

THE CONSTITUTION OF CONSTRUCTION SUPPLY CHAIN RELATIONSHIPS: A POST-FAILURE CASE STUDY

This study aims to investigate how relationships between main contractors and second-tier subcontractors are constituted, particularly after project experiences that deteriorated relationships. Trust is regarded as a structural property of relationship and the duality of trust provides an analytical perspective of investigating the constitution of relationship. This process-based research used case study method and collected data from semi-structured interviews with actors from both main contractor and subcontractor companies. Findings reveal five processes, learning, relating, collaborating, controlling and routinising, that helped constitute trust and thus supply chain relationships. It reveals that relationship failure had strong impacts on initial trust and practices at the front end. The research also shows that constituting relationship and trust is an intended but also an unintended consequence of project organising enabled and constrained by structures of project ecologies. This study contributes to knowledge in that it 1) provides an analytical approach, from the perspective of structuration theory, and relational approach to understanding construction supply chains, 2) empirically demonstrates the dynamics of trust, in the shadow of the past as well as contemporary lifecycle of the construction project, and 3) links construction project management field with the wider field of social science.

Keywords: construction project management, project organisation, process study, supply chain relationship, trust.

INTRODUCTION

This study is about constituting inter-organisational relationships (IORs) between main contractors and second-tier subcontractors in construction projects, particularly in the shadow of negative past experiences and demonstrates how such process is both engineered and emergent.

Collaboration between project businesses is an organisational reality in the project-based industries and managing relationships are necessary if project businesses are to survive and value levered. IORs were found to be the basis of transferring knowledge, managing structural and dynamic complexity, and mitigating risks (Laequddin et al., 2012; Brady and Davies, 2014), but they are not in the centre of traditional project management approaches (Sydow and Braun, 2017). In particular construction project management (CPM), supply chain relationships are of value for both project delivery and project businesses (Meng, 2012) and were identified to be worse than client-main contractor relationships (Alderman and Ivory, 2007). Yet most CPM studies have been interested in client and main contractor partnering (Bygballe et al., 2010), with

exceptions of Meng (2012) and Manu et al. (2015) recently. Moreover, research effort is focused more on the formal forms of collaboration than the social context and emergent process of developing collaboration and relationship (Bresnen, 2009). The effects of the past on present interactions and relationship have been under-researched, especially learning from the unsatisfied past experiences that deteriorate relationships. These formal tools and arrangements, however, faced difficulties of translation into practices in the dynamic contexts (Bresnen and Marshall, 2000). To lever value in the project delivery, CPM research needs to zoom in and understand processes of supply chain collaboration that constitute formal and informal practices as well as the social context in the course of time. Bringing IORs to the centre of analysis and theorising helps bridge distinct projects in time and space and integrate the service contributions to a consistent outcome of value for clients but also main contractors and subcontractors (Sydow and Braun, 2017).

In line with the relationship approach to managing project, the present study centres on IORs between main contractors and second-tier subcontractors in construction projects and takes a structurationist view on trust as a structural property of relationship (Sydow, 1998). The paper proceeds with a literature review section on IORs and trust in construction. Research methodology and methods are then specified, followed by a presentation of findings. Finally, the discussion and conclusion link findings back to theories and explicate contributions.

TOWARDS AN UNDERSTANDING OF THE PROCESS OF CONSTITUTING SUPPLY CHAIN RELATIONSHIPS

A considerable body of CPM studies, as well as the broader discipline of project management, has focused on the critical success factors, best practices or design of collaborative mechanisms and tools at the governance level and the front end (Smyth et al., 2010). Nevertheless, having a closer examination of such mechanisms and tools, their effects on IORs and project performance vary (c.f. case studies of Cicmil and Marshall, 2005 and Davies et al., 2016). In some cases, partnering was used as a guise by main contractors to reap the profits from second-tier subcontractor (Alderman and Ivory, 2007), which dramatically worsens supply chain relationships. It has been argued that second-tier subcontractors and suppliers have less understanding of collaborative mechanisms and question the benefits they can get through collaborating with main contractors (Mason, 2007), pointing to the need for taking an interpretive view and understanding the process of building supply chain relationships in the social context.

The focus has then been on structures but also practices and behaviour in the context (Bresnen, 2009). Agents and actions are not determined by contracts or any forms of structural arrangements; the latter can only have an enabling and constraining effect on the former. The social context where structures and processes interact also needs attention. Zooming out to a broader picture reveals that projects are embedded in a programme of projects of project-based organisations, which are part of inter-organisational networks. Furthermore, these networks operate in the organisational field constituting the institutional life that enables and constrains actors' behaviour and actions (Manning, 2008). Multiple levels of project ecologies equip project actors with rules of interpretations and legitimation as well as resources of power and thus involve the interplay between projects and firms. Time matters as well. Despite any projects have an *ex-ante* defined duration, actors and firms involved in projects have earlier experience and future orientations; most projects have processors, successors

as well as simultaneous peers. Therefore, to understand the process of building supply chain relationships, it is necessary to place relationships in the course of time. Extending the process of relationship constitution to the past and future helps reap the benefit from past experiences, mitigate the negative impacts and prevent path-dependent development (Doz, 1996; Ebers and Maurer, 2016).

The increasing concern with social and process aspects in construction projects mirrors the criticism of rational approach in general project management and the more general structuralism and individualism in the sociological and organisational studies. The critics have proposed a shift in research orientation from instrumentalism towards approaches that capture the dynamic, emergent and social aspects of projects and a 'becoming' ontology and process perspective (Bresnen, 2009; Bygballe et al., 2016), which requires more open, dynamic, and reflexive management and organisation theories. Structuration theory (Giddens 1984) is among one of the theories able to reconcile the interplay of structures and agency in process studies. The concept of duality of structure provides a dynamic lens of viewing how the process of actors interacting with each other is enabled and constrained by the structural conditions and in return how structures are constituted and reconstituted by actors. The recursive dialectics of structure and agency constrains the unilateral construction of social systems and create unpredictability in social dynamics. According to Giddens' structuration theory, the structure consists of rules of signification and legitimation and resources of domination. In construction projects, interpretative and normative rules are divergent and are from project ecologies such as laws, regulations and organisational policies, and bases of power also disperse. The decentralised project organisations authorise project actors power at use, but whether and how to use power depends on interests of parent organisations but also power relationships and resources in the projects (Bresnen et al., 2004). Apart from space, rules and resources are diverse in different phases of the project lifecycle, depending on overall and interim goals and performance. As such, construction actors have diverse interpretative schemes, normative practices, and facilities for gaining resources and play an active role in choosing forms of communication, whether and how to use power and ways of sanction. Their choices either reproduce or transform structural rules and resources.

Through the lens of structuration theory, the dynamics of supply chain relationships can be viewed as the consequence of the dialectics of structural properties of relationships and practices enacted by contractors and suppliers in the project. Trust is regarded as one of such structural properties. Seen through structuration theory, generating trust is to raise the perception of trustworthiness, use trust relations to allocate resources and legitimate relational norms that constrain opportunism and encourage trusting and trustworthy behaviour, and, in turn, trust influences actors' interpretative schemes, facilities of resources and norms of conduct, hence project processes and practices (Sydow, 1998). The recursive and dynamic relations between trust and interaction processes and practices provides an analytic approach to understanding the dynamics of supply chain relationships. Based on extant research (Mayer et al., 1995; Rousseau et al., 1998; Smyth et al., 2010; Sydow, 1998), this research uses a working definition of trust as an actor's current intention to rely on the actions of or to be vulnerable to another party, based on the expectation that the other party can reduce risks and co-create value in a relationship. Particularly, the paper focuses on the main contractor's trust in the subcontractor. A relationship can be

interpersonal. It can also be inter-organisational based upon the sum of the key interactions and individuals.

RESEARCH METHODOLOGY AND METHODS

The research took an interpretive and process-based approach and focused on the informants' view of the topic under research and individuals' perceptions of events and processes. Case study was used to help in-depth study in a local situation, and the aim was to develop analytical generalisations (Yin, 2009). One IOR was selected in the present paper to demonstrate how the supply chain relationship is constituted over time, which involved a piling subcontractor, referred to herein as Found Gamma and a main contractor, referred to herein as Office Plc. The case was in the context of delivering a piling and foundation project for Beta, a building project, in the UK. Table 1 summarised key features of the case.

Table 1: Case Beta overview

Case information	
Project condition	Piling project of an office building in a city development programme and near service tunnels
Data collection duration	7 months
Past experience	- Unsatisfied recent project delivered by a different business stream of Found Gamma and a different team of Office Plc.
Main procurement and contract	- Competitive procurement - Contract: JCT 2011, lump sum, 30-day payment - Value: £59 million
Piling procurement and subcontract	- Limited bid invitation - Contract: Design & Build with JCT 2011 - Lump sum, 45-day payment - Value: £1.7 million

To investigate the sequence and flow of events and understand processes in the course of time, data collection involved three-round interviews at the procurement, execution and completion stages of the piling project, so to capture both historic and contemporary processes. By doing so, the author gathered data about past experiences that dated back up to five years ago as well as on-going experiences in the project Beta. To capture a more detailed and balanced picture of the phenomenon, the research selected six informants from different functional units and hierarchical levels of Office Plc. and Found Gamma, including positions such as bid manager, supply chain manager, project director, project manager, quantity surveyor and site engineer. Bias due to different functional roles and companies were mitigated. To study changes of the relationship and trust, the principal researcher tried to interview the same informants in multiple visits, but due to the handover of the project from the procurement or bid team to the project team, the bid manager of Found Gamma and supply chain manager of Office Plc. were substituted by the project directors. At the completion stage, the researcher did not have the last interview with the project manager of Office Plc. as the project manager moved to other specialist projects of Beta. In total, 17 semi-structured interviews were conducted. All interviews were recorded, transcribed and analysed by the principal researcher. While the length and focus of interviews varied, they were all guided by a research protocol with interview topics and questions. The unit of analysis was the IORs between Office Plc. and Found Gamma. Interview questions were therefore designed to ask informants' views on *own company and the other company*, such as practices of own company,

interactions between two companies, and attitudes towards the other company. Individual views and attitudes were aggregated to form collective views and attitudes representing their companies.

Data were analysed in three steps. The first step was constructing a description of sequences of events, which was reported in Figure 1 due to space constraints.

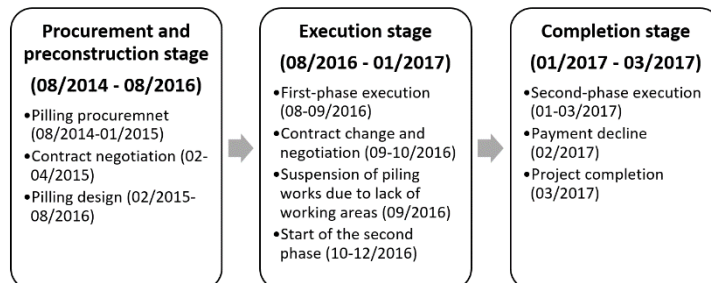


Figure 1: The Process and Events of the Project Beta

A framework analysis approach was then used to uncover processes of constituting trust at different stages of the piling project. The development of the framework was illustrated in Figure 2. The framework consisted of themes within which the material can be sifted and sorted. The first version of framework was drawn upon the interview topic guide but also emergent from the first-round analysis (e.g. ‘Internal communication’ in Figure 2). The framework was then applied to the interview data in its textual form, during which new themes emerged and enriched the framework. All interview transcripts were indexed with numbers that linked back to themes (Ritchie and Spencer, 2002).

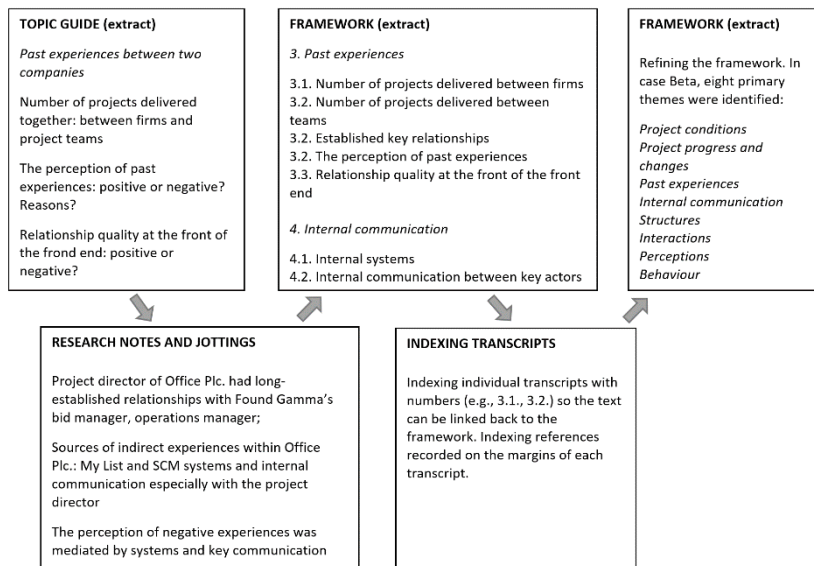


Figure 2: Development of a Thematic Framework

After indexing individual transcripts, data were lifted from the original context and rearranged in charts. The analyst then began to pull together the data and interpret the data set as a whole. The interpretation was influenced by structuration theory, and the processes of constituting the supply chain relationship and structural conditions for trust generated the interpretation of trustworthiness, use trust relations as facilities of resources or legitimate relational norms (see Figure 3 an extract of charts).

CHART 4. INTERNAL COMMUNICATION (extract)				
OFFICE PLC.			STAGE: PROCUREMENT	
	4.1 Internal systems		4.2 Internal communication	
Project director (extract)	‘We have a preferred supply chain. We have people that we have vetted, [and] we are ok to use. Although they have to tender it, from a financial point of view, they’ve got capability, H&S, to carry out the work we need. So, it follows this process to answer that supply chain.’	Learning from the past through My List and SCM systems Infor. from the past +Perceived competence	‘And I did a discussion with our MD at the time. And we went on previously from a job that ... [Found Gamma] have done, which is gone well as well.’	Learning from the past through internal communication Firm level perception influenced by key actor’s experiences +Perceived trustworthiness

Figure 3: An extract of Charts

FINDINGS AND DISCUSSION

Interaction process

Processes that constituted the relationship between Found Gamma and Office Plc. at different stages of the project Beta were identified and consolidated into more generic processes. Table 2 illustrated the findings. On the broadest level, this research identified five fundamental processes – learning, relating, collaborating, controlling, and routinising. From procurement to completion, these processes recursively generated trust by influencing actors' interpretative schemes, encouraging the use of trust relations to allocate resources and legitimating relational norms enabling trusting and trustworthy behaviour.

Table 2: Consolidated Processes

FIRST-ORDER PROCESSES	CONSOLIDATED SECOND-ORDER PROCESS
Learning from the past	Learning
Monitoring	
Shared learning	
Maintaining and building ties	Relating
Relationship-specific investment	
Collaborating based on equity and efficiency	Collaborating
Collaborating based on reciprocity	
Value co-creating: The emergence of social orientations	
The emergence of shared intentions	
The emergence of relational norms	
Structuring the project	Controlling
Maintaining consistency	
Relational control	
Repeating service process	Routinising

Learning was fundamental to generating trust as a rule of signification. Found Gamma cognitively learnt from the past by accepting own mistakes, identifying problems, and behaviourally learnt by allocating actors having good relationships with Office Plc. The willingness of taking responsibility and familiarity between individuals laid a good foundation for fostering the perception of trustworthiness. On the Office Plc.'s side, the internal communication helped reduce suspicion and form the collective perception of trustworthiness in terms of Found Gamma's capability and expectations on collaborating with Found Gamma. The influences of the shadow of the past were intermediated in the process of learning from the past. On the other hand, the interpretation of trustworthiness could be an unintended consequence of learning about project performance. For instance, the perception of integrity and benevolence

emerged experientially and reflexively underneath monitoring project performance and shared learning about problems. For Found Gamma kept consistent service, did extra-mile works and helped solve problems. In other words, the increased knowledge about the other party's competence and intentions was not necessarily a strategic intention derived from the rational calculation (c.f. Williamson, 1993); it might be an unintended consequence of project organising.

Relating provided formal and informal socialisation mechanisms that linked actors and organisations economically and relationally. Office Plc. and Found Gamma structured formal mechanisms such as project meetings, report systems and feedbacks. Formal mechanisms provided common knowledge and a sense of security in the project (Olson et al., 2002). Informal mechanisms included individual relationships as well as equivalent knowledge bases between two parties, which reduced perceived risks and facilitated emergent meanings (Lawson et al., 2009). Office Plc. and Found Gamma maintained firm-level communication through scoring and feedbacks. Multiple routes and levels of communication created abundant connections that ameliorates the need for 'safety nets' to prevent communication breakdown (Staber and Sydow, 2002). Office Plc. and Found Gamma were also bounded by relationship-specific investment in the form of small and big actions such as excelling goals, prioritising resources and extra help. Different from economic hostages that bound organisations by legal or private orders, such relational investment was driven by and sustained reciprocity and equity between two parties (Svärd, 2016). The dialogic communication, equivalent knowledge from project level to management level and consistent teams throughout the service provision largely facilitated mutual understanding (Ballantyne and Varey, 2006).

Collaborating was firstly driven by efficiency gained from early involvement for joint planning and value engineering. The dialogic communication helped sustain collaboration by initiating a sense of equity between two parties. In joint activities, Found Gamma provided consistent service, effective solutions, rigorous H&S procedures and quality design, which, as Office Plc. learnt reflexively and experientially, led to the perception of trustworthiness in terms of competence and integrity, *'Once during the tendering period, they were with us. When they won the job, they worked with us to make sure that we've got a) the right solution, b) understood the problem of the main tunnel...So before and after they won the job, in terms of communication and working with us and solving problems, they've been really good'* (Project manager, Office Plc.). Shared intentions also emerged in the two-way communication, *'we share that, we talk about it, how we make it work...we all get on, we all want to make it successfully'* (Project director, Office Plc.), and both parties expressed *'You are only as good as your last job'* (Quantity surveyor, Found Gamma) and *'got pride on what we do'* (Project director, Office Plc.). The interpretations of competence and intentions eventually routinised as service processes continuously repeated. Trust as a rule of signification and collaboration form a self-reinforcing cycle in the service process. Competence and intention trust serve as a medium and outcome of collaboration.

When emergent changes occurred and caused uncertainties in interactions, as the case of contract change, the virtuous cycle helped form the faith in Found Gamma's actions and motivated actors to use trust relations to coordinate communication and resources under uncertainties, instead of using contractual mechanisms opportunistically and profiting from the other party. Collaborating based with shared intentions and reciprocity encouraged value co-creating where actors and organisations were

socially-orientated and considered mutual benefits. Further, the repetitive trust-based service exchanges formed relational norms that maintained collaboration through relational control. Actors and organisations refrained from opportunism and maintained relational thinking and social orientations, *'working together, collaboratively, understanding each other's drivers and trying to help each other... We have to do what we say on the table. If you've made a mistake we have to pay, we have to pay them what is due. Who says we are going to do something, we have to do it ...if you are a gentleman, if you have a handshake, you have to stick to. Integrity and honesty...it should go for both companies...work together to make it success'* (Project director, Office Plc.). The effectiveness of value co-creating in the service provision and outcomes encouraged the repetition and eventually routinisation of using trust relations as social capital to coordinate service exchanges; the more trust-based service repeated, the more trust gained (Coleman, 1988; Nooteboom, 2002). In turn, trust as an appreciating asset and rule of legitimation supported the continuity of value co-creating.

However, with more knowledge about each other, actors and organisations might find divergent interests, as the early stage of contract negotiation between Office Plc. and Found Gamma. Office Plc. imposed risk terms on subcontract so to extract safeguards for self-interests. Using power in this way was based on the transactionally-based interpretations of supply chain relationships, which hindered trust (Inkpen and Currall, 2004). Power also offered the ability to structure the project. The adoption of standard procedures and structures helped engender a sense of reliability and initiated collectively accepted norms of conduct, which helped develop trust. As the project proceeded with good performance, Office Plc. increased confidence and started to delegate authorities to Found Gamma. In other words, using power to structure the project provided a condition for, rather than an alternative to trust (Poppo and Zenger, 2002). Controlling was found primarily to reduce uncertainties and increase confidence in the service provision and outcomes, instead of detecting opportunism.

Structural conditions

Apart from interaction processes, structures of different levels of project ecologies created conditions that influenced the supply chain relationship. At the project level, the complexity and uncertainty of the project Beta increased the professional requirements that fewer piling contractors could satisfy. Fewer alternatives equivalent to Found Gamma in the market gave Found Gamma more or less power and increased interdependence in the relationship between Office Plc. and Found Gamma.

At the organisation level, Office Plc.'s SCM systems gathered, transferred, retained and transformed supplier information between the project and firm levels and across projects. These systems helped fill in the gap of inconsistent personnel across projects. By looking at the information in the systems, key actors who had no prior experience with the other party, such as the quantity surveyor and project manager in the project Beta, were able to know about their suppliers' trustworthiness before direct interactions. Despite the negative performance in the last project, Found Gamma's overall performance as retained in systems furnished the initial interpretation that Found Gamma's technical and financial capabilities satisfied project requirements. That Found Gamma belonged to the major construction company, Gamma UK, supplied a sense of security and increased perceived trustworthiness in terms of Found Gamma's financial reliability, resource availability and H&S measures. The perception of external risks reduced. Nevertheless, no future project between two

companies after the project Beta balanced the self-reinforcing cycle of trust and value co-creating. With no business secured in the near future or a well-structured strategic relationship, most project actors focused on short-term profits that could be gained through delivering the project Beta (Ebers and Maurer, 2016). Furthermore, learning was largely based on project-specific tasks, focusing on '*whatever...to get the job built quicker and more efficiently*' (Project manager, Found Gamma). In this vein, without the organisational support and structured relationships for future businesses, relationship value and trust might easily lose when individuals were redistributed, and trust relations were not embedded in the firm level (Smyth, 2015).

CONCLUSIONS

This research offers a theoretical lens, the lens of structuration theory (Giddens, 1984), to view construction supply chain relationships and trust. In this manner, this research enlightens a way of building theories in CPM. This is the first contribution of this study. Based on the concept of the duality of trust, the empirical finding illustrates five fundamental processes of constituting construction supply chain relationships and their interplays that form a self-reinforcing cycle of trust and collaboration. This recurrent relationship between trust and collaboration responds to trust as social capital (Coleman, 1988), whose value increases through its use. Trust as a rule of legitimation emerges in the self-reinforcing cycle where reciprocity and equity formed and sustained collaboration (Swärd, 2016). The role of reciprocity and equity differentiates transactional interactions with relational ones. Whereas the latter is driven by responsibility, the former is for accountability that ties actions with 'the normative component of the rationalisation of action' (Giddens 1979: p.85). In this vein, collaborating in construction supply chains is not only about risk mitigation but also risk sharing. The paper also demonstrates how relationship constitution is an engineered but also emergent process by introducing the concept of two-fold learning. Apart from intentional learning from the trust, experiential and reflexive learning also induce the interpretation of competence, integrity and benevolence. In other words, trust can be routinised as a phenomenon that enables and constrains actors' behaviour (Nooteboom, 2002). The development of trust consists of intuition and tacit knowledge and is not purely calculative or rational (Smyth et al., 2010). The concept of two-fold learning also implies that trust can grow in the structuring of power. Viewing trust and power in this way differs from research that regarded trust and trust in a linear relation (c.f. Inkpen and Currall, 2004; Poppo and Zenger, 2002). Finally, by investigating the past and contemporary experiences, this study shows that the shadow of the past has strong influences on the project organising and relationships at the front end and the shadow of the future affects the trust and relationship, particularly by the end of the project (Ebers and Maurer, 2016).

REFERENCES

- Alderman, N., Ivory, C., 2007. Partnering in major contracts: Paradox and metaphor. *Int. J. Proj. Manag.* 25, 386–393.
- Brady, T., Davies, A., 2014. Managing Structural and Dynamic Complexity: A Tale of Two Projects. *Proj. Manag. J.* 45, 21–38.
- Bresnen, M., 2009. Living the dream? Understanding partnering as emergent practice. *Constr. Manag. Econ.* 27, 923–933.
- Bresnen, M., Marshall, N., 2000. Partnering in construction: a critical review of issues, problems and dilemmas. *Constr. Manag. Econ.* 18, 229–237.

- Bygballe, L.E., Jahre, M., Swärd, A., 2010. Partnering relationships in construction: A literature review. *J. Purch. Supply Manag.* 16, 239–253.
- Bygballe, L.E., Swärd, A.R., Vaagaasar, A.L., 2016. Coordinating in construction projects and the emergence of synchronized readiness. *Int. J. Proj. Manag.* 34, 1479–1492.
- Cicmil, S., Marshall, D., 2005. Insights into collaboration at the project level: complexity, social interaction and procurement mechanisms. *Build. Res. Inf.* 33, 523–535.
- Coleman, J.S., 1988. Social capital in the creation of human capital. *Am. J. Sociol.* 94, S95–S120.
- Davies, A., Dodgson, M., Gann, D., 2016. Dynamic capabilities in complex projects: the case of London Heathrow Terminal 5. *Proj. Manag. J.* 47, 26–46.
- Ebers, M., Maurer, I., 2016. To continue or not to continue? Drivers of recurrent partnering in temporary organizations. *Organ. Stud.* 37, 1861–1895.
- Giddens, A., 1984. *The constitution of society: Outline of the theory of structuration.* Univ of California Press.
- Inkpen, A.C., Currall, S.C., 2004. The coevolution of trust, control, and learning in joint ventures. *Organ. Sci.* 15, 586–599.
- Laequddin, M., Sahay, B.S., Sahay, V., Abdul Waheed, K., 2012. Trust building in supply chain partners relationship: an integrated conceptual model. *J. Manag. Dev.* 31, 550–564.
- Manning, S., 2008. Embedding projects in multiple contexts—a structuration perspective. *Int. J. Proj. Manag.* 26, 30–37.
- Manu, E., Ankrah, N., Chinyio, E., Proverbs, D., 2015. Trust influencing factors in main contractor and subcontractor relationships during projects. *Int. J. Proj. Manag.* 33, 1495–1508.
- Mayer, R.C., Davis, J.H., Schoorman, F.D., 1995. An integrative model of organizational trust. *Acad. Manag. Rev.* 20, 709–734.
- Meng, X., 2012. The effect of relationship management on project performance in construction. *Int. J. Proj. Manag.* 30, 188–198.
- Nooteboom, B., 2002. *Trust: Forms, foundations, functions, failures and figures.* Edward Elgar Publishing.
- Poppo, L., Zenger, T., 2002. Do formal contracts and relational governance function as substitutes or complements? *Strateg. Manag. J.* 23, 707–725.
- Ritchie, J. and Spencer, L. (2002) ‘Qualitative data analysis for applied policy research’, in *Analyzing qualitative data.* Routledge, pp. 187–208.
- Rousseau, D.M., Sitkin, S.B., Burt, R.S., Camerer, C., 1998. Not so different after all: A cross-discipline view of trust. *Acad. Manag. Rev.* 23, 393–404.
- Smyth, H.J., Gustafsson, M., Ganskau, E., 2010. The value of trust in project business. *Int. J. Proj. Manag.* 28, 117–129.
- Swärd, A., 2016. Trust, reciprocity, and actions: The development of trust in temporary inter-organizational relations. *Organ. Stud.* 37, 1841–1860.
- Sydow, J., 1998. Understanding the constitution of interorganizational trust. *Trust within between Organ. Concept. issues Empir. Appl.* 31–63.
- Sydow, J., Braun, T., 2017. Projects as temporary organizations: An agenda for further theorizing the interorganizational dimension. *Int. J. Proj. Manag.* 36, 4–11.
- Yin, R.K., 2009. *Case study research: Design and methods.* Sage publications.