based on democratic principles that promote collaboration of all stakeholders to develop workable and meaningful practices to manage megaprojects successfully. Classical pragmatism, as a practice-oriented maxim is a promising and ripe field of philosophy upon which to build megaproject theory of governance. One key reason for this is how pragmatism deals with uncertainty, particularly in relation to knowing: that is, there has never been and will never be absolute certainty; and at the same time, people do not need to know everything.

What does that mean in project governance terms? We must avoid governance mechanisms that restrict the project teams ability to act contextually and solve problems in the course of a project, as it is impossible to predict or anticipate all eventualities that might occur. This is particularly the case in a complex, uncertain and pluralist context, such as megaprojects, where multiple stakeholders with different, at times conflicting objectives engage in the same arena. This plurality of stakeholders is another factor that needs to be considered when developing a democratic governance structure for megaprojects. Actively and democratically engaging the community of practice (i.e. all project stakeholder) brings two major advantages. Firstly, the transparency that all stakeholders are aware of each other’s objectives and positions creates an open platform for adequate conflict management in form of collaborative problem-solving or compromising. Secondly, actively engaging multiple stakeholders means utilising existing knowledge, experiences and different angles to overcome problems. The greater the repertoires of experiences available to the community of inquiry, the more lenses are available to deal with problems and their solutions for situations that they find themselves in.

In summary, pragmatism assumes that *true is what works* and therefore promotes a democratic governance model that advocates flexibility, stakeholder engagement, and context-dependent practices.

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