Loughborough University
Institutional Repository

Methodological considerations of the project management of a hospital project within a practice order network

This item was submitted to Loughborough University's Institutional Repository by the/an author.

Citation: O'KEEFFE, D.J., THOMSON, D.S. and DAINTY, A.R.J., 2015. Methodological considerations of the project management of a hospital project within a practice order network. IN: Chan, P. (ed.) Proceedings of the Annual Engineering Project Organisation Conference, Edinburgh, 24-26 June 2015.

Additional Information:

- This is a conference paper. The conference website is at: http://www.epossociety.org/EPOC2015/

Metadata Record: https://dspace.lboro.ac.uk/2134/20044

Version: Published

Publisher: The Engineering Project Organization Society (EPOS) © the authors

Please cite the published version.

METHODOLOGICAL CONSIDERATIONS OF THE PROJECT MANAGEMENT OF A HOSPITAL PROJECT WITHIN A PRACTICE ORDER NETWORK

D. J. O'Keeffe, D. S. Thomson and A. R. J. Dainty

School of Civil and Building Engineering, Loughborough University, LE11 3TU, UK

Abstract: Practice theory offers numerous theoretical affordances, especially to practitioners and researchers of project management who seek alternatives to the problematic assumed universality of 'traditional' theoretical perspectives. However there is several disagreements left unresolved in practice theory methodology that risk compromising its full potential. Illustrated by an on going, praxiographic study of the practice of project management of a major UK National Health Service (NHS) hospital project, Schatzki's notion of site ontology is drawn upon to implement a research strategy that contributes to resolving such disagreements. It is argued that whilst practice theory methodology ought to be ontologically coherent and contextually driven and, therefore, shaped by the research questions and aims, it is also important to constantly reflect dialogically on the relationship between the particular practice theory used and the phenomena being observed. In addition to adding to the extant literature on the conceptualisation of project management as a practice the study's primary contribution is to identify and examine some of the methodological implications to those who want to use a practice theory approach in consideration of the resolution of its contested methodology.

Keywords: Methodology, project management, practice theory, praxis, teleoaffective structures.

INTRODUCTION

The continuing failure of large publicly funded national building, infrastructure and IT projects has led some commentators to conclude that such projects "never go according to plan" (Financial Times, 1999) or are "Over budget, over time, over and over again" (Flyvbjerg, 2009). Critical authors from the so-called 'Scandinavian School' (Sahlin-Andersson & Soderholm 2002) identify the lack of empirical studies and the assumed universality of project management theory as major deficiencies in the improvement efforts made to address such failures.

A practice theory perspective is investigated as an alternative representation and theoretical approach for improving project management practices within these regimes. Adopting a practice theory perspective could avoid many of the irreducible dualisms (such as actor/system, social/material, body/mind and theory/action) that describe the social world yet remain unresolved in traditional perspectives (Nicolini, 2013, p.2., Corradi et al. 2008). A practice theory perspective considers the experience of a social entity (e.g. a school or hospital) to be the outcome of a complex, interconnected world comprising activities in various states of 'becoming' (Nicolini 2013, p. 2) rather than the outcome of systematic processes with defined boundaries. At its core practice theory is concerned with pragmatic considerations such as the "centrality of ways that people make sense" (Clegg et al., 2011, p.

35). Although the use of practice theory to study organised activities has been growing since the 90s (Reckwitz, 2002; Schatzki, 2002; Schatzki et al., 2001), its application to the project management of construction remains nascent (Winter & Smith 2006; Bresnen 2009; Bresnen 2007; Askland et al. 2013; Marshall 2014).

A practice theory perspective has the potential to grant access to the 'actuality' (Cicmil, 2006) of project management "in flight" in two distinct and beneficial ways. First, it can sensitise project managers to phenomena that are not emphasised by traditional project management paradigms. Second, it can sensitise project managers toward a deeper, reflective understanding of the dynamics of the practice of project management in ways that the rationalist, deterministic and positivist project management processes overlook. It is argued that in the often messy day to day world of project management, often constrained by conditions of bounded rationality, satisficing (Simon, 1972) and use of power (Clegg, 2010) the alternative use of a practice theory perspective can address the shortcomings of such rationalistic management processes.

A practice theory approach to project management shifts away from such rationalism to a conceptualisation of project management as a practice of knowing. Instead of considering project management knowledge, *a priori* as the primary instrument available to inform action, a practice theory approach argues that it maybe more useful to think of project management as a process of knowing involving the articulation of project management knowledge recursively and as intertwined with knowing derived from actually doing project management rather than as a pre-conditioning predecessor to the other. In other words a practice theory approach allows us to think of project management not just as a process, but as something that project managers *do* and in *doing* know and learn the practice of project management. Such a practice theory approach which regards project management as a dynamic practice of knowing however requires an understanding of the relationship between the ontology of project management, prepositional knowledge, know-how, teleology, and doing. The following discussion is likely to interest those who take a critical perspective, including those who draw on critical management studies in wider organisational and societal contexts (Hodgson and Cicmil, 2006) and those who more generally find themselves dissatisfied with traditional theoretical perspectives and seek an alternative qualitative approach based on the 'actuality' of day to day project management activities.

Whilst a practice theory approach has significant potential, much of the literature on practice theory methodology is nascent and contested (Schatzki, 2002, pp. xvii-xviii; Hirschauer, 2005; Halkier et al., 2011, p.6; Nicolini 2013), remaining preoccupied with abstract ontological and epistemological contemplations and providing only limited insight into the intricacy and the 'nitty gritty' of actually doing practice research (Pink, 2012; Littig 2013). Such concerns raise questions, amongst others, about what differences, if any, to research processes does it make if a practice theory is employed.

This contribution is primarily confined to identifying and examining the methodological implications to those who choose to employ a practice theory approach and to consider the resolution of such concerns. To do this, notions and terminology, derived from dense theoretical accounts of the nature of practice theory are used to provide an argument which is used to advance a research strategy for use with a practice theory perspective (referred to from here on as 'the Strategy') that attempts to address the above methodological concerns.

This paper tackles these concerns in two parts. Part 1 develops an argument for the basis of the Strategy, advancing the case for praxiography derived from the distinguishing features of practice theory perspectives. Part 2 illustrates the theoretical implementation of

the Strategy. This is done in Part 2 by mobilising Schatzki's 'site ontology' as an example of a particular practice theory (Schatzki, 2002, 2005, 2010). Whilst the paper is largely focused on the methodological implications and challenges that arose from deciding to use a practice theory perspective, the use of Schatzki's practice theory is illustrated empirically by applying it to the project management of the design and procurement phases of a privately financed major NHS acute hospital in Scotland.

PART 1: AN OUTLINE TYPOLOGY AND DISTINGUISHING FEATURES OF PRACTICE THEORY PERSPECTIVES

Within the dense corpus of practice theory literature, at least two non-exhaustive outline typologies are available[1], one from Schatzki, based on the underlying theoretical basis of the particular practice theory (Schatzki, 2001) and one based on an analytical framework highlighting the relational thinking in practice theories from Carlisle and Østerlund (2005). Schatzki's typology has four categories; philosophers (such as Wittgenstein, Dreyfus, or Taylor); social theorists (Bourdieu, Giddens); cultural theorists (Foucault, Lyotard) and theorists of science and technology (Latour, Rouse, Pickering). Carlisle and Østerlund identify seven attributes of relational thinking in practice (2005, p.93). It is also possible to distinguish two 'waves' or generations of practice theorists. Whilst the first generation, led by some of the foremost theorists of the twentieth century (e.g., (Bourdieu, 1997; de Certeau, 1984; Foucault, 1979; A Giddens, 1979;1984)), laid the foundations of what we now regard as contemporary practice theory, the second generation is currently testing those foundations and building new extensions to the theoretical edifice (Ortner, 1984, 2006; a. Reckwitz, 2002; T. Schatzki et al., 2001; T.R. Schatzki, 1996; Warde, 2005). In the wake of this second wave, practice theory is being put to use across in a wide variety organised activities[2].

Practice theory is markedly different from 'traditional approaches'. Practice theories can also be distinguished ontologically from traditional approaches by their claims regarding what constitutes social life and where it is located (Reckwitz, 2002; Schatzki, 2005). They claim that social life is not located solely within cognitive processes, communications (i.e. 'sayings') or interactions (i.e. 'doings') but instead that social life and practical wisdom are both *intertwined* with routinised actions, networks and arrangements of things including artefacts (such as the use of projectors and computer generated images) and the performativity of humans. The term 'practical knowledge' considers knowing to be bound up with action and vice-versa: knowing and doing are considered ontologically equivalent but analytically different.

Practice theories further distinguish themselves by their heterogeneity. A unified, single corpus of practice theory (Schatzki, 2002) cannot exist because, within such a corpus, individual practice theories would embody incompatible ontologies. This has significant methodological implications for practice theory driven research.

Practice theory perspectives offer numerous views of social and human phenomena (see Nicolini, 2009, pp.3-8, 27-28) that privilege the Aristotelian concept of phronesis as a way of knowing and as a form of wisdom. Phronesis is a quality of mind (a virtue) that refers

---

[1] For a useful further classification of practice theory, based on methodological distinctions and thus relevant to the aims of this paper see Nicolini (2013)

[2] For example published studies in cooking, telemedicine, teaching, business strategy, hiking, family photography, consumer studies, information transfer studies, herb production, and on-line trading to mention but a few.

to practical wisdom whose aim is to produce action (praxis) that is informed by purposeful and value-driven deliberations. Phronesis has distinctive features that underpin practice theory.

Practical wisdom is enacted by determining a morally right action in a specific situation. The interplay between actions that might apply to the situation and the situation's unique features must be reflected upon (Johannessen, 1990). Further, practical wisdom is both distinct from and irreducible to theory: it is primarily concerned with the particular - not, in Aristotle's words, with "open-ended contemplation about the universals" (Aristotle, NE, Book VI). Practice theory perspectives always foreground activity and performance in the study (e.g. the constitution, development, diffusion, sustenance, and demise) of practices. It is the *'doing'* that is the basis of analysis: i.e. the practices not the practitioners involved. Practitioners 'carry' the practice (Reckwitz, 2002). Practice theories are therefore primarily concerned with action and how things get done.

Methodological Considerations Of Practice Theories

The heterogeneity of practice theories creates the opportunity for a 'programmatic' methodological approach (Nicolini, 2013, p. 215). Different methodologies can be applied in combination as the researcher's understanding reflexively develops. This heterogeneity also has epistemological significance; practice theories are not restricted to a certain methodology and a pluralistic methodology will almost always be necessary. Situation-appropriate methodologies strive to reveal the tacit knowledge enacted in observed phronetic reflections; a difficult task given that such knowledge is not exposed through discourse, speech or signifiers. Gheradi (2000) points out that tacit knowledge manifests itself during 'moments' when ongoing practice is disrupted somehow, such as when is a breakdown in the ongoing, pre-reflexive quality of practising. Beech et al. found that "arresting moments" (2012, p. 267) were preceded by increasingly intense divisions between anticipated and encountered practices, during which practitioners experienced increasingly entrenched views and heightened emotions. Thus, developing a methodological sensitivity to 'arresting moments' may provide valuable insight into tacit knowledge by understanding the localised, situated knowledge through which it is revealed (Yanow and Tsoukas, 2009). This is illustrated (within the space constraints available) in the empirical examples below.

A second methodological implication of practice theories is the need for revealed knowledge to be interpreted by the researcher. Interpretation is the perspective by which humans make sense of something in its context using subjective reconstructions of the actions of others. Epistemological complexity arises because practice theories themselves consider objective, unmediated interpretation to be impossible. The researcher is subject to the Kantian notion that new knowledge is always mediated by *a priori* knowledge an implication thereof being the need for the researcher to be both aware of and to continuously reflect upon the influence of such mediation reflexively.

A corollary of the inaccessibility of tacit knowledge is that any expressed representation of it also requires interpretation and reflexivity. In other words, articulating and foregrounding practice requires a material activity and surrounding discursive work that is of itself, another practice (i.e. the researcher's interpretation). As Nicolini (2009, p. 4) points out, studying practice always requires the scrutiny of two practices at the same time: the epistemic practice and the 'what' we are concerned with.

The Case For Praxiography To Build A Methodological Portfolio For Practice Theory

Adopting Mol's (2010) suggestion, 'praxiography' is used in this discussion to signify the distinctiveness of practice theory driven research in comparison to more traditional mono-

methodological approaches. Praxiography is the immersion of a practice theory driven researcher into the *praxis* of organised activity and its situated setting. The term also signifies the distinctive type of emic research developed below. This development will locate the particular methodology used in conjunction with Schatzki's particular practice theory.

Whilst there are resemblances, praxiography is distinct from ethnography in several respects. The term recognises and draws attention to a shift in understanding and use of theory such as that resulting from the adoption of a specific practice theory. Doing practice theory shifts traditional conceptions of the role of theory. Theory is used in practice theory as a means of sensitising and as a 'mode of engaging with the world' (Mol, 2010). This departs from the role of theory as used in, say, a traditional laboratory experiment as abstract laws or concepts that can be falsified or proven. Instead, a continual dialogical engagement with theory through all stages of the researcher's study continually orientates the methodology towards investigation of practices and their connections (Zundel and Kokkalis, 2010). Thus, ongoing dialogue between theory and observation is one of the means available to praxiographers for investigating practices and the claims made about them (Baxter and Chua, 2008).

Praxiography also resonates with Pink's critique that ethnography based on social interactionism is inadequate for the study of everyday life. Such approaches remain distanced from, rather than reflexively situated in, practices (Pink, 2012). "Participant objectivation" is a form of epistemic reflexivity that Bourdieu (Bourdieu, 2003) considered essential for avoiding scholastic bias and fostering relevance to practitioners (Splitter and Seidl, 2011, pp. 100-108). It must frame the researcher's interpretation of the experiences of observed practitioners as they practice.

Recalling that practice theories analyse the 'doing' - that is, the practices rather than the practitioners, praxiography considers the analysis of practices to be the basis of analysis. Practitioners are regarded as mere 'carriers' of practice (Reckwitz, 2002). Shove et al. suggest that a practice can be considered either "a recognisable conjunction of elements consequently figuring as an entity" (i.e. practice-as-an-entity) or a performance (2012, p. 7). The latter conceptualisation provides dimensions of doing for analysis: time; time-span; the presence and reproduction of patterns; and the interdependencies between elements (i.e. materials, competencies and meanings).

Documenting practices is another concern of praxiography. Given that they represent a fracture in routine practice and are thus bound up in multiple tensions and meanings, writing-up arresting moments and the context from which they emerge is challenging. Within the constraints of prose, the researcher must capture the unfolding flow and performativity of each arresting moment as it is being studied; an analysis method that Lahlou refers to as "catching the fish and canning the fish" (2011, p. 609). The researcher must remain open to practitioners' unsettling incidents, struggles, deliberate or otherwise misunderstandings, expressions of passions, heightened emotions, and shifts in subjectivities if they are to remain sufficiently sensitive to arresting moments and able to illuminate and animate them sufficiently for a reader to appreciate their significance in the unfolding practices.

The Need To Address Questions Of Coherence

Practice theory lets researchers consider new empirical examples of practices to create opportunity for theoretical innovation. Before using such opportunities the researcher must carefully consider the coherence of the ontological and subsequent epistemological basis of the selected practice theory (Dainty, 2008; Grix, 2010). The heterogeneity of practice theories

emphasises the need to understand the similarities and differences between them thereby avoiding any risk of combining different and potentially incompatible assumptions (Nicolini, 2013). If this is not done, methodological instruments could be adopted that do not cohere with the overlying ontological and epistemological stances of the selected practice theory perspective. This would, in turn, weaken the foundation of any resulting theoretical innovation (Grix, 2010). Careful consideration *must* be given to the implications of using a *particular* practice theory. The researcher *must* remain vigilant to ensuring that the methodology (chosen to guide any particular observation) and its role in praxiography remains coherent with the *particular* ontology of the *particular* practice theory selected and in addition coherent with the research questions, aims and the characteristics of the phenomenon being investigated. For the purpose of this discussion, coherence has two components: salience and congruence.

Ontological coherence: salience

Salience is defined hereafter as the need to ensure that the methodology employed by praxiography fits at all times with the assumed ontology and with the resultant epistemic consequences of the overarching practice theory perspective adopted (Dainty, 2008, p.3). As noted above, one methodological implication of using practice theory is the use of interpretation to understand observed practice phenomenon (arresting moments in this case). It follows that praxiography entails the use of, at least, a qualitative research approach; one that unambiguously involves interpretation as a means of analysing data (Dainty, 2008).

Coherence with the research questions, aims and characteristics of the phenomenon being studied: congruence

What is empirically found depends to some extent on the characteristics of the phenomenon being studied and the research intent. Following Richards and Morse (2002. p.34), the term congruence is advanced. Congruence is here defined as the need to ensure that the methodology is aligned to a qualitative research approach, is coherent with the research questions, aims and that the researcher is sensitised (Blumer, 1969) to the characteristics of the phenomenon being studied. This will invariably require that the praxiographic researcher recursively reflects upon what the research is trying to do (as it is being done) and is immersed, initially at least, phenomenologically into the practice being investigated.

In sum, here, salience and congruence are two distinct praxiographic terms concerned with different aspects of the coherence of the methodology towards respectively the selected practice theory and the research questions, aims and phenomenological characteristics of the practice being investigated. Attending recursively to matters of salience and congruence will act, whilst carrying out the research, as a mirror for the researcher to reflect upon the coherence of the research as it progresses. Doing so mitigates the risk of ontological or phenomenological dissonance whilst engaged praxiographically and permits the plausibility of the particular practice theory selected to be evaluated against the empirical findings.

PART 2: ILLUSTRATING THE STRATEGY

The first part of this paper advanced the argument that underpins the Strategy: that using a practice theory perspective not only requires consideration of a particular practice theory but also a particular methodology that is salient towards it and remains congruent towards the research questions and aims and the phenomenon being investigated. This part illustrates the theoretical and empirical implementation of the Strategy taking into account matters of salience and congruence as defined earlier. The Strategy involves two steps. These

first two are preparatory, undertaken prior to 'entering the field'. The first mobilises Schatzki's practice theory and considers its ontological and epistemological (and, therefore, methodological) implications for observing the practice of project management of a new NHS hospital during the design and procurement stages of the project. The second is concerned with the same matters but in respect to congruence. It considers the prominent characteristics of the observed phenomenon (i.e. the project management during the design and procurement stages of an NHS hospital) with reference to the research aims and the research questions.

Mobilising Schatzki's Practice Theory

The first step of illustrating the Strategy mobilises Schatzki's practice theory. Building extensively on Wittgenstein and Heidegger, Schatzki has, according to Nicolini (2013, p. 163), "offered one of the more explicit and clear illustrations of the implications of a practice-based approach". "Schatzki is a central interlocutor in current debates … on practice theory" (Caldwell, 2012, p. 2). A prominent feature of Schatzki's work is its breadth and the extent of its convincing (and, indeed, at times polemic) critique of preceding practice theory luminaries such as Bourdieu, Giddens, Taylor, Laclau, Lyotard and Chantal, to mention just a few; and of rival theories related to practice as a social phenomenon such as, for example, Actor Network Theory. For these reasons and the explicitness and clarity of his illustrations about what a practice is and is not (Cox, 2012, p. 2) Schatzki's practice theory is selected to deploy the Strategy in the field.

Introducing Schatzki's Ontology: *the "site of the social"*

According to Schatzki, the best way of approaching the topics that constitute social life (i.e. the nature of social existence, what it consists in, and how it may change) is to tie it to the "site of the social" (Schatzki, 2005). The site of the social, which denotes Schatzki's particular practice theory, resonates with the Heideggerian phenomenological concept of *Lichtung* or a clearing: as in, "the clearing in a forest". Heidegger's phenomenology (1929) proposes that, before we can discern a subject and an object, we need a context in which entities can show up and make sense. That is to say, we need certain conditions so that anything can appear or come to light at all. Heidegger contends that this context is provided by social practices: not solely by the agency of actors or their post-event cognitive deliberations. Schatzki adopts this concept. The "site of the social" recognises two important phenomena. The first is that many actions subsequently progress in response to interactions with other people, events and objects in a particular setting. Second, actions and entities encountered in sites help to mould the sense making of the practitioners that influence their decisions to act.

When applying the ontology of Schatzki's take on practice theory to any organised activity the 'site' is the context where, and as a part of which, the social life associated with that practice immanently occurs. In practice, these sites could be a kitchen, a hospital, a sports field or any other context where organised activity takes place. Schatzki illustrates the concept by referring to a university academic department as an example of a site (2005). Schatzki makes three further points about sites. First,

"Nothing hangs on the choice of the word 'site' to label this context. Usually, something's site is its place, or location: the site of a building, the site of the UN, the site of a battle. (Schatzki, 2005, p. 467)

Second, sites are not necessarily spatial

"It is important to emphasize that sites need not be spatial. Recording a student's grade, for example, intrinsically occurs as part of educational grading practices. This fact, however,

has nothing to do with the spatial properties of practices (e.g. the particular locations in objective space at which their constituent actions occur). (Schatzki, 2005, p.468)

Third, a site is a particular type of context

"A site is a type of context. For present purposes, a context can be loosely understood as an arena or set of phenomena that surrounds or immerses something and enjoys powers of determination with respect to it. Sites, however, are a particularly interesting sort of context. What makes them interesting is that context and contextualized entity constitute one another: what the entity or event is is tied to the context, just as the nature and identity of the context is tied to the entity or event (among others).

Schatzki further claims that a site context comprises a mesh of orders and practices (Schatzki, 2005). Orders are 'material arrangements' of entities (things, people, artefacts) - and that are referred to in Schatzki's later works (Schatzki, 2010) as simply as the 'arrangements' that typically would be found in any place of a given type and which constitute the organised activities of that place. This 'site of the social' has analytical and epistemological consequences for methodology.

The notion of practical intelligibility and the centrality granted to it in Schatzki's ontology

In consideration of the governance of different actions that a person may perform at any moment Schatzki grants ontological primacy to something called 'practical intelligibility'[3] - a fundamental 'watershed' feature of his ontology that he derived from Heidegger that distinguishes his practice theory from that of many others (Nicolini, 2012, p. 164). "Practical intelligibility is what makes sense to a person to do" (Schatzki, 2002, p. 75). Schatzki stresses however that practical intelligibility is a) not the same as rationality -as a phenomenon it "can diverge" from rationality and b) as a phenomenon is it not the same as normativity: "what makes sense for someone to do is not the same as or what is or what seems to be to the actor to be, appropriate, right or correct" (Schatzki, 2002, p.75). Nicolini cites smoking as an example of the latter (Nicolini, 2012). This notion is central to Schatzki's ontology because "practices constitutes horizons of intelligibility, and allow us to respond to different matters in different ways" (Nicolini, 2012, p.164). Schatzki (2002, p.75) argues that practical intelligibility is an individualist phenomenon and consists principally of the features possessed by, or that may be ascribed to, individuals such as a person's goals, affectivity and the projects/tasks that s/he is pursuing. He further argues, crucially however, that non-individualist phenomena (such as practices) determine 'practical intelligibility' by "moulding" the individualist phenomena.

Schatzki's ontology: three notions of practice

Putting "aside", for the purposes on his ontology, the "notion of practice as learning how or improving..." by repetition or development (Schatzki, 1996, p.89), Schatzki's ontology goes on to provide three notions of practice. First and fundamental he considers practice a "temporally unfolding and spatially dispersed nexus of doings and sayings" (Schatzki, 1996, p. 89). This notion "embraces two overall dimensions: activity and organisation" (Schatzki, 2002, p.71). The second considers it "that of a performing an action" (Schatzki, 1996, p. 89-90; Schatzki, 2002). The third, as an extension of his first two notions is first provided in his later writings (2010) in which he develops his ontology in detail with his ideas of time and space and in particular the relationship between activity and

---

[3] For a more detailed account of action sketched in this section see Schatzki, *Social Practices* (1996), chapters 2 and 4.

time and space. Here he refers indirectly to a notion of practice as a human activity that he considers "helps to compose a practice(s) [and] it is at once a carry on of the practice(s) involved" (Schatzki, 2010, p. 209). Schatzki considers human activity should be understood as an indeterminate temporal-spatial event[4]. Schatzki explains this notion of practice in the following terms:

"Human activity is not just an event—it is an indeterminate event (see Schatzki 2010). What I mean is that nothing regarding teleology or motivation can determine or fix, prior to activity, what a person does or why. It is only with the occurrence of activity that what a person does and why become determinate" (Schatzki, 2011, p.5).

In other words, each human activity, as an important constituent of practice(s) is "an inherently temporal-spatial happening that is not, in an important regard, pinned down by what precedes it" (Schatzki, 2010, p. x).

Practice as 'doings and sayings': linked by four 'avenues'

To be recognised (a prerequisite to the researcher's observation) as a practice, 'doings and sayings' must form a nexus. Schatzki considers a nexus to arise when practices become linked by four "avenues" (1996, p. 89) or "dimensions of the organisation of practices" (Schatzki, 2001, p.53). Illustrated in the context of project management, they are: practical understandings (such as knowing how to do things like reviewing gnatt charts, drawings and proposals); rules (such as the explicit instruments and policies that direct project management); teleoaffective structures (namely, the overarching purpose, mood or feelings linked to project management); and general understandings built from reflexive understandings and practical intelligibilities (Schatzki, 2005) developed through project management (for example, understanding how the project will impact how a new hospital can be used to treat patients).

Schatzki defines a teleoaffective structure as "range of normativised and hierarchically ordered ends, projects and tasks, to varying degrees, and allied to normativised emotions and moods" (Schatzki, 2002, p.80). 'Teleo' signifies that the practices are goal orientated and purposeful while 'affective' indicates that they matter to humans and that humans are emotionally committed to them. All practices entail "a set of ends that participants should or may pursue" (Schatzki, 2002, p. 80). Teleoaffective structures promote questions such as "where next" and "how to get there" (Nicolini, 2013, p.166). Practices differ in the sense of purposiveness and concurrent affinity for each of us. Compare, for example, cooking practices with Western child rearing practices: the former has a strong sense of purpose yet fewer feelings of affinity compared to the latter (Schatzki, 1996, p101). Collective perceptions of purpose and affinity lead to the recognition of emerging practices as socially valid, adding a normative dimension to their teleoaffective structure (Schatzki, 2001, p.53). Two further distinguishing features of teleoaffective structures in relation to the notion of practical intelligibility. First teleoaffective structures are not possessed by individuals like the practical intelligibility; instead they are properties of practices. Second, teleoaffective structures do not govern individual activity, as this is governed by practical intelligibility, as noted above.

---

[4] For a more detailed account and explanation of this term than outlined here see *The Timespace of Human Activity* (2010) Chapters 1 and 2.

The Methodological Implications Of Schatzki's Practice Theory

Having summarised the principles of Schatzki's particular practice theory (largely by examining its ontology), its distinctive methodological implications must now be considered. Schatzki's ontology exhibits commonality with other practice theories in that it affords epistemological and methodological insight by recognising that, in practice settings, knowing is not separable from doing (Nicolini et al., 2003).

Two methodological tasks are inferred from Schatzki's site ontology: the need to identify the site and the practices within it; and the need to identify the practice-arrangement bundles of which those practices are part. Arrangements - (see above) - are entities (things, people, artefacts).   A bundle is a set of linked practices and arrangements.   Schatzki contends that researchers do not need to track and register the "potentially labyrinthe complexity of bundles, nets of bundles and so on" but simply need an understanding of "social phenomena and their workings couched in terms of referring, not to details of the practice-arrangement bundles but to entire formations and their relations" (Schatzki, 2005, p. 477). This resonates, methodologically with the concept of congruence advanced earlier. Attending specifically to Schatzki's three notions of practice, this understanding can be provided by ensuring the researcher's methodology is aligned and subsequent observations are sensitive to 'doings and sayings' (recall the first notion above) in addition to the performance of embodied actions and dialogues of the actors observed (second notion). Observations must extend over sufficient time periods for the researcher to also become sensitive to temporal-spatial shifts in practices and to the opportunities presented during the actual occurrence of activities (events) to detect the motivation and teleology (i.e. an explanation of the human activities by way of their purpose) of the actors (third notion). Using Schatzki's practice theory a further methodological consideration is that the researcher's sensitivity and analytical purchase of the observations will be improved by monitoring the four avenues that cause emergent practices to become salient as nexuses and, thus, command the researcher's attention and prompt his or hers reflexivity engaged in praxiography. These distinctive features of Schatzki's ontology, together with the emphasis place on the role of practical intelligibility have particular relevance to the sensemaking actions of participants and, therefore, towards any instances of arresting moments observed in the field.

Applying The Ontology To The Project Management Of NHS Hospitals

An application of the Strategy is illustrated from an ongoing praxiographic study of a large (£250 million / €298 million) new NHS acute hospital project (hereafter 'the Project') in Dumfries, Scotland for a Health Board (hereafter the 'Board').

At the time of writing, substantive design development and procurement of the Project is nearing completion and subject to reaching financial close (i.e. entering into a contract).   Construction will commence later in the Spring of 2015. The Project forms part of the Scottish Government's ambitious NPD Programme of projects (Scottish Futures Trust, 2014). Owing to the complexity of establishing the Board's requirements, the Competitive Dialogue procurement process has been used (Office of Government and Commerce, 2008). Three bidders, each of which is a consortium (structured as Special Purpose Vehicles[5]) of

---

[5] Typically a bespoke 'Special Purpose Vehicle' (SPV) (Hare, 2013) enters into a contract with a building contractor and its supply chain of designers and subcontractors and a separate contract with a facilities management contractor. The SPV concurrently enters into a funding agreement to finance the project's design and construction and ultimately enters into a contract with the procuring public sector authority.

companies (capable of designing, constructing, financing the construction and subsequently maintaining the new hospital over a 25 year period) were short-listed at the commencement of the 36-week period allowed for the Competitive Dialogue procurement phase. This phase involved both bidders taking and developing and refining a reference design, developed independently by the Board over the course of 6 rounds of iterative monthly dialogue sessions in which the bidder's design solution have been progressively developed against predetermined evaluation criteria set out in the Invitation to Participate In Dialogue (ITPD) documentation and consequently evaluated at each round. These sessions have been audio-recorded and field work based on participant observation and the subsequent use of interview techniques such as 'interviewing to the double' (Nicolini, 2009) and confrontation interviews (Lahlou, 2011).

An initial step in the application of the Strategy begins with the identification of the 'sites' in Schatzkian terms, of project management. Following Schatzki, before we can discern a project manager as a subject and, say, an gnatt chart or organogram as an object, we need a context to observe empirically. In Schatzki's words, "Spaces *qua*[6] openings or mediums are pre-eminently qualified to be something where, and as part of which, events occur and entities exist." Project management meetings that take place during the design and procurement stages of the project constitutes such a clearing - the 'site' in which the interactions of socialised actors provides a background understanding of what counts as objects, what counts as subjects and, thereby in terms of Schatzki's ontology, what counts as real. Such meetings are but one example of an identifiable 'site'. When creating a new hospital building through structured processes of design and procurement numerous less formal project management 'sites' also exist and are available to the praxiographic researcher within established project management regimes.

This insight immediately divides sites into those prescribed and formalised by NHS Project Management Policies and others that sit outside such policy stipulations. In Schatzkian terms, all such sites humans, artefacts (man-made objects such as drawings, projectors and computers) and things (entities whose being is not a result of human activities) intertwine and mesh with each other as an example of a practice arrangement to shape project management practice; mould the practical intelligibility of the actors involved and bundle with other practice arrangements linked to project management all within a constellation of linked bundles that constitutes the NHS project and the NHS organisation which such organised activities sit.

A further matter of salience: viewing project management 'sites' within a socio-technical regime

Sensitising the research methodology towards Schatzki's ontology, Schatzki suggests that projects to be considered as socio-technical regimes[7] (Schatzki, 2011). Recalling the above discussion about the need for coherence, regarding project management 'sites' within NHS projects is therefore a further matter of salience. Described non-technically, the socio-technical regime applicable to project management sites within the new hospital project under investigation include: the Health Board client (Holland, 2010) the consortiums of companies and their supply-chains bidding to provide the project (Carrillo, 2006), external government and local authority agencies, established 'models of care systems' (Anthony & Hudson-Barr, 2004; Parand et al., 2014) for delivering healthcare services, the Health Board's suppliers, extant government regulations, the professional associations of those working in

---

[6] Read interchangeably as either 'In the capacity of; character or role of; as being or sometimes as 'an'

[7] Schatzki appropriates the notion of socio-technical regime from Smith et. al., (2005)

and providing the hospital, local industries, businesses and community groups, patient groups and their representative bodies, local infrastructure systems, other Health Boards, and other hospitals and healthcare facilities. These phenomena are either organisations, rules, or material networks. Their configuration forms a socio-technical regime is, ontologically, a practice-arrangement bundle (see Schatzki, 2005). The critical reflection on this contextual complexity is, then, that a project management policy is also subject to numerous external stipulations. Such stipulations are examined in relation to the Strategy's requirement for congruence.

Matters Of Congruency Relating To The Research Intent And The Practice Of Project Management Of An NHS Hospital

The second step in illustrating the Strategy Relating is concerned with highlighting matters of congruence of the methodology to the research intent (i.e. the research questions and aims) and to the prominent characteristics of the phenomenon being investigated - the project management of the Project. These considerations have been informed by two principal assumptions as follows.

First is the assumption that the practice of project management within a large NHS project is, by definition, a complex affair subject to numerous externally imposed constraints in addition to the above social-technical complexity. As a public-sector project, the Project's principal constraints concern: affordability; value for money; legal, technical, environmental, policy, health and safety standards; procurement processes; and delivery timescales - see for example, Scottish Futures Trust Non Profit Distributing (NPD) Model (Scottish Futures Trust, 2014).

Second is the assumption that practice cannot be simply regarded as "just what people do" in some unmediated way: such a notion is a merely a return to a naive form of empiricism (Schatzki et al., 2001). Building on the first assumption, careful consideration, therefore, of matters that are suspected of mediating the practice of project management is required. Such matters considered to date include:

● The need to be publicly accountable imposes strict budgetary, value for money, affordability and business case considerations (Audit Scotland, 2011; Scottish Government, 2014) . These mandated policy requirements, termed here as 'external stipulations' steer the project team to "qualculate" (Tryggestad and Georg 2009, pp. 970-971) the project throughout the procurement phase of the project thereby mediating project management decision-making.

● The authority and deference granted to senior clinical and medical stakeholders -see Russell et al., (2010) and Davies & Powell, (2007) - when they are participating in project management alongside highly experience project managers (Balogun and Rouleau 2007). This observation 'matters' because, in a mutually deficient way, clinicians are largely novices in project management and, to the contrary, project managers are novices in hospital operational and clinical procedures: this can incite demanding requirements for sense-making; a cognitive process that can be consciously unfamiliar to such individuals.

An Example Of Early Empirical Findings: 'Arresting Moments'

Whilst the primary aim of this paper is somewhat abstract and ontologically orientated so as to address the above noted contested methodological considerations that may limit the potential of applying a practice theory perspective toward project management,

selected examples of some early empirical findings are provided in tables 1 and 2 below.These attest to the occurrence of 'arresting moments' (see Beech et al. 2012 for a full discussion of such episodes).

Situation/Incident and context and stage of design development	Practice as associated and related to Bid Evaluation	Role of Visual Representations and other artefacts	Manifestation of stakeholder power and influence	Emotion displayed	Tactics invoked and knowledge used	Ensuing Reflexivity -new perspectives?	Comments
M&E design evaluation (during competitive dialogue phase - see stages C to G)	Building Services design integral to architectural and structural design practices - difference in views from the Board's own Estate's team and the bidder's M&E design team about the use of standards and concerns about 'profligate and over design'.	Significant especially trying to explain new systems to clinical and non-clinical staff.\n\nSpread sheets and further documentation and calculations where also provided in the course of resolving the perceived problems.	In-house Estates officer hostile to notions of output specifications and cynical of design risk transfer - convinced that the Bidder's M&E designer 'over-engineer' and are complacent and profligate - notions of 'fat-cat' engineers and wasteful duplication\n\nUse of position power	Distrust\n\nResentment of being divested of design responsibility\n\nHighly defensive\n\nStubbornness and reluctance to accept proven expertise of Bidder's M&E designers or acceptance of the bidder's need to have certainty against M&E breakdowns or situations in which the punitive payment mechanism of the contract would come into force. Failure to understand role of bidder's technical advisor who are also advising the bidder's financiers.	Use of isolated incidents and examples from entirely different projects, articulated (both in writing and speech) with great 'certainty' in a reflex manner - almost as an instant reaction.\n\nExaggerated concerns articulated to non-technically qualified but highly influential stakeholders such as Chief Executive and Project Sponsor	Demonstrates a lack of understanding of the bidding process. Refusal to accept change. Skilful responses from Bidder's designers\n\nInterviews and 1:1 discussions with protagonists to stay 'open-minded'. Efforts to instil or support further reflection involved numerous meetings with the bidder's M&E engineers - over time - several months - these malcontents became amenable to change.	Despite numerous attempts and trying to educate and resolve this issue persists but to a certain extent is also being encouraged by key stakeholders who are keen to be seen to challenge the notion of design risk transfer. The intervention of bidder's Project Director brought about an amenable change to most but not all of the malcontents.

Table 1: Examples of arresting moments as observed in relation to bid proposals for mechanical and electrical design

Situation/Incident and context	Practice as associated and related to Bid Evaluation	Role of Visual Representations	Manifestation of stakeholder power and influence	Emotion displayed	Tactics invoked	Ensuing Reflexitivity	Comments
Flat Roofs: prejudiced design evaluation examples including resistance to flat roofs and internal rain pipes	Building Whole Life Cycle Costings and established maintenance practices	Significant in terms of visual aesthics and to illustrate extent of perceived 'problems'	Strong lobbying at design evaluation scoring sessions by certain influential members of the Board's Estates representatives rejecting outright bidder's proposals for flat roofs based on unrelated prior experiences from other projects	Utter rejection of any suggestion or proposal to include flat roofs	Use of isolated incidents and examples from entirely different projects	Demonstrates a lack of understanding of the design risk transfer	Despite numerous attempts and trying to educate and resolve this issue persists but to a certain extent is also being encouraged by key stakeholders who are keen to be seen to challenge the notion of design risk transfer
				Upset			
				Stubbornness and refusal to listen to experience and track record of bidder's designers	Exaggerated concerns articulated to non-technically qualified but highly influential stakeholders such as Chief Executive and Project Sponsor	Refusal to accept that materials and technologies have changed.	
			Use of position power				

Table 2: Examples of arresting moments as observed in relation to bidder's proposals to use 'flat' roofs.

15

These example, which studies observed episodes of conflict and contestation serve to support the earlier claim that can employing a practice theory driven approach can sensitise project managers to phenomena that are not emphasised by traditional project management paradigms, namely the epistemological role of conflict.

Beech et al., found that "arresting moments" (2012, p. 267) of conflict were preceded by increasingly intense divisions between anticipated and encountered practices, during which practitioners experienced increasingly entrenched views and heightened emotions. Relations between the bid evaluation practitioners have been observed generally as episodic enacted dialogically through generative encounters. However on numerous occasions these have been disputed by 'arresting moments' (Cunliffe 2001, p. 358; Beech et al., 2012) in which previously taken-for-granted notions and beliefs become disrupted in the course of evaluating the design. It is suggested that these may represent a manifestation of instances of the practical intelligibility (as defined by Schatzki) of one practitioner acting in challenge to that of another: these instances suggest instances of what makes sense in a taken-for-granted way to one practitioner may not make sense for another. Several instances of such arresting moments have been observed involving bid evaluation. Take for example the disruption surrounding the evaluation of the mechanical and electrical (M&E) engineering proposals by one of the bidders during competitive dialogue.

...."all M&E engineers designing new NHS hospitals 'over-engineer' their designs" (Brian- a pseudonym - Head of Estates and Engineering for the Health Board)

Tables 1 and 2 provides narrative from an analysis of this episode and the other episode in terms of relations to other concurrent practices; the role of artefacts and other materialities; use of stakeholder power to pursue their own teleoaffective agendas; tactics and importantly the ensuing practical reflexivity which operated as a consensus amongst all of the participants and not just at an individual level. Specifically in the first example, the strident viewpoint of the quotation above represents the manifestation of the position power of Brian's hostile reaction to the use of output specifications and cynicism of design risk transfer: matters that are actually enshrined in the contract documents. As the discussions ensued he was increasingly convinced that the Bidder's M&E designers 'over-engineer' and are complacent and profligate - with notions of *"fat-cat"* engineers and wasteful duplication being articulated. Observed emotions included distrust of the Bidder's M&E engineers coupled with a tangible resentment of being divested of design responsibility; being highly defensive and ultimately displaying a stubbornness and reluctance to accept the proven expertise of Bidder's M&E designers. Tactics used to press his viewpoints included the use of isolated incidents of over design from earlier entirely different projects procured by the Health Board based on entirely different procurement routes. Furthermore these 'concerns' were articulated to non-technically qualified but highly influential stakeholders such as the Project Sponsor.

Another example relates to strongly entrenched views held a key member of the Board's maintenance staff evaluating the proposal of one of the bidders in relation to flat roofs and external drainpipes also during competitive dialogue workshops (table 2 refers:)

...." I don't care what the bidder's want or how good they think they are at building flat roofs - we don't want them - it's not them that has to face the Chief Executive later on"

Tactics included again the use of position power to influence others and again citing examples of problems with older projects coupled with an outright rejection of modern construction methods or the acceptance of design risk transfer. In both of these instances of 'arresting moments' further reflection and discussion ensued that eventually ameliorated these

polarised positions - in summary what was observed is conflict and emotional tension between practitioners may serve as a catalyst for new insights and epistemic value by way of potential to provide an insight into tacit knowledge by understanding the localised, situated knowledge through which it is revealed (Yanow and Tsoukas, 2009). The use of the Strategy has served to demonstrate that the Project when viewed via a practice theory perspective is, in part at least, a contested activity - and that such conflicts can in themselves reveal further knowledge.

DISCUSSION

Practice theory driven insights into the actuality of project management 'in-flight'

Within the space constraints of the paper the empirical examples illustrates, the 'actuality' i.e. those "complex social processes"(Cicmil et al., 2006, p. 675) of project management 'in-flight' capturing the *flow* of the situated event. The use of Schatzki's site ontology practice-theory analysis vividly reveals, by means of identifying those 'sites' where contested episodes unfolded, the relevancy, role and significant extent to which social interactions by way of doings and sayings of the participants and the use of artefacts shape the outcomes of such events which bear in turn directly on their outcomes. The strength of opinions and views and the affinities and emotions that surfaced from observing and such interactions supports the notion that by studying the social nature of such activities can provide insight and understanding of project management activities in real-time. Regarding the episode abductively serves as a reminder that project management activities continue, over the duration of a building project, to be an "unfolding ontology" (Knorr Cetina, 2001, p. 190).

Limitations of Schatzki's perspective: potential future areas of ontological refinement for future research into project management

In terms of potential areas of theoretical development via the dialogical interplay between the empirical findings revealed to date, the discussion below is confined to the observed limitation in use of some specific facets of Schatzki's practice theory.

Invoking practical reflexivity and the role of "arresting moments" during bid evaluation

To date, numerous other instances of "arresting moments" have been observed in addition to those presented- and whilst Schatzki refers to the role of contested relations, Beech's et. al.'s (2012) notion of arresting moments foregrounds this phenomenon, in relation to design evaluation into sharper contrast. Synthesising Beech's et. al., notion of 'arresting moments' can, it is submitted, sharpen, in this case, Schatzki's practice theory, as a contribution, in relation to the significance of contestation and conflict during episodes of practice. The study has shown that analysing such 'arresting moments' invokes practical reflexivity (Gorli et al., 2015) not only at a personal level but also between the participants. This indicates that practices are not only based on shared understandings - and points towards a more nuanced view, and one appreciates the reality that practices also include the unpredictable presence of such conflicts positively as a potentially valuable insight into the emotions and tacit knowledge of the participants. These finding warrant further investigation and provide a stimulus for the direction of future 'project management as a practice' research.

CONCLUSION

In relation to the purpose of the research: it is concluded that the theoretical argument developed for the Strategy has the potential, by using a practice theory perspective, to

conceptualise project management activities of hospitals as a practice, to reveal new insights and a better understanding of procurement evaluation activities than that those afforded by traditional deterministic approaches based on decontextualised formal processes and abstract theory.

Furthermore, and of wider application, the Strategy has addressed concerns and gaps in the literature about the methodology of practice theory and advances the case for praxiography as distinct from ethnography to those interested in studying the praxis of organised activities such as the project management of hospitals.

Reflecting on the research design and processes to date has shown the potential limitations and benefits concerning the implementation of the Strategy particularly in relation to the use of a programmatic methodological approach that contemplates the use of numerous different practice theories within the same empirical setting. Being an emic qualitative approach requires considerable access to longitudinally observed events and the 'doings and sayings' of participants involved: this may present prospective researchers with challenges, not only in terms of handling, analysing and representing considerable amounts of data but also in obtaining the necessary access and time required for immersion in the field. These challenges however need to be balanced against the potential of the approach to reveal deeper insights and understanding of the actuality of the praxis of project management as indicated by the empirical examples surrounding the instances of 'arresting moments'.

Implications for the use of the Strategy to other practices such as design evaluation and by other construction management practices have also been discussed. The plausibility of such implications would benefit from further empirical investigations and to that end areas of further empirical studies implementing the Strategy in conjunction with alternative practice theories to those used here have been indicated.

REFERENCES

Anthony, M. K., & Hudson-Barr, D. (2004). A patient-centered model of care for hospital discharge. *Clinical Nursing Research*, *13*(2), 117–36. doi:10.1177/1054773804263165

Askland, H. H., Gajendran, T., & Brewer, G. (2013). Project organizations as organizational fields: expanding the level of analysis through Pierre Bourdieu's Theory of Practice. *Engineering Project Organization Journal*, *3*(2), 116–126. doi:10.1080/21573727.2013.768986

Audit Scotland. (2011). *Management of the Scottish Government's capital investment programme*. E.

Balogun, J., & Rouleau, L. (2007). *EXPLORING MIDDLE MANAGERS' STRATEGIC SENSEMAKING ROLE IN PRACTICE* (No. 055). London UK.

Baxter, J., & Chua, W. F. (2008). Be(com)ing the chief financial officer of an organisation: Experimenting with Bourdieu's practice theory. *Management Accounting Research*, *19*(3), 212–230. doi:10.1016/j.mar.2008.06.001

Beech, N., Gilmore, C., Patrick, H., & Greig, G. (2012). Arresting moments in engaged management research. *Management Learning*, *44*(3), 267–285.

Blumer, H. (1969). *Symbolic Interactionism: Perspective and Method* (p. 208). University of California Press.

Bourdieu, P. (1997). *An Outline of a Theory of Practice*. Cambridge, UK: Cambridge University Press.

Bourdieu, P. (2003). PARTICIPANT OBJECTIVATION *. *Journal of the Royal Anthropological Institute*, *9*(April 2002), 281–294.

Bresnen, M. (2007). The Practice Turn in Organisational Studies and Construction Management Research. In W. Hughes (Ed.), *CME 25 Conference: Construction Management and Economics, Past, Present and Future, 16-18th July* (pp. 1747–1756). Reading: University of Reading.

Bresnen, M. (2009). Living the dream? Understanding partnering as emergent practice. *Construction Management and Economics*, *27*(10), 923–933. doi:10.1080/01446190902974145

Caldwell, R. (2012). Reclaiming Agency , Recovering Change ? An Exploration of the Practice Theory of Theordore Schatzki. *Journal for the T*, *42*(3), 283–303.

Carrillo, P. (2006). A Knowledge Transfer Framework : the PFI context. *Construction Management and Economics*, *24*(10), 1045–1056.

Cicmil, S., Williams, T., Thomas, J., & Hodgson, D. (2006). Rethinking Project Management: Researching the actuality of projects. *International Journal of Project Management*, *24*(8), 675–686. doi:10.1016/j.ijproman.2006.08.006

Clegg, S. (2010). The State, Power, and Agency: Missing in Action in Institutional Theory? *Journal of Management Inquiry*, *19*(1), 4–13. doi:10.1177/1056492609347562

Clegg, S., Vallas, S., Fligstein, N., & Thoenig, J. C. (2011). Part II Power : Interviews with Steven Vallas, Neil Fligstein, Stewart Clegg and Jean-Claude Thoenig. *Management*, *1*(14), 88.

Contributors, I. (2006). *Making Projects Critical*. (D. Hodgson & S. Cicmil, Eds.). Palgrave Macmillan.

Corradi, G., Gherardi, S., & Verzelloni, L. (2008). Ten good reasons for assuming a "practice lens" in organization studies. *3rd OLKC Conference*, 1–37.

Cox, a. M. (2012). An exploration of the practice approach and its place in information science. *Journal of Information Science*, *38*(2), 176–188. doi:10.1177/0165551511435881

Cunliffe, A. L. (2001). Managers as practical authors: Reconstructing our understanding of management practice. *Journal of Management Studies*, *38*(3), 351–371.

Dainty, A. R. J. (2008). Methodological Pluralism in Construction Management. In A. Knight & L. Ruddock (Eds.), *Advanced Research Methods in the Built Environment* (pp. 1–12). Oxford, UK: Wiley-Blackwell.

Davies, H., & Powell, A. (2007). *Healthcare professionals ' views on clinician engagement in quality improvement A literature review*.

De Certeau, M. (1984). *The Practice of Everyday Life*. Berkeley, CA: University of California Press.

Flyvbjerg, B. (2009). Delusion and Deception in Large Infrastructure Projects Two Models for Explaining and Preventing Executive Disaster *. *California Management Review*, *51*(2), 170–193. doi:10.1225/CMR423

Foucault, M. (1979). *Discipline and Punish: the Birth of the Prison*. Harmondstworth: Peregine Books.

Giddens, A. (1979). *Central Problems in Social Theory: Action, Structure and Contradiction in Social Analysis*. Berkeley, CA: University of California Press.

Giddens, A. (1984). *The Constitution of Society*. *Elements*. Cambridge, UK: Polity.

Gorli, M., Nicolini, D., & Scaratti, G. (2015). Reflexivity in practice: Tools and conditions for developing organizational authorship. *Human Relations*, 1–29. doi:10.1177/0018726714556156

Grix, J. (2010). *The Foundations of Research* (p. 224). Palgrave Macmillan.

Halkier, B., Katz-Gerro, T., & Martens, L. (2011). Applying practice theory to the study of consumption: Theoretical and methodological considerations. *Journal of Consumer Culture*, *11*(1), 3–13. doi:10.1177/1469540510391765

Hare, P. (2013). PPP and PFI: the political economy of building public infrastructure and delivering services. *Oxford Review of Economic Policy*, *29*(1), 95–112. doi:10.1093/oxrep/grt007

Heidegger, M. (1929). *Being and Time*. Albany, New York, USA: SUNY Press.

Hirschauer, S. (2005). On Doing Being a Stranger: The Practical Constitution of Civil Inattention. *Journal for the Theory of Social Behaviour*, *35*(1), 41–67. doi:10.1111/j.0021-8308.2005.00263.x

Holland, W. W. (2010). Competition or collaboration ? A comparison of health services in the UK. *Clinical Medicine*, *10*(5), 431–433.

Johannessen, K. (1990). *Rule Following, Intransive Understanding and Tacit Knowledge - An Investigation of the Wittgensteinian Concept of Practice as Regards Tacit Knowledge* (pp. 151–173).

Lahlou, S. (2011). How can we capture the subject's perspective? An evidence-based approach for the social scientist. *Social Science Information*, *50*(3-4), 607–655. doi:10.1177/0539018411411033

Littig, B. (2013). On high heels: A praxiography of doing Argentine tango. *European Journal of Women's Studies*, *20*(4), 455–467. doi:10.1177/1350506813496397

Marshall, N. (2014). Thinking, saying and doing in collaborative projects: What can we learn from theories of practice? *Engineering Project Organization Journal*, *4*(2-3), 107–122. doi:10.1080/21573727.2014.916689

Mol, A. (2010). Actor Network Theory-sensitive terms and enduring tensions. *Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, *50*(1), 253– 269.

Nicolini, D. (2009). Articulating Practice through the Interview to the Double. *Management Learning*, *40*(2), 195–212.

Nicolini, D. (2013). *Practice Theory, Work, & Organisation: An Introduction* (p. 272). Oxford, UK: Oxford University Press.

Nicolini, D., Gherardi, S., & Yanow, D. (2003). Introduction : Toward a Practice-Based View of Knowing and Learning in Organizations. In D. Nicolini, S. Gherardi, & D. Yanow (Eds.), *Knowing in Organisations* (p. 280). Armonk, NY, USA: M.E. Sharpe.

Office of Government and Commerce. (2008). Competitive Dialogue in 2008 OGC / HMT joint guidance on using the procedure. (R. Court, S. Andrews, & B. Park, Eds.).

Ortner, S. B. (1984). Theory in Anthropology Since the Sixties. *Comparative Studies in Society and History*, *26*(1), 126–166.

Ortner, S. B. (2006). *Anthropology and Social Theory,Culture, Power and Acting Subject*. Durham, NC: Duke University Press.

Østerlund, C., & Carlile, P. (2005). Relations in Practice: Sorting Through Practice Theories on Knowledge Sharing in Complex Organizations. *The Information Society*, *21*(2), 91–107. doi:10.1080/01972240590925294

Parand, A., Dopson, S., Renz, A., & Vincent, C. (2014). The role of hospital managers in quality and patient safety: a systematic review. *BMJ Open*, *4*(9), e005055. doi:10.1136/bmjopen-2014-005055

Reckwitz, a. (2002). Toward a Theory of Social Practices: A Development in Culturalist Theorizing. *European Journal of Social Theory*, *5*(2), 243–263. doi:10.1177/13684310222225432

Reckwitz, A. (2002). *The Status of the "Material" in Theories of Culture: From "Social Structure" to "Artefacts." Journal for the Theory of Social Behaviour* (Vol. 32, pp. 195–217). doi:10.1111/1468-5914.00183

Richards, L., & Morse, J. M. (2002). *Read me first for a user's guide to qualitative methods* (p. 262). Thousand Oaks, CA: SAGE.

Russell, V., Wyness, L. a, McAuliffe, E., & Fellenz, M. (2010). The social identity of hospital consultants as managers. *Journal of Health Organization and Management*, *24*(3), 220–36. doi:10.1108/14777261011054581

Sahlin-Andersson, K., & Soderholm, A. (Eds.). (2002). *The Scandinavian School of Project-Studies: Beyond Project Management- New Perspectives on the Temporary- Permanent Dilemma*. Malmo: Liber.

Schatzki, T., Knorr Cetina, K., & Von Savigny, E. (2001). *The practice turn in contemporary theory*. (T. Schatzki, K. Knorr Cetina, & E. Von Savigny, Eds.). London, UK: Routledge.

Schatzki, T. R. (1996). *Social Practices: A Wittgensteinian Approach to Human Activity and the Social*. Cambridge, UK: Cambridge University Press.

Schatzki, T. R. (2002). *The Site of the Social* (p. 318). University Park, PA, USA: Pennsylvania State University Press.

Schatzki, T. R. (2005a). Peripheral Vision: The Sites of Organizations. *Organization Studies*, *26*(3), 465–484. doi:10.1177/0170840605050876

Schatzki, T. R. (2005b). Peripheral Vision: The Sites of Organizations. *Organization Studies*, *26*(3), 465–484. doi:10.1177/0170840605050876

Schatzki, T. R., & Cetina, K. K. (n.d.). *The Practice Turn in Contemporary Theory*.

Scottish Futures Trust. (2014). Scottish Futures Trust NPD Model. *NPD Webpage*.

Scottish Government. (2014). Scottish Capital Investment Manual. *Scottish Capital Investment Manual*. Retrieved October 27, 2014, from http://www.scim.scot.nhs.uk/

Shove, E., Pantzar, M., & Watson, M. (2012). *The Dynamics of Social Practice- Everyday Life and How It Changes* (p. 208). London UK: Sage Publications.

Simon, H. A. (1972). Theories of bounded rationality. In C. McGuire & R. Radner (Eds.), *Decision and organization: A volume in honor of Jacob Marschak*. Amsterdam.

Smith, A., Stirling, A., & Berkhout, F. (2005). The governance of sustainable socio-technical transitions. *Research Policy*, *34*(10), 1491–1510. doi:10.1016/j.respol.2005.07.005

Splitter, V., & Seidl, D. (2011). Does Practice-Based Research on Strategy Lead to Practically Relevant Knowledge? Implications of a Bourdieusian Perspective. *The Journal of Applied Behavioral Science*, *47*(1), 98–120. doi:10.1177/0021886310396322

Times, T. F. (1999, November 24). Royal Opera House Cancels Performance. *Financial Times*. London, UK.

Tryggestad, K., & Georg, S. (2009). On the emergence of roles in construction: the qualculative role of project management. *Construction Management and Economics*, *27*, pp. 969–981.

Warde, a. (2005). Consumption and Theories of Practice. *Journal of Consumer Culture*, *5*(2), 131–153. doi:10.1177/1469540505053090

Winter, M., & Smith, C. (2006). *Rethinking Project Management*.

Yanow, D., & Tsoukas, H. (2009). What is Reflection-In-Action? A Phenomenological Account. *Journal of Management Studies*, *46*(8), 1339–1364. doi:10.1111/j.1467-6486.2009.00859.x

Zundel, M., & Kokkalis, P. (2010). Theorizing as Engaged Practice. *Organization Studies*, *31*(9-10), 1209–1227. doi:10.1177/0170840610374405