

Rethinking the Role of Local Communities in Megaprojects. A Review and Synthesis of the Literature

Francesco Di Maddaloni

Kingston University

Author's Note

FRANCESCO DI MADDALONI is a PhD candidate at Kingston Business School. Francesco's area of research interest encompasses soft skills of project management, stakeholder management and megaprojects. He is also an active member of the knowledge, process and project management research group based in Kingston University.

Abstract

This paper develops an organising framework to record and synthesise the extant of literature on the outcomes of stakeholder management practices in major public infrastructure and construction (PIC) projects. Importantly, by understanding the stakeholder side at the local community level, this review will suggest theoretical criteria for better decision making that can minimise the environmental and social impact of megaprojects. Additionally, this paper records both convergent and contrarian findings in the literature. Findings suggest that the stakeholder management research has focused strongly on primary stakeholders' ability to control project resources, whilst the effect of megaprojects on the legitimate secondary stakeholders remains widely unexplored. Furthermore, the impact of megaprojects on people and places at the local community level is relatively under-researched with greater research attention being paid to understand how secondary stakeholders can influence the project. The contribution of this study is twofold. Primarily, this is a first systematic effort to explain not only the role of local community in major PIC projects, but also to understand megaprojects' stakeholder managerial practices on the local community level. Secondly, this review suggests avenues for future research by identifying the research gaps in the extant literature.

Keywords: *Megaprojects; Secondary Stakeholders; Local Community; Stakeholder Analysis; Systematic Review*

Track: Stakeholder Management of Major Public Infrastructure and Construction Projects

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Introduction

Cluttered by misrepresentation and flawed in decision making process, megaprojects are considered a built-in recipe for local impact but not local benefits. Becoming more ubiquitous with global infrastructure spending estimated to be US \$57.8 trillion for the period between 2013 and 2030 (McKinsey Global Institute, 2013), megaprojects have never attracted so much attention as in the contemporary research because of their unavoidable impact on people, budgets and urban spaces. Controversially, despite the disturbing performance about megaprojects, many more and larger public infrastructure and construction projects (hereafter, PIC) are being proposed and introduced with optimistic figures for budget, schedule and benefits (Flyvbjerg, 2014). It is therefore essential to minimise the environmental impact and wastage of public resources through better decision making. The poor performance of megaproject shows how managing time and cost, has no direct impact on time and cost performance; managing time and cost is just bayoneting the wounded, wild guesses that find mistakes in feasibility. We believe that managing benefits has a greater impact, and managing the local community will help manage benefits.

By considering projects as a temporary organisation (Turner and Muller, 2003) our main theoretical background draws into the stakeholder theory, which provides solid basis for stakeholder identification, classification and assessment by taking into account the needs and requirements of the project stakeholders as an essential element of project success (Cleland, 1986; Donaldson and Preston, 1995; Olander 2007). However, too often project managers have mainly focused on technical skills encapsulated into rigid procedures, and too often the political and social issues around megaprojects have been overlooked and stakeholders are poorly managed. Although not many works have been addressed primarily on project

stakeholders and their management (Achterkamp and Vos, 2008; Yang, Shen and Ho, 2009); consolidated stakeholder analyses have focused on those actors important to the project's economic interests, such as suppliers, sponsors and customers (Aaltonen and Kujala, 2010) leaving apart the human social needs around project developments.

In this paper, the attention would be given to those "secondary stakeholders" such as community groups, lobbyists, environmentalists and other non-governmental organisations rarely considered in the current literature. More specifically, the research focus is on the analysis of the local community affected by major PIC projects and whose interests often differ from those of the project; with the objective of drawing a better concept of the stakeholder "local community", blurring defined in the current academia of project management. Because of project's limited resources, project managers cannot always address the concerns of every potential stakeholder (Mitchell, Agle and Wood, 1997); however a broader stakeholder view that takes into account the "less important" ones is highly essential in the context of major PIC projects due to the environmental and societal impact the projects typically have.

Although the literature on megaprojects is growing fast, there has not been academic effort to undertake a systematic review of the extant construction project's literature affecting the local community context. Whilst different studies (e.g. Teo and Loosemore, 2011; Eesley and Lenox, 2006) provides valuable insights into local community's influence in project outcomes, they overlook the literature on outcomes of megaprojects affecting their social needs in such projects. Review of literature focusing on local communities in megaprojects is important from both the theoretical and managerial perspectives because their growing ability to impact the project negatively (Olander and Landin, 2008) and build coalitions with more powerful stakeholders (Bourne and Walker, 2005, Newcombe, 2003).

Previous empirical research suggests that megaprojects are systematically characterised not only by time and budgets overrun, but also affected by scope creep and benefits shortfall (Flyvbjerg, Bruzelius and Rothengatter, 2003; Flyvbjerg, 2014). For instance, understanding and minimizing the effect of megaprojects on people and places can help managing project benefits, by re-thinking a tailored approach for local community which will help project managers to improve accountability and transparency in their decision making. This work develops an organising framework of an ongoing PhD research that through a systematic review seeks to record the extant literature on how the stakeholder management practice of major PIC projects manifests itself on the local community level.

The review aims to provide academic researchers an overview of “*what we know*” as well as direction for future project stakeholder research by offering insights on “*what we need to know*”. The focus of this systematic review is on studies which present an intersection between three areas of knowledge domain i.e. megaprojects (context), stakeholder analysis (extent) and local community (phenomenon of interest).

The remainder of this paper is structured as follow: First, the methodology and the organising framework of the review are elucidated. Second, the findings of this literature review and the identified research gaps in the extant literature are presented. Finally, this paper concludes by discussing the contributions of this study.

Methodology and Organising Framework

Systematic review has been argued to provide the most efficient and transparent method for identifying and evaluating extensive literatures (Mulrow, 1994). Therefore, this paper adapts and combines the guidelines suggested by Tranfield, Denyer and Smart (2003) and Mok, Shen and Yang (2015) to conduct systematic reviews in order to meet a defined "gap" in the literature and minimize bias and errors by providing "high-quality" evidence.

2.1. Procedure

The first step was to identify an initial list of keywords specific to the research objectives. The provisional list of relevant keywords was in the second instance refined through ongoing discussions with senior academics. The discussion assessed the relevance and size of the literature and delimited the subject topic. Following Davies and Crombie (1998), criteria for inclusion and exclusion of studies in the review were agreed with the desire to base reviews on the best-quality evidence. The result yielded a total of 8 keywords which were used in the literature search. These keywords are relevant to our area of investigation related to megaprojects, stakeholder management procedures and local context:

- **Megaprojects:** *megaprojects; large construction projects; major infrastructure projects.*
- **Stakeholder Management Procedures:** *stakeholder analysis; stakeholder identification; stakeholder classification; stakeholder assessment.*
- **Local context:** *local community.*

Second, search strings were developed from the identified keywords with the help of Boolean operator **AND*/*OR** to search and access the relevant literature. Search strings employed in this review are: **1.** *“megaprojects” OR “large construction projects” OR “major infrastructure projects” AND “local community”* **2.** *“megaprojects” OR “large construction projects” OR “major infrastructure projects” AND “stakeholder analysis” OR “stakeholder identification” OR “stakeholder classification” OR stakeholder assessment”* **3.** *“local community” AND “stakeholder analysis” OR “stakeholder identification” OR “stakeholder classification” OR “stakeholder assessment”*.

Third, rigorous search criteria were established for paper retrieval. Although best-quality evidence can be also obtained through high quality newspapers and official conferences reports (Tranfield *et al.*, 2003), but only academic journals were selected for review. The search was restricted to peer-reviewed journal on the database. Following Conn, Valentine, Cooper and Rantz (2003), grey literature such as book reviews, editorials, dissertations and papers in conference proceedings were excluded from the systematic search process. Two academic databases: ABI/INFORM complete and Business Source Premier, were searched for relevant publications. Moreover, the scope of publication search was scaled down to a time span 1997-2015. This timeframe was selected according to Mok *et al.* (2015), which depicted that relevant publications specifically from the perspective of stakeholder management and megaprojects appeared only since 1997. A total of 196 articles were retrieved after the first stage of selection.

Subsequent to the exclusion of non-English papers, some of the retrieved publications appear to be less relevant. Therefore, a filtering process previously applied by Yang, Shen, Ho, Drew and Xue (2011b), and more recently Mok *et al.* (2015), was also adopted in this review. The filtering process consists in two stages: the first stage screened out publications which did not

contain the abovementioned keywords in their titles and abstracts. In the second stage, a brief review of the paper contents using NVIVO software excluded the less relevant and irrelevant papers; after checking for duplication, a total of 76 papers were included in this review.

Figure 1 and 2 summarize the retrieval process.

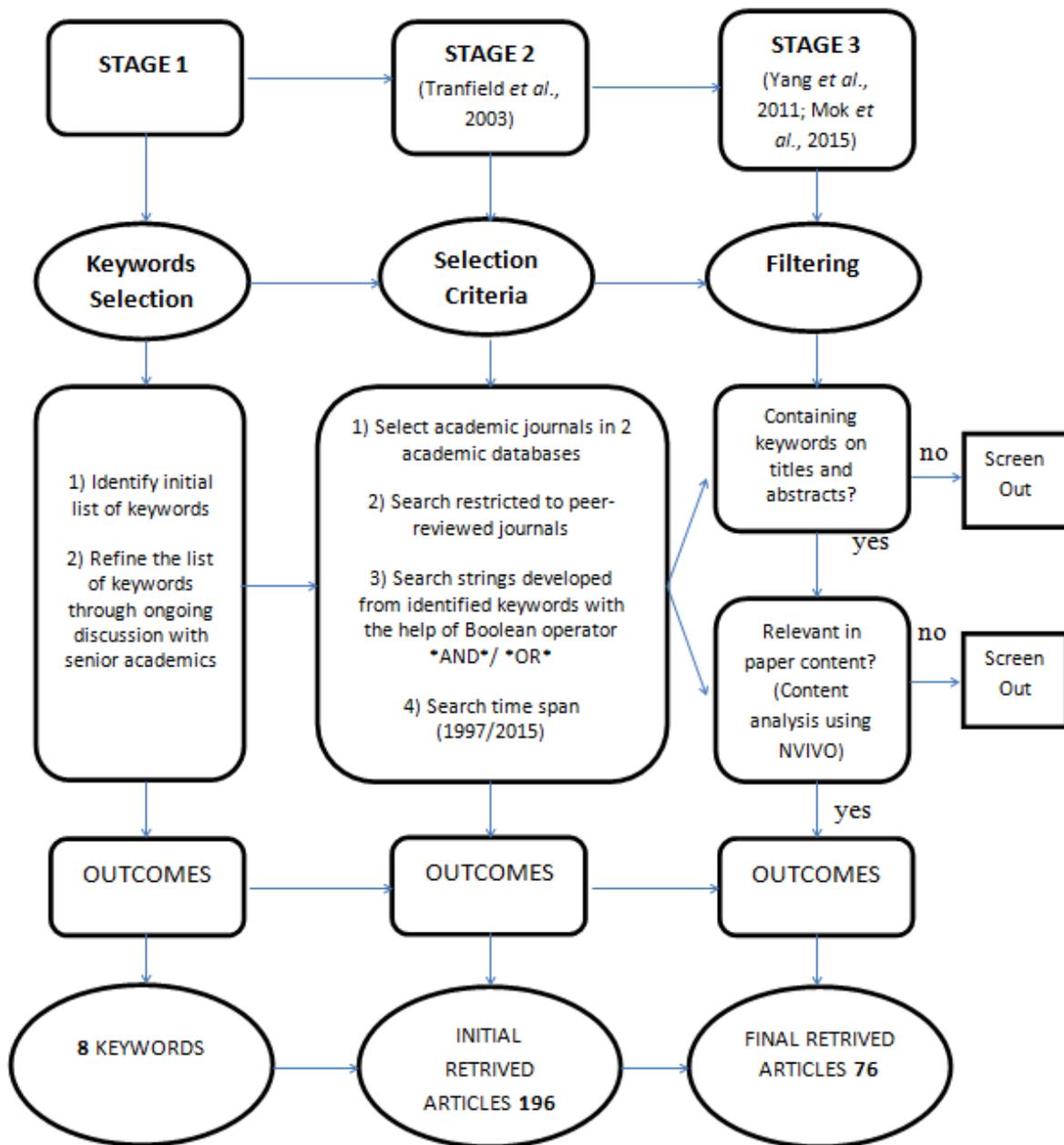


Figure 1: Publications Retrieval Process (Adapted from Mok et al., 2015)

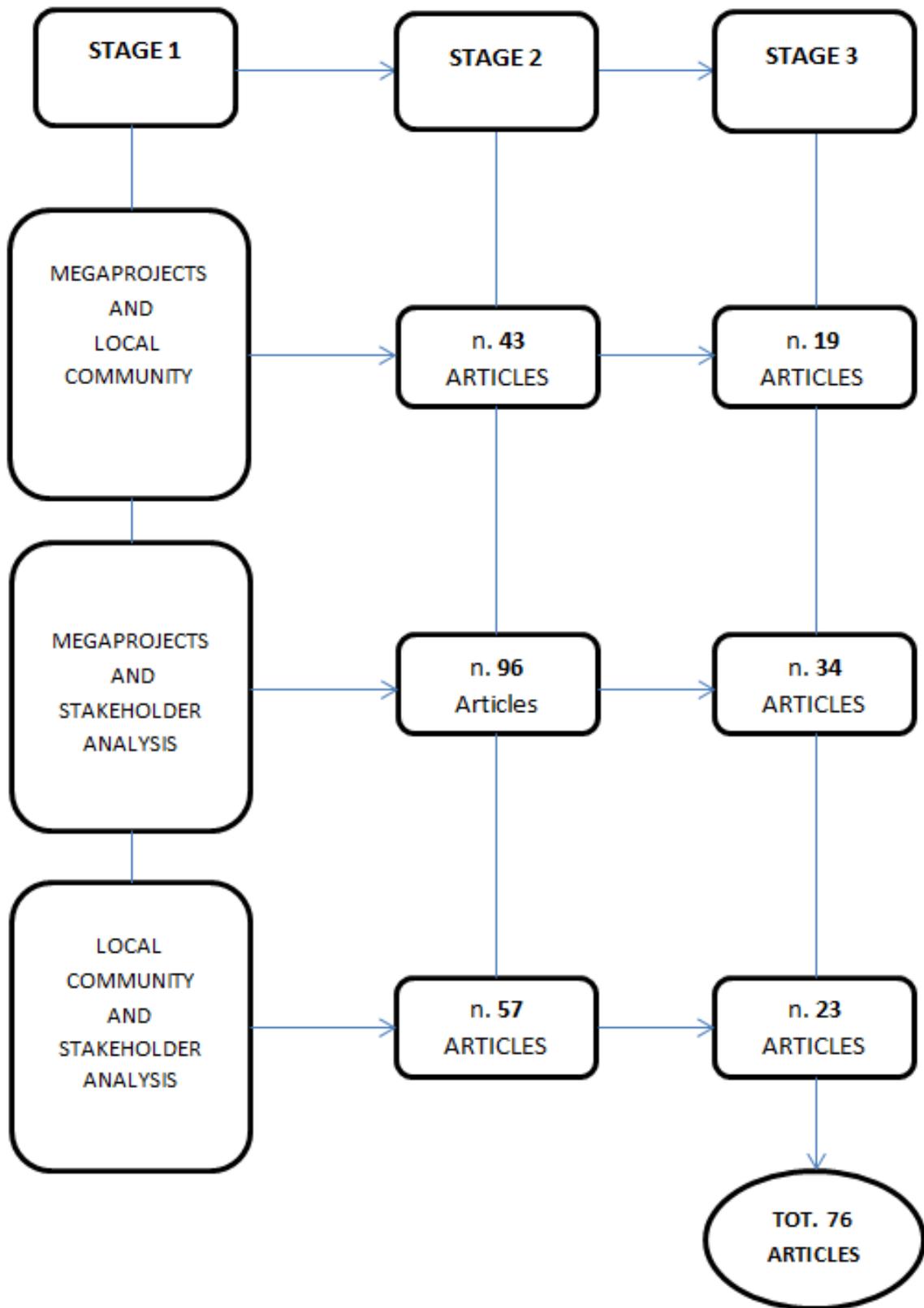


Figure 2: Retrieval outcome for specific areas of investigation

Table 1 presents the distribution of selected publications in different journals and, for the purpose of this study, the codebook proposed by Laplume, Sonpar and Litz (2008) was adapted for content analysis (table 2). The content analysis used for paper selection represented a structured and systematic technique to identify the current body of knowledge and observe emerging patterns in the literature (Mok *et al.*, 2015).

Journal Title	Number of Selected Papers
International Journal of Project Management	15
Construction Management and Economics	9
Journal of Project Management	7
Academy of Management Review	4
Journal of the American Planning Association	3
Journal of Business Ethics	2
Transport Policy	2
Business Ethics Quarterly	2
Strategic Management Journal	2
Journal of Transport Geography	2
Scandinavian Journal of Management	2
Local Economy	2
Journal of Management	2
Habitat International	2
Journal of Public Budgeting, Accounting and Financial Management	2
Sloan Management Review	2
Journal of Facilities Management	2
Journal of Management Studies	2
Oxford Review of Economic Policy	1
Harvard Business Review	1
Environmental Impact Assessment Review	1
Building and Environment	1
Energy and Buildings	1
Academy of Management Executive	1
Environment and Behaviour	1
British Journal of Management	1
Forum for Applied Research and Public Policy	1
Management Decision	1
European Journal of Innovation Management	1
Journal of Construction Engineering and Management ASCE	1
TOTAL	76

Table 1: Distribution of selected peer-reviewed papers

CODE	DEFINITION OF CODE
<i>Quantitative Variables coded</i>	
Year	Year of publication
Author	List of authors
Article Title	Title of the article
Journal	Publication in which the article was published
Concern	Primary stakeholders, secondary, both
Project	Type of mega PCI project
Perspective	Project or Organizational perspective
Geography	Country from which the data was collected
Methodology	Qualitative, quantitative, mixed methods
Data Source	Survey, interview, secondary data, others
<i>Quantitative Variables Coded</i>	
Research Questions	Research question explicitly stated in the article
Contributions	Contribution explicitly stated in the article
Findings	Major findings explicitly stated in the article

Table 2: Codebook of the study (Adapted from Laplume *et al.*, 2008)

2.2 Organising Framework

To organise the empirical evidence and key findings, an organising framework of the literature has been developed. The framework comprises the context (area 1), extent (area 2) and phenomenon of interest (area 3) of the study. By investigating these areas in combination with each other (area 4, 5 and 6), the framework shows the extant literature addressed to stakeholder management practices at the local community level in major PIC projects and suggests contingent gaps in the literature.

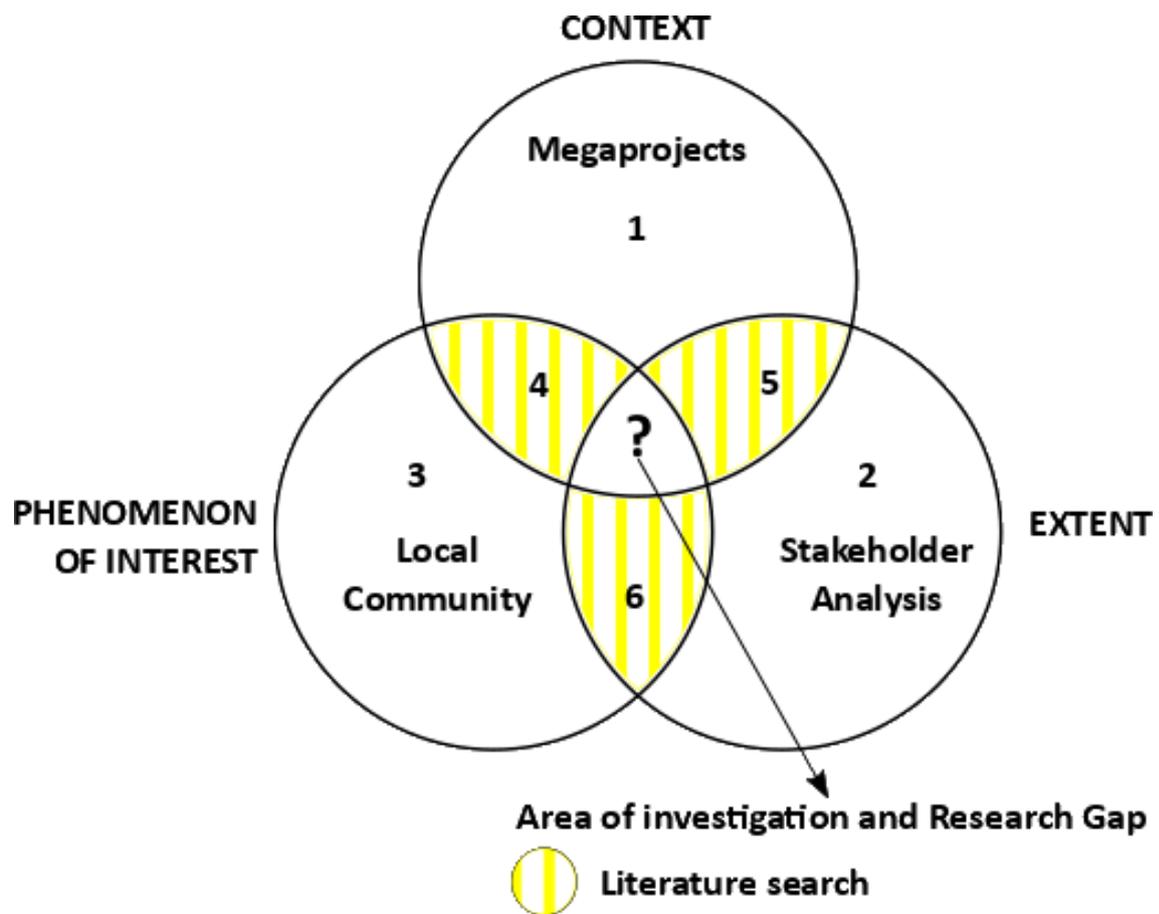


Figure 3: Organising Framework

Findings

3.1. Descriptive Findings

Although the majority of the academic efforts has been addressed to regular size construction projects, selected studies originate from peer-reviewed academic journals recognising the growing importance of megaprojects as an area of research. The study adopts either qualitative or quantitative research strategy. Thus, more mixed methods studies are required to unravel the richness and depth of megaprojects impacting the local community of places. The paper evidenced that the important contributions on stakeholder theories and practices have been made in ordinary size construction projects, research interest on megaprojects has been rising rapidly only since 2005. This suggests that there is a growing research interest in understanding the poor performance of major PIC and related problems in stakeholder management.

3.2. Conceptual Findings

By content analysis this study reveals that stakeholder management research in relation to megaprojects has rarely taken into account secondary stakeholders and, ironically, stakeholder management practices almost excluded from any managerial attention those impacted on their everyday life by the environmental and social disruptions of major PIC projects; the local community. In fact, although varying stakeholder analysis methods exist, all with their own strength and weaknesses, a tailored approach for the stakeholder local community is nowadays missing in the project management arena. Highly legitimated, the local community in stakeholder management is blurring represented by scholars as a single

entity and not as a multiple subgroups with their own needs, fears and expectations. Thus, a new perspective is required to assess the moral issues, interests and claims of different subgroups of the local community of place, as the norm rather than the exception, socially impacted by megaproject's development. Managing the local community will help to manage benefits, by aligning major PIC objectives and interests with those of the local community. This it might represent one of the cures for the “ill” of megaprojects.

3.2.1. Area 4: Megaprojects and Local community

What we know

Literature on megaprojects suggests that it has been a natural inclination in academic works to have a negative view of large infrastructure developments; this could be explained by the inability of managers and project promoters to manage globalisation and city growth. Often associated to 'planning disaster' that generate heavy impact on people and places and systemic cost overruns (Altshuler and Luberoff, 2003), in part due to lack of accountability or public participation (Flyvbjerg *et al.*, 2003); the performance of megaprojects has seen little improvement although they are becoming more ubiquitous. Extensive studies show that nine out of ten such projects have cost overrun, a problem in private as well in public sector projects and geography does not matter either (Flyvbjerg, 2014). Similarly, benefit shortfalls of up to 50% are also common, with no signs of improvements (Flyvbjerg, Holm, and Buhl, 2002; 2005).

While Jia, Yang, Wang, Hong and You (2011), affirm that megaprojects have close connections with globalisation and civilization, and they are how globalisation becomes urbanised (Moulaert, Rodriguez and Swyngedouw, 2003); it is inevitable that megaprojects will attract high socio-economic and political interest, and high industrial and public attention

(Turner and Zolin, 2012). In fact, many countries see megaprojects as a tool to enhance their status in global political and economic systems, satisfying human, economic and social needs, elevating a country's social image, and delivering leading international events (Jia *et al.*, 2011). Too often major PIC projects reflect the temptation of going where no man has gone before (Trapenberg Frick, 2008).

Despite the fact that Zhai, Xin and Cheng (2009) argued for a lack of formal definition of megaprojects in academia; the term, which emerged in North America in the late 1970s, describes a wide variety of highly visible, expensive and often controversial public transportation and construction projects (Bearfield and Dubnick, 2009). Sykes (2008) identifies nine characteristics that differentiate megaprojects from regular public infrastructure projects. These are size, time, location, unique risks, financing difficulties, public opposition, market impact, insufficient experience, and unpopularity. For Sung and Zhang (2011), mega construction projects are massive investments of infrastructure, often initiated by the government, which have extreme complexity, long schedule, immense lifespan and significant social impacts. Therefore, because the dimensions of complexity and uncertainty, megaprojects are a different breed to manage compared to regular size infrastructure programs because they face intense pressure to minimize their adverse construction and post-construction social impacts (Capka, 2004).

Decisions made by project managers have a significant impact on the strategic value delivered by megaprojects in the construction industry (Eweje, Turner and Muller, 2012). However, organisational strategy often misses to achieve the desired results and, historically, megaprojects have performed poorly in terms of benefits and public support. This article reinforces how focusing too much on technical skills is one of the errors that have been made in project management.

Literature shows that project failure can be traced back to human error or misjudgement (Johnson, 2006; Virine and Trumper, 2008), and poor judgement negatively affects the way the decisions were made (Hammond, Keeney and Howard, 1998). It is an exception when megaprojects are not cluttered either by “*delusional optimism*” and “*deception*” (Flyvbjerg, Garbuio and Lovallo, 2009), and often project managers promoting ventures that are unlikely to come in on budget, on time, or to deliver the promised benefits. The decision making of megaprojects very often is not driven by the real needs of the society but only by the technological, political, economic and aesthetic sublimines praised by Flyvbjerg (2014) which: “*Ensure coalition between those who benefit from these projects and who will therefore work for more such projects*” (2014, p.8).

While the extant literature argues for the unavoidable impact of major PIC programs on local communities and urban spaces (Olander and Landin, 2008; Xue, R. Zhang, X. Zhang, Yang and Li, 2015) by recognising the negative impact that local community can exert on project’s results (Olander and Landin, 2005; Aaltonen and Kujala, 2010); the two terms of megaprojects and local community have been rarely investigated together. Although many publications provide just a generic classification on the types of environmental (Melchert, 2007; Zimmermann, Althaus and Haas, 2005) and social (Vanclay, 2002) impact of construction projects on communities; a more in-depth study has been recently presented by Xue *et al.* (2015), which have empirically identified four major environmental and social impact factors of urban subway constructions affecting citizen’s daily life. They indicated residents’ travel, transportation, environment and daily life as the major factors impacted by infrastructure projects. However, people and places can be affected by megaprojects’ development in different ways, and Xue *et al.* (2015) study is only restricted to a case in China and does not qualitatively capture moral issues, different needs and expectations of residents.

Unpopularity and local opposition is a common threat for megaprojects; this growing and natural tendency for secondary and external groups to try to influence the implementation of facility development projects (Boholm, Lofstedt and Strandberg, 1998) is commonly labelled NIMBY (Not In My Backyard) syndrome. This concept is defined by Dear (1992) as *"the protectionist attitude of and oppositional tactics adopted by community groups facing an unwelcome development in their neighbourhood"* (1992, p.288). Burningham (cited in Olander and Landin, 2008) used the concept of NIMBY to identify opponents of new developments who recognize that a facility is needed but are opposed to its siting within their locality. While for Lake (1993) NIMBYism should be recognised for what it is, "an expression of people needs and fears" (Lake, cited in Olander and Landin, 2008); the widespread criticism of the NIMBY concept attempts to provide alternative explanations, drawing on disparate factors such as personal characteristics, place attachments, and project-related constructs (Devine-Wright, 2102). However, because the urgency of developing more rational construction programs to minimize negative impact on citizen's daily life and in urban development (Xue *et al.*, 2015), it is necessary for project managers of major programs to better understand and analyse the concerns, needs and moral issues of (local) stakeholders not only at the inception phase of the project but throughout its entire life-cycle.

What we need to know

Findings show that practitioners and academics have tended to look megaprojects at national government, or large public or private sector organisations. Therefore, the constituency local community offers an interesting perspective to research because repeatedly excluded from the project communication plan, with negative implications for project success. In the extant literature little research has examined the social implications of megaprojects on the local community level.

First of all, megaprojects frequently promote optimistic pro-growth visions of the city far away from the realities of urban problems and challenges (Altshuler and Luberoff, 2003). Driven by those sublimines praised by Flyvbjerg (2014), rare are the occasion when megaproject estimations on time and budgets are close to reality. Literature shows how the poor performance recorded by large infrastructure program could have drastic economic and social consequences for an entire country, and how project-promoters, in contrast with the principle of profit maximization, often still keen to work on it even with deficit (Yang, Wang and You, 2011). Mistakes found place in the stage of feasibility, where project planners and decision makers have often failed to treat megaprojects as a different breed to manage compared to conventional construction projects due to their long life expectancy which goes well beyond the immediate completion of the project (Sanderson, 2012; Eweje *et al.*, 2012).

Therefore, because its unique characteristics, a better focus on how to manage project's benefits instead of wild guesses on time and budgets is required on megaprojects. What is really important is not whether the project finished in accordance with time and cost targets, but that it produced a worthwhile outcome at a time and cost that made it worthwhile. Although it is widely recognised that minimizing benefit-shortfalls and enhance positive input is achievable through better stakeholder management procedures (Cleland, 1986; Donaldson and Preston, 1995; Bourne and Walker, 2005; Cleland and Ireland, 2007; Olander 2007); academic thinking on major public infrastructure and construction projects have rarely aligned project's objectives with those of the local community. Little has been done by managers and academics alike to achieve a people centred vision for cities which enhances quality of life and prosperous neighbourhoods. In fact, common are the cases where megaprojects have delivered just local disruption but not local benefits. For example, the animated protests in Susa Valley against the High-Speed Rail connecting Italy (Turin) to France (Lyon), or the riots during the world cup in Brazil or, to mention one more, the violent

protest in Turkey over the construction of a shopping centre in 2013. From our point of view these are arguably cogent examples of the ramifications of projects which overlooked social and political context.

For instance future research could investigate the effect of major PIC projects on the stakeholder local community in different phases of the project life cycle. Importantly, there is a need to focus more on understanding concerns, needs, and moral issues of the constituency local community impacted by megaprojects, which has not been captured by practitioners and academics alike in the stakeholder management arena.

3.2.2. Area 5: Megaprojects and Stakeholder Analysis

What we know

Major PIC should not be viewed as simply more expensive versions of normal projects; "mega" also connotes the skill level and attention required to manage and understand conflicting stakeholder interests and needs through the extensive project life cycle of major programs (Capka, 2004). In fact, findings from the literature show that a major challenge affecting large infrastructure developments is a lack of understanding of the various interest groups, the motivation behind their actions and their potential influence during the project life cycle (IFC, 2007; Winch and Bonke, 2002; Millers and Olleros, 2001).

During major PIC projects, stakeholder's needs are often different and disputes are likely to happen; therefore, listen and respond to stakeholder interests and concerns is a process that helps project manager to maximises stakeholder positive input and minimizes any detrimental or negative impact (Bourne and Walker, 2005; Cleland and Ireland, 2007). Since Cleland (1986) brought the stakeholder concept into the project management field, the

management of project stakeholders can be considered an established area in contemporary standards of project management (APM, 2013; PMI, 2013). However, much often the project owners fail to take opinions of the other groups into consideration, and this will attract hostility towards the project. Hence, throughout the project life cycle a vast numbers of interests will be affected, both positively and negatively; representatives of these interests are referred to as the project's stakeholders (Olander, 2007).

Problems arisen from the stakeholder management in major PIC has been recently discussed by Mok et al. (2015) which, through a systematic review of the literature, found weaknesses on four major research topics: stakeholder interests and influences, stakeholder management process, stakeholder analysis methods and stakeholder engagement. The authors reveals that stakeholder management approaches in megaprojects are subject to national context of the project, indicating recommendations and the need for further research on stakeholder management in the specific context of major PIC projects.

Focusing on the stakeholder analysis process, literature reveals that scholars considered stakeholder analysis either as a process or as an approach to support decision making and strategy formulation (Yang, 2013). While for Olander and Landin (2008): *“The stakeholder analysis process should be to identify the extent to which the needs and concerns of external stakeholders can be fulfilled, and analyse the possible consequences if they are not”* (2008, p.561); Aaltonen (2011) stated that stakeholder analysis in PIC is an interpretation process by project managers in analysing the project stakeholder environment. Therefore, the importance of identifying exactly who the participants are also includes an accurate identification of the stakeholders' interest and their impact over the project (Achterkamp and Vos, 2008).

Stakeholder identification is widely regarded as the first step in stakeholder analysis (Cleland and Ireland, 2007; McElroy and Mills, 2000; Jepsen and Eskerod, 2008) where

classification is considered an important element of the identification process (Achterkamp and Vos, 2008). Findings from the literature show that various stakeholder analysis methods are presented in previous research concerning stakeholder identification, classification and assessment (Mok *et al.*, 2015). In fact, exploring the literature, scholars have classified stakeholders in different ways: e.g. external/internal (Aaltonen and Sivonen, 2009), primary/secondary (Clarkson, 1995), direct/indirect (Lester, 2007), proponents/opponents (Winch and Bonke, 2002), core and fringe (Hart and Sharma, 2004), actively/passively involved (Vos and Achterkamp, 2006), fiduciary/non fiduciary (Goodpaster, 1991). Therefore, within the broad context of the stakeholder theory, diverse stakeholder groups are identified and classified in different ways, and various stakeholder mapping techniques exists.

In order to identify and prioritise stakeholders among different and competing claims, Mitchell, Agle and Wood (1997) developed the stakeholder salience model based on three attributes: power, legitimacy and urgency. According to their typology, stakeholders belong to one of the seven categories: dormant, discretionary, demanding, dominant, dangerous, dependant and definitive stakeholders. This classification system indicates the amount of attention that project managers should give to stakeholders needs (Mitchell *et al.*, 1997). However, although many scholars cited this model in their papers and important methods such as the Power/Interest matrix (Johnson, Scholes and Whittington, 2005) and Stakeholder Circle methodology (Bourne and Walker, 2005) were developed from the root of Mitchell *et al.* study; the model does not reflect the stakeholder dynamic attitude through the different phases of the project lifecycle (Olander, 2007) and neither the resources nor the network positions of stakeholders can be considered static (Pajunen, 2006).

Literature shows the growing interest addressed on stakeholders attitude towards a project. This attitude is captured by the model proposed by McElroy and Mills (2000), which

distinguishes whether a stakeholder is an advocate or adversary of the project in five levels: "active opposition", "passive opposition", "not committed", "passive support", and active support". Olander (2007) and Nguyen, Skitmore and Worg (2009) propose a quantitative approach (stakeholder impact index) to assess stakeholder impact integrating more variables from Mitchell et al. (1997), Bourne and Walker (2005) and McElroy and Mills (2000). Moreover, a social network approach (Rowley, 1997) has been applied in the stakeholder analysis for a small infrastructure project by Yang, Shen, Borne, Ho and Xue (2011a), which consider the interaction among multiple stakeholders by examining their simultaneous influence and to forecast the corresponding responses and organizational strategies (Rowley, 1997).

Li, Ng and Skitmore (2012) consolidated a list of seventeen stakeholder interest and different priorities in large PIC of major stakeholder groups based on their research on an infrastructure project in Hong Kong. What emerged from their study is that in many cases stakeholders seek to prevent their vested interest from being jeopardised, in fact an issue that is very important to one stakeholder group may be in the lowest priority of other group (Li *et al.*, 2012). Some scholars focus on the link between spatial dynamics and stakeholder impact. The concept has been applied in the context of infrastructure planning by Dooms, Verbeke and Haezendonck (2013), which examined that the stakeholder structure and interests vary with their spatial distance from the project, with stakeholder gaining higher salience as they become geographically closer to the project (Dooms *et al.*, 2013). However, although conceptual frameworks and analytical models have been suggested by scholars of stakeholder theory, all with their own strengths and weaknesses; managerial priorities and concerns have been addressed almost exclusively on those primary stakeholders important to the project's economic interests (Aaltonen and Kujala, 2010; Hart and Sharma, 2004).

What we need to know

In the pioneering work of Freeman (1984) *Strategic Management: A Stakeholder Approach*, the central argument was that the firm should not consider only those groups who can affect it but also those who are affected by its operations. Freeman (1984) was the first scholar who clearly identify the strategic importance of other groups and individuals to the company but, ironically, “*the resulting work on stakeholder management has focuses almost exclusively on the former: primary groups that are critical to the firm survival in its current business*” (Hart and Sharma, 2004, p.9).

Scholars have mainly distinguished primary stakeholders from secondary stakeholders, and classified them using the literature's prevailing stakeholder salience model proposed by Mitchell *et al.* (1997). Whereas primary stakeholders are characterised by contractual relationship with the project such as customers or suppliers, or have direct legal authority over the project such as governmental organisations; secondary stakeholders do not have a formal contractual bond with the project or direct legal authority over the project (Eesley and Lenox, 2006), but they can influence the project (Clarkson, 1995). According to Aaltonen, Kujala and Oijala (2008), while actors of such interest include community groups, lobbyists, environmentalists and other non-governmental organisations, if secondary stakeholders are excluded by project managers they may engage in a set of actions to advance their claims, with negative consequences to direct operational costs and to the reputation of the focal organisation (Eesley and Lenox, 2006).

Much of our knowledge about the stakeholder analysis practices in the megaproject context has been from the stakeholder impact perspective; especially on the impact that primary stakeholders can exert on project outcomes. This perspective, despite more than two decades of refinement and integration of stakeholder thinking into multiple disciplines, has

led stakeholders to be defined mainly by their generic economic functions (Aaltonen and Kujala, 2010). In fact, the majority of prior project research has focused on the management of those primary stakeholders important to the project's resources. Whereas secondary stakeholders are intensely claiming for a legitimate role in project decision making (Olander and Landin, 2008), scarce managerial attention has been given to the process of managing the social and political impact of megaprojects affecting those "secondary actors".

Therefore, future studies should investigate the effect of megaproject developments on the secondary stakeholders. Specifically, the social impact of megaprojects on the stakeholder "local community" is under-researched and thus requires greater research attention. Third, further studies should develop tailored analysis for secondary stakeholder groups. These methods should include qualitative insights by capturing different feelings, needs, and expectations of those actors daily impacted by megaproject developments. This is important as the extant literature shows that the variegated stakeholders' analysis models are silent on the social impact of major PIC on secondary stakeholders through the different stages of the project life cycle.

3.2.3. Area 6: Local Community and Stakeholder Analysis

What we know

While common trends see project managers constantly looking down on these stakeholders who have little obvious power and considering them as a weak (Newcombe, 2003); different scholars have suggested that these stakeholders deserve much more attention because they may be the cause of major disruption to a project's development through unseen power and influential links (Bourne and Walker, 2005, Newcombe, 2003; Olander and

Landin, 2008). The extant literature shows the ability of secondary stakeholders, especially the local community, to have a strong influence on the attitudes of the more powerful actors (Newcombe, 2003) and, even with no formal power to affect the decision-making process for a project, they possess an informal power that can press powerful stakeholders to change their positions (Olander and Landin, 2008).

Although some scholars have recognised the primary importance of the stakeholder: “local community” (e.g. Clarkson, 1995; Atkinson, Waterhouse and Wells, 1997; Hillman and Keim, 2001) because *“they provide infrastructure and markets, whose laws and regulations must be obeyed, and to whom taxes and other obligations may be due”* (Clarkson, 1995, p.106); other academics have normally perceived the local community not as vitally important for the successful delivery of a project. Findings from the review of the literature show that the reason why the local community is commonly classified as a secondary stakeholder is because it has not formal or official contractual relationship with the firm or direct legal authority over the firm (Cleland and Ireland, 2007; Eesley and Lenox, 2006), and because it is not directly engaged with economic activity (Lester, 2007; Savage, Nix, Whitehead and Blair, 1991).

Because in recent years project promoters have faced legitimate pressure to demonstrate greater ethical responsibility in their decision-making (Deutsch and Valente, 2013); stakeholder theory recognises the growing importance of communities as a new class of stakeholders. However, drawing into the stakeholder management literature, the concept of community has been left constantly unclear and undefined, enabling any number of entities to claim this role due to broad interpretation. A unique contribution of solving this dilemma was given in stakeholder management by Dunham, Freeman and Leidtka (2006), which raise *“the problem of community”* as indicative of the definitional problems within the stakeholder theory.

Although many have explored the terrain of “community”, defining its meaning is not an easy task. From the pioneering work of Hillery (1955) over ninety and conflicting definitions of the term “community” emerged, and the only common characteristic among them was that they dealt with people. The origins of the term "community" are to be found in the old French word "communité", which derives from the Latin "communitas" ("cum" meaning "with/together" and "munis" meaning "gift"), a broad term used to describe fellowship or organised society (Beck, 1992). While for Parsons (2008) a community refers to a fluid group of people united by at least one common characteristic such as geography, shared interests, value, experiences, or traditions; Pacione (2001) has defined local community as a group of people who share a geographic area and are bound together by common culture, values, race or social class.

Although Webber (1963) was the first one to set the stage for a broadening of the notion of community away from purely place-based definitions; from the perspective of a construction project, community refers to a multitude of overlapping, competing and often conflicting interests groups which shift over the project life cycle and whose interests are potentially affected by that project (Teo and Loosemore, 2011). Similarly, Atkinson and Cope's (1997) stated that the local community cannot be treated as a single homogeneous, easily identifiable group because, as mentioned by Skerratt and Steiner (2013), they possess their own perceptions and different vision.

Dunham *et al.* (2006) stated that we are simply told that "community" is a stakeholder without regard to what a community actually is. Dunham *et al.* (2006) identified and described four distinct sub-categories of community: community of place, community of interest, virtual advocacy groups, and community of practice. The scholars proposed finer grained sub-categories which were previously aggregate under the amorphous heading of "community". Community of place refers to those community stakeholders that live in close

proximity to the firm's operations. Community of interest refer to individuals that are unified by a common purpose or interest and may or may not be in close proximity to the firm's operation. The virtual advocacy groups are whose purpose appears to be the short-term goal of disruption, rather than any problem resolution. While community of practice denotes professional work groups united by a sense of shared interests, values and purpose (Dunham *et al.*, 2006).

Although this study recognises that community built on interaction and identity are playing an increasingly important role in the business world, especially with the accelerated technological development; this research emphasised the traditional view based on geography, or place-based communities which, based on the physical proximity of the members to the project developments (Driscoll and Starik, 2004; Dooms *et al.*, 2013), represents the most common conceptualisation of what is meant by community by project managers in the construction industry (Teo and Loosemore, 2011).

What we need to know

Many theorists and practitioners have simply used an ordinary stakeholder strategy by mapping different actors using general references to customers, investors, employees, suppliers and local community; some scholars have explored the subject in detail. However, what emerges is that most of the consensual classifications in the literature see the local community (and arguably any other group) represented as a single entity, described into a broad-brush approach which, according to Dunham *et al.* (2006, p.24): “*Ignore or fail to take account of important and marginalized interests*” of many autonomous units of people with their own needs, fears and expectations.

Literature shows the lack of attention paid to making the notion of local community operational in the context of large infrastructure projects. The main point is that if a clear definition is lacking, it is not possible to determine whether the relevant sub-groups of the community of place have been correctly identified and, consequently, whether a stakeholder analysis has been accomplished in a satisfactory way. Therefore future studies should provide an in-depth investigation of the notion of local community and make it operational in the context of major PIC projects. In fact, contemporary academic thinking on the role of local communities in stakeholder analysis does not explain why, despite tools and processes being in place, there is still a consistent shortfall in managing megaprojects and their environmental and social impact on local communities and places.

4. Conclusions

Through a systematic literature review the poor performance of megaprojects and underlying assumptions of stakeholder management in major PIC projects have been examined. Focusing on the concept of local community, this study revealed significant inconsistencies in the way the local community as a class of stakeholder has been treated and conceptualised in the project management discipline. This systematic review reinforces the need of a transparent process in which risks and planning fallacy may be acknowledged with more accountability, reducing the impact on people and places and the distances between local community and megaprojects. The aim is to bring megaprojects benefits into the local community context, by overcoming the inability of managers and project promoters to manage globalisation and city growth for a sustainable and equilibrate urban development. This review identifies research gaps in the extant stakeholder management literature and provides directions for future research examining the megaproject arena.

This paper is limited by the fact that it is conceptual in nature and requires empirical research. This can be addressed in future studies.

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