**Editorial PMJ special issue**

Megaprojects are “large-scale, complex ventures that typically cost 1 billion USD or more, take many years to develop and build, involve multiple public and private stakeholders, are transformational, and impact millions of people” (Flyvbjerg, 2017: 2). While megaprojects are often differentiated by the amount of their capital investment they are also characterized in other ways. For example Zhai et al. (2009: 99) state that megaprojects exhibit ‘extreme complexity, substantial risks, long duration and extensive impact on the community, economy, technological development, and environment of the region or even the whole country’. On the other hand, taking a sociological perspective, Gellert and Lynch (2003, 15-16) consider megaprojects as displacements by stating that ‘We define mega-projects broadly as projects which transform landscapes rapidly, intentionally, and profoundly in very visible ways, and require coordinated applications of capital and state power’. Merrow (2011: 12) adds that many megaprojects ‘end up being disappointing to their sponsors; a fewer number turn out to be destroyers of shareholder wealth; and a few are horrendous with respect to anything and everything involved—the investing companies, the local population and the environment’.

Despite all the negative impact that megaprojects are purported have, surprisingly, more and more of them are being built. Flyvbjerg. et al. (2003) refer to this phenomenon as the ‘megaproject paradox’. Not only more of them are planned and built, they are becoming more ambitious as well. Flyvbjerg (2017) has equated the size of some of the megaprojects being built as being equal the GDP of many nations citing projects like the Joint Strike Fighter which is predicted to cost close to 400 billion USD which is close to the GDP of Austria (p. 3). He predicts that soon we will be looking at ‘terraprojects’ observing that ‘there is no indication that the relentless drive to scale is abating in megaproject development. Quite the opposite; scale seems to be accelerating’ (p. 5).

One reason for such acceleration in megaprojects can be gleaned from the projections of infrastructure to meet the world’s needs. McKinsey (Garema et al. 2015) estimates that the ‘world needs to spend about 57$ trillion on infrastructure by 2030 to keep up with the expected GDP growth. OECD (Mirabile et al. 2017) estimates that ‘global infrastructure investment needs of USD 6.3 trillion per year over the period of 2016-30 to support growth and development’ that exceeds the figure proposed by McKinsey. But megaprojects are not only large infrastructure projects. For example the *Business Insider* (Desjardins 2017) who list the world’s nine largest megaprojects include a theme park of 64$ billion in Dubai as a megaproject. Urban planners (Altshuler& Luberoff 2003) have predicted that buildings such as stadiums and museums will take the shape of megaprojects in the future.

According to futurist Thomas Frey from the Da Vinci Institute megaprojects are expected to increase rapidly to 24% of global GDP in a decade. He predicts that projects that are initiated to control extreme weather, handling large amounts of data and solving human problems such as disease will also become megaprojects in the future. The project management community is still struggling to find consistent ways of improving the performance of megaprojects in engineering, construction and defense sectors. It is ill prepared to propose ways to handle megaprojects that will arise in non traditional areas like human condition and addressing the effects of climate change. (<http://www.futuristspeaker.com/job-opportunities/megaprojects-set-to-explode-to-24-of-global-gdp-within-a-decade/>). We need a better understanding of megaprojects as they are increasing in numbers and magnitude as well as being applied in new sectors still untouched by the project management and systems engineering practices. A wider perspective will be needed.

Mega-projects can be viewed as some of the most interesting phenomena in social science. They represent the major achievements by collectives to influence the progress and direction of society and the mustering of collective strength to infuse major institutional change. Indeed, launching a mega-project is a way of getting attention, a way of getting things done - of creating dreams and high aspirations. South Africa’s high speed metropolitan transport network has been described as ‘Glitz, glamour and the Gautrain; Megaprojects as political symbols’ (Westhuizen 2008).Megaprojects typically function as mechanisms to infuse trail making (Hirschmann, 1967) – establishing a new path of development, and order transformation (Eisenstadt, 1995). Indeed, they oftentimes operate as institutional projects – spearheading change of institutional frameworks and belief and norm systems.

Historically they have had enormous importance ranging from the cathedrals built to protect society from its worst enemies to current high-tech mega-projects, such as the Large Hydron Collider, launched to ensure the sustainability of technology and research advancements. In both these cases, people and experts travel far to take part in this important societal projects – the freemasons travelled across the cathedrals assisting the church and local communities to realize their dream of a new cathedral, or scientists taking part in various large-scale projects, working as post-doctorates, and later on as directors of research in building the global knowledge of physics and science. The projects function as action localities (Grabher, 2002) that build arenas for collaboration and learning, of the creation of future ties that shape the future of industrial and technological developments. They are important and understanding their nature and dynamics is an important task for social science.

Megaprojects attract our attention, appeal to our senses, attract the attention of the media, and recently it is receiving increasing scholarly attention. An overall and intriguing question pertains to the issue of why mega-projects exist. Indeed, one might simply answer – because they are needed, because they generate value, simply because they have are promoted by a convincing business case that is attractive. Understanding the rationale underlying the decision to implement a megaproject would lead us to look further into what seems to drive the megaproject business and why megaprojects are considered attractive to decision makers who are pushing these ventures forward. What are the features of megaprojects that make them so attractive to decision makers and to societies at large that they seem to be increasing in numbers despite reports of their poor performance?

Flyvbjerg (2014) introduced the framework of the four sublimes of megaprojects from which he wanted to explain the factors that drove the megaproject development. He identified the technological, political, economic, and the aesthetic sublimes as the most important to explain the rapid expansion of megaproject businesses (see Table 1).

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| --- | --- |
| **Type of sublime** | **Characteristic** |
| Technological | The excitement engineers and technologists get in pushing the envelope for what is possible in “longest-tallest-fastest” type of projects.  |
| Political | The rapture politicians get from building monuments to themselves and their causes, and from the visibility this generates with the public and media.  |
| Economic | The delight business people and trade unions get from making lots of money and jobs from megaprojects, including for contractors, workers in construction and transportation, consultants, bankers, investors, landowners, lawyers, and developers.  |
| Aesthetic | The pleasure designers and people who love good design get from building and using something very large that is also iconic and beautiful, such as the Golden Gate bridge.  |

**Table 1. The ‘four sublimes’ that drive megaproject development (Flyvjberg, 2017: 6)**

An additional reason (or sublime) has been pointed out by Thomas Frey of Da Vinci Institute is *Community Pride*. Frey states that ‘everyone loves to tell stories about the big things their community accomplished’ (http://www.futuristspeaker.com/job-opportunities/megaprojects-set-to-explode-to-24-of-global-gdp-within-a-decade/)

According to Flyvbjerg (2017), there are a number of factors that are typically overlooked by decision makers and other significant actors working on the implementation of megaprojects.

1. Megaprojects are inherently risky because of long planning horizons, nested interfaces and complexity.
2. Mega projects are often led by planners and managers without a complete understanding and domain experience, creating weak leadership of the projects.
3. Megaprojects are typically multi-actor processes involving multiple stakeholders with diverse and conflicting institutional backgrounds.
4. Megaprojects are often building on technology and design that are non-standard which shapes a uniqueness bias among planners and managers wo tend to see their projects as difficult to compare with other projects, and thus making it difficult to learn from history and experience.
5. Megaprojects are typically overcommitted and centered on a particular kind of project concept at an early stage, creating various kinds of lock-ins which might set aside alternatives.
6. Megaprojects are like big businesses which might create principal-agent problems and optimism bias.
7. Megaproject scope and ambition levels will change significantly during the life of the project.
8. Megaprojects are high-risk activities with overexposure to black swans, extreme events with massively negative outcomes.
9. Megaprojects often fail to account for the complexity and unplanned events that are inherent in their implementation.
10. Megaprojects are built on misinformation about costs, schedules, benefits, and risks. The result is “cost overruns, delays, and benefit shortfalls that undermine project viability during project delivery and operations” (Flyvbjerg, 2017: 8).

The question is not about why we should do major planned change, but rather why projects need to be this large, and why we need to implement them as ‘projects’ – as temporary organizations with a definite beginning and explicit end date. In that respect, one might ask: what are the economic and technical rationales underlying major projects? An obvious alternative is to implement them instead as minor piecemeal initiatives, as a set of smaller projects. This kind of analysis renders a lot more theoretical triggers and representing a key question pertaining to why a particular phenomenon exist in the first place. Similar explorations and debates have taken place in other fields of scientific inquiry, including why cities exist, why nations exist, why tribes exist, why communities exist and so forth. The question obviously for management and organization scholars relates to classic debates about why large firms exist – what are the advantages of scale and scope of megaprojects. This also leads the way for an analysis of the managerial and organizational challenges associated with them. We know a great deal about their importance. We are becoming increasingly aware of their prevalence and we certainly know a lot about their problems. However, we know far less about their management and organization.

Research on mega-projects has also developed rapidly in recent years, reflecting the importance and progress they have made in society at large. A number of special issues have begun to appear in prominent journals creating an abundant amount of literature on megaprojects, for example, the *International Journal of Project Management (2011 & 2017)*, *Organization, Technology and Management in Construction (2012), International Journal of Architecture Engineering and Construction (2014), Journal of Management and Engineering (2015)*, *Urban Policy and Research (2017)* andInternational *Journal of Managing Projects in Business (2018)*.. It is especially welcome to see that mega-projects have entered the center stage of research in management and organization studies Van Marrewijk 2016), as well as economic geography (Rasgam et al. 2014) and urban planning (Steele 2017). Even though, the progress made is impressive and important, with a number of achievements made related to better stories and better constructs, there is still a dearth of detailed stories of the major projects shaping society, and the theories that we might rely on to understand and explain their nature and dynamics. The idea with the present special issue was to push the boundaries for research on mega-project management. In that respect, we wanted (aimed?) to achieve a few important things.

First, to advance the theoretical discourse on mega-project management, beyond simply presenting empirical accounts, and statistics of mega-project performance. Instead we thought it would be important to drive the discussion around explicit theoretical debates on how to understand the nature and dynamics of these projects.

Second, to advance the use of empirical approaches by revisiting history. We know that history is filled with fascinating examples of mega-projects and that these projects are still open for empirical research and that much information about many of these projects are still available in books, reports, etc. but which have not received attention from a scholarly point of view trying to untangle the challenges associated with their management.

Third, our last attempt was that we were interested in their management, not just the decision preceding these projects, but actually – how can we understand the way that these projects are managed and lead. We are in that respect interested in the inner functioning and processes of mega-projects – how they are managed and organized. By emphasizing the importance of what goes on in projects we are moving beyond the conventional approaches on what goes on before mega-projects are launched or after they are completed.

We also initially thought we would relate and build on the idea of various sublimes in mega-project management and the effects that these sublimes have on the management of these projects. The original idea of sublimes in mega-projects came from Flyvbjerg’s paper in 2014 in this journal (Flyvbjerg, 2014) and the paper has received much attention from project scholars and other management and organization scholars ever since. We thus thought it was timely and the right context to advance some of these ideas further. Several authors in this special issue have referred to these sublimes in their papers.

From history, we know that mega-projects have played a significant role in creating the society in which we live. The large-scale and pre-industrial canal projects constitute some of the most profound mechanisms for shaping technological progress in large parts of the world. Many of them educated the project managers that in subsequent projects were so important to get the large-scale projects on track. This in turn led to the advancement of capabilities to run even larger projects which was epitomized in the development and construction of the railway systems in the Western world during the mid 19th century, and moving further with a range of infrastructure and other construction projects that paved the way for the industrial revolution in many countries around the globe. People did not talk about mega-projects back then but they certainly worked on them, many of these historic projects were in relative terms larger than the mega-projects we see taking form in our society today. That said, encouraging the historical exploration into megaprojects seems important, to see what we can learn from history, to see what in-depth stories of how these projects came into fruition and how they emerged seems to be an important task for management and organization scholars. This means clearly that we need to recreate these mega-project stories by visiting the books and reports written about them, the stories told by the people who populated these projects. We do not know what is in this data, in these stories and what they might lead to in terms of theoretical insights, but it is worth collecting them and analyzing with a project organizing mindset (Soderlund and Lenfle, 2013; Sankaran 2017) – of looking upon these projects, not as objects, not as outputs, but as processes of organizing, as emerging organizational entities, and action localities for the intermingling of politics and power (Clegg and Kreiner, 1973).

We also know that scholars from a wide range of disciplines have taken interest in mega-projects – initially primarily in domains such as urban planning and engineering, but increasingly so in areas like sociology and business administration. It is also interesting to see the progress being made in research into mega-projects at some of the leading business schools in the world, such as Said Business School at Oxford University, BI Norwegian School, University of Technology Sydney, University of Québec at Montreal, University College London, University of Pennsylvania – all schools engaged in the development of centers of excellence to drive research on mega-projects further. In that respect, interesting as organizational phenomena mega-projects have emerged as fertile cross-disciplinary ground for exchange of ideas across a wide range of domains, ranging from urban studies, engineering, science, to social science. This is a path recently created and a path that hopefully will prosper in the decades to come.

There are at least three pressing and critical issues in megaproject management research. First, their existence. Second, their management and organization. And third, their success and performance. Fourth, their future.

First, as mentioned earlier, we need to have a lot more elaborate discussions about why megaprojects exist, not why people want to do certain things but why they choose to do things through the mechanisms of projects, and why they want to group these initiatives and actions into large-scale projects, oftentimes even mega-projects, and beyond. This requires more theoretical scrutiny and discussions – not only empirical stories, which are desperately needed, but also awareness of the larger social science literature in economics and organization theory. This inquiries might relate to economics-based explanations pertaining to transaction cost theory, they might relate to the mustering of capabilities, the handling of interfaces and complexity, they might obviously also relate to power issues. Engaging more in the theory of megaprojects is an important feat for management and organizational scholarship, of using extant theories of organizations and ‘firms’ and exploring in what sense they might inform our understanding of megaprojects is obviously one important path for research. However, developing new approaches and unique theories of megaprojects is just as important – to then be able to demonstrate in what respect megaproject research might contribute to wider management and organization theory, and to social science at large. For these reasons we need bolder attempts to develop better theories of megaprojects. These efforts are just beginning to take shape in the organization studies literature and project management literature. Scholars writing about megaprojects are using institutional theories (Biesenthal et al 2017; Chi et al, 2014; Mahalingam et al. 2007) and theories of conflict. (Jia et al. 2011) to explain phenomenon in megaprojects to increase our understanding. Scholars in the UK are reporting on how innovation simple rules innovation for large high-risk projects (Davies et al. 2017).

Second, we need to know more about what goes in in megaprojects – how they are managed and organized, from within, by the managers who are set to take them to fruition. In that respect, we need to understand how managers implementing large-scale projects deal with the sublimes often associated with them, of over-optimism, of realizing the project from dreams to reality. These are trouble laden journeys in which managers rarely have positive news to tell to the people involved or to the stakeholders observing the progress of the project. How do managers deal with such a situation of managing in head-wind? Getting more into the actual occurrences, the nested processes of managing and organizing in megaprojects is a critical concern for management and organization studies. So far, too much research has been interested in looking at them from an outside-in perspective, of looking at the black-box of megaproject management. Too little attention has been paid to what happens inside the box of megaprojects, how managers work to establish functioning regimes for cooperation and relevant mechanisms for coordination. This needs to change.

Third, how do megaprojects perform? We often hear consultants and scholars complaining about the underperformance of megaprojects. This is all in order. It is their job and it is a simple way of telling the world that their services are needed and important. However, is it true and how would we know? How do we measure performance of megaprojects? Oftentimes we hear the story about on time and on budget as being the most important parameters of measuring success. We rarely use the same parameters when evaluating and discussing the performance of other ventures and organizations. Why? Why are these parameters the most relevant in the context of megaprojects? Consider the case of Norway. We know that their strategic success as well as their operational success have been improved considerably the last few years – if looking at how they perform in relation to planned numbers. However, we rarely compare megaprojects with each other. How much is a relevant sum for developing a new bridge in one country compared to the numbers in another country? What country is best when looking at the performance of their megaprojects? Is it then only relevant to compare if they reach the stated objectives? Is this a measure we in anyway would believe is relevant for comparing other kinds of organizations and ventures, such as corporations? Of course, not. But they are frequently the ones we use in the context of megaprojects, because we have not worked hard enough to find measures that are relevant and instrumental. This needs to change.

Fourth, and perhaps the most important thing related to research on mega-projects is in what respect they contribute to solving the big problems in society. These projects cost a lot of money, they consume enormous amount of resources and attention, and we should expect them to deliver value to society and to the organizations and individuals that are involved in them. In some cases, one might wonder whether this really is the case. Do mega-projects really solve the mega-problems of our society? Do we have the right projects to solve the right problems in our society? This obviously makes it important to get projects addressing the United Nation’s major goals related to poverty, climate change, economic unfairness, and terrorism. What problems are best suited for being handled by megaprojects, what problems are best handled by programs, what problems are best handled by a portfolio of smaller projects, and what problems are best handled without the aid of projects?

This special issue contains six interesting papers that in various ways contribute to the literature on mega-projects.

*List of the papers: NOT SURE ABOUT THE ORDER BELOW.*

*In the right order*

*Brief summary of the topics covered – try to identify a number of important patterns in the papers, for instance themes covered, conclusions, theories used, topics addressed, etc. (see my analysis later)*

Alfons Van Marrewijk analyses a high speed train (HST) megaproject in The Netherlands demonstrating how power and politics can have an adverse effect on its progress (Clegg et al. 2017). The paper’s focus is on exegetical meanings that have an impact on social, cultural and political situations and processes. Using an anthropological approach the author captures the meaning of failures that occurred in the HST megaproject scenario as multi-vocal that changed over time and represented strategic power struggles among key stakeholders.

The failures of the project occurred on three ambitions of the megaproject that were derived as meanings attributed from an analysis of the data collected: HST as a radical, innovative contract introducing Public Private Partnerships in the rail sector; as an intervention in the Dutch rail sector to break down its monopolistic position; and as a lynchpin of rail transport business for The Netherlands in the European transport sector. All four sublimes proposed by Flyvbjerg (2014) – technological, political, economic and aesthetic acted as drivers for the four public organizations who participated in the project.

The methodology used is a decade long longitudinal ethnographic study to arrive at a ‘*verstehen*’ of the social reality of the megaproject as it was constructed by its stakeholders. Data that could not be captured through interviews and observations were supplemented by secondary data.

The paper shows how the exegetical meanings acted to legitimize the arenas for a power struggles that are often found in megaprojects. (Clegg & Kreiner 2013). The symbolic ambitions of the HST project turned out to be unrealistic due to failed liberalization, incapability to meet the challenges, exhibiting civil resistance to change and causing both time delays and cost overruns. The paper shows how project management scholars can conduct a historical analysis of megaprojects that can contribute to project management studies (Soderlund & Lenfle 2013).

Eskerod and Ang, in their paper on stakeholder value constructs, explain how to understand, classify and express megaproject stakeholder values using the example of the Astoria-Megler Bridge connecting Washington and Oregon State which had its 50th anniversary in 2016. They use the four sublimes proposed by Flyvbjerg (2014) and value constructs derived from research conducted by Ang to analyze the case study of a symbolic bridge (Ang & Killen 2016). They try to provide an answer to the often asked question ‘How do you measure the success of a megaproject?’ by extending its evaluation beyond the conventional project close-out stage into its impact stage (Turner & Zolin 2012).

The paper uses a single case study of a rich and powerful case with multiple sources of evidence using online videos, websites and photographs besides interviews and observations. Data analysis using the four sublimes showed that the bridge provided evidence of a technological sublime by having the longest continuous truss span in the world; political sublime used as a means of political promise during an election by the then Governor of Oregon; the growth in the tourism business contributing to the economic sublime and the delight of the local stakeholders and tourists as an aesthetic sublime. The two value constructs that were prominent during the analysis were that the bridge provided ‘generative value’ for local communities by unlocking development opportunities in the longer term and ‘retrospective- reflective-future oriented value’ evident from the passionate speeches that were made at the 50th anniversary of the bridge.

This paper contributes a ‘value language’ to project management researchers and practitioners to gain a better understanding of the value that a megaproject can provide while engaging with its stakeholders. It can further help in evaluating the success of a megaproject from a ‘value perspective’ that extends beyond traditional measures of project success that is often extended to megaprojects.

Harris’s paper on competitive precinct projects offers a systematic review of the literature of key issues created by the rapid growth of mixed-use megaprojects in cities (that tend to be large enough to be called a ‘precinct’) that do not seem to be good examples of urban planning. He argues that these megaprojects are motivated by city-based international competition; mobility and growth of knowledge economies creating pressures on urban space; redirection of investment from physical to human capital; and the dominating role of politics driving a market-rule ideology.

His review of the literature reveals five consistent issues introverted project-led governance that circumvent local planning frameworks; international marketing for talent tending to obscure local issues; spatial and social disconnection due to following the money and creating barriers between the new and the old; generic urbanity through imitation irrespective of the context where they are being built; and lack of public benefit caused by the rhetoric of delivery. He attributes this to the emergence of neoliberal oriented development practices.

Harris argues that these competitive projects that hase competitive precint megaprojects are a missed opportunity in good urban planning as they fail to provide housing and employment opportunities in areas in cities that are already connected with less effort; missing an opportunity to increase value through rezoning industrial land ot residential; and achieving the synergy through lack of coordination with other major government assets or projects.

Harris also contributes to the urban planning literature by suggesting alternative direction for building competitive precinct projects by developing principles-based project frameworks that can overcome the five criticisms pointed out earlier in the paper and establishing monitoring and adequate accountability to ensure that they are being followed and using a more contextual evaluation of such projects. The contribution this paper makes to project management literature is the dangers of projectification in urban planning (Book et al. 2010).

Instead of investigating why megaprojects fail, Holzman and Shenhar (2017) study why some megaprojects succeed. In particular, they attempt to identify ingredients of and commonalities amongst successful megaproject. To do so, the authors review the ambiguous literature on project success that propose a multitude of perspective on what project success is and how we can evaluate it. Following the multiple perspectives, the paper determines four dimensions, based on which they analyse the success of megaprojects. The four dimensions are efficiency, impact on customer, business/financial success and impact on society.

The paper uses multiple case studies to qualitatively explore commonalities amongst successful projects. The study includes multiple research methods to identify relevant case studies, such as content analysis, interviews, expert judgement. Following a step-wise analysis the authors produce a list of fourteen case studies that were deemed successful in at least some of the in the above-mentioned dimensions of success. After finalising the list, the author’s objective was to identify the vital factors that were responsible for the achievements of the most successful megaprojects. In order to do so, they reviewed the literature to come up with a list of 37 success factors that could help to explain megaproject success. Then, the authors performed an iterative cluster analysis to reduce the number of factors until no further reduction was feasible. Ultimately, the authors identify three distinguished and unrelated elements that can explain success of megaprojects, namely having a clear strategic vision, total alignment of all relevant stakeholders and the ability to adapt to complexity.

Based on their findings, the authors suggest that successful megaprojects are able to integrate all three elements. That is, a clear vision is set and communicated to all those who are involved or may be impacted by the project. Relevant stakeholder embrace that vision and are totally aligned with it, which includes knowing your roles and responsibilities top achieve that vision. Lastly, complex challenges are identified and addressed appropriately. According to Holzman and Shenhar, these three elements are what successful megaproject have in common.

Steen et al.’s (2017) paper aims to model the decision-making and problem-solving process in a more dynamic and realistic way that overcomes the idea of rationality in organisations. According to the authors, rational choice models of planning and decision-making are dominant in the megaproject literature, but have limited utility in explaining the problems of complex megaprojects. To overcome those rational models, the paper introduces Cohen, March and Olsen’s is (Cohen et al., 1972) garbage can model (GCM), as a decision-making model. In particular, the authors use GCM as a way of explaining the differences in problems identified by businesses that are attributed to megaproject delays and cost overruns in the Australian oil and gas industry.

Steen et al. (2017) use quantitative methods and comparing media reports from business and industry associations with survey data. The results are produced from the mean rank exercise and indicate that, while megaproject executives focus their attention on solutions that involve external parties like government and labour unions, the problems within the project that are prioritised by managers of firms within the supply chain network are actually quite different and relate more closely to the performance of the project. According to the authors, this finding is inexplicable from a rational choice perspective without concluding decision-making failure, but from a GCM perspective, the results can be explained through the lens of conflicting agendas and solutions to a stream of multiple problems.

In summary, Steen and his co-authors identify differences between members of the supply chain in the Australian oil and gas industry in terms of what they perceive are major barriers to meeting business objectives. Their study is therefore a valuable snapshot of the perceptions of those firms that made up the industry supply chain, ranging from owner/operators of the project through to construction firms and other businesses.

Gillett and Tennent use the 1966 FIFA World Cup to investigate megaprojects and show how sports mega-events can achieve multiple tangible and intangible benefits; even beyond the original vision. Since the actual realised benefits, in regards to outputs and outcomes, from sports mega-events can differ from what was proposed, the authors use multiple theoretical lenses to capture the multiplicity of benefits that can occur. In particular they use Flyvbjerg’s (2012; 2014a) “four sublimes” model and Morris and Geraldi’s (2011) framework of project management levels to identify a wide range of potential drivers of megaprojects, that provide a basis for evaluating project success.

The 1966 FIFA World Cup, which was held in England, is an interesting and relevant case that provides the authors with a temporal perspective that allows the researchers to investigate the longitudinal scope and effects of a project while avoiding certain political and ethical concerns of researching contemporary megaprojects. Gillett and Tennent (2017) utilise an inductively based archival research approach and draw upon project documents together with periodicals and secondary sources, such as autobiographies. In the first step, the authors performed an archival analysis of the main three project phases. Then, the authors examined the original proposals, the revised plan and what actually happened. In third step, the authors researched the project network to determine contextual factors (e.g. institutional) in which the project took place.

Based on the results of their research, the paper argues a broader view of the factors that need to be taken into account when evaluating megaprojects as success or failure over time needs to be considered, including its symbolic impact on national identity and status or international relation. In addition, the authors find that the temporal nature of implementing megaprojects is quite dynamic, which means the strategic and institutional context changes (or can change) over the course of the project. Hence, the paper argues for a dynamic understanding of the nature of megaproject management and its performance evaluation.

Brief analysis of papers based on summaries (Chris has a better knowledge of the papers to improve this part)

While van Marrewijk reports on the failure of a megaproject Holzman and Shenhar study why megaprojects succeed. In the Dutch HST megaproject (van Marrewijk) while the vision of the project was radical and innovative it failed to reach these aspirational goals due to power struggles, resistance to change and institutional differences. The factors identified by the Holzman are both inwardly and outwardly focused van Marrewijk’s paper is more inwardly focused. The two articles also differ in their methodological approach. While Van Marrewijk’s study is a long ethnographic study that uses historical analysis Holzman and Shenhar use multiple case studies and a mixture of research methods. A case study approach is also used by Eskerod and Ang but it is a single case study of a historic bridge. A common thread that is common among several papers is the notion of valuing project success. Eskerod & Ang take a multistakeholder perspective in evaluating value of a megaproject over a fifty year period from which it was delivered while, Holzman and Shenhar use conventional ways of measuring project success. Gillett and Tennent also use a combination of tangible and intangible benefits in their evaluation suggesting the requirement of a broader view to measure success. Power and politics are another common thread in the papers with Harris concluding that the role of politics driven market rule has resulted in opportunities missed in mixed use urban projects. Van Marrewijk’s paper also reports arenas of power struggles in the Dutch HST train project that led to conflicts. The fours sublimes proposed by Flyvbjerg feature in two papers. Van Marrewijk’s paper explains how all four sublimes acted as drivers for the organizations participated in the Dutch HST project. Gillett and Tennant use the four sublimes model to investigate the drivers for the FIFA world cup project. Steen’s paper uses a quantitative method to explain differences in perception in decision making in supply chains associated with a megaproject. The variety of methods used in the different papers suggests that megaproejcts need to be viewed from different perspectives using different angles to increase our understanding of megaprojects as a cultural ecosystem by studying the interconnected organizational elements of megaprojects in their wider institutional contexts as suggested by Kususma (2014).

*Summing up – main insights from this special issue. Main lessons learned from the papers included in the special issue.*

*A few final words for the future. Perhaps a few words about methodology, qualitative research, ethnographies, novels, shadowing, observations, comparing different kinds of megaprojects, different sublimes, different contexts, different countries (Scott and colleagues), understanding the challenges associated with managing inter-institutional projects (Dille and Söderlund, 2011), the time and temporality of them (see our papers, Biesenthal, Söderlund, Dille, etc.)*

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