

Book Reviews

Managing Project Supply Chains

Ron Basu, Gower, Aldershot, Farnham, 2011
168 pp, ISBN 978 1 4094 2515 1, £26.50 (pb)

In most construction supply chains, designing, manufacturing and constructing parties work together in temporary coalitions on different building projects. Relations between these parties have often been criticized for being adversarial and conservative (for example, Egan, 1998). The dissatisfaction with this traditional organization of construction supply chains has led several firms to offer integrated project coalitions such as design-build or design-build-finance-maintain-operate (DBFMO). These approaches aim to reduce project uncertainty by integrating different stages of the building process. The emergence of these non-traditional building project management methods results in a less fragmented organization of the building process and provides possibilities for supply chain management practices that may approximate to established practices within other industries. However, in many design-build and DBFMO projects, the traditional working climate in which collaboration is poor and interaction tends to be conflict-oriented, is still common. Consequently, although the construction industry is 'ahead of most other industries in terms of outsourcing' (Dubois and Gadde, 2000, p. 207), construction contractors still do not take full advantage of the opportunities and benefits of buyer–supplier cooperation.

In this context, Basu's study on the management of project supply chains could provide important insights in how to improve efficacy in construction supply chains. Basically, his study consists of two parts: a model describing different stages of the project supply chain and a review of different mechanisms that integrate these stages. Both parts are discussed here.

In the first part of the book, Basu splits the project supply chain model up into a project planning chain (Chapter 3) and a project delivery chain (Chapter 4). The project planning chain deals with project planning activities and information flows. It contains three building blocks: (1) customer focus and stakeholders; (2) resource and time management; and (3) procurement and supplier focus. The project planning chain starts with establishing a clear overall scope of a

project and developing relationships with different groups of stakeholders. An important issue mentioned is that supply chain management awareness (knowledge of the benefits and contributions of supply chain management in a project) should be embedded at the very early stages of a project. Examples from the construction industry are given to show the risks involved when this awareness is lacking (p. 42). A critical part of a project planning chain is the procurement of suppliers. In particular, the selection of strategic suppliers is touched upon. The need 'for considering supplier relationships from a strategic perspective' (p. 58) is emphasized. The project delivery chain, the second part of Basu's model, deals with project implementation and closure activities and physical flows of materials on site. It contains three building blocks: (1) supply management; (2) building and installation activities on a site; and (3) the hand-over and closure of a project at the final stage of the project life cycle. Partnering and engaging suppliers are also mentioned here as important strategies in the management of suppliers.

Considering supplier relationships from a strategic perspective and the phenomenon of partnering have become important in the construction sector, too. Several studies have shown that not all partnering projects do well and that there are no quick fixes that guarantee success (Bresnen and Marshall, 2000). It is interesting to know how, in other project-based environments, cooperative relationships are developed. Especially in a project supply chain, parties face uncertainties over the limits of someone's trustworthiness. They face the risk of a business partner offering too little in terms of effort and attention. There is also the risk that a business partner takes too much. This involves cheating, threats and power play. It is what Williamson (1979) has called 'self-interest with guile' (p. 234). In the partnering literature, it is questioned whether cooperative relationships can be intentionally shaped over a single project, or whether establishing and maintaining cooperative relationships between project participants requires a process of cultural change that can only develop over a longer period of time (Bresnen, 2007). The question, under what conditions strategic supplier relationships and partnering can be developed in a project supply chain, is not discussed by Basu. Involvement and commitment are

mentioned as important aspects in a project supply chain but how to deal with the lack of them is not discussed.

The second part of the book focuses on mechanisms for integrating the different stages of the project planning and project delivery supply chain. The two major integration mechanisms mentioned are systems and procedures (Chapter 5) and quality and performance management (Chapter 6). When elaborating on systems and procedures external and internal quality standards are mentioned, followed by a list of financial and accounting procedures. It is not explained why and how these standards and procedures support the integration of the different stages of a project supply chain. The underlying problem of this overview is that the focus is solely on procedures for formal control or, as Das and Teng (2001, p. 259) put it, 'the establishment and utilization of formal rules, procedures, and policies to monitor and reward desirable performance'. Formal control, through systems and procedures, can be problematic because of difficulties with regard to the predictability of the project process or outcomes caused by unforeseeable endogenous and exogenous changes. In the event of formal control becoming less effective in governing a project supply chain, informal control can be seen as an alternative governance mechanism. Informal control focuses on developing shared values, beliefs and goals among business partners such that appropriate behaviour will be reinforced and rewarded. This type of control requires less codification and is based not on the explicit threat of legal enforcement but on the implicit threat of social sanctioning. No attention is paid in this book to this type of control as an integration mechanism.

When discussing quality and performance management, it is again difficult to find out how this second integration mechanism supports the integration of different stages of a project supply chain. Lead time, cost control and planning are mentioned as examples of objective measures to assess quality and performance. Attention is also devoted to subjective dimensions of service quality and performance management, such as responsiveness, assurance, empathy, professionalism, and pleasantness of the service provider (p. 90). This is in line with the most commonly used metric to assess the subjective performance of inter-organizational relationships: satisfaction with the relationship. Subjective dimensions of organization quality are also mentioned, such as continuous learning, teamwork culture and management commitment (p. 92). In contrast to the review on systems and procedures, Basu takes here a more balanced view: quality and performance

management of a project supply chain are discussed in terms of both objective and subjective outcomes.

An interesting question is how both integration mechanisms, formal control through systems and procedures and performance and quality management, interact in a project supply chain. If the performance of a project partner is subsequently considered to be weak, the organizations involved may come to perceive their partner firms as less trustworthy than they originally thought, leading to an increase in formal control which, in combination with the perceived weak performance, further diminishes the level of trust initially present. It may also work the other way around, so that the performance of a partner firm is interpreted in such a way that it improves the level of trust. Therefore, relationships between parties in a project supply chain can easily trigger virtuous cycles of trust or vicious cycles of distrust. Very high levels of formal control can be detrimental to the performance of a relationship since business partners may, for instance, sink into overregulation. As a relationship develops, business partners may also change the forms of control they have previously adopted. This is most likely when performance is considered better or worse than expected.

In conclusion, Basu's model of the project planning and project delivery chain is a nice starting point for analysing the management of project supply chains. When elaborating on the integration of different stages of such supply chains, more attention has to be devoted to informal forms of control instead of focusing on the use of formal forms of control. Further study is also needed on the interaction between systems and procedures and performance to understand the dynamics in a project supply chain. To overcome the deteriorating patterns of behaviour faced by principal and contractor organizations in many construction supply chains understanding these dynamics remains a key challenge.

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Architectural Theories of the Environment: Posthuman Territory

Ariane Lourie Harrison (ed.), Routledge, London, 2013

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Spoiler alert: her opening essay makes it apparent that the book's editor, a lecturer and critic at Yale University's School of Architecture, means well. Ariane Lourie Harrison expresses in the closing paragraph of that essay a hope that the interpretive constructs of posthumanist theoreticians will prompt practitioners and students to be more responsive to the precariousness of humanity's situation: our numbers and technology have increased to an extent that we clearly have the power to seriously damage or destroy outright our means of survival. It is a worthy intent, shared by many others in the professions that work to produce and manage our habitat.

The problem is one of comprehension. Upon reaching the end of this densely written anthology, readers not already steeped in the rich intellectual broth of French philosophers and postmodern literary criticism may find themselves feeling like Lewis Carroll's Alice in her encounter with Humpty Dumpty '... too much puzzled to say anything' (Carroll, 1871).

The problem begins with the word 'posthuman'. Readers might imagine some post-apocalyptic future: think of Alan Weisman's book *The World Without Us* (Weisman, 2007) or Pixar's animated movie *WALL-E* (Stanton, 2008), but here the term refers to a present in which architecture, people, and the rest of creation are bound inextricably together in networked 'assemblages'. Men, women, boys, and girls are no longer the principal target of architectural creation and the assemblages are

impossibly complex. Urbanization is 'a process of contiguous de-territorialization and re-territorialization through metabolic circulatory flows'. The creatures formerly known as 'humans' have become 'an informational pattern that happens to be instantiated in a biological substrate' (p. 164) ... and so on.

'When I use a word,' Humpty Dumpty said in rather a scornful tone, 'it means just what I choose it to mean – neither more nor less.'

'The question is,' said Alice, 'whether you can make words mean so many different things.'

'The question is,' said Humpty Dumpty, 'which is to be master – that's all.' (Carroll, 1871)

The reader of *Architectural Theories of the Environment* clearly is dealing with masters.

The anthology has 25 entries, 10 of them designed as case studies describing buildings, installations, and other projects chosen to exemplify principles of post-human thinking. The others are expositions of these principles as seen through various lenses, from feminist literature to environmental ethics, although the distinction between principles and cases blurs in some instances. The set is divided about equally into three sections said to focus on (a) the agents, animals, cyborgs, and algorithms that might be termed the customers for posthuman architecture; (b) the architecture itself, assemblages of materials, living or not, possibly incorporating the customers; and (c) a broader sphere, ecological perhaps but not necessarily of larger geographic scale, that is the 'posthuman territory' of the book's title ... *The Matrix* (Wachowski and Wachowski, 1999), perhaps?

The last of these entries is a case study of the Ruin Academy, an independent architectural research institution and public space housed within a formerly abandoned structure in Taipei. The project, a product of what humans might understand to be an adaptive reuse, includes fireplaces that emit smoke into the surroundings, gardens and a fifth-floor public sauna that admit the surroundings to the project's space, and unruly vegetation growing out of the structure's openings to blur the project's edges. Such remarkable features signal posthuman design. The institution's name, 'a metaphor for the desired ruin of academia's fortified mentality' (p. 304), is a delicious irony, following as it does this book's many pages of academic exegesis. The editor does not offer a final summary or suggest overarching conclusions to ensure that the reader has gotten the book's point. The point is manifold, it would seem, and not easily gotten. Posthuman territory is a complicated place; words may be inadequate.