

**A space for reflection and learning? An investigation of  
physical, relational and existential space  
in client-consultancy projects**

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## Introduction

Project-based forms of organisation have attracted interest among academics and practitioners because of their potential to support tacit learning among project members, capitalising on the 'strength of weak ties' by bringing together people from different knowledge contexts (Sydow et al., 2004; Ibert, 2004; Schindler & Eppler, 2003; Ayas & Zeniuk, 2001; DeFillippi, 2001; Hobday, 2000; Ford & Randolph, 1992; Granovetter, 1973). By working together towards a typically explicit and finite goal, project members are deemed to achieve a degree of shared knowledge which is more difficult in hierarchical, functionally-structured arrangements where relations and knowledge bases are differentiated and separated. Indeed, the classic reason for creating projects within bureaucratic organisations is that they provide an alternative structure based on task rather than function, bringing together individuals with functionally different knowledge to achieve a common goal in a manner conducive to knowledge transfer (Ford & Randolph, 1992; Knight, 1976). Almost regardless of the degree of prior socialisation among members, the project is seen as providing opportunities to those involved for 'learning-by-absorption' and 'learning-by-reflection' (Scarbrough et al., 2004).

However, whilst the potential for project-based learning ('PBL') within single-organisation projects is generally accepted, the likelihood of inter- or intra-organisational PBL is acknowledged to be more problematic (Ayas & Zeniuk, 2001; Chaston, 1998). For example, project members may become tightly involved with each other and the specific needs of the project, and may have only 'attenuated links' with the wider organisation (Bresnen et al., 2004: 1538). One consequence of this is that knowledge shared amongst project members does not easily 'leak' to the organisation (Ibid: 1539; Tempest & Starkey, 2004). Furthermore, even within a project, there may be barriers to learning and knowledge transfer if project members belong to different organisations, occupational groups (Child & Rodrigues, 1996) or networks of practice (Brown & Duguid, 2001). Yet, it can be argued that project-based learning is critical to joint venture organisations or client-consultant assignments, for example.

The processes of PBL have been summarised by Scarbrough et al. (2004) as essentially those of learning-by-absorption (drawing on the concept of absorptive capacity) and learning-by-reflection. However, as we argue in the paper, whilst generic examples of reflective practices are given in the literature (e.g. 'collective discussions', Zollo and

Winter, 2002: 342), these descriptors in themselves do not reflect the range of interactional outcomes which might be generated. Discussions may have constructive or detrimental outcomes; they may lead to negotiated consensus or stalemate; they may build bridges or erect barriers. In other words, the existence of 'reflective practices' *per se* does not reveal enough of the content or outcomes of those practices, nor whether they are ultimately conducive to PBL. This equivocality raises the question of what influences the outcome of these project-based practices?

The purpose of this paper is to explore the 'spaces of possibility' which influence the outcome of interactions such as reflective practices' in project contexts. The empirical setting for the research was a nine month client/consultancy project. This setting was selected because management consultancy provides a classic example of an inter-/multi-organisational project, where members include both clients and consultants (and perhaps other contractors), and where it is assumed that knowledge will be acquired, co-produced and transferred *within* as well as *across* organisational boundaries in order to resolve client 'problems', generate consultancy offerings, and develop client and consultant skills (Semadeni, 2001; Hargadon, 1998; Engwall and Kipping, 2004).

Using ethnographic techniques such as observation, interview and documentary data analysis, the dynamics of the project were investigated throughout its duration as well as in post-completion reviews. This level of access provided insights into knowledge transfer in action and over time - a perspective which has been relatively neglected in the consultancy literature. Using this dataset, the paper presents examples of apparently successful as well as unsuccessful knowledge transfer. In doing so the paper explores the influence of the *relations of the knowers* and the relational 'spaces' which knowers inhabit (and create). These relational aspects of knowledge transfer are particularly significant at the pragmatic boundary, where 'knowledge is invested in practice and so is "at stake" for those actors who have developed it' (Carlile, 2004: 559; 2002).

Our analysis of the relational and spatial aspects of knowledge transfer draws on two areas of literature: firstly, that of situated learning theory with its emphasis on participation, identity and practice (Lave and Wenger, 1991; authors, 2006); and secondly, the literature on 'spaces of action' which examines the *possibilities* of action entailed in different forms of participative space, be it physical or metaphorical (Lefebvre, 1991; Homer-Nadesan, 1991; Cooper, 2005). In the sense used in this paper, space 'is much more than the container of things' (Cooper, 2005: 1693). It is

'not [a] setting (real or logical) in which things are arranged, but *the means by which* the positing of things *becomes possible*' (Merleau-Ponty, 1962: 243, emphasis added).

In this sense, our focus is on the *participative space(s) of possible actions* and the outcomes which those spaces and actions produce. This suggests that interactional outcomes (e.g. outcomes from the process of 'collective discussions') can be analysed in terms of the spaces which generated them.

Through our analysis of the case study we show that three spaces, and the relationships between them, are particularly important. Firstly, the 'physical' space which provides the physical and material resources (and the symbolic interpretation of them) for learning. Secondly, the 'relational' or structural space which represents the relationships and power dynamics between people, and which therefore shapes the possibilities for interaction and the structure of interactions that do occur. Thirdly, the 'existential' or agential space whereby individuals' senses of self-identity promote/s a willingness to give and receive new ideas and interpretations. Each of these spaces generates possibilities for learning, as well as constraints. For example, the outcome of collective discussions might be quite different (and not so reflective) if the physical space were virtual rather than face-to-face; if the individuals inhabited an existential space of anxiety rather than self-confidence; and if the relational space entailed a power relationship of subordinate and superior rather than equals. Furthermore, the interactional outcomes will themselves act as conditions which influence the (re) 'production of space' (Lefebvre, 1991). This adds a temporal dimension to the analysis.

Having briefly introduced our main themes, we now return to a review of the PBL and space literatures as they relate to this paper.

## **Project-based learning**

Projects are an important organisational form in many industries and typically share certain characteristics: a limited duration (ranging from a few weeks to several years); a specific task (after which the project will close); and the engagement of project members with differentiated areas of expertise. These characteristics are often positioned as creating advantages to the organisations which use projects, particularly in terms of the potential for project-based learning ('PBL'). For example, it is argued that projects harness the 'strength of weak ties' by bringing together people with different experiences and expertise

(Granovetter, 1973). The juxtaposition of differentiated expertise is believed to create sufficient 'cognitive distance' and promote challenging debate thereby facilitating innovative and creative thought (Piaget, 1970; Bogenrieder and Nooteboom, 2004; Nooteboom, 2004; Szulanski, 2003). The rather transient status of many projects also has political consequences. As Sydow et al. (2004: 1475) have argued, a project which is 'presented as a temporary relatively short-lived phenomenon ...does not pose the same threat to vested interests as would the creation of a permanent new department or division'. Seen in these ways, one could argue that projects provide an ideal vehicle for project-based learning (because of their multi-disciplinarity), and that the learning is less threatening and more easily assimilated into the organisation (because of the project's temporary nature). At the same time, these conditions may diminish legitimacy and credibility in the wider organisation such that 'learning' is not disseminated.

Furthermore, the outcome of project-based interactions may not be 'learning' in the positive sense that tends to be assumed. Indeed, the demands of the immediate task may take priority over opportunities for reflection, learning and dissemination of best practices (Sydow et al., 2004). What is at issue here has a resonance with the 'cognitive load' arguments of Sweller (1988) and others who suggested that the mental effort of 'doing' may leave no time for reflection or deeper understanding or changes at the level of long-term memory. Similarly, some have argued that 'the one-off and non-recurring nature of project activities' provide limited scope for drawing out any generalised principles for learning (Winch, 1997; Hobday, 2000) which can be systematically repeated and applied in new projects (Gann and Salter, 2000). Others, however, have countered that most projects do offer the potential for 'economics of repetition' (e.g. Davies and Brady, 2000).

Given these dilemmas and paradoxes, the question turns from *whether* PBL occurs (since we know from the literature that the answer is contingent and complex) to *how* it occurs. Here the literature provides some useful insights into the project processes and practices which support learning. Scarbrough et al. (2004), following a review of the literature, identified two major processes of PBL within organisational contexts: learning-by-absorption and learning-by-reflection. The first process draws on the seminal concept of 'absorptive capacity' which Cohen and Levinthal (1990: 128, 133) define as 'the ability to recognise the value of new, external information, assimilate it and then apply it to commercial ends' (see also Szulanski, 2003). What is critical is not only the exposure to new knowledge, but also the willingness and structural/resource-based ability to understand it, assess its utility, and then use it - perhaps to the exclusion of 'old'

knowledge which is now deemed inappropriate in some way (Ibid: 133) and no longer 'at stake' (Carlile, 2002). The second process identified by Scarbrough et al. (2004) is learning-by-reflection. This process 'shifts the focus from the distribution of prior knowledge to the development of reflective practices within the organisation' (Ibid: 494). The emphasis here is not so much on individual reflection by individuals (see Schon, 1983; Senge, 1990) but on the development of collective practices, be they formal and institutionalised, or informal and spontaneous. Such practices include, for example, 'collective discussions, debriefing sessions and performance evaluation processes' (Zollo and Winter, 2002: 342) and facilitate the 'articulation of implicit knowledge' (Ibid; see also Prencipe and Tell, 2001). Once articulated, such knowledge may be subjected to examination, critique and reformulation (Huber, 1999: 72). In other words, knowledge is not simply accumulated and 'assimilated' to fit pre-existing ideas and ways of thinking, but is actively 'accommodated' in ways which result in the transformation of knowledge to fit new ways of understanding the world (Piaget, 1970). Learning-by-reflection and knowledge transformation are potentially enhanced by the diversity of experience and knowledge bases among project team members. On the other hand, the cognitive and personal challenges which ensue may provoke entrenchment and rejection of others' viewpoints rather than receptivity to alternative perspectives, ideas and values (Chinn and Brewer, 1993).

Thus the literature reveals a fundamental paradox around the potential for learning and knowledge transfer in a project context. A basic assumption is that the *possibilities* for learning are created when individuals with different knowledge bases come together in a joint task or project goal, the resolution of which depends on collaboration among specialists. Indeed, it is a basic premise of constructivist theories of learning (Piaget, 1970) and the 'strength of weak ties' arguments (Granovetter, 1973) that learning is the result of accommodating new and different ways of thinking which challenge pre-existing ideas. However, realisation of that potential may be thwarted by the very differences which created it, suggesting the possibility of an 'optimum' level of cognitive and social distance at which point challenges become acceptable for consideration.

An important area of literature which recognises the value of these differences as well as the need to bridge them is the literature on 'boundaries' (e.g. Star and Greisemer, 1989). In the specific area of knowledge transfer, Carlile (2002; 2004) has synthesised much of the boundaries literature to develop a useful and important conceptual framework representing the boundaries to knowledge transfer (syntactic, semantic and pragmatic) as well as the

processes required to bridge them (transfer, translation and transformation). In explaining the rationale behind these processes, Carlile draws attention to the varying properties of *knowledge* (novelty, dependence and difference), whilst also acknowledging the agency of the *knower* by recognising that individuals may not be willing to transform what, to them, is knowledge 'at stake' (Carlile, 2002: 445). Nevertheless, in the Carlile framework as well as some of the PBL literature, there is a tendency to explain knowledge transfer in terms of the structures of knowledge and knowledge boundaries, as opposed to the spaces between those boundaries in which individuals seek to learn and articulate their knowledge.

With this in mind, this paper explores PBL by investigating the 'spaces of action' (Homer-Nadesan, 1996) which enable processes such as learning-by-reflection. Our interest in developing a spatial perspective on PBL developed as a result of initial analysis of our empirical case study data, which precipitated a review of relevant literatures. An important influence in this connection was Bradbury and Lichtenstein's (2000) advocacy of a 'relationality' orientation which 'explores the spaces between people and phenomena in organizational life' (2000: 551). Such an orientation assumes that 'the real work of the human organisation occurs within the *space of interaction* between its members' (Ibid, emphasis added). Thus, in response to a classic sociological dilemma, emphasis is shifted from structures (such as the characteristics of knowledge or of the project) to relationships and interactions. Indeed, we argue that the interactional outcomes of discussions in which knowledge is articulated and developed (or remains silent) are influenced by tensions between the spaces of possible action which prevail in a given setting, be they physical/material, relational or existential.

## **Spaces of action**

The spatial perspective has a tradition in several areas of the social sciences, including the literature on identity (e.g. Homer-Nadesan, 1996) and geographically dispersed/co-located teams (e.g. Cramton, 2001; Hinds and Mortensen, 2005). In the identity literature, for example, attention is given to the 'spaces of action' which individuals are able or want to negotiate within broader socio-cultural structures. This emphasis on the possibilities of action is also relevant to an understanding of knowledge transfer, where research is attempting to interpret why some efforts towards knowledge transfer succeed whilst others fail. An investigation of the possible spaces of action is important because knowledge transfer usually depends as much on *relational* aspects (which are relatively enduring in

their effect and therefore difficult to 'pin' to specific instances of knowledge transfer), as on the *physical/material* aspects and on the interactions where ideas and knowledge can be seen to be articulated, challenged, discussed and co-produced. Furthermore, there is an *existential* dimension which relates to an individual's sense of identity and the knowledge which is 'at stake' (Carlile, 2002: 445) and therefore tied to the expression of that identity (Lave & Wenger, 1991).

In the next section we therefore propose investigating three types of 'spaces of action' - physical/material, relational and existential. We suggest that each of these spaces - and the possibilities for action which they entail - influences the nature of project-based interactions and their outcomes. We recognise, however, that these do not constitute a definitive set of spaces. Nevertheless, we argue that each one brings important explanatory power to our understanding of interactions and outcomes. Later in this paper, in order to demonstrate the heuristic value of this spatial perspective, we (re)interpret our case material through this lens in order to help explain why some interactions (e.g. apparently 'reflective' practices) failed to generate learning whilst others succeeded in doing so.

***Physical/material space.*** This dimension refers to the physical space which individuals and groups inhabit and may share with others, together with the material objects which may become boundary objects. At a basic, tangible level, the available physical space affords different interactional possibilities: for example, whether project members can meet face-to-face in shared accommodation or whether they must meet virtually in video conferences; whether they can stop by at each others' offices on their way to get coffee; or whether meetings must be formally-arranged because of the lack of shared, proximal physical space. The physical/material space may, however, be experienced and interpreted differently by different people depending on a variety of circumstances. Whilst physical space does have an objective quality to it, its symbolic meaning may vary.

The spatial configuration will influence the nature of ensuing interactions or indeed whether they occur at all (as in the case of spontaneous encounters). They will also influence the 'richness' (Daft and Lengel, 1986) of the information which can be shared, the possibility of developing personal ties, shared identities and shared contexts (Hinds and Mortensen, 2005), and the ability to co-manipulate boundary objects. For example, some research suggests that geographically-dispersed teams with no shared physical space tend to find conflict difficult to identify and manage, with deleterious consequences for performance and group learning (Hinds and Bailey, 2003). Conflict arises because distant



team members 'struggle to come to terms with different perspectives, unshared information, and tensions between distant subgroups' (Hinds and Mortensen, 2005: 290). Furthermore, individuals tend to make negative and generalised attributions about distant colleagues where information is missing or misunderstood (Cramton, 2001). At issue here perhaps is the relative lack of shared group identity and shared context of the sort typically enjoyed by co-located teams who are able to see what colleagues are doing, understand and empathise with problems, share information, engage in 'spontaneous communication' (Hinds and Mortensen, 2005) and experience the 'noise' of the project (Grabher, 2002; see also Kraut et al., 2002). In other words, whilst physical proximity is often presumed to produce 'closeness' and collaboration, this is not necessarily the case since the *experience* of physical space is mediated by a number of factors.

***Relational space.*** The relational space describes the broad scope or structure of relevant relationships in terms of roles played and mutual expectations. The relational space creates *possibilities* for interaction by allowing access for some individuals whilst excluding others, and it also influences the structure of interactions that do occur.

The notion of relational space resonates with the concepts of 'participation' and access outlined in situated learning theory (Lave and Wenger, 1991). Here, the development of an individual's practice, and indeed their ability to do so within a wider community of practice, is largely dependent on the availability of participatory opportunities. For example, as Lave and Wenger argue in their analysis of the meatcutter community, the apprentices were unable to develop the full range of butchery skills because:

'the commoditization of labor ... transform[ed] apprentices into a cheap source of unskilled labor, put to work in ways that den[ied] them access to activities in the arenas of mature practice.' (Ibid: 76).

In a project environment, the relationships and reputations among individuals and their organisations tend to shape the way project interactions unfold and the nature of access to key individuals (Ekinsmyth, 2002). As Grabher has argued, and as we shall see in our case study, project practices and individual behaviours are 'shaped both by past experiences and affected by the shadow of potential future collaboration' (Grabher, 2002: 209).

***Existential space.*** We have so far discussed two dimensions of our proposed spatial framework: physical/material, and relational. Clearly, there is a dynamic between them: the tangible possibilities for interaction are shaped by the nature of the physical space,

whilst the ability of individuals to *access* and *participate* in those interactions is influenced by the structure and power dynamics of the relational space. For example, in a consultancy apprenticeship model, newcomers may be allowed peripheral access (Lave and Wenger, 1991) to project meetings at the client or consultancy offices where they act as note-takers but are not expected (nor encouraged) to interact fully in the discussions (authors, 2006).

However, while relational space reflects the structural dynamics surrounding a given project or knowledge transfer scenario, it is also important to consider the space of action at the intra-personal level, which we conceptualise as the *existential space*. This space reflects an individual's sense of self (derived from a multiplicity of prior experiences, relationships and cultural settings) as well as the possibilities for future interactions with others. This dynamic between self (the now) and action (the future) is reflected in Norberg-Schulz's classic conceptualisation of existential space as comprising three elements: centres, directions and areas (Norberg-Schulz, 1971, cited in Thwaites, 2001). Whilst the *centre* provides a sense of 'here I am' based on a myriad of experiences, *direction* is:

'... the awareness of continuity, connecting the centred sense of location, or the known, with the sense of the unknown, or future possibility'  
(Norberg-Schulz, 1971, cited in Thwaites, 2001: 251)

The potential *directions* for one's life (in the long-term) and one's interactions with others (in the short-term) are bounded by one's perceptions of *area* - the extent and range of possible spaces of action which one is conditioned to 'see'. From a structuralist perspective, it could be argued that an individual's awareness of available actions and directions is ultimately determined by prior relationships and what Bourdieu calls 'habitus' (1977). However, in this paper we take a more interactional view (Whittington, 1992) which acknowledges the possibility for greater discretionary action arising from tensions between structural rules, for example.

## **Interactional outcomes and conditions**

We suggested earlier that the importance accorded in the literature to learning-by-reflection (e.g. Scarbrough et al., 2004) should be qualified by an understanding of the *outcomes* of reflective practices, as well as the influences on those outcomes. We argued that reflective practices such as 'collective discussions' (Zollo and Winter, 2002: 342) did

not necessarily lead to project-based learning, but might generate a diverse range of interactional outcomes. We further proposed that a focus on outcomes would benefit from an analysis of the influences which shape them, and suggested a spatial perspective as one way of achieving this. 'Space' in the sense used in this paper is not a 'container of things' (Cooper, 2005: 1693) but is a *generative space of possible actions*. It is the tension between the concurrent spaces - physical/material, relational and existential - which influences the nature and outcome of practices such as collective discussions. Furthermore, these outcomes themselves shape the nature of the available spaces, and so on in a recursive cycle.

Having introduced the conceptual orientation for the paper, we now turn to our empirical research and begin by introducing the research methods.

## **Methods**

The findings reported in this paper are based on an exploratory, qualitative study of client-consultancy projects, from which we present data from one case study. The research used semi-structured interviews, observation and documentary evidence, enabling us to examine the processual and relational aspects of knowledge transfer *in action* and *over time*. The advantage of a case study approach is that it permits an investigation of complex systems and phenomena in ways which snapshot interviews by themselves cannot (Stake, 1995). The case presented here encompassed the span of a typical client-consultancy project, including project implementation and post-project reviews. The client ('Global') is a multinational organisation which worked with a leading strategy consultancy firm ('StratCo') over a period of 9 months with the aim of identifying strategic options for developing Global's business portfolio. The empirical setting is described in a later section.

Over the course of the research, we observed four meetings involving clients and consultant project team members. These included formal project review meetings as well as informal, spontaneous interactions. We also visited the client and consultant offices on many occasions and were able to observe their working environment. Throughout the project and in follow-up meetings, 51 interviews were conducted with client and consultant project team members, as well as other individuals with a peripheral involvement in the project. Typically, informants were interviewed several times over the course of the project, enabling us to ascertain their views on project learning and practices,

and to clarify aspects about meetings, agendas and issues which were not always evident to us as observers. Interviews lasted between 45 to 90 minutes, and the questions were drawn from a pre-designed interview schedule which was adapted in-situ to permit exploration of interviewees' unanticipated comments. The majority of interviews were recorded and fully transcribed. Interview and observational data were supplemented with documentary evidence. This included background documents, minutes of meetings, Gantt charts representing project events, presentation materials and project deliverables.

Data analysis was theoretically informed to the extent that we adopted a situated and practice-based view of knowledge and its transfer (Lave and Wenger, 1991; Orlikowski, 2002). This meant that our analytical work was already sensitised towards explaining the data in terms of constructs such as situated learning, participatory opportunities, knowledgeable practice, power relations and so on (authors, 2006). Nevertheless, although our analysis was theoretically-informed at a broad level, we sought to remain open to emerging themes and unexpected insights.

Our preliminary processes of analysis involved what Kvale (1996) calls 'categorising' and 'condensing'. *Categorising* entailed first-level (descriptive) and second-level (analytical) coding using the qualitative software tool NUD\*IST NVivo, supported by a code-book developed using guidelines recommended by Boyatzi (1998). In all, 128 codes were developed during this period of analysis, grouped under 18 tree-codes such as 'relationships', 'identity' and 'project background'. *Condensation* entailed the creation of summaries for each piece of data (e.g. each interview) and the accumulation of research memos on contextual aspects of the case such as person-profiles and event-timelines. These were amalgamated to form a research case pack. By combining the two analytical approaches of categorisation and condensing, we were able to continually iterate between 'in-detail' and 'in-context' levels of analysis. The case pack and NVivo-coded data were thus complementary in several ways, and formed a basic set of materials which could be discussed, shared and further analysed within the research team. Furthermore, given the exploratory nature of our research, our initial interpretations were regularly discussed with the case study participants to ascertain their reactions and reflections.

## **Research setting**

The case discussed in this paper involved a strategy portfolio review by a multinational client (Global) and a leading firm of strategy consultants (StratCo). Global were regular

and experienced users of consultants. Their preferred strategy consultancy was PrimeCo, another leading firm and StratCo's direct competitor. However, for this particular project - initially a 12-week review of strategic options at divisional level (e.g. whether to invest in, or divest, business units) - Global selected StratCo to gain a second opinion on recently-completed work by PrimeCo, and to try out their potential to produce strategic insights at the divisional level. From the beginning of the project, StratCo felt they were 'on trial', even though they regularly worked with the client at a lower, business-unit level. Indeed, the StratCo partner responsible for this client boasted that he was 'more [Global] than they are' and could tell the head of corporate strategy a few things about his predecessors and role.

The project team initially comprised eight StratCo consultants (1 partner, 1 project manager, 2 principal consultants, 4 junior consultants) and 6 clients (1 project manager and 1 strategic analyst in the corporate strategy unit, and 4 representatives from the business units). However, whilst only one of the consultants was part-time on the project, all of the clients retained substantial responsibilities in non project-related tasks. This significantly constrained the possibilities for interaction as shall be discussed later in the paper, particularly as the two sub-teams were not co-located but had to rely instead on email or telephone conversations or on irregular meetings at the client or consultancy offices. Furthermore, access by the project team (both client and consultant) to the divisional director (and therefore primary decision-maker) was limited largely due to his preoccupation with more pressing strategic issues, especially early on in the project. This meant that at critical decision points, for example whether to focus on strategic options for corporate growth or for cash flow improvement, he was unavailable or unwilling to give a 'steer' to the project team. This generated a sense of uncertainty and ambiguity about the type of strategic options which might be appropriate and which could therefore be recommended to the director and his senior management team.

The mechanics of the project involved iterations between data analysis, interpretation and recommendation. Analysis involved gathering financial, econometric and market data, and applying mathematical models. The models examined what-if scenarios using econometric assumptions (such as market growth-rates) and a range of 'lenses' which allowed the project team to interrogate the data and to ask questions such as 'what's the impact on cashflow of option Z?'<sup>1</sup>. The choice and design of appropriate lenses was considered by all parties to be critical since the lenses were the realisation of insightful strategic questions about the direction of the organisation. Indeed, Global urged StratCo to be even

more innovative in the design of lenses to enhance the evaluation of strategic options. To some extent, StratCo were successful in this; for example they developed an Urban Wealth Index lens to correlate geographic areas of wealth with geographic usage of Global's products - a lens which generated important insights for the client. However, in other respects (as in the 'conceptual framework' example described below) StratCo were perceived as lacking the capability to develop enough rigorous and insightful lenses. In spite of these difficulties and the lack of a conceptual framework to integrate the various lenses, the project team developed a series of strategic options which were later presented to the divisional director and his senior team for discussion and prioritisation. Following this meeting and the approval of the options list, StratCo were employed for a second phase of 6 months' duration in which to investigate the chosen options in greater depth.

The Phase 2 project team comprised many members from the first phase except that the client and consultancy sub-teams were now lead by new project managers. To a large extent, Phase 2 entailed a repetition of previous work, though at great depth and with more frequent iterations with co-opted (and part-time) senior managers from each business unit. Indeed, after a while, the 'core team' - client/consultant project managers, senior client managers and other project members as needed - met every fortnight in order to review progress, give strategic steers, and guide the full-time team members about the direction of their work. The client project manager, who had witnessed several such strategic reviews whilst employed at Global, became convinced of the need to routinise aspects of the strategic review process so that it could be repeated relatively simply in later years. She developed the idea of creating a 'toolkit' of the procedures, models and lenses used, and hoped to encourage the client senior managers to adopt the language (and implicit ways of thinking) used in the current project. However, as we shall see, this goal was not realised in the way originally envisaged. Nevertheless, judged against the original goals, the project was ultimately judged to be successful: it produced an analysis of the strategic options available to Global in a manner which allowed the divisional director to make decisions around implementation. Besides, an evaluation of 'failure' would have been costly to all concerned.

Over the course of the client-consultancy project, a number of knowledge transfer scenarios were identified which were either articulated by the research participants or observed during our research. The examples are not intended to represent a final or definitive list of all the learning which occurred, but they reflect key instances which became evident as part of our research. For simplicity, we present these examples in two

ways: firstly, each example is briefly described in the form of a mini-vignette; secondly, we analyse the examples to illustrate the influences of the physical/material, relational and existential 'spaces of action'. The first iteration is organised by *example*, and the second iteration is organised by '*spaces of action*', thereby allowing us in the (second) analytic section to draw on previously-elaborated examples.

## **Examples of knowledge transfer**

As discussed in the previous section, we now describe five illustrative examples of knowledge transfer (successful and unsuccessful) which reflect key instances of learning identified by participants or by ourselves using research methods set out earlier.

### ***1. Incremental lenses***

The client wanted '*new lenses beyond the usual business mind*' with which to analyse the corporate portfolio and develop insights about new strategic options. The consultants provided several lenses such as the Urban Wealth Index which the clients found useful. The clients were able to *translate* the new lens to suit their strategic needs and to generate insights. However, the clients did not *transform* the way they viewed their portfolio.

"It wasn't a case of replacing the other lenses, but it was an increment - another way of looking at our portfolio". [Client]

### ***2. Conceptual framework***

The client managers understood how to use the lenses individually, but not how they could be incorporated into a single 'conceptual framework' and then used to support high-level strategic decision-making.

"We should have done a better job in connecting the dots. The conceptual frame of this whole analysis is not really clear, still. It's a variety of lenses but there's nothing holding them altogether. There's no overarching concept. It's much more data driven. Right into the detail". [Client]

However, the consultants seemed to prefer to avoid ambiguity at formal workshops. This meant they did not generate debate and decision-making among client managers about how to integrate the lenses to produce a single conceptual framework representing a coherent strategic direction.

### ***3. The knowledge transfer 'toolkit'***

The client project manager in Phase 2 wanted to 'capture' the learnings gained from the project and asked the consultants to codify this knowledge into a CD-ROM 'toolkit' containing analytical models, information about the 'lenses' and so on. She hoped that the client managers would begin to adopt the language and concepts used in the project and use them in their future strategic decision-making.

"We're trying to get the business managers to start owning this and not just to see themselves as the recipients of the output of this analysis. So [we want them] to actually get involved in the construction and the validity... That's the model that I'm still trying to encourage in a very implicit way. I haven't really told the team this is what's going to happen." [Client project manager]

However, few client managers adopted the Toolkit as a comprehensive package. They participated in the project more as recipients than as initiators of a Toolkit. Their motivation to champion the toolkit was limited.

### ***4. 'Primary owner' lens***

The client were interested in the consultants' use of the term 'primary owner' of a resource which apparently gave them new insights into how to view their strategic portfolio. The clients asked for a briefing document about the concept (e.g. what it meant, and justification for its use) but the consultants did not respond to the request.

A junior consultant later told the researchers privately that the concept was only a basic economic term. A Websearch for the term revealed that it may have originated from a competitor consultancy firm.

Consultants seemed reluctant to admit that their conceptual idea was just a generalised economic idea - and one that probably originated from a competitor. The existential concerns of the consultants seemed to lead them to 'drop' the concept rather than admit that they themselves did not have a clear and succinct definition and understanding of it.

The clients were unable to grasp the logic around the 'primary owner' concept and so did not adopt it as a strategic lens.



## ***5. Knowledge transfer between consultants***

During the project there were several instances of consultants learning from each other especially through coaching and mentoring interactions. For example, the project manager in phase 1, who had considerable experience with the client, coached the phase 2 project manager about how to handle the relationship with the client project manager, after there were initial frictions in the relationship.

The consultants shared a semantic understanding of the project which created a platform for coaching/listening interactions. Their mutual interests and apparent acceptance of hierarchical relationships created a relational space in which the advice was accepted and put into action (thereby bridging the pragmatic boundary)

### **Analysis and discussion of the case**

In the preceding section, we examined five instances of knowledge transfer (as well as failures) which had been articulated by the research participants and/or identified as part of our research methods. In this particular case study, the barriers to knowledge transfer tended to be at the semantic and pragmatic levels. By contrast, the social and educational similarities (authors, 2006) and longer-term relationship between the client and consultant had the apparent effect of reducing the likelihood of syntactic (and to some extent, semantic) boundaries. However, as we argue later, syntactic barriers remained in the sense that client and consultants were not always able even to get to speak to each other. This was partly due to the absence of co-located physical space, and partly because the consultants were relatively peripheral to the Global divisional director's day-to-day activities, thereby reducing the possibility for regular and informal communication with a key decision-maker.

Having described and introduced the five examples, we now re-analyse them within the overall context of the client-consultancy project. In doing so we use a spatial perspective to see what further insights can be gained about how the spaces of possible action shaped the interactional outcomes. We do this by considering each of the three spaces in turn.

***Physical/material space.*** In the case study, due largely to the confidential and commercially-sensitive nature of the project, the client and consultant sub-teams worked in separate locations and came together only occasionally in impersonal conference/meeting rooms. As one consultant explained, this had the effect of creating a

more formal 'transactional' as opposed to 'partnership' atmosphere. One effect of this was that consultants sometimes seemed anxious to avoid client contact unless they had something concrete to contribute. Indeed, in the early weeks of the project there were few client-consultant interactions, much to the concern of the Global project manager and, later, the StratCo project manager who joined after two weeks. As predicted by and drawing on Cramton (2002), the Global client was inclined to interpret the consultants 'non' interactions rather negatively, since he had limited observable, situational information to go on. As he later explained:

I was kind of getting a little nervous because I wondered "what are they actually doing all day?", while they were just crunching away [at the numbers], soaking it all up ... They just seemed to need time to gain confidence and [then] start making statements and suggestions. [Global project manager, Phase 1]

It seems that the consultants, in those first weeks, were anxious to delve into the data analysis in order to understand it and then make insightful interpretations, but were reluctant to raise their heads until they were fully conversant with it. Their concerns to present themselves as competent, intelligent consultants (which relates to our notion of existential space) seemed to generate a reluctance to open up a dialogue with their client. This situation was changed only when StratCo's project manager - who had a prior relationship with some of the clients and felt more secure in his position - joined the team and insisted that his consultants create points-of-contact with their opposite number. Thus the lack of co-located space created a transactional relationship which produced formal interactions. In an iterative way, the formal tone of these interactions generated an apparent diffidence among the junior consultants (who were without their project manager in the early weeks) such that they actively avoided interactions until they had fully analysed Global's financial data. This practice ostensibly changed once the StratCo project manager joined the project. He commented 'I am asking each of them [in the StratCo team] to talk to their point of contact for the streams of work and I said "I don't care how you do it but go and do it", and they're doing it'. In spite of this intervention, the tentative nature of the consultants' interactions persisted throughout Phase 1 of the project. As another client commented:

[StratCo] are very concerned about their air-time and want to say something where the client will think, "OK, that's great". ... They teach

these guys to say open their mouth only when they really know something.  
[Global analyst]

The lack of informal physical space may also partly explain the perceived failure of the consultants to develop a conceptual framework to integrate the lenses used for the strategic analysis (example 2: 'no conceptual framework'). The consultants claimed that the required discussions would be too lengthy and ultimately unproductive. However, another interpretation is that the consultants were reluctant to lobby for informal workshops (where the conceptual framework would have been discussed, negotiated and shaped) because these represented high-risk interactions which might produce chaos and disagreement, leaving them to appear as incompetent facilitators. Their sensitivity was particularly acute given their knowledge that they were 'on trial' viz-a-viz their competitors PrimeCo, and were therefore in a subordinate position.

***Relational space.*** The relational space which influenced the interactions between Global and StratCo was dominated to a large extent by structures of dependence/independence. Global were using StratCo on this particular project partly in order to 'test' their capabilities and compare them with those of StratCo's competitor, PrimeCo. Global were in many respects the dominant player in the project, knowing that they could turn to PrimeCo in future dealings; however, they became increasingly depending on StratCo as the project (and time) progressed because of the potential cost of re-contracting the work with PrimeCo if StratCo withdrew or were fired by Global. Nevertheless, in the short duration of Phase 1, StratCo operated at the periphery relative to Global's senior management team, and even relative to the client project team since their time was frequently diverted towards other, 'more pressing' client business. They participated not as partners at the heart of the client organisation, but more as transactional contractors at the periphery. This positioning influenced their ability to understand the strategic context for their work, especially as they had relatively few close relationships at senior executive level with whom to explore and test their tentative ideas.

To some extent, as we discussed earlier, this was also a consequence of their own reluctance to countenance more 'open' and informal interactions which carried the risk of exposing their potential inability to bring the project to a fruitful close. In other words, the nature of the relational space meant that the consultants perceived their range of possible actions to be relatively limited: they were 'on trial' and therefore reluctant to risk a wrong move. The consultants' relationship was starkly different from that enjoyed by at least one

senior executive at StratCo's competitor, PrimeCo. One PrimeCo partner had such a close and long-standing relationship with Global's CEO that the two of them scheduled regular weekend phone calls so that they could discuss various aspects of Global's strategy.

The perspective of relational space also sheds light on the limited success of the Global project manager in Phase 2 to transfer the project-based learning into the wider organisation (example 3: 'Toolkit'). On the one hand, the project manager managed to arrange for the consultants to document their analytical models, lenses, procedures and templates, and to codify them in the form of a CD-ROM 'toolkit'. Her intention was that the senior managers in the operational businesses (and not just those temporarily working in the project team) would use the Toolkit, adopt the linguistic terms and practices implicit in tools, and then change their ways of 'thinking about strategy'. She explained that she wanted to 'try to get the business managers to start owning this [strategic review process] and not just to see themselves as the recipients of the output'. However, the business managers seemed to participate in the project more on an instrumental level, working on the project with the specific aim of completing the current strategic review, but without long-term developmental intentions to change their own business unit practices thereafter. In terms of the interactions and 'collective discussions', it was not possible to 'see' that their behaviour was only instrumental and parochial. Nevertheless, our post-practice interviews with the client suggested that whilst the Toolkit was drawn upon occasionally to locate and update the financial spreadsheets, the tools, procedures, and lexicon of the project were not widely adopted.

**Existential space.** To some extent, one can see the failure by the consultants to develop the 'primary owner' lens (example 4: 'Primary owner') as a product of conflicts of self-identity. One might have expected the clients' interest in the primary owner concept to have instigated a flurry of activity from the consultant - bringing together the requested briefing document to explain the meaning of the term and its potential application. The consultants' repeated failure to produce the requested document seems especially unusual given an albeit fairly facile comment by the StratCo project manager that 'the client is always right'. However, in this case, the consultants were apparently reluctant to admit that their conceptual idea was only a generalised notion - and one that probably originated from a competitor. The existential concerns of the consultants seemed to lead them to 'drop' the concept rather than admit that they themselves did not have a clear, succinct or proprietary definition and understanding of it. In this sense, it was their identity, rather

than their knowledge, which was 'at stake'. Their concern to present themselves as thought-leaders was given priority over the need to respond to the client.

In contrast to the apparently self-imposed reticence between client and consultant (which limited knowledge transfer possibilities), relationships between the consultants themselves (and between members of the client organisation) seemed more robust in several respects, which facilitated a degree of learning not seen at the cross-organisational (client - consultant) level (example 5: Knowledge transfer between consultants'). The interactions which appeared to be particularly productive were those between individuals of clearly distinct levels of seniority, where the authority of the senior consultants were (at least overtly) accepted. For example, the Phase 2 project manager accepted the advice of the previous project manager - a senior colleague with greater experience with Global - about how best to 'handle' the Global project manager. The advice-giving seemed possible because of the relational space where the roles of learner/novice and advisor/expert were accepted as a normal part of consultancy apprenticeship. On the other hand, the lack of conflict might be explained at the existential level by processes of identity control and regulation (Alvesson and Willmott, 2002) where the individual's space of action is constrained and moulded as 'organizational control is accomplished through the self-positioning of employees within managerially-inspired discourses about work and organization ..." (2002: 620).

We have so far outlined three dimensions which help describe the spaces of possible action available to consultants and clients as they engage in project activities. Using the example of the StratCo/Global project, we have shown how a spatial perspective illuminates and helps explain how knowledge is developed and transferred (or not) across organisational boundaries and across knowledge boundaries (syntactic, semantic and pragmatic (Carlile, 2002). One theme arising from our analysis is that *the relational position of the 'knower'* who holds 'knowledge at stake' is as important to our understanding of knowledge transfer as are the characteristics of knowledge itself (e.g. in terms of novelty, difference and dependence, Carlile, 2004). Thus, although insights can be gained from analysing the 'boundaries' which knowledge crosses, the processes and indeed the *possibilities* of those processes occurring require a different form of analysis. In this paper, we have proposed a spatial perspective because it allows us to examine the dynamics between the 'knowers' at a physical/material, relational and existential level.

## Conclusion

This paper builds on the PBL literature by proposing that a spatial perspective may shed light on the outcomes and effectiveness of reflective practices such as collective discussions.

The importance of reflective practices is identified in recent debates which propose that knowledge transfer processes can be summarised as those of learning-by-absorption and learning-by-reflection (Scarborough et al., 2004). Learning-by-absorption refers to the process of recognising the value of new information, assimilating it, and then applying it. Learning-by-reflection is a process of thinking critically about one's experiences and about new information, and developing one's knowledge as a result. As outlined by Scarborough et al. (2004), these processes imply that the potential for learning is influenced in two ways: the distribution of prior and common knowledge within a project (and across projects in the case of projects-to-organisation learning); and secondly, the extent of reflective practices within and across projects, which may be facilitated by collective discussions, debriefing sessions and so on (Vince, 2000; Zollo and Winter, 2002; DeFillippi, 2001).

However, the PBL literature also points to a fundamental paradox around the potential for learning and knowledge transfer in a project context. On one hand, learning-by-absorption and learning-by-reflection are potentially facilitated by diversity of experience and expertise among project team members (and organisational employees in the case of cross-project learning), and by the novelty, difference and dependence of members' respective knowledge (Carlile, 2004). On the other hand, the 'challenge of difference' may also provoke disagreement, incredulity, and rejection of the novel knowledge, as individuals seek to preserve their 'knowledge at stake' (Carlile, 2002: 445) and their sense of identity (see also Chinn and Brewer, 1993).

We have suggested that one way to unpack this apparent paradox is through using a spatial perspective, and by asking, how do the available 'spaces of possible action' enable or constrain learning in spite of, or because of difference. For example, we showed how, in Phase 1 of the Stratco/Global case, the rather transactional nature of the participative space prevented the consultants from gaining access to senior managers' informal contextual insights which they needed in order to produce the requested strategic lens framework. Furthermore, their existential concerns and desire to be seen as intellectually astute meant

they were reluctant to offer tentative insights even though some members of the Global project team offered 'off-the-record' type meetings. As a result, interactions tended to manifest as formal presentation-style meetings, or as discussions where the consultants would (in the eyes of some clients) only offer ideas which were concrete and had a high probability of acceptance. By contrast, StratCo's competitor, PrimeCo, moved in a different participative space where the senior partner had the ear of Global's CEO, and where consultants were comfortable offering tentative ideas and possibilities with a view to substantiating them later.

As with all conceptual frameworks, a spatial perspective will obscure some aspects of knowledge transfer and favour others. The question of which elements are brought to the fore depends on the theoretical assumptions which inform the conceptual development. Our development of a spatial perspective builds on a number of themes including situated learning theory and physical space research (e.g. Hinds and Mortensen, 2005), and so tends to focus on issues of participation and identity (the relational and existential spaces) and the influence of physical space. As demonstrated in our empirical research, these 'spaces' can be usefully constructed not solely as 'containers', but as spaces of *possible actions* which therefore shape the nature and outcome of interactions in project and other settings. A spatial perspective thus helps to explain why some interactions are detrimental to learning, whereas others are more successful in promoting knowledge transfer.

We suggest that further research to elaborate and refine this spatial perspective will generate additional insights into the dynamics of project-based interactions and learning.

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<sup>1</sup> For reasons of confidentiality, details about the models, lenses and strategic options relevant to this project have been changed.