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A Qualitative Study of Three City Development Projects

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CONTRADICTIONS IN PROJECT BASED LEARNING: A QUALITATIVE STUDY OF THREE CITY DEVELOPMENT PROJECTS

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ABSTRACT

In complex product system industries such as construction, innovation and explorative intra-project learning are critical aspects for developing and delivering complex and customized products. Some research has, however, demonstrated that it is difficult to utilize learning from development projects in the permanent organisation. Hence, the project learning paradox explains that the unique and discontinuous character of project-based activities creates intra-firm boundaries that hinder the transfer and use of valuable knowledge gained within particular projects.

In this paper we aim to gain further understanding of the obstacles in project based learning in a public client organisation by illustrating the impact of the learning paradox on daily practices in complex urban area development projects. This paper is based on the data from three qualitative case studies at a large Municipality in the western part of the Netherlands. We present results of a set of 15 semi-structured interviews with different actors representing the project organisation and the permanent organisation. Each interview was individually analysed on the basis of an analytical framework based on layers of knowledge governance and were then further analysed within the project team.

The results indicate six contradictions; three contradiction in the learning structure of project organisation and permanent organisation, and three contradictions in transferring and capturing knowledge by project organisation and permanent organisation. This contributes to unravelling the complex phenomenon of organisational processes of knowledge governance in PBO's since the temporary versus permanent dichotomy appears to problematic in its pervasiveness.

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KEYWORDS

Construction client, organisational learning, project based learning, urban area development

INTRODUCTION

Projects represent decentralized environments and can be understood as specific forms of temporary organisations. They are seen to provide unique opportunities for innovation because they allow for exploration (Bygballe & Ingemansson, 2014; Davies & Hobday, 2005; Kenny, 2003). As Grabher (2002) explains, temporary organisations comprise project or event specific entities; they are constituted either to deliver some specific temporally defined project or to deal with some event or occurrence, after which they cease to be. Organisational structures developed around projects are often used as tools for accomplishing change in other organisations, which in most cases are their parent organisation (Johansson, Löfström, & Ohlsson, 2007). In relation to this, organisational learning, in terms of both explorative learning within projects and exploitative learning across projects, is recognized to contribute to the competitive position and of strategic importance (Eriksson & Leiringer, 2015; Van Donk & Riezebos, 2005).

Recently, project management scholars have developed a growing interest in project based learning. Project-based learning is about encompassing both the creation and acquisition of knowledge within projects (Ayas & Zeniuk, 2001) and the subsequent transfer of such knowledge to other parts of the organisation, including other projects (Bakker, Cambré, Korlaar, & Raab, 2011; DeFillippi & Arthur, 1998; Scarbrough et al., 2004). Organisational learning in Project Based Organisations (PBO's) specifically refers to the process of making newly created project-level knowledge available to the organisation as a whole by sharing, transferring, retaining, and using it (Bartsch, Ebers, & Maurer, 2013; Prencipe & Tell, 2001). Hence, while projects are recognized for their advantage in learning and innovation, the transfer of the ephemeral innovation to the permanent practice faces substantial challenges (Bartsch et al., 2013; Prado & Sapsed, 2016).

The knowledge-based view on PBO's assumes that the project and organisational levels should interact to ensure the accumulation of knowledge. This gets expresses in knowledge governance, which is about achieving long-term and successful interaction between the project level and the organisational level (Lundin et al., 2015). However, in PBO's effective knowledge sharing remains a challenge, as the unique and temporary nature of projects and programs does not support knowledge transfer 'from, between and within' projects (Almeida & Soares, 2014; Lindner & Wald, 2011). So on the one hand, through their transience and inter-disciplinary nature, project ventures are likely to be very suitable for creating knowledge in the context of its application (Hobday, 2000). On the other hand, however, the temporary nature of projects by the same token seems to inhibit the sedimentation of knowledge, because when the project dissolves and respondents move on, the created knowledge is likely to disperse (Bakker et al., 2011; Grabher, 2004).

Exploring how organisations can attend to organisational tensions that become paradoxical when opposing each other is part of paradox studies (Smith & Lewis, 2011; Stoltzfus et al., 2011). Bakker et al. (2011) discusses the 'project learning paradox': the autonomy of projects offers opportunities for creating new and innovative knowledge, but disseminating this knowledge is difficult exactly because of this autonomy. The relation between temporary project organisations and more enduring forms of organizing is an interesting phenomenon in this respect (Bakker, DeFillippi, Schwab, & Sydow, 2016; Burke & Morley, 2016). Some research has demonstrated that it is difficult to utilize learning from temporary development projects in the permanent organisation (Pemsel & Wiewiora, 2013; Swan, Scarbrough, & Newell, 2010), and that implementation is often ceremonial (Johansson et al., 2007). Others have discussed the differentiating characteristics separating the 'temporary' from 'ordinary' organisations (Lundin & Hallgren, 2014; Lundin & Soderholm, 1995; R.A. Lundin & Steinthórsson, 2003). Hence, the unique and discontinuous character of project-based activities creates intra-firm boundaries that hinder the transfer and use of valuable knowledge gained within particular projects by subsequent projects and or the project-based organisation as a whole (Bartsch et al., 2013; Prencipe & Tell, 2001).

This research contributes to the project based learning literature that focuses on the relation between the project organisation and the permanent organisation in knowledge governance (Davies & Brady, 2016; Prencipe & Tell, 2001; Scarbrough et al., 2004). The aim of this study is to gain further understanding of the obstacles in project based learning in complex urban area development projects. The central research question in this paper is: "In what way is the permanent organisation able to learn from knowledge gained within temporary projects organisations?". We look into the temporary versus permanent dichotomy and explore the (temporary) notion of organisational learning processes by looking into the lack of integration between exploitation practices in projects and exploration practices by (permanent) parent organisations (Grabher, 2002; Lundin & Hallgren, 2014; Lundin & Soderholm, 1995; van Marrewijk, Ybema, Smits, Clegg, & Pitsis, 2016; Winch, 2013).

To answer our question and identify the potential of being a 'learning organization', the learning capacity of the engineering department of a large Dutch Municipality is studied using an interview series. Our study includes three complex urban area development projects in which new ways of collaboration were applied. It illustrates the impact of the learning paradox on daily practices in complex urban area development projects of public client organisations. We elaborate on six identified contradictions; three contradiction in the learning structure of project organisation and permanent organisation and three contradictions in transferring and capturing knowledge by project organisation and the permanent organisation. In addition, the paper also shows some early practices of mechanisms to bridge the gap between the project organisation and the permanent organisation.

The paper proceeds as follows. The theoretical background discusses themes of organisational learning in PBO's, considering the practice of transferring of knowledge from projects to the permanent organization. We then explain the qualitative research approach to studying the knowledge governance practices of

three city development megaprojects in a large Dutch municipality followed by a discussion and conclusion.

ORGANISATIONAL LEARNING IN PBO'S: TRANSFERRING KNOWLEDGE FORM PROJECT TO PERMANENT

Learning in PBO's (or organisational departments with project-based characteristics) takes place at different levels; individual, group (project team) and organisational levels (Bakker et al., 2011). The focus of project-based learning is to encompass both the creation and acquisition of knowledge within projects (Ayas & Zeniuk, 2001) and the subsequent transfer of such knowledge to other parts of the organisation, including other projects (Bakker et al., 2011; DeFillippi & Arthur, 1998; Scarbrough et al., 2004). Project Based Organizations (or specific project-based organisational departments within an organisation) operate mainly at the project level (which includes project management, project control, learning in projects) and the organisational level, including strategy, top management, cross-project coordination, and learning across projects (Hobday, 2000; Sydow, Lindkvist, & DeFillippi, 2004).

The extent to which these levels are developed but also integrated with each other can lead to desired learning outcomes. The knowledge governance approach (Foss, 2007) aims to transcend these different levels by looking into the micro-foundations of knowledge in order to see how knowledge can be institutionalized in organisations. This knowledge-based view on PBO's assumes that the project and organisational levels should interact to ensure the accumulation of knowledge and focuses on finding mechanisms that will affect individuals and their interactions (i.e., at the micro level) to achieve both aggregate pre-set outcomes and collective knowledge-based goals (Foss, 2007).

THE PROJECT LEARNING PARADOX: PBO'S INTRA FIRM BOUNDARIES IN TRANSFERRING KNOWLEDGE

In general, the construction of a project organisation in order to achieve product or process innovation by a process of detachment forming an independent organisational unit, is seen as a way to make an innovative project manageable (Johansson et al., 2007). The results of projects are generally expected to be implemented in a permanent organisation. This precondition establishes some kind of relationship during the projects' life cycle and it also creates opportunities for implementing results from a project in the permanent organisation (Kenny, 2003). This implementation phase is described as institutionalized termination and includes a component called bridging (Johansson et al., 2007). Bridging occurs when experiences from the temporary organisation's lifetime are transferred to other temporary or permanent organisations. This implies a relationship that influences in both directions, or embeddedness, going beyond project management (Blomquist & Packendorff, 1998; Johansson et al., 2007). It is about balancing between competing and often incompatible institutional demand of the more permanent parent organisation and situational requirements of a developing project (Stoltzfus, Stohl, & Seibold, 2011). A focus on long-term organisational learning, which might be

beneficial for the portfolio as a whole, will likely be sacrificed for short-term problem-solving in troubled projects (Eriksson & Leiringer, 2015).

Literature suggests that projects present what might be called a "learning paradox". Through their transience and inter-disciplinary nature, project ventures are likely to be very suitable for creating knowledge in the context of its application (Gann & Salter, 2000; Grabher, 2004; Hobday, 2000; Scarbrough et al., 2004). The temporary nature of projects by the same token seems to, however, inhibit the sedimentation of knowledge because the created knowledge is likely to disperse when the project dissolves and respondents move on (Bakker et al., 2011). It appears that PBO's face substantial obstacles in capturing knowledge and in the re-cycling of project-based learning that stem from the relatively self-contained, idiosyncratic and finite nature of project tasks (Almeida & Soares, 2014; René M Bakker et al., 2011; Bartsch et al., 2013; Bresnen, Edelman, Newell, Scarbrough, & Swan, 2003).

Research has shown that the unique and discontinuous character of project-based activities create intra-firm boundaries that hinder the transfer and use of valuable knowledge gained within particular projects by subsequent projects and/or the project-based organisation as a whole (Bartsch et al., 2013; Gann & Salter, 2000; Prencipe & Tell, 2001). From a knowledge governance perspective, organisational structures and mechanisms play an important role in influencing and shaping learning processes that involve the creation, sharing and integration of knowledge across organisational levels (Eriksson & Leiringer, 2015; Nicolai J Foss, Kenneth Husted, & Snejina Michailova, 2010; Gooderham, Minbaeva, & Pedersen, 2011). The project management office (PMO) is one such organisational structure. The PMO could provide a strategic link that represents the interests of the project managers at strategic level (Eriksson & Leiringer, 2015; Hill, 2004).

Following from this project learning paradox, one of the crucial challenges for project managers concerns the successful transfer of knowledge created in a project to the wider organisational context in which it is embedded (Bakker et al., 2011; Schindler & Eppler, 2003). This is 'problematized' by the perspective of the permanent organisation being referred to as project owners (Bakker et al., 2011; Turner & Müller, 2004). A high level of absorptive capacity of the project owner is a necessary condition for successful project knowledge transfer, which implies that the responsibility for knowledge transfer seems to in the first place lie with the project permanent parent organisation, not with the project manager (Bakker et al., 2011)

EXPLOITATION VS. EXPLORATION IN ORGANISATIONAL LEARNING: LACK OF INTEGRATING PRACTICES

Organisational learning in PBO's specifically refers to the process of making "newly created project-level knowledge available to the organisation as a whole by sharing, transferring, retaining, and using it" (Bartsch et al., 2013). Other definitions of organisational learning focus on learning of 'organisational members', the acceptance of their knowledge and applicability in organisational activities, implying changes in these activities (Berends, Boersma, & Weggeman, 2003). For Simon (1991), organisational learning always starts with individual learning, and this poses challenges in terms of how individual knowledge is transferred or to other organisational members or how it sediments into the organisational memory. Looking

into organisational learning it is therefore important to not only focus on how 'learning' is officially organized in order to stimulate the transference of knowledge (e.g. training programs, official evaluations), but to also take into account the way that project managers or respondents engage in informally organized ways of learning (discussions/reflections 'on the job', how new project managers become a member of the practicing community, how best practiced are communicated, etc.).

Literature on knowledge governance describes three mechanisms of knowledge sharing activities: formal, relational and informal mechanisms, taking place at different levels; individual, group (e.g. project team) and organisational (Bakker et al, 2011). Learning takes place through both implicit individual knowledge building within tasks and practices, as well as the more reflective moments within teams and organisational efforts to adequately capture or implement this acquired knowledge. In this context Zollo and Winter (2002) distinguish three learning processes: 1) experience accumulation - learning by doing which leads to local experts, 2) knowledge articulation – learning by reflecting, think and confront, leading to awareness and understanding – and 3) knowledge codification – learning by (re) writing, implementation and replication, translated into manuals and procedures on project management processes.

Organisational learning is about balancing exploitation and exploration where exploration concerns the development of new skills and competences and exploitation concerns relying on 'old certainties' and developing or improving already existing skills and competences (March, 1991). March (1991) proposes that exploitation and exploration are two fundamentally different learning activities between which firms divide their attention and resources. Whereas exploitation is associated with activities such as "refinement, efficiency, selection, and implementation", exploration refers to notions such as "search, variation, experimentation, and discovery" (March, 1991). Exploitation and exploration may therefore require fundamentally different organisational structures, strategies, and context (March, 1991). In PBO's there often is a lack of integrating mechanisms between the explorative development projects and the exploitative business. Therefore the structural separation of exploration and exploitation at SBU and project portfolio levels does not enhance exploitation of explorative knowledge and technologies (Eriksson, 2013). The PBO has an internal diffusion problem, often leaking the benefits of innovation and new knowledge, which flow more easily through communities of practice that extend beyond rather than within firm boundaries (Brown & Duguid, 2001; Prado & Sapsed, 2016). PBOs face a recurring tension between the always-immediate demands of the project and the opportunities for learning and disseminating best practices and innovations (Prado & Sapsed, 2016; Sydow et al., 2004). March (1991) therefore argues that successful firms are ambidextrous contributed to a general shift in organisational research from trade-off to paradoxical thinking, as explicated in the work of for example Eisenhardt & Martin (2000), Gavetti & Levinthal (2000) and Smith & Lewis (2011).

METHODS

This research is based on the data from three qualitative case studies at a large Municipality in the western part of the Netherlands with the overall aim of studying on the municipality as a 'learning organisation' (Örtenblad, 2002). The underlying idea of the studied organisation in testing out innovative collaborative contract forms in urban area development projects was to initiate a cultural change within the municipal organisation by adopting a new role and a new working method. The studied municipality is aware that this ambition does not just arise and requires learning. In the past few years, this large public client, actively worked on the application of new forms of cooperation to gain experience. Specifically, in recent years, the municipality has applied new ways of cooperating with the market in a number of very large, complex area development processes, expecting that this method would yield added value to the municipality.

Three of these projects are used as case studies for this paper, studying the learning capacity of the organisation, specifically department of Area Development. This department has project-based characteristics, as the Project Management Office (PMO) composes project teams for each project 'hiring' different professions from various departments/groups within the organisation as a whole. The case projects proceed each other in time, allowing to build on experiences in former projects. Project 1 and Project 2 are both initiated as large scale public-private partnerships and both tendered out using a competitive dialogue. Both projects had, next to project goals/ambitions, goals ambitions regarding building knowledge/learning. Project 3 was even more ambitious in using the expertise of the market in a well advanced public private collaboration in which many of the learning objectives were placed with the market parts

A series of qualitative semi-structured interviews has been conducted. In addition evaluation reports are studied. We take on a knowledge-based view on PBO's, focusing on how the project- and organisational levels, besides inherently in a tense relationship, should interact to ensure the accumulation of knowledge (Pemsel, Müller, & Söderlund, 2016). Due to the multi-faceted characteristic of the concept of project-based learning in PBO's there is a need to reach a certain layering in the interviews. Hence, studying the learning capacity of a municipality in the context of urban projects, we analyse both the individual, the project team, the departments and the (permanent-)organisation itself. In addition to this the municipality may have different roles in the urban development process. In line with this from analytical reports of urban development projects there are indications that various stakeholders, at various institutional levels or in different permanent organisations, are benefit from different types of organisation. Therefore a group of interviewees was chosen to represent a cross-section of the organisation.

We interviewed employees both from the permanent organisation (line organisation) as well as those primarily working for one or more of the three cases in the project organisation. For each of the three projects (Project 1, Project 2, Project 3, the ascending numbers correspond to the sequence of execution), we spoke with the internal commissioner, the project manager, and the members of the project team

which were engaged with either market and contracting, legal affairs or involved in drawing up the program of requirements (PofR). This led to a series of 15 interviews (respondent A to O, see table 1), of which some of the interviewees had multiple roles (e.g. respondent A who was involved in both the project environment as the permanent organisation), and some where involved in multiple projects (like respondent M, N). The interviews varied from one hour to one and a half hour and were combined with several related internal documents relating to knowledge governance and learning practices. The interviews were all recorded and transcribed verbatim to ensure reliability.

Table 1: Overview of respondents

Function	**Permanent organization**	**Role in project**	**Project 1**	**Project 2**	**Project 3**
Head of Commissioning	A	Internal commissioner	A	A	E
Head PMO	B	Project manager	F + G	H	I
(Head) of Exploitation	C	Market & Contracting	J	J	K
Organisational advisor / HR	D	Legal Affairs	L + M	L + M	M
		Space & Living (PofR)	N	N	O

The multilevel approach is also reflected in the analytical framework which is used as an underlying structure to develop a topic list by means of which the three projects could be discussed in relation to learning. This analytical framework was based on the theoretical understanding of knowledge governance. We distinguished three levels of measurement; 1) awareness, 2) active steering, and 3) structures and systems, each containing themes that represent elements of the theory discussed, see table 2.

Table 2: Analytical framework project based learning

Level of measurement	**Themes**		
Awareness	Use of own network; Informally collecting knowledge	Awareness of existing knowledge and experience	Interest in learning
Active Steering	Organisation of knowledge sharing; learning pathways / learning activities during projects	'Right' knowledge – 'Right' moment – 'Right' place	Stimulating knowledge sharing; atmosphere / culture team, mind set and trust
Structures & Systems	Influence of organisational structure	Organisational culture	Tools

Each interview was individually analysed by the first two authors on the basis of an analytical framework, and then further analysed within the project team. These results

were completed both from the perspective of inter-project learning and organisational learning. Next, all tables with results were combined in a summarizing table, only stating the findings that were named, or indirectly commented on, by at least half of the interviewees. This way, not only topics that one agrees on are included, both also aspects were consensus is missing are included. Only existing programmes and other aspects named only ones that could be checked on their existence are also included, however with a notion that they were mentioned by less interviews. Six key 'opposing forces' traversing all three layers of analysis (awareness, active steering and structures and systems) emerged from our data; three following from contradictions in the learning structure of the project organisation and the permanent organisation (living apart together, the transparency dilemma and complementarity of learning objectives), and three contradictions in transferring and capturing knowledge by the project organisation and the permanent organisation (incoherent parallel systems of learning, discontinuity on attention to learning and vulnerability of securing knowledge). These provide the structure in presenting the findings.

CONTRADICTIONS IN THE LEARNING STRUCTURE

LIVING APART TOGETHER

In the projects we have studied, our respondents generally seemed to be aware of the fact that as a project you have to distance yourself from the permanent organisation in certain ways. The dissociation from the relatively political and bureaucratic permanent organizations appeared to lead to a confidential and safe environment that encourages learning within the project and positive results. The dissociation can either be a physical separation between permanent and project, or a more symbolic distance. However, our data suggest that these different ways of seclusion are strongly related. For example, in one of the projects, the physical dissociation was quite literal as the project team started to work in another building. Many respondents experienced this as positive, emphasizing that it allowed them to work more decisively

"Put it on the table, discuss it with one another, make sure you have an open atmosphere, so that everything is discussed well and that you know of one another: yes, that point has been discussed, but we agree, so this is the decision and this is how we will proceed. That is very important." (respondent O: Space & Living, project 3).

Several respondents reflect on this aspect in the context of the municipality's political and bureaucratic work environment. The distance ensures that there is more freedom and space to operate outside the municipality's 'regulatory' system. This makes that project team members do not have to ensure support from the separate departments over and over again (with every decision) and encourages project team members to challenge each other and search for creative solutions for complex problems.
The physical distance between project and line has also created a more symbolic distance between the different employees and departments. An illustration of the symbolic distance found in one of the cases is the 'secrecy/mystery' that was built around the project.

"That distance works very well inwards. Specifically in the tender, because it was very exciting, there were a lot of discussions, but there was also a real bond. Outwards, this works exactly the other way around, we were seen as a closed stronghold. And that had two reasons: we were in a tender, so everything was confidential, it really should not be revealed. We were in our own space, which contributed a lot the that team formation and the collective feeling, but that really created a distance with outside." (respondent F: project manager, project 1)

The project team members felt that the respective departments did not fully appreciate the knowledge that was acquired within the project. The context of complex urban area development projects appear to ask for more creative solutions 'out of the box' to meet the ambitious objectives. According to our respondents this has however resulted in a certain 'jealousy' from the staff in the permanent organization, because they interpreted the project as a group of people who have been 'freewheeling'. This feeling may have been reinforced by the general idea that 'the best people in the municipality' have been chosen to do this project. Although not every respondent clearly indicates that this 'paradox of distance' impedes the daily course of events, it does have repercussions on the learning ability of the organisation.
Looking from the perspective of inter-project learning we especially see a connection between two of the case projects. Much of the earlier executed tender of Project 1 is 'projected' on the subsequent tender of Project 2. For example, there was a well-functioning 'soundboard' (steering committee of former project team members), influencing inter-project learning in an advantageous way. Current project team members were able to ask questions whenever they felt they needed it, and because these project team members became project team members of other projects as well, information was implicitly transferred to other projects.

This also gets expresses in the occupation of the project team. From experiences in Project 1 it was understood that the group dynamics with a strong team spirit and a high commitment of all team members was of great importance in innovative confidential tender procedures. Project team members depend on each other and have to exchange knowledge and experience. By working very closely together, people became aware of the knowledge that is present and one works (forced in a certain way) on building the right group dynamics to stimulate knowledge sharing. It is precisely this awareness of the available knowledge that offers benefits for current project and future projects. However, the involvement of team members of the former project in the subsequent project created a 'divided' group dynamics because the project team of the former project was already known as a 'special' group in the permanent organisations, the different permanent organisations from which each project team is composed. Combining created a harmful hierarchy between experienced and inexperienced project team members, with a negative effect on learning/knowledge exchange. Certain tasks were taken over by 'flown in' experienced team members instead of giving the inexperienced ones the chance to gain experience.

"And the learning moments, or the transfer of knowledge, mainly involved the same crew. Largely the same crew. Also the external parties, the office that supported it

was the same office that had supported us earlier." (respondent F: project manager, project 1)

To sum up, the dissociation of project, and thereby its project team members, either physically or symbolic, creates a dynamic and a strong culture that is thought to be positive from the project goal. This, however, appears to hinder learning between the project and the permanent organisation.

THE TRANSPARENCY DILEMMA

The experience of 'distance' between project and permanent is enhanced by the confrontation with confidentiality in carrying out projects. On a daily basis the project team is confronted with the political tension around certain unique urban area development projects. Legal obligations from the public domain lead to confidentiality in projects that hinders exchange and embedding of knowledge within the organisation. Many respondents indicate that they experience the political responsibilities in their client organisation quite heavily. This has its effect on transparency, as this responsibility often create a 'seeming' openness. Especially in the initial stages of complex projects, particularly in the tender process, project team members are faced with a high level of confidentiality. This obstructs the learning capacity, and it affects the possibility and way of learning from and between projects and the possibility to (and term of) 'embedding' lessons in the permanent organisation. The respondents revealed that the political pressure creates a reaction of 'cramps', a defensive culture is created. In this respect respondents often mention an abundance of control mechanisms arising at different levels of the organisation. The organisation is explained as an organisation that wants to control everything, to rethink everything three times.

In addition, several respondents mention the conservative nature of public officials, contributing to a certain fear of innovation that does not stimulate learning new things. It is explained that the desired course of action in innovation, openness and discussion , is counteracted by confidentiality that is necessary to function in a politically sensitive environment. It is explained that this transparency dilemma hampers the 'normal' course of events whereby exchange between project team and departments (permanent organisation) is possible when certain questions arise during innovative projects. Where, with new innovative ways of working the desire is to communicate/ and discuss options and their consequences.

"For new things - that's the way I look at it at least - you want to have conversations, you want soundboards, you want your ideas to be tested by market parties, by stakeholders, but that cannot be done, at least not in important phases of the tender." (respondent H: project manager, project 2)

Many respondents also emphasize that the increasing collaborative way of working is changing learning: you do not have to know certain things yourself, you have to find the right people.

"For example, let's have look at how my children currently function. My son is trying to set up a company. And then I see how that works, he just goes searching on the

internet or in his network and he involves people and so he builds up the knowledge that he needs at that moment." (Respondent B: Head PMO, permanent organisation)

However, some respondents mention that this 'looking for information outside', outside the 'project bubble', is problematized by confidentiality, and may therefore counteracts learning.

"So that conversation, with someone who is not in that project organisation, cannot take place, and that kind of conversations prove, at least in my practice, to have added value. So I missed that." (respondent H: project manager, project 2)

What is often also mentioned by respondents is the use of more experienced project team members for a politically charged project. Next to choosing these experienced people because they are trusted in their ability to deal with the pressure on these politically charged projects, respondents notice the additional advantage of immediate presence of a lot of knowledge and experience in the project team. In a way this steers the right knowledge and experience on the 'right place' at the 'right time'.

"To the nature of the assignment. What is the complexity, both in a political sense as well as in a substantive sense. (....) So you immediately look for the heavier categories. Someone with experience in similar projects." (respondent E: internal client, project 3)

So although it can be concluded that political responsibility 'paralyzes' complicating various 'routes' of knowledge exchange, learning from these confidential projects is not impossible. Experience is always gained and the knowledge exchange within the project team intensifies. This leads to a greater awareness of the knowledge and experience that various disciplines (i.e. departments) bring along.

COMPLEMENTARITY OF LEARNING OBJECTIVES

When discussing organisational learning it is important that lessons from projects eventually are structurally found back in the organisation. This starts with embedding the experiences and knowledge that individual project team members take back to their department, belonging to the permanent organisation. Respondents mention that many development opportunities are offered; both in the professional field - e.g. course development consultations and peer audits-, as well as in the areas of personal growth, - e.g. talent development, mentoring program and training. Respondents also indicate that individual preferences are leading. Hence, there is generally no correspondence between the required knowledge in the department and individual learning objectives of employees of the department. The learning objectives of the organisation, spread over the different departments, thus do not find their way down, and coordination with respect to complementarity within the department is absent in many departments.

"In principle you have a conversation cycle which is actually your assessment cycle and functioning cycle. Of course you can mention that, your supervisor can do it or you can do it yourself, what your learning goals are and in what way you want to meet them." (respondent J: Market & Contracting, project 1 and 2)

With regard to the translation of the personal development into concern interests, the compartmentalization in the organisation seems to have a paralyzing effect on the individual development that is separate from the professional aspect. Respondents indicate many initiatives of bottom-up learning, and emphasize that learning from each other and with each other is considered important in different situations. However, some respondents also admit that bottom-up reflecting and analysing is only initiated at times when this is considered important by the concerned project team members. This evaluation is not always done.

In the context of organisational learning evaluation cycles are also important. Interesting is that the respondents belonging to the permanent organisation acknowledge the inappropriate use of evaluations. It is explained that evaluations are used as a way of defending. Respondents representing the project organisation often discuss the inefficient use of evaluations. The emphasis here is on the lack of 'depth', partly because evaluations are carried out by external parties, and therefore do not produce lessons that can be used well in projects. For this reason it is often decided to have its own evaluation. However, both by respondents representing the permanent organisation and at the project organisation it is also recognized that no time is taken to learn. There seems to be a short-term orientation. For the permanent organization, this stems from the short term of political administrative attention. For the project organisation, the result-oriented culture contributes to taking no time for learning, especially not in between the successive phases of the project.

"The project is already finished for this organisation. I think the ground breaking was 3 weeks ago, but the political and administrative focus is already gone. (.....) The attention is therefore already entirely gone from the project, so you do not put the best people on it anymore, they are already looking for something new. " (respondent A: head of commissioning, permanent organisations + internal client, project 1 and 2)

The aforementioned aspects all have a link with the way in which the organisation is organized; 'Concern Municipality' seems to oppose the learning capacity. Thinking from clusters, departments and projects leads to good coordination towards higher levels. This appears to be related to the line of responsibility in the project organisation (project-based), information goes from person to person, from project to project, from department to department, from departmental consultation to MT. This flow runs in one direction (reciprocity is lacking) and with this it is difficult to learn as an organisation. Reflecting on these bottom-up initiatives, they seem to go beyond working according to structures and systems. With regard to learning this proactive attitude is desirable - the own initiative, the marking of a situation from which it is useful to draw lessons or the sharing of the lessons learned to different places and levels of the organisation where the lessons are considered important. But what we also see is that project leaders do not always provide feedback, they choose to work on their own and account is only taken of what falls within the mandate. When it is actually necessary to step outside the mandate, no question is asked to the internal client which can lead to 'escalation'. However, because individuals 'grow' within the

organisation and start working on an increasingly higher level of abstraction, experiences with this situation will ultimately unconsciously find their way within the higher layers of the organisation. Hence, we can conclude that although there is no active or conscious management of complementarity in project and concern goals, information finds its way - in a limited way - into different parts of the organisation.

Table 3 presents an overview of the contradictions as found in the learning structure of the Municipality based on the three urban area development projects that are included in our study. Both the physical and symbolic distance, the transparency dilemma and the misalignment between learning objectives contribute to the structural gap between the project organisation and the permanent organisation in the context of project based learning.

Table 3: Summary of three contradictions in the learning structure of 'project' and 'permanent' organisation

Contradictions in the learning structure of 'project' and 'permanent' organisation	
Living apart together	The dissociation from the political/bureaucratic leads to a confidential and safe environment that encourages learning within the project and results in successful projects. The distance this creates however hinders learning between project and permanent-organisation (bilateral).
The transparency dilemma	The political tension around certain unique urban area development projects and legal obligations from the public domain leads to confidentiality in projects that hinders exchange and embedding of knowledge within the organisation.
Complementarity of learning objectives	There are many opportunities within the organisation to develop on an individual level, supported by the organisation. The learning objectives of the organisation, however, don't find their way down and alignment in terms of complementarity within the department remains omitted at many departments.

CONTRADICTIONS IN TRANSFERRING AND CAPTURING KNOWLEDGE

INCOHERENT PARALLEL SYSTEMS OF LEARNING

We experienced that respondents hold different 'visions' regarding learning. Therefore different systems of learning have arisen, originating from the permanent organisation or the project organisation, more or less connected to each other. Yet, respondents seem to agree on the importance of certain systems and protocols with regard to learning or knowledge assurance. Respondents know about different existing information sharing tools (for example IntraNet, standards in which evaluation and reflection cycles are embedded, separate evaluation cycles) and know where to find them. The importance is mainly seen in the possibility to structure learning within and between projects (so that the wheel does not have to be reinvented every time) and enabling the acquired knowledge to be safeguarded (so that knowledge does not 'linger' with individuals. but also find more embedding in the

broader organisation). However, the analysis also showed that a certain tension exists between wanting to outline frameworks and norms that also require a certain flexibility to meet the specific contextual details of a complex project. This does not necessarily mean that existing systems and protocols are insufficient, but that the existing tools alone do not cover the total spectrum of learning within complex projects. When respondents representing project team members talk about learning and knowledge transfer, they emphasize that in addition to the already existing systems, a more informal system must exist that does justice to the 'network qualities' of these types of projects. For example respondents often mention sharing knowledge with the - proverbial or literal - coffee machine or elevator.

"And of course you also regularly talk to other project managers. And sometimes that happens in a more organized form, but often also informally at the coffee machine." (respondent I: project manager, project 3)

"Well, a lot is already happening in the corridors, or at the lift, because you have to wait a long time for the elevator in this building." (respondent O: Space & Living, project 3)

These kind of more informal moments of knowledge sharing are explained to be flexible in the sense that they are not, as the existing tools do, bound to a stringent location or time; it is the more 'spontaneous' encounters in which employees can keep each other up to date on each other's daily routine. It offers openings to retrieve or bring knowledge in a freer way, e.g. through network meetings, critical conversations, sounding board groups, etc. Many respondents see these ways of learning as a valuable addition to (or perhaps even more valuable than) the already existing systems that structure learning and knowledge sharing:

"It is most beneficial if you have experienced it from the inside. You have been part of such a dynamic or of those discussions with market parties. That is something you do not lose anymore. In addition, I did my very best to give lectures about such a tender process, about that performance orientation. But if you hear that, and you go to a lunch lecture, it is still different than if you were part of such a team. And that's what I find complicated. " (respondent F: project manager, project 1)

There are indications from data that the different systems of learning stand in the way of each other and that they are not connected in good synergy. In this respect we identified the distinction between on the one hand the slow, incremental learning belonging to the permanent organisation and, on the other hand, the more dynamic project learning that is focused on the - sometimes sudden - changes within complex projects.

"The crux of this kind of complex projects is: acting quickly. You do not do that in your formal project meeting. You do that as soon as you get out of the meeting. You just think quickly: 'we have to do that too', or 'oh, we still have to sit together for about an hour tomorrow' (...) It's all about thinking about conscious deliberations,

and what you need to fight for now, if you want to deviate from the standard." (respondent N: Space & Living, project 1 and 2)

This image is reinforced, as the respondents often appeared to consider learning through systems and protocols as a form of control. Several times the proverbial 'tick a box' is suggested to suggest that learning has degenerated into something purely instrumental. Respondents emphasize that learning and knowledge transfer has an important creative component that can not only be captured in the 'tick off boxes'. As one of the project managers reflects, when we talk about incitement to learning.

"I want to make project members very aware of what they want to learn and how they think they should learn. I want to enable and empowering and not be opinionated (...) I see that as a challenge: how can I make those people as enthusiastic as possible and stimulate someone as much as possible, so that that he or she capitalizes his learning potential with his own convictions, expertise and skills" (respondent G: project manager, project 1)

What especially seems to be difficult is the management from the permanent organization on integral, flexible, sustainable projects crossing the boundaries of the organization. Where the lines represent different disciplines, the projects work throughout the whole organisation organised in a matrix.

“We are a line organisation, but the municipal assignment is often matrix, flexible or sustainable. And that is not how we are organized." (respondent L; legal affairs, project 1 and 2)

Facilitating project team members through the line also means that different interests come together. Project team members deal with both overall organizational goals (from the department) and project goals (translation of the political mandate represented by the project manager). In principle, the departments puts project team members in service of the project. Project goals and organizational targets must not collide. However, discussing the knowledge transfer between line and project it seems that departments in the line do not appreciate the practical project lessons, do not know how to embed them in the department. The context sensitivity of gained knowledge and experience is pointed at as hard to capture, and capturing this knowledge and experience does also not correspond with the dynamic environment of projects, the ‘truth’ changes during the project.

This may also have to do with the difference in 'structure' of learning. The permanent organisation focuses on organized learning moments to create a certain form of measurability. However, this structure is not considered appropriate within the project organisation; there the focus is more on 'learning on the job'. Where the permanent uses tools to create more uniformity in projects, the project organisation requires more flexibility because of the changing and often unique projects. In the absence of suitable top-down systems for the projects, different learning initiatives develop bottom-up from the projects. These initiatives seem to coexist in parallel and are

insufficiently connected. This raises the question whether the right form of facilitation has been found, when in addition a large amount of personal initiatives is organized.

DISCONTINUITY IN ATTENTION TO LEARNING

Although there are different systems of learning and the importance of the different systems is acknowledged, there is not always enough attention for learning. There seems to be a discontinuity in attention to learning in different phases of complex urban development processes. The development of a large urban area takes a long time and goes through a wide range of different phases before a project is actually completed. Respondents acknowledge that that the idea exists that the start phases of the project (development, tendering, signing of contracts) are more important than the phases that follow. This phenomenon is explained to be understandable in a way, because the project is still vulnerable in the initial phase and there is a risk that the parties will withdraw and the project will be terminated early. However, in the context of learning, this has a number of consequences, which mainly focus on the continuity in the expertise and competences of project staff involved. As respondents mentioned, ambitious and progressive politically sensitive project, with complex new forms of cooperation, are often started with experienced people in order to get the project off the ground in a solid and successful way. What in this case is labelled as 'right' has to do with someone's experience and expertise. The selection of the 'right' project staff for a particular project generally takes place through the Project Management Office (PMO), and in a way that most closely resembles the principle of supply and demand: clients reach out to the PMO and ask about the people who could be suitable for this project.

"You mainly look at what they have done before and how they have done it. And we have very intensive contact with all people. I sum up a top five by heart. And then after that come the substantiation and so on, but so, I can think of those like that. And when I ask my colleagues they will come up with about the same list. You just know that. " (Respondent B: Head PMO, permanent organisation)

However, the selection of employees also takes place in a different way, based on an already existing 'network' of people who know each other (for example from earlier projects). This informal selection takes place both to check the quality of the employees but also because this would go faster than if the usual route were to be followed. This selection takes place outside the formal line under pressure of 'heavyweights' in the function of project manager.

"Partly it is decided, and in the crucial position I simply look for people within the organisation, because I know, of course, who I should have. (...) I just approach them personally: do you feel like it? Yes, look, this organisation is not that big either, so I know most people. (...) And then I do not go to the department manager initially, but I use my confidant in that department to see who would be suitable for that. " (respondent N, Space & Living project 1 and 2)

In this context the respondents express that this informal selection happens because you may not get the best or right people for your project via the line manager, because he or she is mainly concerned with looking at who has time to be placed on a

project. The changes within project teams could however be explained from the perspective of phasing. When discussing the three area development projects within the Urban Development Cluster, it becomes clear that the long-term character of these projects means in practice that different phases are followed within which different types of knowledge and experience are desired. A number of explanatory practical situations emerge in the interviews. For example, the transition from the start-up phases to the execution of regular work processes is often mentioned in the follow-up phases, and the respondents of this study are of the opinion that this relates to the 'type' of people that is needed for these different phases. The start-up phase is characterized by the fact that everything has yet to be figured out and where much experience and integral thinking capacity is required. In the follow-up phases, there is a need for a different level of education, and accumulated experience is more focused on subject-specific and substantive knowledge.

"... and you enter a phase now, where you actually have to make more use of the regular work processes (...) Because it is completely devised, there are models and the models have to be completed and guided further" (Respondent M: lagal affairs, project 1,2 and 3)

As already mentioned above, a project receives a certain importance label before the project has already started. However, this importance seems to be reduced once the first phases of a project have been successfully completed. It is mentioned that often after the tender, and when the contracts have been signed, these projects seem of less important from a political point of view, while in reality it sometimes takes ten to twenty years before a project is actually completed. One of the respondents characterizes this as *'the treadmill of next project, next project, next project' (Respondent B: Head PMO, permanent organisation).* After the tendering of a project, a different kind of expertise of employees is expected and the 'heavyweights' or already been 'taken away' for another eye-catching project. The moment people leave a project or are removed from the project can be a pitfall. There thus seems to be not enough continuity of knowledge and thereby knowledge sharing throughout the different phases of the construction cycle of complex urban area development projects.

"The conscience of a project is very often in the minds of people. You cannot transfer that to a file. The contract between the municipality and a market party for the project is something like 7000 pages and that does not even contain anything. That's in the minds of the people who work there" (respondent A, head of commissioning, permanent organisation + project manager, project 1 and 2).

VULNERABILITY OF SECURING KNOWLEDGE

Looking at the changes in project teams resulting from in time changing 'importance' (or attention to) of projects another concern comes up; it brings along a vulnerability in knowledge assurance, especially of process knowledge. The need for other types of knowledge and experience in the different phases of the area development project (from complex and initiate method to standardization and work with regular work processes) is expressed in (often consciously directed) changes in the project team. Dealing with the pure, profession-specific execution of individual processes within

the project, this does not cause any problems, because after all, the right knowledge and experience are being delivered at the right time in the right place. However, with the change of project team members, in addition to subject-specific knowledge and experience, process knowledge (e.g. insight into (in) formal agreements and e-mail exchanges) is also lost. In line with this also the networks that have been built up with people working in the project area and their colleagues, especially contextual, knowledge, disappear. Whereas any lack of subject-specific knowledge can be taken care of by the use of other people and or training, ensuring process knowledge is a different story. As emphasized by the respondents, this type of knowledge is largely in people, in relationships that have been built up, and in not public information such as email exchanges and the like.

The awareness of this vulnerability inherent in this project-oriented organisation is present at different levels of the department. At various levels initiatives arise aiming to deal with this vulnerability. For example, many respondents mention looking for a natural moment of change. It is considered important that a certain phase in the project can be closed properly.

"Then it is important to look for a natural moment. It's not that you switch between people in a negotiation process, because then another party tries to put things on the table again, which we thought we had settled." (respondent E: internal client, project 3)

In order to be able to guarantee continuity, it is extra important to think about how knowledge gained can be safeguarded during these transitional moments so that this knowledge and expertise remains 'within' the project. An abrupt change in occupation of the project team is experienced as negative by most of our respondents, and it is often suggested that it is important to think about how the overlap of project staff should take place. This means that a new project employee for a certain period of time ‘walks along’ with the departing employee so that relevant knowledge and details of complex projects of this kind can be shared. It is indicated by respondents that this is already happening, but not consistently or sufficiently, especially for the reasons given above that a new project is seen as more important than managing an already existing project in its executing phases. This overlap has the additional advantage that there is time for the successor to find his or her place in the team and build trust that is necessary for effective knowledge exchange.

"You try to ensure as quickly as possible that the department in question will propose a new person to you and, if possible, a good transfer takes place. (... ..) But we always try to have an overlap in which the new project manager can be prepared for the job.” (respondent E: internal client, project 3)

One is also aware of this vulnerability when external forces are hired. In this discussion respondent make a distinction between various reasons for hiring external forces and in relation to this the importance of learning. Firstly, the hiring for a ‘second opinion’ where the goal is not necessarily to acquire knowledge. Secondly, the hiring to solve underemployment where the knowledge and experience is already

present within the organisation. And thirdly, the hiring of knowledge that is not present within the organisation and therefore could be learned. For this last reason of external hiring, an attempt is made to let 'hired knowledge' land within the organisation, often by linking the externally hired person to an internal employee, working side by side on the assignment. However, respondents were also aware that this takes time so a trade-off is made; when the knowledge is incidental (used once in a very specific project) it is not considered profitable to put these hours into it, and therefore no, steering on, active learning takes place.

Although it definitely possible to learn in this context, the dynamics and time pressure do lead to a different process of learning which require specific initiatives. For example, a 'soundboard' group was initiated at Project 1. This 'soundboard' group consisted of departing project team members and is intended to consult process information during the follow-up phases of the long-term area development project, by presenting and testing different situations and / or difficulties in people with previous experience in the relevant project. In addition to regular meetings, the current project team members can individually approach the members of the sounding board group.

"We have now also set up a soundboard group for the project. A lot of experienced people from the project have started doing other things. But in order to maintain that historical knowledge for that new organisation, there is a soundboard for the project and there are some veterans in there. There, the new organisation simply has the space to ask questions, involve them, ask them for advice, and so on. " (Respondent J: market &contracting, project 1 and 2)

In line with this, at a higher organisational level, and at the same time also at a higher scale level, the studied organisation has taken steps to become more area-oriented. By deploying project leaders for a defined area, and creating a larger pool of project staff for this area - which in turn can be deployed in groups on projects in the area - knowledge of actors in the area can be built upon and maintained. In addition, it offers time and space to build true confidential relationships - both within the project teams and with the stakeholders from the area - that are necessary for effective exchange. Thus, while a changes in the team for long-term urban area development projects problematize knowledge sharing and capturing, especially process knowledge sharing and capturing, there is a great awareness of this vulnerable situation and several initiatives arise to deal with this phenomenon.

"And that people also have common knowledge of the area. That they then not only know that specific project, but also what's going on outside. And that you sometimes also have to deal with the area people, the area organisation, that you just know them as well. " (Respondent I: project manager, project 3).

Table 4 presents an overview of the contradictions that relate to transferring and capturing knowledge between the project environment and the permanent organization. We found that parallel systems of learning are often not coherent, a

certain discontinuity exists in the attention towards learning and a specific initiative need to be taken to secure the transference of knowledge due to its vulnerability.

Table 4: Summary of three contradictions in transferring and capturing knowledge by 'project' and 'permanent'

Contradictions in transferring and capturing knowledge by 'project' and 'permanent'	
Incoherent parallel systems of learning	Within the organisation there is a level of awareness of the value of systems (protocols) aiming to steer on learning activities. And much is done, developed and organized around learning from projects. In the absence of adequate top-down systems for projects, different initiatives are developed bottom-up from projects. These initiatives however seem to exist next to each other (parallel) and are not sufficiently aligned.
Discontinuity in attention to learning	There seems to be not enough continuity on learning activities throughout the construction cycle of complex urban area development projects. In the initial phase(s) (i.a. contracting phase), projects receive a lot of attention and (a lot of) lessons are drawn therefrom. However, the monitoring learning during the continuation phases (implementation, management) is often limited.
Vulnerability of securing knowledge	One is, at different levels of the municipal organisation, aware of a certain vulnerability in securing process-knowledge in dealing with changes in the team for long-term urban area development projects, both in relational terms and in terms of (in) formal agreements. At various levels initiatives arise aiming to deal with this vulnerability.

DISCUSSION AND CONCLUSION

The aim of this study is to gain further insight in project based learning by asking the **FOLLOWING** question; "In what way is the permanent organisation able to learn from knowledge gained within temporary projects organisations?". **WE FOCUSED ON THE ENGINEERING DEPARTMENT OF A LARGE DUTCH MUNICIPAL ORGANISATION AND STUDIED THREE COMPLEX URBAN AREA DEVELOPMENT PROJECTS.** Overall, we saw that project-based learning is difficult. Without a dedicated learning strategy, an accompanying structure to support the implementation of this strategy and an organisational culture that explicates learning, the character of a project oriented organisation can hinder learning processes. Within projects the effects of learning may be beneficial (e.g. involving outside expertise, disseminating knowledge informally, developing innovative ideas). However, this strong internal focus may negatively affect learning between different projects or between the project environment and the permanent organisation. The findings show six contradictions between the project organisation and the permanent organisation representing several barriers in project based learning. So despite the fact that prior research indicates that alignment between project and permanent organisation is necessary in learning, our findings embody opposing forces that make project based learning somewhat paradoxical (Fairhurst et al., 2016; Stoltzfus et al., 2011).

We studied the impact of the learning paradox on daily practices of public client organisations. This contributes to the academic project management debate on project

based learning in two distinct ways. First, it contributes to the knowledge governance perspective on constructing detached project organisations to achieve innovation and better organizational performance. The three contradictions related to the differences in learning structures between the client organisations and the permanent organisation - 1) 'living apart together', 2) the transparency dilemma and 3) the complementarity of learning objectives - reflect organisational structures and mechanisms that play an important role in influencing and shaping learning processes across organisational levels (Eriksson & Leiringer, 2015; Nicolai J Foss et al., 2010; Gooderham et al., 2011). Second, it contributes to the interpretation of organisational learning and its different definitions. The three contradictions related to the differences ways of learning, knowledge sharing and capturing - 1) incoherent parallel systems of learning, 2) discontinuity in attention to learning at the different stages of complex projects, and 3) vulnerability of securing knowledge, illustrate the difficulty in making bottom-up creation of project level knowledge available to the organisation with its top-down learning structures (Bartsch et al., 2013). This shows the difficulty of balancing exploration and exploitation (March, 1991); where in the initial phases complex projects receive a lot of attention and lessons are drawn, in the continuation phase project team members rely on existing skills and competences. It also clarifies the problematizing of acceptance of knowledge of organisational members (Berends et al., 2003) due to the differences in type of knowledge gained in project organisations, process knowledge, and the knowledge on which different departments of the permanent organisation are build, the subject-specific knowledge.

To practitioners the findings of this study could to better prepare for temporary collaboration in complex infrastructure projects. By looking into the knowledge governance practices, we gained understanding about the practical challenges that project managers and the project management office face in bridging the gap between inter-project learning and organisational learning. The project manager is expected to be the linking pin between different departments and the internal client, as they carry out the mandate within the project team. Therefore project managers are in the 'right' position to 'serve as a bridge' between inter-project learning and organisational learning, facilitating the solutions to the six identified paradoxical dualities. However, what seems to be difficult is the management from the permanent line organization towards integral, flexible, and sustainable projects. Where the organizational lines represent different disciplines, the projects are organized throughout the organisation in matrix. In order to support the project manager, it could be interesting to look at the an 'equivalent' person in the permanent organisation who also has responsibility for learning. The appointment of a knowledge manager at organizational management level and structural evaluation should focus on all phases of the project preparation up to and including implementation. This is in line with the idea of project sponsorship (Sense, 2013). Agreements on learning goals, bridging the relation between temporary project environments and permanent parent organisations, and a long term learning philosophy are needed for organisations to learn from their projects and become a learning organisation. This involves reflection upon the context and situatedness of temporary work in order to align mutual expectations and to stimulate learning between the project and permanent organisation. Without these, project employees may fall back on isolation and establish innovative work practices out of sight of the

permanent organisation. Future studies could focus on the long-term effects of project based learning, as also expressed by Pettigrew (1990). Our study confirms the problematic nature of the temporary versus permanent dichotomy and its pervasiveness, which needs to be further explored in order to adhere to the temporary notion of organizing learning processes (Lundin and Hallgren, 2014).

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