

Project organizations as organizational fields: expanding the level of analysis through Pierre Bourdieu's Theory of Practice

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This paper can be seen as a response to the 2012 special edition of the *Engineering Project Organization Journal*, in which the authors provide a theoretical review of past research in various subfields of social science and management science. The many papers in the edition provide, as Levitt [(2012) Editorial: Special issue on fundamentals of social and management science for engineering project organizations. *The Engineering Project Organization Journal*, **2**, 1–3] proclaims, 'solid points of departure to frame questions and methods for [...] research and, thereby, to contribute more significantly to the knowledge base and practice of engineering project organization and management'. Drawing on a challenge posed by the editor and authors of the special edition to expand the existing levels of analysis in the engineering project domain, this paper explores a possible theoretical framework that can build on the existing foundation of research and bring new analytical insights about the sector; namely Bourdieu's [(1977) *Outline of a Theory of Practice*, Cambridge University Press, Cambridge and New York; (1990) *The Logic of Practice*, Polity Press, Cambridge] Theory of Practice. Through an analysis of Bourdieu's key concepts—habitus, capital and field—the paper investigates how the architecture, engineering and construction sector and the project organizations of which it largely consists may be investigated not only through its processes and interactions but also through the objective relations that exist beyond these processes and networks.

Keywords: Bourdieu, capital, field, habitus, project organization.

Introduction

The construction industry is largely driven by individual, one-off projects that are transient and formed around loosely coupled firms (Dubois and Gadde, 2002; Turner, 2006). Relational contracting is an essential element of the industry, with predominantly small firms working together in large project teams. These teams, or *project organizations*, are temporary and will usually be dissolved at the completion of the project (Brewer *et al.*, 2005; Henisz *et al.*, 2012). Each project organization will attain a unique organizational structure, which—even if the same firms collaborate on future projects—will not rematerialize due to the particular contextual and project-specific factors that form part of its establishment. Organizational design changes depending on factors such as project goals, task characteristics, coordination methods, actors, resources, institutional logics and governance structures (Carroll and Burton, 2012; Scott, 2012) and project organizations possess inherent ambiguities, uncertainties and interdependencies that make them highly complex.

Whereas there are a number of industries that are project-based, the construction sector is unique in the exclusive nature of each project and the fact that these one-off projects consist of transactions that 'have no strong "shadow of the future" (Henisz *et al.*, 2012, p. 37). The distinctive characteristic of each project relates, first, to the particular problem that is addressed (i.e. the task at hand) and, second, to the specific team that work on the project (Mohamed and Tucker, 1996).

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Each project will evolve through discrete phases that can be perceived as distinct dealings between key participants and stakeholders who move in and out of the project (Henisz et al., 2012, p. 37). There is, thus, a discontinuity of participation across the project's lifecycle and its diverse phases, which poses a particular hazard to the project. This hazard is what Henisz et al. (2012, p. 38) call 'displaced agency' and refers to the accumulated costs of a number of independent transactions that the project's participating organizations may accrue due to the associates' incentives to move costs or responsibilities to other counterparts that are not part of the transaction. Understanding this hazard and the implication of the diversity of construction tasks on the composition of the industry are beyond the scope of this paper. Instead, it is our intension to explore how greater preparedness for external and internal challenges can be assured through a better understanding and assessment of the identities and preferences of key stakeholders, the boundaries that exist within and beyond the project organization, the formal and informal relationships that underpin professional activities and relationships and the ties between the project organization and the larger contextual environment of which the project is part.

The paper is based on the assertion that a thorough understanding of project organizations and the challenges associated with their transitory nature must expand its focus to include not only issues related to process, interactions and interrelations but also the sociological implications of these matters. Understanding the social organization of projects and the way that sociological elements such as cultural, environmental, psychological and personal factors inform project organizations are vital for project success. Such factors aid organizational and personal decision-making and govern network coordination; they form part of the institutional logic and governance structures of project organizations; they influence the negotiation and maintenance of organizational boundaries; they support and/or discourage collaboration and distribution of resources; and they influence inter- and intra-organizational communication and dynamics. An important question to ask is how these sociological elements inform project organization and practice. While we do not intend to answer this question in pragmatic terms -a task that requires in-depth empirical research-we aim to propose a theoretical answer that can expand the level of current analysis. More specifically, we will explore the theoretical framework of Bourdieu (1977, 1990) with the aim of providing an analytical approach to understanding the inter- and intra-organizational dynamics, the role of organizational boundaries and the sociological dimensions of project organizations. Bourdieu's relational model has been chosen for analysis due to its ability to bridge methodological individualism and structuralism, and because of the latent prospect of his theory to shed light onto the interdependencies of project organizations and the relationship between agent(s), society and practice. The paper is divided into three main parts. First, it outlines the concept of project organizations and provides a brief overview of the existing analytical framework used to understand the phenomenon. Second, it provides a brief discussion and definition of Bourdieu's key concepts and his theoretical framework. Third, it considers how Bourdieu's theory may expand current scholarship on project organizations through the notion of organizational fields. The paper draws on a broad reading of Bourdieu's scholarship, as well as the paper 'Bourdieu and organizational analysis' by Emirbayer and Johnson (2008).

Project organizations

As an industry, the construction sector incorporates a range of key players, including construction managers, architects, design engineers, construction engineers and other government agencies and industry groups. Aimed at delivering a wide range of services to the building sector and other industries, the industry represents a complex and inherently fragmented sector that works, in large, on temporary and context-specific projects. The project-based nature of the industry and the ephemeral character of its constituent project organizations set construction organizations apart from other more integrated and established organizations. The unique character of the industry emerges out of the highly fragmented nature of the architecture, engineering and construction (AEC) sector and its reliance on open tendering and subcontracting. Reflecting the temporal and project-based nature of construction services, the dynamics required to manage and deliver large-scale construction projects have been addressed through terms such as 'projects' (Cleland and King, 1983), 'temporary organizations' (Berggren et al., 2001; Turner and Muller, 2003), 'project-based firms' (Whitley, 2006) and 'temporary multi-organizations' (Cherns and Bryant, 1983). Essentially, these various concepts refer to the loosely coupled connection of firms in transient relationships; the key characteristic of project organizations.

A number of definitions of project organizations exist, including that of Turner and Muller (2003, p. 1) who define a project as the

endeavour in which human, material and financial resources are organized in a novel way, to undertake a unique scope of work, of given specification, within constraints of cost and time, so as to achieve beneficial change defined by quantitative and qualitative objectives.

Similarly, though in a more straightforward manner, Cleland and Ireland (2002) explain that project organizations will be a unique, complex effort towards achieving specific objectives within pre-set targets that cross organizational lines. Project organizations are conceived as complex, temporary, unique, novel and transient organizations established with the aim of delivering beneficial change. They will typically work within an uncertain and transient environment that requires flexible, goal-oriented and staged processes (Berggren *et al.*, 2001; Turner and Muller, 2003).

A project organization is determined by a combination of factors, including: the nature of the project itself (Duyshart et al., 2003); the nature of the individual firms (member organization) that form part of the project team (Gajendran and Brewer, 2007); the formal, contractual, relationship between the various member organizations (Chan et al., 2005); and the informal relationships between member organizations, which may precede or develop during the current project (Ford, 1997). Thus, a project organization is characterized by a network of interacting actors, resources and activities. Similarly, and adding further complexity to the project organization, each individual member organization is characterized by a network of interacting actors, resources and activities. While all projects are invariable associated with a commissioning client, project organizations will always be centred on a project rather than on an individual firm; that is, it will be centred on organizational dynamics of the project organization, not its individual member organizations.

In an analysis of construction organizations, it is important to acknowledge how these organizations play a dual role as, on the one hand, permanent, stationary firms with their unique organizational structure, culture, stakeholder relationships, procedures and policies, and, on the other hand, members of project organizations characterized by specific and transient goals and structures (Winch, 1989, 2000; Berggren et al., 2001; Welling and Kamann, 2001). Organizations may at the same time be working towards their own commercial goals within the boundaries of their organizational dynamics and towards the goal(s) of a project organization-goals and commitments that may be incongruent (Moberg et al., 2002). The potential inconsistency between the organizational dynamics of individual firms and project organizations has led to the perception of a highly fragmented and contested industry, where uncertainty and conflict underpin inter- and intraorganizational engagement. In line with this, existing scholarship on project organizations emphasize the central role of questions related to employment, work processes and resources; that is, issues related to distribution and organization of resources, identification and allocation of roles, responsibility and risk, and establishment of boundaries (e.g. Bechky, 2006; Whitley, 2006; Modig, 2007).

Research of the potential discordance of project organizations: supply chain and social network analysis

The potential discordance between the organizational dynamics of project organizations has instigated a proliferation of research into the phenomenon. Sociological and managerial approaches, such as supply chain analysis (e.g. Cox and Ireland, 2002) and social network analysis (e.g. Chinowsky and Taylor, 2012), have been employed in attempts at understanding and addressing this discordance, as have the theoretical constructs of organizational contingency (e.g. Carroll and Burton, 2012) and social heuristics (e.g. Beamish and Biggart, 2012). In relation to the former, supply chain management studies have investigated the network of facilities and distribution options that form part of governance processes, procurement strategies, development, production and distribution. With the aim of increasing transparency and alignment of the various elements of a supply chain, such studies have explored the linked relationships and processes beyond the boundaries of the individual organization (e.g. Cox and Ireland, 2002). They have identified issues of domination (Cutting-Decelle et al., 2007) and fragmentation, matters that have been addressed through a call for increased integration to enhance project outcomes (e.g. Gilbreath, 1988; Wainwright and Waring, 2004; Briscoe and Dainty, 2005). The reading of the AEC sector from a supply chain perspective brings important insights into a range of issues related to the flow of logistics and information, to both upstream (supply side) and downstream (customer/client side) business relationships, value chains, transformation, integration and demand. Because of the conceptual emphasis on a linear process and the focus on optimizing management activities, it does, however, shed little light on the processes by which relationships, value and processes of fragmentation and integration develop, are negotiated and transformed.

The limitations of supply chain analysis are, to some extent, addressed through existing research into the network of interacting actors, resources and activities (e.g. Hakansson and Johanson, 1992; Ford, 1997). Chinowsky and Taylor (2012, p. 18) argue that social network analysis provides an alternative approach to examine project interactions by 'formally modelling core and exogeneous interrelationships, as well as

formal and informal project interactions'. As such, it allows exploration of the dynamic and complex endeavours of project organizations and the rich collection of interrelations that exist at and across multiple levels of analysis. Providing an analytical framework that is scalable from small work groups within individual enterprises right up to the industry as a whole, social network analysis considers the variety of clusters of actors, resources and activities, as well as relationships, behaviours and operating patterns, that define the production of discrete products and services.

Social network analysis has, historically, attained attention in relation to three key themes in the engineering project organization domain, namely communication efficiencies; collaboration effectiveness; and expansion of methodologies and scope of phenomena examined (Chinowsky and Taylor, 2012, p. 18). Through the attention to greater degrees of complexity than what is generally addressed in the traditional project management context and through a wide range of methods and analytical perspectives, it has identified the role of dependency relationships and made important steps towards a comprehensive understanding of the full complexity of engineering projects (Chinowsky and Taylor, 2012, p. 21). Social network analysis does, however, emphasize concrete ties over more abstract relations and network positions and, thus, may fail to identify relations of force and contestation that structure it as a whole. Moreover, as Chinowsky and Taylor (2012, pp. 21-22) contend in their review of past social network research in engineering project organization scholarship, further research is required for the engineering project organization community to advance. As they explain, while there has been an emphasis on inter-organizational network studies, further research is required in relation to the intraorganizational effect on project execution and development. Such research is important because of the impact that the dynamic relationships between and within organizations may have on projects. Only by understanding such intra-firm relationships may we gain a comprehensive perspective of project execution and the contextual environment's role, direct or indirect, on the project and the network of individuals and firms.

Network analysis—which may incorporate supply chain management studies—provides a useful avenue for (empirical) investigation into organizational dynamics, including exploration of the shift of organizational arrangements. They do, however, rarely explore, as Emirbayer and Johnson (2008, p. 23) assert, 'the process by which the very *value* of the resources exchanged through these ties is contested, constituted, and contested again', and further exploration of the human side of project organizations as relational networks is thus required. While network analytical methods can be used to understand the sociocultural and interpersonal elements of the project organization domain, it needs to be supported by a thorough theoretical framework that can identify the complex dynamics that are at play between the multiple levels of analysis.

One possible lens that has been, so far, under-utilized in project management research is the analytical framework of Bourdieu. In contrast to both social network and supply chain analysis, Bourdieu's theoretical framework calls for a consideration of the dialectical relationship that exists between structure and interaction. This does not undermine supply chain and network analysis; indeed, as Bourdieu (1996a, p. 132) himself explains, a study of organizations must necessarily entail an analysis of networks as this may lead analysts 'to construct the network of the objective relations among establishments that, like heavenly bodies belonging to the same gravitational field, produce effects upon one another from afar'. However, further understanding of these relations requires an expansion of the analytical framework to include the context of institutions, including rules and roles (Salancik, 1995, p. 2), the definition of regularities and rules (Bourdieu, 2005) and the truth of the exchanges, which will always be found, at least in part, beyond the interactions themselves (Emirbayer and Johnson, 2008, p. 10). By supporting social network analysis (including studies of supply chains) with the theoretical framework proposed by Bourdieu, these studies will not only document the relationships between the external context and projects (Chinowsky and Taylor, 2012, p. 18) but also allow for exploration and investigation of the processes and dynamics that support these relationships. As such, they will not only be able to answer what exists in terms of relationships and interdependencies but also how this has come to existence and continues to sustain, and why this is so.

Bourdieu's Theory of Practice: habitus, field and capital

Before considering how project organizations may be analysed through Bourdieu's Theory of Practice, it is necessary to define his key concepts and outline the core of his theoretical framework. The theoretical premise presented in the books *Outline of a Theory of Practice* (1977) and *The Logic of Practice* (1990) represents a general theory and methodology for the study of implicit, often invisible, power structures that are embedded in society. Central constructs to Bourdieu's theory are the notions of *field*, *capital* and *habitus*, as well as *taste*, (*symbolic*) power, body hexis and doxa. The three former concepts are of particular importance to this paper.

Essentially, through the triadic concept of field, capital and habitus, Bourdieu presents a relational theory that embeds the dialectic character of the relationship between agency and structure. He argues that the social world and the subjects within it are coconstituted through dialectical relations between the objective structures and the structured dispositions that agents behold which actualise, reproduce and transform those very structures (Bourdieu, 1977, p. 3). Bourdieu's analytical framework exposes a circular relationship between different layers of social reality in which the notions of field, capital and habitus are interlinked. The relevance of his relational theory to organizational studies has been identified in past research and particular concepts are already well known in the organizational literature. The emphasis has, however, been on the concepts of field and capital-only two of his three key concepts-and the specific ways in which these terms have been applied in organizational analysis suggest that the full significance of Bourdieu's relational model is yet to be sufficiently comprehended (Emirbayer and Johnson, 2008, p. 1).

Habitus

The omission of the concept of habitus in Bourdieu inspired organizational analysis is somewhat paradoxical, considering its position as the linchpin concept of his theory (Throop and Murphy, 2002, p. 186); habitus is the concept that ties all the other elements of his framework together. Bourdieu employs the notion of habitus in his argument for the concept of culturally conditioned agency, using the term to describe enduring, learnt and embodied principles and dispositions for action. Habitus is a 'strategy-generating principle' that enables 'agents to cope with unforeseen and ever-changing situations' (Bourdieu, 1977, p. 72); it is an internalized structure or set of structures, which originates from pre-existing external structures, that guides individual practice (Throop and Murphy, 2002; Askland, 2007). As such, it refers to the generating and structuring principles and representations that produce identity, commitment, engagement and, ultimately, practice. An individual's habitus embodies her or his personal history, including social location (class, ethnicity, gender, etc.). It is developed through primary socialization, constructed and transformed through practice within specific cultural, social and historical contexts. As such, an individual's habitus will reflect the collective history of the group (or variety of group) to which she or he belongs, the social field within which she or he acts and her or his individual biography (Askland, 2007, p. 240).

Field

The term *field* refers to a relatively autonomous configuration, or network, of objective relations. It is a space characterized by a particular logic of action, by its forms of capital, accumulation of history and determinate agents (Bourdieu in Wacquant, 1989, p. 39). Every field will follow a particular set of rules, which form part of a game of power by which the members of the field act and negotiate their relations. As such, a field offers fundamental resources, values and relations that individuals use when they establish their internal perception of self and when they negotiate and transform the underlying dispositions that create meaning and practice (habitus), and it provokes expectations to behaviour, both in the present and in the future (Bourdieu, 1977). The earlier an individual enters a specific field, the less she or he will be aware of the associated learning of the 'rules of the game' and the greater is her or his 'ignorance of all that is tacitly granted through [her or] his investment in the field' (Bourdieu, 1990, p. 67). A field is a relative entity; the boundaries of a field 'are situated at the point where the effects of the field cease' (Bourdieu in Wacquant, 1989, p. 39). The dynamic principles of a field, Bourdieu (in Wacquant, 1989, p. 39) explains, 'lies in the form of its structures and, in particular, in the distance, the gaps, between the various specific forces that confront one another'. These forces are what define the specific capital of a field, the third of Bourdieu's central organizing concepts.

Capital

Capital only exist and function in relation to a particular field; as Bourdieu (in Wacquant, 1989, pp. 39–40) explains:

it confers a power over the field, over the materialized or embodied instruments of production or reproduction whose distribution constitutes the very structure of the field, and over the regularities and the rules which define the ordinary functioning of the field, and thereby over the profits engendered in this field.

There is a number of different types of capital, including symbolic (i.e. status, honour and prestige), social (i.e. valued social relations, contacts and networks), cultural (i.e. legitimate knowledge, educational qualification, language, artefacts and goods) and economic (i.e. money or financial resources). Capital, alongside dispositions and positions, shape opportunities for action. It has a determining nature for social position that influences conditions that form life experiences and practice and, subsequently, habitus (Askland, 2007, p. 241). It is, however, not a static value; individuals may acquire or expand their capital and, importantly, contest dominant species of capital.

The triadic concept: a hermeneutic circle

The triadic concept of habitus, field and capital reflects 'a sort of hermeneutic circle: in order to construct the field, one must identify the forms of specific capital that operate within it, and to construct the forms of specific capital one must know the specific logic of the field' (Bourdieu and Wacquant, 1992, p. 108). Neither field nor capital can, however, be perceived without acknowledgement of habitus, which represent a connection between the social past and the social present (Emirbayer and Johnson, 2008, p. 37). When conceived in its totality, the triadic concept provides a springboard from which organizations can be analysed through its intra-organizational structures. In contrast to approaches that theorize organizations as basic units of social structure (Davis, 2005), it enables exploration of alliances, franchising, outsourcing and temporary engagement that cross the conventional boundaries between organizations and identification of the various positions, rules and roles that underpin interaction.

Project organizations as fields: incorporating Bourdieu's theory into the engineering project organization domain

Of Bourdieu's concepts, one that has attained significant attention in organizational analysis is that of field. As Emirbayer and Johnson (2008, p. 2) explain, this 'concept has been deployed to capture dimensions of the inter-organizational-as opposed to intra-organizational-level of analysis'. In this context, the notion of organizational field (Emirbayer and Johnson, 2008, pp. 5–21) has emerged as a description of a set of organizations that are active in a recognized area of institutional life (DiMaggio and Powell, 1991, p. 64); areas such as the AEC sector. The concept of organizational field is particularly valuable in relation to the AEC sector as it is not restricted to one type of organization (e.g. architecture, engineering or construction), but rather incorporates all the organizations that are engaged in the activity in question. As such, the concept of organizational field offers a powerful tool with which understandings of the AEC organizational environment, its structures, practices and interrelations can be explored.

Organizational field: analysis of the AEC organizational environment

In contrast to other environment-level concepts (such as, e.g. organizational population, networks and

clusters), the notion of organizational field enables analysis of the social configurations in which the organizations in themselves are positioned. It allows detailed analysis of configurations that often have been designated by vague terms such as 'the economy' or 'the political sphere' as semi-autonomous fields (Emirbayer and Johnson, 2008, p. 3). A variation of the concept has been introduced to the engineering project organization domain by Scott (2012), who in his paper on the institutional environment of global construction projects speaks about the concept of 'organization field'. This concept, he explains, can be employed to 'illuminate the ways in which institutional elements operate at various levels of analysis, including that of the transnational field of GCPs and the local field surrounding specific GCP' (Scott, 2012, p. 27). It is a concept, he explains, that in various ways include arenas such as policy domains and producer markets, as well as fields of conflict, contention and bargaining that evolve around specific issues (Scott, 2012, p. 30). It encapsulates both symbolic and relational systems, horizontal and vertical relations, distant and localized influences, organizational coherence and discrepancy, emergent and established organizations, the existence of conflict and of consensus, and the effects of the wider environment on the field (Scott, 2012, p. 30).

According to Scott (2012, pp. 30-1), an organizational field is composed of a combination of three institutional elements: institutional logics, actors and governance structures. Scott's analysis of organizational field components echoes the Bourdieuian logic and the concept of social field as presented in Bourdieu's original work. The analysis does, however, fall short of the holistic and comprehensive potential embedded in Bourdieu's work due to three primary reasons. First, the categorization of the three field components as key elements of the organization field pools Bourdieu's triadic concepts under one heading and, subsequently, restricts the analysis of the dynamic relations that exist between objective structures and structured dispositions. Second, the pooling of distinct levels of analysis makes it unclear what or who carries the logic of the organizational field-the actors or the institution-and how this logic is maintained or transformed. Third, by ignoring the distinct role and the circular relationship between field, actor (habitus) and capital, the proposed framework does not further an understanding of why and how institutional logics exist, why organizational practices are the way that they are and how the relationships between the subjective and objective elements of the field move together in the negotiation of activities, power, communication, distribution of resources, etc. There is no doubt that Scott's concept of organization field represents an important contribution to existing scholarship, particularly in its potential to map different

arenas of organizational life; it is, however, primarily a mapping exercise of the local and extended networks of project organizations, which incorporates both local and global structures and stakeholders, and it does not explain the underlying processes that sustain or challenge these structures and that illuminate the stakeholders' roles and positions.

In contrast, when adopting the Bourdieuian framework in its totality, a holistic and comprehensive analysis is made possible from the notion of a field as being situated within matrices of relations (the relational context). Emirbayer and Johnson (2008, p. 6) explain that any field 'must be conceptualized as a configuration of relationships not between the concrete entities themselves-e.g., the specific organizations at hand-but rather, between the nodes those entities happen to occupy within the given network or configuration'. In organizational space, they continue, these points and positions and the forces that unite them 'together constitute (from a synchronic perspective) a structure or a temporary state of power relations within what is (from a diachronic perspective) an ongoing struggle for domination over the field' (Emirbayer and Johnson, 2008, p. 6). Part of the struggle of domination relates to who should be in the position to define the organizing principles of the field; a struggle that reflects the uneven distribution of resources (such as, e.g. political power, financial capital, access to key stakeholders, etc.) across the structure of the field. Thus, it is possible to separate between the structure of distributed resources in a field and the interactions between the actors-or organizationsthat are part of the field. It is this very distinction that adds an analytical advantage to Bourdieu's framework. His theory expands the descriptive and enumerative evocation of a field (chain or network) as the sum of the individual agents linked together by relations of interaction or cooperation, to an advancement of a field as a structural force that reflects objective relations that are 'constitutive of the structure of the field and which orient the struggles aiming to conserve or transform it' (Bourdieu, 1996b, p. 205, cited in Emirbayer and Johnson, 2008, p. 9).

Capital and field logic: analysis of organizational interaction

According to Bourdieu's theory, structure and interaction mutually presuppose each other and both should be incorporated into an analysis of organizational interaction if a comprehensive picture of the creation, transformation and reproduction of relations, value and resources is to be achieved. As part of this, there has to be consideration of capital. The structures of an organization and, more specifically, the configuration of power relations, reflect the concept of capital as relationally interdependent with that of field (Emirbayer and Johnson, 2008, p. 11). Capital in this context refers to more than material resources; it incorporates the different types of capital outlined earlier and encompasses 'a wide variety of different species of resources, convertible, in principle, into one another at different rates of exchange' (Emirbayer and Johnson, 2008, p. 11).

While the task of identifying the specific capital, its distribution and the succeeding power relations of the AEC sector as an organizational field is beyond the task of this paper, it is worth noting the implications that this argument might have to the analysis of the sector in general and project organizations more specifically. The argument poised above does, for example, allow for a more focused investigation of the structures, the objective relations, underpinning network positions. Moreover, the concept of capital and the idea of a configuration of power relation implies that capital, in whichever form, might at the same time represent a weapon and a stake within a given field. Possession of capital-whether it is financial, social, cultural or symbolic capital-exerts power or influence on the bearer; it distributes the actors (organizations or individuals) within a field along dominant and dominated poles. Tension surrounding the distribution of capital may create a space of struggle for organizational power that can prove to be significant for the contours and dynamics of a field (Emirbayer and Johnson, 2008, p. 13). What this suggests is that fragmentation, contestation and conflict-which in the project organization literature is portrayed as a problematic element of the AEC sector-may be part of the very logic of the AEC organizational field. While integration may be, as suggested in the literature, a temporary solution to this problem, it does not solve the struggle for domination, which is embedded in the field. The notion of integration addresses the question of interaction and the synchronic elements of the field, largely overlooking the issue of the underpinning, more objective, diachronic, relations.

Connected to the above argument is the need to acknowledge the integration of history and structure (Bourdieu, 1977). Fields are dynamic; they embed a motor for potential innovation and dynamism for ceaseless change (Emirbayer and Johnson, 2008, p. 17). This does not suggest revolutionary change. In fact, because of the shared interests that constituent organizations have in the very existence and stakes of the fields, fields are often characterized by outward stability and reproduction (Emirbayer and Johnson, 2008, p. 18). Thus, internal struggles and transformation will only lead to 'partial revolutions that can destroy the hierarchy but not the game itself' (Bourdieu, 1993, p. 134, cited in Emirbayer and Johnson, 2008, p. 18). Organizations that are part of a field will have particular (individual) interests, as well as shared commitments or investments. This argument represents another point in which researchers interested in the dynamics of project organizations should stop and pause. Firstly, it leads to questions over the dominating drivers of project organizations: are these the individual interests of member organizations, the unstated allegiance and investments that underpin their interaction, or both? What is the nexus between these divergent commitments and interests? Second, it raises a question as to whether or not the emphasis of conventional research on fragmentation and conflict is the result of a disproportional favouring of the individual interests of member organizations at the expense of the tacitly shared commitments and investments. Because, despite the relative pessimistic picture that is drawn of project organizations, the sector as a whole continues to deliver built assets. This is where the third of Bourdieu's key concepts-habitus-can help illuminate some issues at stake.

Habitus: analysis of project organizations as agents and as fields

Organizational practice is largely *practical* or non-strategic praxis. It is advance on the basis of predominantly unreflective premises, presumptions and valuations, and only in circumstances where there is discordance between unreflective presuppositions and objective structures will such habitual logics of response be challenged. Action is, as such, primarily driven by active dispositions that have developed through gradual accumulation of past experience (Emirbayer and Johnson, 2008, pp. 18-19). This refers to the notion of habitus, though at an organizational level. Bourdieu (1990) makes reference to such a 'group habitus', defining it as 'a subjective but non-individual system of internalized structures, common schemes of perception, conception and action, which are the precondition of all objectification and apperception' (p. 60). There are dangers associated with transferring the notion of habitus to the level of a 'class' or 'group' (Bourdieu, 1990). Nonetheless, the practice and position-taking of organizations must always, as Emirbayer and Johnson (2008, p. 19) assert, 'be understood, not as the self-expressions of a singular actor, but rather as compromise products of a whole complex of negotiations and contestations unfolding over time within that organization understood as itself a field'.

In relation to project organizations, the notion of the *organization as field* implies that, while each member organization will have their own interests, goals and plans, their actions as members of a project organization will not solely be driven by these self-interests; their

actions will also reflect their interest in being part of 'the game'. The member organizations will have their 'group habitus' that equips them to be part of the particular field (project organization). They have a 'feel of the game' (Bourdieu, 1990, p. 67), which is required for participation within the given field. It is this 'feel of the game' that bestows upon the membership organizations 'a capacity for practical anticipation of the "upcoming" future contained in the present' and it is what makes 'everything that takes place in it seems [*sic*] sensible' (Bourdieu, 1990, p. 67).

The above argument illustrates how Bourdieu's theory encompasses a notion of scaling in that many organizational fields are embedded within similar fields of even greater scope (Emirbayer and Johnson, 2008, p. 21). This notion of 'scalability' can prove to be particularly useful in relation to the AEC sector and project organizations more specifically. A project organization can at the same time be seen as an organizational field and an organization as field; that is, it is both a unit for inter-organizational and intra-organizational investigation. As such, it allows analysis of the structures and interactions of member organizations of a project organization (where the project organization represents the organizational field) or the interactions of the project organization(s) and other organizations (where, for example, the AEC sector represents the organizational field), as well as analysis of the dynamics within a project organization or within the individual member organizations.

Project organizations attain a dual role as, at the same time, agents and fields. A project organization is an agent with its own dispositions and strategy-enabling principles (habitus) that are constructed and re-constructed through practice within the field. Its life as an agent is, however, short lived due to the temporary nature of the project to which it is associated, and it is dependent on the relatively autonomous member organizations. It is the autonomy of the member organizations that makes the project organization appear as inherently fragmented. The issues of fragmentation and autonomy may, however, be translated from a problem to a quality of the project organization if it is approached as a field rather than an agent. If perceived as a field made up by a relatively autonomous group of member organizations that engage in struggles over symbolic authority and positions, then project organizations can be seen as historically positioned institutions that extend the temporal arrangement associated with a particular project. That is, the theoretical abstraction of a project organization as a field may enable analysis of the project organization as a 'black box' (Emirbayer and Johnson, 2008, p. 22), which represents a structure that exists independent of its member organizations and their relations; it may allow exploration of the objective relations that precede the project organization as an agent.

Conclusion: implications for future research

It has been our intention in this paper to explore how Bourdieu's triadic concept relates to the AEC sector, with a particular focus on project organizations. We argue that the notion of 'fields'-and its congruence with units or work constellations (within an individual firm), the firm itself, the project team(s) to which it belongs and, finally, the industry of which it is a constituent part-represents an analytical lens by which investigations into project organizations may be expanded from its conventional emphasis on processes and inter-organizational relations to intra-organizational dynamics and the more objective structures that establish the project organization as both an agent and a field. Issues related to fragmentation, power, conflict and struggle can be explored through the interrelated concepts of position and disposition, capital and habitus. Ultimately, this offers an analytical tool for the development of strategies that may enable individual firms, project organizations and the industry itself to function and grow. The notion of scaling that is encompassed within Bourdieu's theory is congruent with the scalability of the structures that are found within the industry (sometimes formal, sometimes not), subsequently allowing the nesting of these very structures and the emergence of similar structures throughout the field. It can thereby be assumed that the collective habitus of interconnected firms that operate in the construction industry as part of a multiplicity of project organizations will give rise to broadly similar outcomes (some good, others bad; some founded upon collaboration, others conflict). Collectively, this sense of a shared habitus is what defines the industry; it bestows collective, enduring, learnt and embodied principles of action upon its members.

What, then, could future research that adopts the Bourdieuian framework find and how would it expand the current level of analysis? Some potential outcomes include the following:

- Greater understanding of project complexity and, subsequently, insight into organizational dynamics and management structures that may lead to project success or failure. This would be supported by the system analytical measures that separate the three distinct, yet interlinked, elements that form part of organizational practice—field, capital and habitus—and the analytical incorporation of both synchronic (present) and diachronic (historical) elements.
- Expansion of current insight into both formal and informal relationships through the theoretical

provision of the social world and its subjects as co-constituted and the argument that social (organizational) realities are developed and transformed through dialectic relations between the objective structures and the structured dispositions of the agents (individuals or organizations). Bourdieu's overarching argument supports the development of a holistic understanding of the processes underpinning the formal and explicit goals and practices of project organizations, as well as those underpinning the informal relationships between and within organizations. It will, thus, not only identify the various agents and their relations, or web of relations, but also the more longitudinal processes through which the agents become players within the field, attain their positions, get access to resources and attain the dispositions required for (individual or organizational) practice within the project organization as a field and/or the project organizational field.

- Identification of intra-organizational dynamics that exist in dialogue with the inter-organizational dynamics, their relationships and influence on one another. This will allow further insight into organizational boundaries, the role of such boundaries in both project and organizational development, the role of individual agents and agents as groups (e.g. project coordinators, project managers, clients, contractors, designers, technical personnel, etc.), levels of integration and/or exclusion and so on. It provides a theoretical framework for understanding how relationships and boundaries are developed, maintained and transformed.
- Greater insight into collectively held principles that underpin and are used for communication, collaboration and evaluation, how they develop and why they are how they are. As such, it will support understanding of decision-making processes at various levels of the project organization. Moreover, as Beamish and Biggart (2012) contend in their discussion of social heuristics, it may support quick coordination and, subsequently, reduce coordination costs, provide justifications for actors' decisions, support an understanding of network failure or success, enable a level of predictability and make design and construction processes more manageable. In contrast to existing research that examines collectively held principles or social heuristics (e.g. Beamish and Biggart, 2012), it will not only identify social heuristics that may be used but also how these are developed, sustained and transformed.
- Determination of the dominant forms of capital, its distribution within a field and, subsequently, the

distribution of power. This would include determination of the balance of different types of capital including symbolic, cultural, social and economic —and the ways in which the various types of capital create opportunities for action and practice within the field. Furthermore, it could determine how individual organizations within the project organizational environment may change their positions over time through the synchronic and diachronic attainment or loss of capital. In the increased global or transnational environment of project organizations, this would include consideration of language skills, knowledge of local culture and local policy, extended stakeholder network, etc.

- Insight into how agents—individuals or organizations—attain the 'feel of the game' which is required in order to be a practitioner within the project organizational field or a project organization field.
- Greater understanding of the collective dispositions—habitus—driving organizational practice in the project engineering field, including how this collective habitus manifests at the pragmatic level of the AEC sector and project organizations.

Further work is required to explore how these potential outcomes empirically manifest within the engineering project organization field. When seeking to understand this-as well as the boundaries of the industry, its structures, logic, interrelations, conflict and distribution of power-Bourdieu's theory offers a conceptual framework for a multi-level research agenda. It also offers an epistemological and methodological framework that can overcome some of the dualisms of organizational inquiry, including those between subjective and objective realities (micro- and macro-level research foci), agency and structure, past and present. Moreover, through the idea of the interdependence of social determination and human agency (Tabar et al., 2010, p. 170), Bourdieu's theory and, in particular, the notion of habitus, could further our understanding of issues related to sense-making in organizations (Weick, 1995, 2001). This may provide valuable insights into aspects related to symbolic processes, rationalization, presumptions of action and decisionmaking as they form part of individual construction firms and complex project organizations.

While this paper represents the end of a thought experiment through which the relevance of Bourdieu's concepts to the AEC sector and project organizations has been explored, further empirical work is required to investigate how the concepts of field, capital and habitus manifest in more practical terms. Through multi-disciplinary enquiry, Bourdieu's theory can be integrated into a methodologically and analytically inventive approach that may yield new knowledge of and insight about a complex issue. At the time of writing, there is no planned research effort that will follow this paper, though opportunities for future research that can empirically delve into the dynamics of project organizations and the challenges the AEC sector is facing in an environment of economic, industrial and social change are explored. Such research would address the increased call for a study of the construction sector, which investigates it as a contextually specific domain and that may, subsequently, enhance knowledge of the dynamic and intertwined relationship between practice, innovation, collaboration, risk appreciation, ethics and other structural elements of the sector.

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