Sustainability Governance and the Sociomateriality of Social Media: Lessons from Megaprojects

Johan Ninan
Bartlett School of Construction and Project Management,
University College London (UCL), London – WC1E6BT, UK,
Johan.Ninan@gmail.com

ABSTRACT

There is a need for effective governance of environmental, economic, and social sustainability in the modern age. This paper discusses the most neglected social sustainability dimension considering the case of megaprojects as they are large scale displacements and disruptions. The multiple and conflicting interests of different stakeholders make social sustainability very challenging in the context of megaprojects. Social media is used for different purposes and encompasses multiple affordances from a sociomateriality perspective. From the dimensions of power perspective, this paper conceptualizes how social media can be leveraged for alternative governance. The persuading, framing, and hegemonizing uses of social media for implementing negotiated interests, identifying with existing interests, and influencing existing interests respectively are discussed. Following this, the role of organizing in social media to give continuity and consistency to discourses is discussed. It is highlighted that for leveraging the full affordances of social media, the interest group's representing environmental, economic, or social dimensions need to organize themselves through social media pages.

KEYWORDS

Sustainability, Social media, Sociomateriality, Megaprojects

1. INTRODUCTION

Sustainability defined in the Brundtland Report is 'meeting the needs and expectations of the present without compromising future generations to meet their own needs and expectations' (Brundtland, 1987). The focus is simultaneously on the environmental, economic, and social dimensions frequently referred to as the 'three pillars' (Hacking & Guthrie, 2008) or the 'triple bottom-lines' (Colbert & Kurucz, 2007). Environmental sustainability refers to reducing the harm to environment by managing pollution and conserving natural resources (Swaim et al., 2014). Economic sustainability refers to the ability of the local economy to sustain itself financially over a long period of time (Pieterse, 2011). Social sustainability refers to reducing the impact of products or policies on human rights, safety, health, and other community concerns (Blake-Beard et al., 2010). Compared to other pillars, economic sustainability takes care of itself; after all, economic behavior is motivated by self-interest (Smith, 2010). While environmental activists push for environmental sustainability particularly because of consequences like climate change, the most neglected sustainability dimension is the social dimension (Omann & Spangenberg, 2002). This dimension is particularly crucial for megaprojects which cause large scale displacements and disruptions (Gellert & Lynch, 2003; Sturup, 2009).

Megaprojects are projects that cost more than one billion USD (Flyvbjerg, 2014). The distinguishing features of megaprojects, in contrast to conventional projects, is its widely disparate actors with multiple and conflicting interests (Ninan et al., 2019). Megaprojects bring together numerous stakeholders in the form of sponsors, experts, contractors, government agencies, opposing stakeholders and other institutions of external players (Miller et al., 2017). Among them managing external stakeholders is complex because they operate in highly permeable boundaries

with no contractual instruments to govern them (Mahalingam & Ninan, 2019). Rather than the number of different external stakeholders in megaprojects, it is the institutional differences such as divergent perceptions regarding the legitimate means and ends of the project which are a source of project complexity (Orr and Scott, 2008). Researchers have explored the use of social media to engage with these external stakeholders and create socially sustainable projects (Ninan et al., 2020; William et al., 2015).

Social media initially started to connect people online and soon expanded to be a destination for entertainment, news, and information (Park et al., 2009). Companies are exploring the use of social media to enhance firm reputation (Tsai & Men, 2017) and improve employee relations (Men, 2015). Thus, social media is used for different purposes and encompasses multiple affordances from a sociomateriality perspective. Social media engagement can be defined as a set of behaviors through which strategic leaders seek to leverage social media affordances to communicate with stakeholders in developing and executing strategy (Heavey et al., 2020). Social media can be leveraged for sustainability governance by facilitating interactions and strategic conversations across hierarchical levels and geographic boundaries (Ewing et al., 2019). Adding to this, communication boundaries are porous on social media as messages targeted at one audience can spillover to others with unintended consequences (Heavey et al., 2020). This paper seeks to understand the use of social media for social sustainability governance in megaprojects and proposes a conceptual framework for practitioners and future researchers.

2. LITERATURE REVIEW

Governance is defined as the sum of the many way's individuals and institutions, public and private, manage their common affairs (Carlsson et al., 1995). Even though to govern is to yield

power, power is oddly ignored in the governance literature (Arts & Van Tatenhove, 2004). Organizational power exists in different forms, which can be understood from the three dimensions of power framework (Lukes, 2005). Power in the first dimension, known as power in decision making, involves the direct mobilization of power and relies on the actor's ability to mobilize resources to realize certain goals (Avelino, 2011). The second dimension of power, known as power in non-decision making, involves the mobilization of biases to keep topics off the agenda (Fleming & Spicer, 2014). The third dimension of power, known as latent power, involves shaping subjects' preferences, attitudes, and political outlook such that an alternative is unimaginable (Lukes, 2005). For managing external stakeholders, Ninan et al. (2020) map the three dimensions of power to persuading, framing, and hegemonizing strategies.

The dimensions of power dictate the multiple affordances of social media from a sociomateriality perspective. Explaining sociomateriality, Orlikowski (2010) highlights three ways in which people interact with technology. In the first 'absent presence' perspective, researchers do not acknowledge the presence of technology. In the second 'exogenous force' perspective, researchers acknowledge technology as a powerful driver, but as a 'hardware' which is separate from agencies. In the third 'emergent process' perspective, the social and the material are entangled in multiple and dynamic ways in everyday life, one shaping the other. This entanglement of users and technology much above the agency of the humans and the features of the technology is called as sociomaterial assemblage (Wagner et al., 2011). Digital technologies such as social media are more prone to sociomateriality because these are often free and also bring together people from different walks of life who tend to use them differently.

While there are numerous studies on social media, there is still a lack of conceptual frameworks that explain the role of social media in managing conflicting interests. This paper proposes, (1) a conceptual framework of the sociomateriality of social media for managing conflicting interests, (2) a conceptual framework for the flow of interests according to organizing in social media.

3. SOCIAL MEDIA AND CONFLICTING INTERESTS

In megaproject settings, external stakeholders have different and often conflicting interests. Social media can manage interests in three ways: Implementing negotiated interests, identifying with existing interests, and influencing existing interests. These are shown in Figure 1 and explained below.
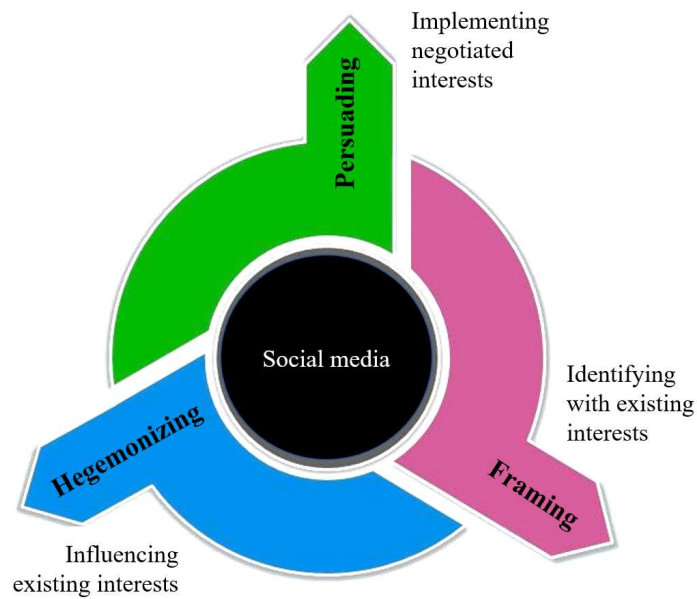

Figure 1: Social Media and conflicting interest management

IMPLEMENTING NEGOTIATED INTERESTS

In the first dimension of power, social media can enable discussions with the affected external stakeholders thereby persuading them to favor the project by improving coordination and speeding the approval process. As highlighted in the work of Ninan et al. (2020), external stakeholders raise concerns on social media pages of the megaproject and the project team often responds to the concerns and clarifies. Often these discussions result in a negotiated interest which may even be implemented in the project. As Baptista et al. (2017) note, social media can facilitate more open approaches to decision-making, in the process incorporating ideas, knowledge, and resources dispersed across multiple stakeholders.

IDENTIFYING WITH EXISTING INTERESTS

With the second dimension of power, social media is used as a strategic tool for framing seek to propagate certain issues and hide others. Describing framing in development projects, Kornberger & Clegg (2011) note that the techno-rational discourse of the planner is substituted with the seductive, media-focused language of the strategist, thereby hiding certain issues. In stark contrast to implementing negotiated interests as discussed above, here, a discussion is not facilitated on certain topics and hence they do not arise in decision making. Highlighting this affordance of social media, Heavey et al. (2020) record that strategic leaders use social media to create a veil of vagueness in corporate disclosures, or conversely to overwhelm stakeholders with a proliferation of extraneous information designed to distract from the core issue or news of the day. This results in the creation of a dominant frame, an interpretation with the highest probability of being noticed, processed, and accepted by most people (Entman 1993).

In the third dimension of power, social media is used to influence existing interests by providing a vehicle for articulating preferences, recursively feeding them back, subtly shaping concurrence, consensus, and communication. Social media communication such as celebrating regional festivals discussed in the work of Ninan et al. (2020) encodes a new culture of regional pride which is subsequently associated with the megaproject. Highlighting this affordance, Heavey et al. (2020) note how social media is used for social influencing, in the process aligning stakeholders around a vision matching with the project.

4. IMPORTANCE OF ORGANIZING IN SOCIAL MEDIA

As highlighted above, social media and its different affordances can be used for sustainability governance. As discussed, only 'implementing negotiated interests' considered the interest of the external stakeholders. Both 'identifying with existing interests' and 'influencing existing interests' involved the project modifying the interests of the external stakeholders as shown in Figure 2.
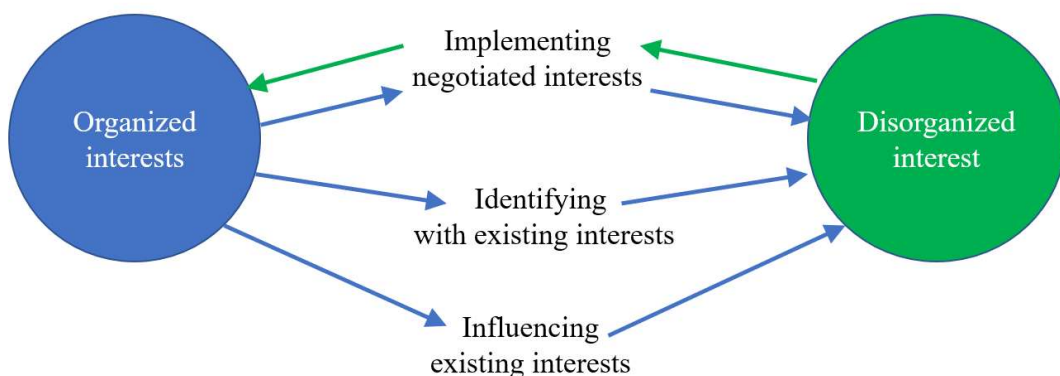

Figure 2: Flow of interests according to organizing in social media

Even though there were isolated instances of framing and hegemonizing by external stakeholders, their lack of consistency resulted in the reduced effect. Organizing in social media can give continuity and consistency to discourses. Within megaprojects, multiple interest groups operate a social media page to organize and get their vested interests from the project. From a governing sustainability angle, for leveraging the full affordances of social media, interest group's representing environmental, economic, or social dimensions need to organize themselves through social media pages.

5. CONCLUSION

Social media can help address conflicting interests in sustainability through three affordances: implementing negotiated interests, identifying with existing interests, and influencing existing interests. While this paper discusses the social sustainability of megaprojects, conflicting interests exist for environmental and economic sustainability as well. The multiple affordances of social media can be leveraged by interest groups by organizing themselves through official social media pages and engaging in the three dimensions of power.

The framework developed here can be used by sustainability practitioners to organize themselves in social media. Adding to this, researchers can explore the micro-dynamics of these multiple affordances through in-depth studies in other contexts. In the future, the relationship between these affordances of social media can be explored.

REFERENCES

1. Arts, B., & Van Tatenhove, J. (2004). Policy and power: a conceptual framework between the 'old' and 'new' policy idioms. *Policy sciences, 37*(3–4), 339–356.
2. Avelino, F. (2011). *Power in transition: empowering discourses on sustainability transitions.* Rotterdam: Erasmus University.
3. Baptista, J., Wilson, A. D., Galliers, R. D., & Bynghall, S. (2017). Social media and the emergence of reflexiveness as a new capability for open strategy. *Long Range Planning, 50,* 322–336.
4. Blake-Beard, S., O'Neill, R., Ingols, C., & Shapiro, M. (2010). Social sustainability, flexible work arrangements, and diverse women. *Gender in Management: An International Journal. 25*(5), 408-425.
5. Brundtland, G. H. (1987). World commission on environment and development. *Our common future, 17,* 43-66.
6. Carlsson, I., Ramphal, S., Alatas, A., & Dahlgren, H. (1995). *Our global neighbourhood: The report of the commission on global governance.* Oxford, UK: Oxford University Press.
7. Colbert, B. A., & Kurucz, E. C. (2007). Three conceptions of triple bottom line business sustainability and the role for HRM. *People and Strategy, 30*(1), 21.
8. Entman, R.M. (1993). Framing: toward clarification of a fractured paradigm. *Journal of communication, 43*(4), 51–58.
9. Ewing, M., Men, L. R., & O'Neil, J. (2019). Using social media to engage employees: Insights from internal communication managers. *International Journal of Strategic Communication, 13,* 110–132.
10. Fleming, P., & Spicer, A. (2014). Power in management and organization science. *The Academy of Management Annals, 8*(1), 237-298.
11. Flyvbjerg, B. (2014). What You Should Know about Megaprojects and Why: An overview. *Project Management Journal, 45*(2), 6-19.
12. Gellert, P. K., & Lynch, B. D. (2003). Megaprojects as displacements. International Social Science Journal, 55(175), 15–25.
13. Hacking, T., & Guthrie, P. (2008). A framework for clarifying the meaning of Triple Bottom-Line, Integrated, and Sustainability Assessment. *Environmental Impact Assessment Review, 28*(2-3), 73-89.
14. Heavey, C., Simsek, Z., Kyprianou, C., & Risius, M. How Do Strategic Leaders Engage with Social Media? A Theoretical Framework for Research and Practice. *Strategic Management Journal.* 1-38.
15. Kornberger, M., & Clegg, S. (2011). Strategy as performative practice: the case of Sydney 2030. *Strategic organization, 9*(2), 136–162.
16. Lukes, S. (2005). *Power: A radical view.* London: Springer Nature
17. Mahalingam, A., & Ninan, J. (2019). External stakeholder management in megaprojects–a framework of strategies and power in practice. In P. Chinowsky & J. Taylor, (eds.). *Proceedings of the engineering project organization conference*, 1-22. Colorado, USA: Engineering Project Organization Society (EPOS).
18. Men, L. R. (2015). The internal communication role of the chief executive officer: Communication channels, style, and effectiveness. *Public Relations Review, 41,* 461–471

19. Miller, R., Lessard, D. R., & Sakhrani, V. (2017). Megaprojects as Games of Innovation. In B. Flyvbjerg (Ed.), *The Oxford Handbook of Megaproject Management*, (pp. 217- 237). Oxford: Oxford University Press.

20. Ninan, J., Clegg, S., & Mahalingam, A. (2019). Branding and governmentality for infrastructure megaprojects: The role of social media. *International Journal of Project Management, 37*(1), 59-72.

21. Ninan, J., Mahalingam, A., Clegg, S., & Sankaran, S. (2020). ICT for external stakeholder management: sociomateriality from a power perspective. *Construction Management and Economics*, 1-16.

22. Omann, I., & Spangenberg, J. H. (2002). Assessing social sustainability. *Biennial Conference of the International Society for Ecological Economics*. Sousse, Tunisia.

23. Orlikowski, W. J. (2010). The sociomateriality of organisational life: considering technology in management research. *Cambridge Journal of Economics, 34*(1), 125-141.

24. Orr, R.J., Scott, W.R. (2008). Institutional exceptions on global projects: a process model. *Journal of International Business Studies, 39*(4), 562–588.

25. Park, N., Kee, K. F., & Valenzuela, S. (2009). Being immersed in social networking environment: Facebook groups, uses and gratifications and social outcomes. *CyberPsychology & Behavior, 12*(6), 729-733.

26. Pieterse, E. (2011). Recasting urban sustainability in the South. *Development, 54*(3), 309-316.

27. Pitsis, A., Clegg, S., Freeder, D., Sankaran, S., & Burdon, S. (2018). Megaprojects redefined–complexity vs cost and social imperatives. *International Journal of Managing Projects in Business, 11*(1), 7-34.

28. Smith, A. (2010). *The Wealth of Nations: An inquiry into the nature and causes of the Wealth of Nations*. Harriman House Limited.

29. Sturup, S. (2009). Mega projects and governmentality. *World Academy of Science, Engineering and Technology, 3*(6), 892-901.

30. Swaim, J. A., Maloni, M. J., Napshin, S. A., & Henley, A. B. (2014). Influences on student intention and behavior toward environmental sustainability. *Journal of Business Ethics, 124*(3), 465-484.

31. Tsai, W. H. S., & Men, L. R. (2017). Social CEOs: The effects of CEOs' communication styles and para-social interaction on social networking sites. *New Media and Society, 19*, 1848–1867.

32. Wagner, E. L., Moll, J., & Newell, S. (2011). Accounting logics, reconfiguration of ERP systems and the emergence of new accounting practices: A sociomaterial perspective. *Management Accounting Research, 22*(3), 181-197.

33. Williams, N. L., Ferdinand, N., & Pasian, B. (2015). Online stakeholder interactions in the early stage of a megaproject. *Project Management Journal, 46*(6), 92-110.