**PRACTICE TRANSFER IN MNES AS THE SOCIALLY
EMBEDDED TRANSLATION OF PRACTICES**

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ABSTRACT

Purpose - With a few exceptions the mainstream literature on learning in MNEs has shown little concern for the transformational nature and the social constitution of learning. We address this gap by drawing on Scandinavian institutionalism, social learning perspectives and comparative institutionalism.

Design/methodology/approach – A comparative case study was conducted of two subsidiaries of the same MNE. The subsidiaries received similar practices from HQ but displayed contrasting learning outcomes.

Findings – It is shown that learning outcomes differed based on the varying extent to which practices were translated, which depends on the participation of local actors. The difference in participation pattern in turn is rooted in differences in the institutional context of the two subsidiaries.

Research limitations/implications – It is recognized that apart from institutional influences, organizational idiosyncrasies may be at work. In addition, we briefly address the question to what extent the notion of contrasting in forms of capitalism is still useful when comparing the German and British institutional context.

Practical implications – The findings highlight the importance of involving employees in the translation of new practices. A challenge for MNEs is that learning of new practices can differ by institutional context. Where enabling institutional conditions are absent, conscious effort may be needed to ensure employee participation.

Originality/value – This paper highlights that MNE practice transfer rests on the translation of the practice content to the local context, and that subsidiary-level learning processes may be institutionally embedded thus establishing a link between subsidiary learning and the macro-level context. As such, this paper both illustrates the value of social learning perspectives and highlights the relevance of the work of institutionalists for understanding MNE learning processes.

Keywords - knowledge transfer; multinational; subsidiary learning; social learning theory; Scandinavian and comparative institutionalism

Paper type Case study

1. Introduction

With a few exceptions the mainstream body of literature on learning in MNEs has shown little concern for the transformational nature and the social constitution of learning (e.g. Gupta & Govindarajan, 2000; Hansen, 2002; Schulz, 2003). Instead, successful learning is generally perceived as a flow of knowledge, that is, as the more or less successful absorption of predefined kinds of knowledge (Becker-Ritterspach, 2006). Similarly, the process of learning is typically understood as knowledge transferred across industries and countries in a form that is detached from the wider social networks that contribute to firm survival and effective performance (e.g. Zahra *et al.*, 2000). This dominant view — where learning refers to a process of shifting discrete best practices — is a structuralist one (Macharzina *et al.*, 2001; Uhlenbruck *et al.*, 2003) which results from the literature's bias towards cognitive 'knowledge oriented' perspectives (Hong *et al.*, 2006a, 2006b) and information theory's sender-receiver model of information exchange (Noorderhaven and Harzing, 2009; Carlile, 2004).

This has lent weak attention to the transformational nature and social embeddedness of learning processes in MNEs. Cognitive perspectives for instance, with their focus on 'knowledge' instead of learning processes, "tend to regard organizational learning as acquisition, storage and transmission of collective knowledge" (Hong *et al.*, 2006a). This not only deemphasizes the transformation of meanings and practices in learning processes, but it also ignores their social constitution. By the same token, the dominant sender-receiver model focuses on how complex organizational characteristics of MNEs, the characteristics of the knowledge transferred, and the knowledge-related characteristics of sending and receiving subunits impact knowledge flows in MNEs. But only scant attention is devoted to how sub-organizational processes and the social context constitute learning at the micro- and macro-level.

Drawing on Scandinavian institutionalism (Czarniawska and Joerges, 1996) and social perspectives of learning (Elkjaer, 2005) and comparative institutionalism (Whitley, 2007), we argue that successful organizational learning depends on socially embedded translation work of participating actors who are enabled and constrained by their situatedness in host institutional settings. In this view, practice transfer will only lead to learning—that is, desired changes of local practices—if the transferred practices are translated by actors embedded in a specific social context. Translation work is necessary because it facilitates the integration of practices into a new social context. At the same time, local actors must be both empowered and enabled by their social context to participate. Only under such conditions will local actors

be able to relate to the transferred practices, engage in and perceive them as their own and subsequently institutionalize them. In other words, much in contrast to the mainstream perception of knowledge transfer in IB, it is argued here that only those units with a social context that is accommodating of local actors' participation in new forms of organizing and provide operational flexibility for translation of practices will be successful learners.

Drawing on two subsidiaries of the same MNE, we discuss two contrasting cases of learning within the context of a centrally initiated practice transfer. While both subsidiaries share similar roles in the MNE and have to adopt the same practices, they differ markedly in their learning patterns, that is, in terms of translating practices to the new social context. Specifically, while the German site features comprehensive translations of the transferred practices, the British site reflects much less translation effort. We show here that this difference in translation work is linked to different institutional conditions that shape different organizational conditions in terms of participation patterns at the two sites. We also demonstrate why the initiative dies down in one subsidiary and why it is sustained locally in the other case.

The paper is organized as follows. In the following section, section 2, we review the dominant view of learning in the IB literature. Following this discussion, we present an alternative framework of learning in MNEs, drawing on Scandinavian institutionalism, social learning perspectives and comparative institutionalism. In section 3 we present our research methodology and introduce our cases. Drawing on the analytical framework, we compare our empirical cases in section 4 and explain their different learning patterns. In section 5 we discuss the institutional embeddedness of the different organizational conditions found in the two case studies. In the final section, we summarize our findings and highlight our contribution to the literatures on IB and institutionalism.

2. Theoretical background

The dominant conceptualization of learning within MNEs is what Noorderhaven and Harzing (2009) term the sender-receiver model (e.g. Szulanski, 1996; Gupta and Govindarajan, 2000). Derived from information and communication theory (Carlile, 2004), the sender-receiver model suggests that knowledge flows are enabled and constrained by (1) the sending unit, (2) the receiving unit, (3) the transmission channel, (4) the transfer message, and (5) the transmission context (Szulanski, 2000). Specifically, within the context of knowledge flows in MNEs, literature based on the sender-receiver model has particularly looked at: (1) *The characteristics of the sending unit* – such as motivation and knowledge stock (Szulanski,

1996; Foss and Pedersen, 2002; Gupta and Govindarajan, 2000); (2) The *characteristics of the receiving unit* – most notably its motivational conditions and ‘absorptive capacity’ (Szulanski, 1996; Foss and Pedersen, 2002; Gupta and Govindarajan, 2000; Minbaeva et al., 2003; Tsai, 2001); (3) The *characteristics of transmission channels or the intra-organizational context* such as network or relationships in the MNE – based on structural configurations as well as communication, coordination- and control mechanisms (Szulanski, 1996; Almeida and Phene, 2004; Björkman et al., 2004; Foss and Pedersen 2002; Gupta and Govindarajan, 2000; Hansen, 1999, 2002; Hansen and Lovas, 2004; Teigland et al., 2001; Tsai, 2001); (4) The *characteristics of the transferred knowledge* (Szulanski, 1996; Foss and Pedersen 2002; Hakanson and Nobel, 2000; Hansen, 1999, 2002; Kotabe et al., 2003; Schulz, 2003) — frequently based on the classical distinction between tacit and explicit knowledge — as well as the similarity or complementarity of knowledge exchanged between units (Hansen 2002; Zanfei, 2000; Sölvell and Zander, 1995; Almeida and Phene, 2004); (5) The characteristics of a unit’s *business and technological environment and external/local network relations* (Almeida and Phene, 2004; Forsgren et al., 1999; Foss and Pedersen, 2002; Frost, 2001; Mudambi, 2002; Pearce and Papanastassiou, 1999; Kotabe et al., 2003; Yamin and Otto, 2004).

Thus, the sender-receiver model has furthered our understanding of how complex organizational characteristics of MNEs, the characteristics of the knowledge transferred, and the knowledge-related characteristics of sending and receiving subunits as well as certain aspects of the technical and business environment enable and constrain knowledge flows in MNEs. However scant attention has been devoted to sub-organizational processes and the social context that constitute learning at micro-level and macro-level. Even though a number of contributions in the knowledge flow stream adopt the learning *term* (e.g. Zahra et al. 2000; Macharzina et al., 2001), saliently this literature continues to adopt a strictly ‘knowledge-oriented’ perspective in which knowledge is treated as an invariant substance (Hong et al., 2006b). As such, knowledge-oriented and cognitive perspectives largely neglect the transformational nature of transfer processes, their social constitution and their embeddedness in the wider institutional context.

To address the inattentiveness to the transformational nature and the situatedness of learning, we seek to combine three bodies of theory. First, we draw on the social learning theory to unravel the social constitution of learning at the micro-level. Second, to better understand the transformational nature of social learning, we draw on Scandinavian institutionalism and draw on its concept of translation. Third, we draw on Whitley’s

comparative institutionalist approach to relate the organizational influences on learning to the complex national institutional embeddedness of learning processes in MNEs.

Social learning perspectives

Social or contextual learning perspectives centre on the idea that learning is constituted by actors that participate and interact in social processes (Elkjaer, 2005). In this view, learning is performed by collectives of participating actors – also understood as ‘communities of practice’ (Lave and Wenger, 1991) – that are embedded in specific social contexts. It involves actors who actively participate and communicate to construct meanings (Wenger, 1998). Learning in the social learning perspective not only sees participation as constitutional for learning but raises the question of who participates and why. This points to the relevance of organizational power structures and conflicts in learning processes. Elkjaer (2005: 45) argues that “the issue of empowerment [is] essential as learning requires access and opportunity to take part in the ongoing practice”. Thus, a focus on participation and its prerequisites turns our attention to power- and incentive-structures, trust and other factors that enable or constrain participation in different social contexts.

This, in turn, underlines the importance of the situatedness of organizational learning (Cook and Brown, 1999) and the influence of various contexts to which learning is exposed (Gherardi, 2000). The contextual situatedness of learning also implies that practices transferred across organizational and societal divides rely on re-contextualization (Brannen, 1999) or transformation (Gherardi and Nicolini, 2000). It is this aspect that is particularly highlighted by *Scandinavian institutionalism* through “translation”. While social learning perspectives have explored micro-processes of learning and have emphasized the importance of organizational contexts, they have, so far, paid only scant attention to the complex institutional contextuality that affects organizational learning processes in MNEs. Specifically, how institutional contexts structure patterns of participation and interaction in organizations. As we will argue below, Whitley’s (2007) comparative institutionalist approach on organizational learning sheds light on this link.

Scandinavian institutionalism

Scandinavian institutionalism offers a fruitful discussion on learning in MNEs as it conceptualizes transfer processes across time and space and acknowledges its transformational nature. Its significant constructs of ‘editing’ and ‘translation’ help us define learning processes as sequences of translation rather than as ‘flows’ or ‘diffusion’ (Sahlin-

Anderson, 1996; Czarniawska and Sevón, 1996). Czarniawska and Joerges (1996) argue that 'ideas' can only be transferred if they are disembedded. This requires, as a first step, the translation of 'ideas' into 'objects' or 'quasi-objects' (Czarniawska and Joerges, 1996). 'Objects' or 'quasi-objects' are semantic as well as physical artifacts such as texts or prototypes. However, to be organizationally meaningful and successfully integrated at the receiving end, objects or quasi-objects need to be translated into 'action'. Only if an 'action' is repeated and stabilized is there a chance that the transference will rise above a passing fashion into an enduring institutional practice (Czarniawska and Joerges, 1996). In a similar vein, Sahlin-Anderson (1996) sees the transfer process as a 'continuous editing process', in which practices and organizational forms are generalized, circulated and re-edited depending on fluid situational and institutional conditions. The outcomes of such processes are new organizational forms and practices that combine 'old and new, alien and local'. Sahlin-Anderson (1996) underlines that the editing process is also a process of social control as different editing rules apply (depending on the institutional context) and only certain actors may participate as editors.

Scandinavian institutional approaches offer a comprehensive understanding of learning as practices travel across organizational and national divides. They suggest that learning in the receiving context implies *change in two directions*. As actors seek to integrate an objectified practice into their social context, translation is required to tie the new practice into existing systems of meaning (cognition) and practices (behavior). In this process of integration or translation, both the translator's cognitive and behavioural contexts and the translated practice itself change (Czarniawska and Joerges 1996). This notion is in alignment with Rottenburg's (1996) argument that when an idea or 'a thing' is transferred to a new context, the idea as much as the context undergoes transition. Rottenburg (1996) stresses that only if actors tie new knowledge into their systems of meaning and then act upon it in a way that produces a new meaning or behavioural expression, can we say that integration has taken place. Within this view, both the transfer of practices into a new cognitive and behavioural system and the shift away from original meanings and actions through translation, are inherent features of learning.

In contrast to the social learning perspective, contributions from Scandinavian institutionalism pay only passing attention to issues of power and empowerment that can influence the translation or transformation process (Becker-Ritterspach, 2006). Power and its foundations tend to be overlooked (Forssell and Jansson, 1996; Sevón, 1996), perceived as 'taken-for-granted political structures' and 'ideological control' (Czarniawska and Joerges,

1996), 'social control' (Sahlin-Andersson, 1996), or understood as embedded in 'dominant reality definitions' (Rottenburg, 1996). A common feature of both social learning theory and Scandinavian institutionalism is that both fail to make explicit how different patterns of empowerment and participation, even if we accept that they are to a large degree taken-for-granted and unquestioned, reflect different types of institutional contexts.

Towards a social learning perspective in MNEs

Drawing on Scandinavian institutionalism, we understand learning as socially embedded translation work. Practices transferred into a new organizational and societal context need to be translated to manifest as learning. This involves both a cognitive and a behavioural component. Practice transfer constitutes learning upon its cognitive and behavioural integration into the receiving context. This, in turn, means that the meanings and practices of what has been transferred as much as the pre-existing meanings and practices in the receiving context undergo change and take on new forms. In other words, the receiving unit and its actors change the transferred as much as the transferred changes the receiving context and its actors. However, from a social learning perspective, translation is not accomplished by atomized actors, but by social collectives that involve social actors that are differently empowered to participate by their organizational context (Lave and Wenger, 1991). Going beyond social learning theory and Scandinavian institutionalism we argue that such organizational conditions of participation are structured to a large degree by the national institutional context. We argue that such an understanding is particularly important in understanding learning processes in MNEs, as these firms' units operate by definition in different national institutional context.

To further our understanding of the institutional embeddedness of organizational learning, we draw on Whitley's business system framework. Whitley (2007) conceptualizes the link between learning capability at the organizational level and national institutional differences by highlighting the effect of different patterns of authority sharing and organizational career on the learning capability of firms. The main line of reasoning is that firms require their employees' commitment and competence (the improvement of employer-specific knowledge and skills) for organizational learning activities. The employees' commitment and competence is crucially related to the willingness of owners and managers to share authority and the longevity and functional specificity of organizational careers. Whitley (2007) argues further that the willingness of owners and managers to share authority with different groups and the nature of organisational careers is greatly affected by societal institutions, especially those governing trust relations and skill formation and control

(Whitley, 2007). In other words, organizational learning capabilities develop differently owing to variations in authority sharing and organizational careers that are connected to different institutional frameworks. Drawing on Whitley's framework, we explore the extent to which we can relate different learning outcomes in the two subsidiaries under consideration to different patterns of authority sharing and organizational careers. Specifically, authority sharing "involves owners and top managers delegating considerable discretion over task performance – and sometimes task organization – to skilled employees, and encouraging them to contribute to product and process improvements" (Whitley, 2007:149). Whitley essentially argues that the higher the scope and degree of authority sharing, the greater the collective development of new skills, products and processes.

Organizational careers is conceptualized as the extent to which firms are willing to provide long-term careers to key groups of employees to encourage them to contribute to the development of collective firm-specific competences through extensive collaboration within and across departmental boundaries. Whitley (2007) distinguishes here the scale and scope of staff covered by long-term careers as well as the functional specificity of organizational careers, particularly "how far up the formal hierarchy of managerial positions successful staff remain in the same broad functional field of expertise" (Whitley, 2007: 157). In simple terms, he suggests that the higher the scale and the scope of long-term careers, that is the more comprehensive the *commitment to staff* in the firm, and the less hierarchically and laterally confined, that is the less *structural demarcations* in the organization, the higher the collective learning potential within and across departments. In other words, commitment to staff and structural demarcation in terms of both hierarchical and lateral relations is expected to shape participation patterns. Combining Whitley's comparative institutional approach with insights from social learning theory we expect to see differences in organizational *authority sharing* and *organizational career (commitment to staff and structural demarcation)* to manifest in different *participation patterns* and, hence, differences in *learning outcomes*.

To sum up, our perspective on subsidiary learning aims to explore how learning, understood as the socially embedded translation work of actors, is organizationally constituted by different patterns of participation and if these patterns can be associated with different national institutional contexts. Hence, combining the social learning perspective with Scandinavian institutionalism and comparative institutionalism, we see subsidiary learning as translation work that is constituted by actors who participate in social processes (Elkjaer, 2005) that are embedded in different host institutional contexts.

3. Research methodology and case introduction

The research project on which this paper builds involved comparative case studies of learning in a Dutch MNE operating in Germany and the UK in the chemical industry. The study was part of a larger study that compared, based on theoretical replication, two MNEs with different strategies and four subsidiaries operating in contrasting institutional context (i.e. Germany representing the collaborative and the UK the compartmentalized form of governance) (Whitley, 1999). While the initial research project investigated the combined effect of MNEs organization model and a host institutional context on organizational learning in four subsidiaries operating in contrasting institutional context, this study's aim was to understand in more detail why two of the subsidiaries of the same MNE, having similar characteristics in terms of transfer channel, transfer content, sending and receiving unit, reflected so markedly different learning patterns. Our interest was in highlighting the extent to which variation in learning patterns could be attributed to different subsidiary organizational conditions embedded in the wider national institutional context. We aimed to investigate the processes whereby continuous improvement in production was enacted by actors within a given local organizational context interacting with a wider institutional context of a country.

The subsidiaries were selected on the basis of their contrasting learning patterns. The selection of the chemical industry of study was significant from the standpoint of high internationalization and innovativeness (see CEFIC, 2001). Thus, it lent itself to investigating cross-national incidents of learning. Both the British and the German MNE operated a flow-production process.

The study focused on the introduction of new procedures and systems in production that had behavioural consequences (Child, 1994), and in particular on the processes whereby continuous improvement in production was enacted by local actors. Learning was defined as the acquisition and enactment of these new practices by collective actors at subsidiaries. Learning patterns could vary based on the extent to which new practices were translated in the receiving context. This could either be extensive or limited.

While the institutional distance between the Netherlands and Germany may be perceived as smaller than that between the Netherlands and the UK, the difference in institutional distance is considered to be marginal (Hotho, 2009), hence it did not cause a difference in the way in which knowledge was transferred to the two subsidiaries. Both subsidiaries received the knowledge in much the same way, which did not appear reflective of any particular institutional context. More importantly, the transfer content largely consisted of

management practices which were already highly abstracted from their (mainly Japanese) institutional origins.

The case study involved a total of 15 semi-structured formal interviews (2 in Dutch HQ, 4 in the UK and 7 in Germany), ranging from headquarter management down to site managers at different levels, carried out between July 2005 and August 2007. The field research at both subsidiaries comprised two daily visits plus a week-long participant observation. The latter provided ample opportunity for long informal conversations with shop-floor members (operators, team leaders and shift managers) during the work process as well as work breaks. In addition, company documents were analyzed. Company documents included, for example, strategic and mission plans, internal newsletters, documentation on operational procedures and performance as well as all kinds of shop floor displays. Information that was collected from documentation and respondents focussed on the strategic and operational goals underlying the continuous improvement initiatives, resources that were made available by headquarters, the manner in which changes were implemented, the extent to which the subsidiaries changed their practices and the degree to which the headquarters was involved in this process.

The reliability of the findings was enhanced by making explicit the procedures that were followed for data collection. These procedures included matters of interview protocol, tape recordings of interviews and feedback on transcriptions or executive summaries from the participants. Interview data from a particular work group were checked against responses from another group to validate findings. Similarly, subsidiary and headquarter members' accounts were cross-checked against each other. In addition, interview responses and contents of documentation were compared, where possible, and inconsistencies discussed with interviewees.

Interview transcriptions were scanned to identify the extent to which practices were translated at subsidiary firms, as well as the organizational initiatives embedded in host institutional characteristics that were associated with the variation in translation. The case studies were combined with systematic comparison using Mill's (1974) methods of agreement and difference. Detailed accounts ensured that context-boundedness of (the conditions underlying) a phenomenon of interest was elicited. A systematic comparison allowed for a significant theoretical leverage to make generalisation possible. The analysis required the elimination or the 'successive exclusion of the various circumstance which are found to accompany a phenomenon in a given instance, in order to ascertain what are those among them which can be absent consistently with the existence of the phenomenon' (ibid., p. 392).

This analysis contributed to the homogenization of construct definitions and measures to build mid-range theory (Eisenhardt, 1989).

Research Sites

Dutch Chem (a pseudonym) is a Fortune Global 500 company employing 62,000 people globally and operating in more than 80 countries. The unit on which this study was based produced paints. Since 2000, the company had been standardizing and centralizing its organization to reduce costs.

German Sub

Like most subsidiaries in Dutch Chem, German Sub was acquired in 1998. German Sub introduced continuous improvement in 2004. German Sub hosted two different production departments—a wall paint and a lacquer plant—on its compound in Cologne. While there had been some investment, particularly in the lacquer plant, most of the manufacturing technology was old and inherited from the former owner. The workforce counted 411 and was severely reduced as part of HQ induced change initiatives. Since the introduction of continuous improvement, the production volume had been increasing.

British Sub

British Sub, acquired by Dutch Chem in 1994, introduced continuous improvement in 2003. The subsidiary manufactured both water-based and solvent-based paints. British Sub's mostly old production technology had been taken over from the previous owner. Like German Sub, the work force had been reduced over time owing to HQ's change initiative. At the time of research the workforce comprised around 324 people, down from 466 before the introduction of the change programme. This was paralleled by a decline in production volume.

4. Empirical findings

Dutch Chem's change initiative

With increasing pressure to reduce costs owing to increased competition in the industry, Dutch Chem introduced a continuous improvement programme called Star Trek at various sites in Europe in 2003. At the heart of the change initiative stood the effort to improve the operational performance of Dutch Chem's different production sites. The required operational improvements included service level to customers, quality, cost per litre, stock

levels, and health, safety and environmental (HSE) issues (Star Trek Roadmap company document). Each site was informed of the need to achieve results in these five key areas. While the Star Trek suggested a range of practices (such as 5S, OEE, FROK, SMED, value stream mapping) to achieve the results, the sites were largely given the flexibility to decide on them (Supply Chain Europe Director). Rather than having to stick to and implement all defined practices, the sites were encouraged to select and translate them and to embed them in their own local visions of the Star Trek programme. This was also reflected in the specification of participation and empowerment as crucial ingredients for continuous improvement the Star Trek Roadmap.

The overall vision for Production & Logistics [P&L] is to become a competitive weapon for Dutch Chem Europe. What does that mean for an individual site? It could mean exactly the same, but it could also be translated into a more local vision. The vision should motivate people to work on the realization of that vision, so it should be something that people can recognize, can handle and can translate into real actions. The vision must be of course in line with the overall P&L vision. (Star Trek Roadmap document)

To summarize, Dutch Chem asked its subsidiaries to improve operational performance on a continuous basis. In Czarniawska and Joerges (1996) terms, the Star Trek Road Map provided the subsidiaries with a set of ‘objectified practices’ that broadly guided the implementation of continuous improvement in various subsidiaries.

Learning processes at British and German Sub

The research stays and interviews at the British and German Sub revealed substantially contrasting processes of organizational learning. German Sub was able to sustain improvement efforts with the high involvement of its shop floor workers and management. The site developed its own path to achieving the key measures through extensive translation. By contrast, British Sub faced challenges in sustaining improvement efforts. While German Sub was able to maintain an effective continuous improvement process that outlasted the end of the Star Trek programme and managerial change at the headquarters, the continuous improvement process at British Sub saw the “fizzling away [of Star Trek] over the last one and a half to two years” (Operator). “At first, the push from above is big, but then it withers over time because people are busy. The target has been to get the service level up to 99 per

cent, which has reduced the focus on other principles” (Manager of the blue shift, British Sub).

Learning at the German site

During the interviews and research stay it became clear that, in contrast to British Sub, German Sub had taken the freedom provided by HQ and had translated Star Trek into its own local vision, guiding principles and practices. This translation involved a departure from the original wording of Star Trek to a more locally focused slogan and image with which local employees could identify.

I would say that Star Trek has no meaning for the people. I know that other sites did that differently but I, we very deliberately took the decision not to sell it under the label Star Trek. I would say it certainly was for us, as managers, a trigger. For me personally, I understood it as “there is finally some legitimation that what we want to do we can do with an official approval”. . For them [workers] this [Star Trek label] is much too far away. And you have to get the people’s attention and you cannot get their attention with something they don’t grasp or associate with. (Factory manager lacquer plant)

At site management level Star Trek was translated into “Impossible is Nothing”. In addition, to the general translation of Star Trek into a local vision and programme involving local site management, there was yet another step of translation that involved the participation of the local workforce. This involved deriving local guidelines from Star Trek together with the local work force. These guidelines were accompanied by the slogan “We from Cologne hand in hand”. The local workforce strongly identified with the slogans, accepted them as guiding principles and took pride in having had a role in formulating them.

“The guidelines” are something you can fall back on. This is something the subordinate and the superior can refer to in any kind of discussion. And under each guideline there are a number of explanations that are understood by all. (Factory manager wall paint plant)

These behavioral guidelines, in turn, were seen as a corner stone in realizing a new continuous improvement practices. They allowed moving away from a formal and cumbersome improvement system to sustained continuous improvement practices on a permanent basis. In fact, many examples of such continuous improvement practices were found during the

research stay. They included changed filling processes for acticides, eye shower installations, piping to reduce yeast and the development of a local system to track the service level (“Manko tracking”). Not only did the different improvements outlast the end of the Star Trek initiative, but the continuous improvement process proved sustainable even after the initiative had died down at corporate headquarters. While the guidelines formed a crucial element in accepting the need for continuous improvement, the wording of Star Trek or continuous improvement was deliberately avoided. This was also related to the fact that local workers had bad experiences with the consultancy firm that was involved in the early implementation phase, and with the formal improvement system at the site.

Moreover, local management not only avoided taking on all practices suggested by Star Trek, but also the suggested manner in which they could be implemented:

We call it S4S, I mean 5S is the standard understanding which was originally introduced by Toyota and zealously followed tralalal since, I mean all the way down to organizing your desk and defining a position for your pen. I am a big fan of imitation. Now, if someone had a good idea and we try to take that on board one-on-one, this is not possible. Because each plant is different. I can get ideas somewhere else but then I have to see what fits best my system. (Production advisor lacquer plant)

In contrast with the British site, standard operating procedures did not play a crucial role in the realization of continuous improvement at German Sub. These procedures were deliberately “not spelled out in all detail” (Production advisor wall paint plant). There was a lot of “experience knowledge” involved that was difficult to formulate (Production advisor wall paint plant). Moreover, workers were seen to differ in how they operated their machines, which also meant that using and defining in detail amounted to futile exercise.

Overall, the aim was to create an improvement culture of learning that involved the entire organization. This implied that there was no particular project, practice or group of the workforce that was singled out to carry the improvement process. Rather, translation of the Star Trek program involved the participation of a wide range of different actors from across the organization, irrespective of hierarchical and functional divides.

Authority sharing

German Sub’s local production manager was a firm supporter of participative management and very much valued bottom-up input from the workforce.

You have to accept that they know a hell of a lot. They know three times more than the stupid manager knows. He may know more about planning issues, but machine

knowledge and understanding the problems there the man in the line knows best. And one has to appreciate that... if this is not the case we I have a problem. (Factory manager wall paint plant)

By the same token, his management team encouraged participation and subscribed to his 'people make the difference'-orientation. Overall, top and middle management displayed high trust in the local capability and felt the need to involve the work force.

The main point is that you have to take the people into the boat. If you don't do that you don't even have to start. You have to be well integrated, you have to care about them, you have to listen to them, you have to talk to them and you have to give feedback be it positive or negative. One must not let this trickle into the sand. Otherwise motivation gets lost. (Production advisor wall paint plant)

Much more important than all those key words is that you take the people with you. That the people are inspired to create their own ideas. This imposition of certain things is in my view the wrong way. There are certain incentives to achieve certain basic systems. (Factory manager wall paint plant)

Importantly, the local management style tried to replace a blaming, cover up and punishment culture, with a culture of setting incentives for good performance based on rewarding of bonuses to those who met performance targets and accepting the occurrence of mistakes. These, in turn, also encouraged participation in continuous improvement efforts.

If production runs fail—costing about 30,000 to 40,000 Euros—workers are not punished any more. Instead they enter the office without hesitation and admit something has gone wrong. There is discussion as to why it occurred and how the same mistake can be avoided in the future...Earlier, workers would receive an official warning and some would even lose their jobs. (Production advisor, wall paint plant)

In the German Sub, participation was also strongly driven by the local labour relations. The work between the works council and management was overall based on trust and cooperation. The works council played an active role in translating Star Trek initiatives into the local context. The works council was also involved in the design and redesign of the incentive system that went hand in hand with the integration of maintenance.

For example, in group work we started of with an agreement between 'Betriebsrat' and management (Betriebsvereinbarung). So this was worked out in the starting phase and the complete works council was involved. We discuss this among ourselves and then we approach the management with our suggestions. Of course they are often not 100% identical and so we try to find a compromise. That we most of the time always find. ... Yes, it is not only about group work but also about the compensation system that goes with it. We articulate for example what kind of bonus we expect. (Chair works council)

Organizational career – commitment to staff

In the view of the German production management the Star Trek document put a wrong emphasis on connecting improvements with the laying-off of people. While lay-offs were also considered and took place, they were rather seen as a last resort.

When it comes down to people, if you read his strategy paper or the road map, I am not sure in which paper it stands, then it says: the improvements mainly have to come from laying off people. ...It is written in there. And I think he maybe means something different, but that's what is written in there and I don't think so. (Director of the German production site)

In contrast to the British site, the 'people make the difference orientation' had even led to a departure from the path that had been introduced by the mandatory consultancy firm connected to the Star Trek program:

We started this [continuous improvement] with a consultant named [X]. I was deeply impressed by the [X] people who more or less went with me through that first stage of change, changing process, changing the mindset. But they had one problem: [X] did not care about people. ...When we started with [X], we were looking for results...But every time I went around in the factory, people were totally frustrated... When we went from one project to another, sustainability went away... In the last two years, we strongly focused on people's behaviour and in creating a culture environment...Whatever we do, we try to focus on our people, on behaviour, on culture, on getting their passion...It is all about people at the end, and nothing else. (Director of the German production site)

The works council also played a crucial role in management's long-term commitment to employees. For example, it encouraged management to employ young apprentices upon the

completion of their training. At the same time, the German employment legislation protected the long-time employees assuring that the core capabilities or competences¹ did not drain during repeated rounds of layoffs.

He (talking about the production advisor wall paint plant) was on a specialist list and this has saved him from unemployment. But you cannot put all young people on a specialist list. Otherwise you end up with a huge specialist list. In simple terms, it was based on a point system on low down in the list was laid off. Thereby, we had to lay off qualified “Chemiekanten”, who made a good job in production with a clear growth potential. ...But clearly the first layoffs were mainly governed by social criteria and in the last 2 to 3 years we are thinking more about changes, I mean about people who for whatever reason do not perform. This does not mean that they have to be laid off all the time. There may be as well other solutions. A case in point is a worker who cannot operate the AI aggregate for nervous system related problems. He will be shifted to another workplace... So it is a two step process, first the social plan and second thinking about expertise (Factory manager wall paint plant)

While some sections of the workforce felt that the works council was too close to management, the overall effect had been one of trust building in the workforce because the management and the works council integrated each other's interests and concerns as much as possible. The factory manager of wall paint commented in this context “we cannot complain”, adding that it is a relation of “giving and taking” (Factory manager of wall paint).² Importantly, apart from assuring work force motivation to participate in the continuous improvement, the commitment to staff insured that important improvement know-how stayed and reproduced in the company.

Organizational career – structural demarcation

Overall, there was a comprehensive interaction in the factory along vertical and horizontal lines in the structure. As regards vertical relations, some demarcation was reduced by devolving more responsibility to groups on the shop floor. Prior to the introduction of Star Trek, production groups were separated much more strictly into departments – there was “a

¹ Most of the operators worked for the company for 20 to 30 years due to the incentives that repeated social plans offered for the recruitment of older, long-standing employees. In addition, many workers, particularly the group speakers, had gone through an apprenticeship finishing as “Chemiefacharbeiter qualification” (highly qualified workers).

² This attitude of mutual trust was also involved when we requested research access. Only after we introduced our project to the works council, and the works council approved our project, did management allow our research stay in the plant

wall” between different departments. What is more, earlier “Meisters” would oversee and hierarchically control these processes. With the introduction of Star Trek, control was completely devolved to the group which was often headed by a group speaker with a “Facharbeiter” qualification. While the role of the remaining “Meisters” had changed from a line to a more advisory and coordinating role, they still formed an important link between workers and middle management. In other words, there was a weak demarcation between workers, first-line and middle management which aided in instilling a continuous improvement culture:

The plant is headed by the factory manager of wall paint. His right hand and link to the lines is a so called production advisor who worked himself up from the shop floor and is now a ‘Meister’. He strongly interacts with the group speakers of different departments...The group speakers [most of whom had an apprenticeship or trade training who were, under the old structure, known as foremen] have a very high acceptance with the workers. (Group speaker wall paint section, German Sub).

As regards horizontal relations, the interaction pattern was also very smooth. The reorganization of the maintenance unit, and its integration into production were crucial in achieving this. For example, since the reorganisation, both the fitters and electricians were readily available and approachable as they also had to report to the factory managers. The reorganization not only reduced the hierarchy but also facilitated the integration of maintenance and production know-how.

Yes, earlier it was called suggestions for improvement; today we simply call it an order for the workshop...Earlier, under the old workshop hierarchy, there was really a hierarchy. There we had the fat ‘Obermeister’ sitting at the top, and when he said now it is green; it was green, even if it was blue. That’s how it was. So people only had an opportunity to submit their suggestion through a third way called “Vorschlagswesen (Improvement system)” like maybe it is better if I change the hose of the pump every three months then I have fewer problems with the cleanliness. Now when the workshop hierarchy was broken up this changed. From then on, we had a workshop order list in excel where we could simply write down what we needed to get done and [X] checks this thing on a daily base and sees maybe consults [Y] if it is going to be too expensive or if extra resources are being provided...So the ideas of people are almost always tackled with or implemented within a very short period of time, without

having to make a big fuss. (Factory manager/Production advisor wall paint plant, German Sub)

The rather low structural demarcation in vertical and horizontal terms had two effects on participation and, hence, on the implementation continuous improvement practice. In vertical terms, the low demarcation (and authority sharing) secured a fast decision making and implementation of bottom-up improvement ideas and, thereby, the continued commitment of the workers to participate in the improvement practice. In horizontal terms the low demarcation allowed the participation of actors with complementary know-how, enhancing the improvement competence.

Learning at the British site

In contrast to the German site, the British Sub showed few signs of translating Star Trek and sustaining continuous improvement. It had difficulties translating Star Trek into a local vision which was, for example, reflected in the local management's critique of HQ for not providing firm guidance on changes to implement.

This is more of a management issue where not enough or due attention has been given...Our improvement efforts are more or less a trial and error process. We need a firm strategy. There is a lot from headquarters that is relevant but we are asked further questions like 'where do you see yourself in the future? What is your local vision? We do not know how these translate to the operational level. (Site manager)

Overall, British Sub featured more of a top-down communication approach to implementing Star Trek. According to one shift manager, Star Trek was communicated to operators by "bombarding them with graphs and notice boards" (Shift manager, British Sub). In a similar vein, an operator with eight years of experience recalled: "the Star Trek program was communicated through leaflets and by a quick session upstairs. Majority has not been implemented" (Operator, British Sub). The low degree of local translation was also reflected in British Sub's master plan to continuous improvement, which strongly focused on the measurement and improvement of operational indicators, rather than offering a framework linked to local identity to implement continuous improvement. The European improvement manager commented on British Sub in this context:

There is no skeleton to the continuous improvement programme. It is like jelly. There is no structure. Hence, we need to address the capacity to improve. There is a model

for improvement that most people know now that involves measuring and analysing the opportunity, allocating resources (particularly people) and solving problems. 80 % of time is put into collecting data, with very little energy put into solving problems. Why would it, if resources are not deployed to this. It should be 20% data collection and analysis and 80% on resources and problem solving. (European Improvement Manager)

In contrast to German Sub, middle and lower management at British Sub did not identify with the Star Trek program and were only marginally involved in translating it. By the same token, workers were not involved in the translation of the Star Trek programme into local guidelines in any collective goal-oriented way. The shop floor did not perceive it as its own, but rather as “a management thing” (Operator). During the interviews and the research stay, it became clear that only limited sections of the work force identified with the Star Trek programme and took on continuous improvement practices. The operators seemed largely ignorant of the Star Trek program. Most changes that had taken place in the – presumed – context of Star Trek affected only a small portion of the work force or production process; most operatives simply lacked an overview to notice these changes, or their consequences.

For the most part, continuous improvements were expected to manifest in improved standard operating procedures and behaviour following improved procedures. As such, the improvement process relied on formalization and explication, in contrast with German Sub, where the standard operating procedures and their documentation played only a minor role in realizing continuous improvements. While a range of standard operating procedures were redefined, we found substantial discrepancy between formally defined procedures and actual behaviour. For example, a team leader commented that standard operating procedures are “brought in, people hear about it, but people tend to do it their own way”. According to him, people adapted or even ignored the standard operating procedures because “they can do it quicker”. He further explained that this followed from experience, and that people should only cut corners when it was safe, adding operators generally “do three quarters of” the standard operating procedures (Team leader, British Sub).

While German Sub developed locally continuous improvement practices that outlasted the Star Trek initiative, the solutions developed British Sub failed to institutionalize. For example, the implementation of ‘5S’ areas was discontinued after the responsible consultancy firm and improvement manager left the site. Although one area of the ground floor had been successfully transformed following the ‘5S’ practice, the initiative was not put into a

sustained practice throughout the factory by shop floor workers. In the words of one operative: “if you spill there [the 5C area], you clean it up; but if you spill somewhere else, you just leave it”.

Overall, there was also little effort to translate the Star Trek program to the local site or of involving the shop floor in its translation. Those continuous improvement practices chosen for application, such as 5S or value stream mapping, largely reflected the suggestion of the Star Trek Road Map and showed little signs of having been openly and deliberately translated to the local context by means of local participation. Instead, quite a number of modules such as 5S were offered to operators in classroom training, owing to the level of subsidies offered by the UK government to minimize the loss of manufacturing jobs. To a large extent, improvement processes were allocated to so-called process improvement groups (PIGs) or projects rather than perceived as a collective endeavour involving the entire organization on a constant basis. One operator told us, for instance, that she had never participated in a PIG, and had seen no changes coming from them. She stated that changes should have gone “all the way, not just parts” adding that it “has to be factory wide“ (Operator).

Authority sharing

In contrast to German Sub, there were few signs of authority sharing. Participation in continuous improvement was not supported by a motivating incentive system at British Sub. Rather “continuous improvement has also meant loss in shift payments. This was a big concern for the operators” (Site manager). At the same time, there was recognition on the part of the senior site management that change in management involving a “better mix of people” and more “people managers” was required (Site manager for the UK). Particularly, middle management was identified as hampering the introduction of continuous improvements through lack of participation and leadership:

I am very hands-on, but I also work at a strategic level. In order to get managers like [X] out of their comfort zone, you need to create an environment that is challenging for them. It is by far more rewarding and effective to change the motivation of the majority of people who are mainly on the shop floor, then help managers to be able to deal with this and support it. You create a pull (bottom-up) versus a push (top-down) [change]....They are very traditional, political animals, not normally very good listeners. (European Improvement Manager)

Similarly, a team leader commented that management was not listening: “That’s a straight no”. Work experience on the shop floor also pointed to “a blame culture”:

Higher management should have an independent position when supervisors have problems with an operative. They often unconditionally side with the supervisors. It is the old [previous owner of the site] mentality...Lower management seems to support some sort of divide and conquer style...There is a blame culture. (Operator)

On the shop floor, in turn, there was much complaint that management did not respond to operators’ inputs. An operator in pre-labelling, who worked at the site for 20 years, expressed his frustration with the attitude of management:

They have to work on the communication between different sections, shifts, and between the shop-floor and management, which should be clearer.... Requests should be followed up quicker, and management should believe what operatives are saying. This has not improved. There are personality clashes between lower management and the shop floor. There is a way to be asked and a way not to be asked (Operator).

Overall, lower and middle management seemed to prefer to be distant from and not associated with shop floor activities. There was only limited respect and understanding of shop floor and in-house capability. This was also reflected in the strong reliance on external consultants and training. It contrasted sharply with German Sub, where the site manager had graduated from the ranks of workers, took pride in his production know-how and appreciated shop-floor insight.

In a similar vein, British Sub’s labour representation at the company level played much less of a proactive role. The UK master plan for continuous improvement stated in this respect: “Unions are not yet in the boat: ‘what’s in it for me?’”. While the unions supported external training of the workforce, there was no indication that they played an active part in translating and shaping the continuous improvement organization associated with the Star Trek program.

The unions who are still quite strong in this country, they of course cannot oppose those kinds of steps in continuous improvement. They see as well that the people who vote for them, they actually like doing this. (Operations director)

Organizational career – commitment to staff

With regard to reducing labour, the British management had fewer concerns and found it much easier to reduce its head count. This condition may have worked against finding more

employment-securing solutions in realizing cost reductions connected to continuous improvement. Put differently, in a scenario where lay-offs are comparatively easy, improving performance by reducing head count may be the first and not the last resort. This in turn puts additional strain on continuous improvement processes that are organized into projects.

On the other side, we have had a restructuring here. We have taken out 60 jobs. It was not difficult to get volunteers. 'If you have a redundancy program here, I will volunteer'. In the Netherlands, it will never happen. They will fight until the end, until the judge decides. The same in Germany. You will never get rid of people in a way like that. (Operations director)

[X] takes a lot of effort to explain to me that there has always been a conflict between the implementation of continuous improvement and delivering the results. [X] explains that costs went down across Europe, and that that internally put a lot of pressure on cost saving. The focus had been on "head count", and though no people were actually laid off, the natural erosion of people through retirement, changing jobs, and even through death, had led to a reduction in work force which was not replenished. Consecutively, resources (man-power) had been so tight that they simply had insufficient resources to free up operatives for additional training etc. [X] says that therefore, it's a chicken and the egg story. (Site manager)

In short, the strong emphasis on reducing head count in British Sub had the effect that the remaining employees found little time to participate and contribute to improvement activities.

Organizational career – structural demarcation

Management and shop floor interaction at British Sub was marked by a high social and professional demarcation and mutual opposition. The strong demarcation between middle/first line management and the shop floor hindered the sustainability of continuous improvement efforts:

The Star Trek principles are broadly based on a philosophy of continuous improvement which means involving people, building in quality, clear target setting, JIT, and eliminating waste. Easier said than done. Even today this is not clear, or if it is, it is certainly not delivered. Either principles have not been translated into shop floor objectives or there is a fear factor at first-line and middle management levels.

This is the biggest blockage. There is cherry-picking of practices with which they feel comfortable, and then a period of waiting. I have been going to the shop floor. Once you engage them, they will turn the business around. They have to challenge the status quo. They have technical, traditional management backgrounds. Continuous improvement way of working means working close with people. There needs to be a shift from 'telling' to 'inquiring'. (European Improvement Manager)

While there was the realization of a need for an organizational change to facilitate the continuous improvement process, little change had taken place. Operators found, for example, that at least one management layer should be removed as there were "too many cowboys, not enough Indians" (Operator).

As at German Sub, group work had been introduced at British Sub as part of the continuous improvement practices suggested by Star Trek. Although this introduction would have been expected to change some of the problems in management-worker relations, communication problems persisted. The ineffectiveness of organizational change was largely rooted in the continuation of a hands-off management marked by strong socio-professional demarcations between lower/middle management and workers. At the same time, there was some change with regard to the functional demarcations. In this regard there was "setting up of cross-functional improvement groups with the involvement of those people who are keen on continuous improvement" (Site manager).

However, it was the project-based nature of these "cross-functional improvement groups" or "process improvement groups" (PIGs) that strongly accounted for the limited translation at British Sub. While these PIGs removed, to some degree, functional demarcation, their success was limited. On the one hand, they involved a limited section of the organization. As a result, those not involved found it difficult to relate to the improvements suggested by PIGs. On the other hand, PIGs were particularly vulnerable to time and resource shortage because they were not part of day-to-day working activity. They were vulnerable to time and human resource shortages: "The PIGs died before they started. Not because they didn't want it, but because they have been understaffed for a long time. There simply is no chance to get together" (Operator, British Sub). A shift manager indicated that PIGs had been in decline as service levels went down and all hands were needed at the machines. As a result, resources that were deemed necessary for the implementation of Star Trek could not be freed up.

In addition to the internal compartmentalization and temporary nature of improvement projects, there was also much externalization in facilitating continuous improvement by making extensive use of external consultants and training facilities. Both the hierarchical demarcations in the organization and the demarcation between those who were involved in projects and those who were not, led to internal organizational divides that reduced the motivation and the capacity for realizing continuous improvement throughout the organization. At the same time, the unions were also not too supportive of efforts to reduce professional divides through the introduction of multi-skilling, which was a requirement for the implementation of group work.

The skills level of the workforce can be more up-to-date. Multi-skilling is widespread only in the warehouse, across electrical and mechanical skills. Skills can be upgraded. However, the workers need to have the right opportunity. They appreciate investment in skills. (Task rotation is favoured by some employees). Trade unions are against multi-skilling, because earnings are designed around one skill. Hence there is an impact on earnings. (Site manager)

Union membership also appeared to go hand in hand with the demarcation between the shop floor and first line managers and middle management.

Trade unionism started here. The team leaders are union representatives. There is still a line of demarcation between management and operators. (Site manager for the UK)

In contrast to German Sub, there were functional and substantial hierarchical demarcations between different members of the organization at British Sub. These demarcations played an important role in explaining low levels of participation and in turn limited translation of improvement practices at British Sub.

5. Discussion: The institutional embeddedness of learning

Prior to the implementation of Star Trek, both the German and the British sites faced similar pressure to implement continuous improvement to change their operational performance. Yet the sites differed markedly in how they dealt with this pressure and consequently with regard to their learning patterns. While German Sub displayed extensive translation and a high institutionalization of continuous improvement across different organizational levels, British Sub showed limited translation and a lower level of institutionalization. A corner stone of the

difference rested on the participation patterns in the two subsidiaries. In German Sub the high levels of participation was based on a high managerial commitment towards authority sharing and a low vertical and horizontal demarcation in the organization. The latter was largely facilitated by the structural integration of production and maintenance and by the introduction of an integrating incentive system. In addition, the local works council participated and played a very proactive role.

In British Sub the low levels of participation rested on low authority sharing and high levels of vertical and horizontal demarcation. Also, contrasting with German Sub, the local unions played only a passive role and did not participate much in the translation of the Star Trek. The limited internal participation at British Sub was also enforced by the heavy reliance on external trainers and consultants. This contrasted with the German case, where the participation of external actors was rather low (see Table 1).

- Insert table 1 about here-

The different organizational conditions observed in German and British Sub can only be fully understood in the light of their embeddedness in the wider institutional context of Germany and Britain. While organizational idiosyncrasies play an important role which cannot be equated with a mere reflection of institutional conditions, it is important to see how they are intertwined with the wider institutional context. Below, we outline how the differences observed in terms of authority sharing and organizational career may be related to the institutional context.

Whitley categorizes the UK as managerially coordinated with limited internal authority sharing and organizational career perspectives to skilled staff. Germany, in contrast, is classified as a cooperative hierarchy with extended internal authority sharing and organizational career prospects to skilled staff. In terms of collective learning ability this implies that while learning in managerially coordinated firms is generally restricted to the managerial hierarchy, learning in cooperative hierarchies occurs on a much broader scale as it rests on the contributions of all long-term employees which crucially involves skilled workers (Whitley, 2007).

Whitley argues that these different learning capabilities rest on different kinds of authority sharing and organizational careers, which are connected to different institutional frameworks. These are defined by different political, financial, labour market and skill

formation systems. In the following discussion we will focus on the latter as we see these as crucial to understanding variation in participation patterns in our cases.

Institutional Roots of Authority sharing

In line with Whitley's framework, we find a stronger collective learning capability at the German Sub compared to British Sub. We also find that this is crucially related to different participation patterns, involving a strong continuous improvement process in German Sub that rests on a strong commitment of skilled workers. In contrast to this learning mode, we find a rather temporally and spatially restricted learning process in British Sub that hardly builds on the involvement of skilled workers.

Societal roots of these differences rest among other factors in different skill formation systems and industrial relations system (Whitley, 2007, see also Delmestri and Walgenbach 2005). For example, the British context has a highly compartmentalized skill formation system that very much rest on professional demarcations. In addition, there is more emphasis on generic skills across firms coupled with weak internal labour markets. Taken together, generic skills, professional demarcation and low commitment to firm-specific careers limit the willingness to share authority (Whitley, 2007). This is different in more integrated and less compartmentalized skill formation systems (involving employers, unions and state agencies) that are coupled with stronger internal labour markets, like that in Germany.

For instance, a key feature of the German skill formation system is its technical craft orientation and its continuous nature, creating strong cross-hierarchical occupational identities and allowing for "the possibility of moving vertically between different educational programmes and levels" (Sorge, 1995: 255). In our case this was also reflected in the backgrounds of German Sub employees. For example, the German Sub director started as a worker and moved into the director position through a continuous path of skills development. The long-termist approach is complemented by a highly developed system of vocational education and training creating a technically competent and flexible workforce (Ferner *et al.*, 2001). Managers—in particular first line and middle managers—graduate from the shop floor level and speak the same technical language. In this context, the "Meister" constitutes, in particular, an important professional category as he forms a smooth link between management and the shop floor (e.g. Becker-Ritterspach, 2005). The continuous nature, the vertical mobility and technical craft orientation of skills development encourages vertical participation (cf. Delmestri and Walgenbach 2005).

In the UK, by contrast, there are fewer opportunities for continuous advancement and exposure to combined practical and academic training in the higher education system (Lane, 1997). Not only is the system highly compartmentalized and diverse (e.g. Whitley, 1999), there is also a strong decoupling of practical and academic knowledge. Management careers are more generalist in nature and focused to a greater degree on learning through experience than formal qualifications (Tregaskis *et al.*, 2001; Delmestri and Walgenbach, 2005). In fact, “[t]he stronger the link between academic knowledge and practical experience, the less prestigious the educational programme” (Sorge, 1995: 257). Moreover, technical programmes are generally rated inferior to academic programmes. As a result, British managers tend to be “generalists and their approach to management is more likely to be generally administrative and financial than technical” (ibid., p. 251). There is a strong separation of strategic and operational management and the exercise of control via financial mechanisms (Aguilera and Jackson, 2003). This is not surprising given that managers typically receive education in ‘general’ management with a strong emphasis on finance (ibid.). Managers are also seen to have “little understanding of individual professional fields and [as] not possess[ing] the necessary competence required in each area” (Sorge, 1995). Similarly, Delmestri and Walgenbach (2005:198) argue that “Italian and German middle managers are more involved in knowledge work activities (e.g. technical problem solving) than British ones, who restrict themselves to ‘management’”. Both the compartmentalization of the education system and the decoupling of practical/technical and academic know how in the British education system may explain the strong socio-professional distance across different organizational levels. This education-system based distance not only restricts the vertical mobility but also implies that different employee categories in the organizational hierarchy have different professional identities and speak different professional languages reducing the conditions for effective participation in vertical and lateral terms.

However, different patterns of participation are also related to differences in the German and British industrial relations and their regulatory frameworks (see also Whitley, 2007). A typical feature of the German industrial relation system is the strong element of cooperation between the works councils and management. This becomes possible because part of labour conflict – such as wage bargaining – is externalized to higher-level negotiations and collective agreements between employer and employee associations. At the German Sub, the conspicuous smooth management-works council interaction was very much reflective of the traditional German institutional framework. It was this participative behaviour and spirit of mutual trust that allowed German Sub’s works council to play a proactive role.

In contrast to German Sub, we found a more passive role on the part of the local unions who were sceptical of multi-skilling efforts at the British Sub. The passive role may be related to the high importance of professional demarcations in the organization of unions in the UK, often involving different unions at a site. In other words, various unions represent different sections of the workforce, which reinforces socio-professional demarcation (Sorge, 1995). In contrast to Germany, industry-level collective agreements tend to be insignificant, leaving the settlement of most important aspects of the employment relationship to company level negotiations (Sorge, 1995). This, in turn, bears the potential for higher conflict levels and lower participation in the union-management relationship and lower trust and cooperation.

Dutch Chem granted its UK and German sites high operational flexibility, as well as left them less supported, whereby a local subsidiary could, based on its own initiatives, change its work systems. For instance, the German site of Dutch Chem emphasized and sustained change in mindsets through an integrated 'dual approach', where collective arrangements and high involvement systems form a partnership (see Tüselmann et al., 2006). In other words, the highly regulated and strongly institutionalized industrial relations context of Germany required an approach that addressed the local institutional pressure of a collectivist system as well as responded to competitive pressures to improve quality and minimize cost. This was achieved at the German site by implementing collective and direct employee involvement schemes. The former included representation of works council members' interests in continuous improvement changes through their participation in alternative work practices (also see Wood and Fenton-O'Creevy, 2005), and the latter involved direct participation in practices, information sharing and consultation that were focused at the level of the individual employee.

By contrast, there was no ownership of continuous improvement practices at the UK site of Dutch Chem owing, in part, to the adoption of a 'low road' minimalist approach, i.e. the absence of high involvement system (evidenced by the hands-off approach to management) and of collective arrangements. It is quite common in deregulated industrial relations settings such as the UK to have predominantly individualistic employee relations patterns, which may take either the 'high road' individualized direct involvement approach, where there is direct employee participation but no collective arrangements, or 'low road' minimalist approach where there is neither direct employee participation nor collective arrangements (Tüselmann et al., 2006). Guest and Conway (1999) argue that in 'black-hole' organizations, where there is neither a set of progressive HRM practices nor a recognized

union, there is more negative attitude and work experience than in cases where one or the other or both exist(s).

Organizational careers

Organization-wide participation and thus collective learning capability is strongly enabled and constrained by organizational career patterns. In this respect Whitley (2007) emphasises the scale and scope of staff covered by long-term careers as well as the functional specificity of organizational careers. As in the case of authority sharing, Germany and the UK differ markedly in this respect. While in managerially coordinated firms, like the UK, the commitment to and the range of employees covered by organizational careers is mainly limited to managers and senior experts, cooperative hierarchies have a considerably wider scope, including skilled workers. In the latter the functional specificity is also much more pronounced and reaches up into senior management. This implies again that learning in managerially coordinated firms is limited to the managerial hierarchy. In this context Whitley argues:

Companies where these career types dominate are able to generate strong coordinating abilities, particularly of different functions and expertise, but they tend to be less effective in learning how to implement continuous improvements to work processes, especially when that involves skilled labour force. (Whitley, 2007: 160)

This may also explain, why the management relied more on external actors and expertise to support the learning process at British Sub. In cooperative hierarchies, in contrast, learning across vertical divides is much more common.

Functionally specialized careers extend further down organizational hierarchies to encompass many skilled employees, and so encourage widespread commitment to joint problem solving and organization-specific knowledge development. (Whitley, 2007: 160)

However, while continuous improvement capability is considerable here, Whitley (2007) emphasises that it is strong within functional departments and much less across functional divides. This would also explain why management in German Sub was eager to reduce functional barriers by integrating maintenance and production, which was seen as the main stumbling block to learning.

The skill formation system, industrial relations and labour market system play a strong role in explaining differences in organizational careers and in lateral and vertical demarcations. For example, the vertical demarcation between workers and management has, traditionally, not been very pronounced in Germany. Sorge (1995) found that “the organizational division into separate units, jobs and hierarchical levels [in Germany] was much less extensive than in France and Great Britain” (Sorge, 1995: 250). Here again, the long-term commitment to all kinds of skilled staff and on skills development combined with a strong technical craft orientation create similar occupational identities among employees of different levels in the organization (cf. Whitley, 2007).

By contrast, the UK identifies with a ‘Taylorist’ work system that combines high levels of job fragmentation and strong manager-worker separation (Whitley, 1999). Sorge adds that “[n]owhere else is the difference between managers (line) and specialists (staff), between hierarchical authority and expertise sharper than here [UK]” and adds that “[d]epartments, task groups, jobs and professions are more sharply delineated” (Sorge, 1995: 251). In addition, employees in the maintenance division, specialist staff positions and in upper management have much more professional autonomy and a higher status than employees directly involved in production (Sorge, 1995). These vertical and horizontal demarcations are again rooted in the compartmentalization and decoupling of academic and technical/practical knowledge in the British system. Unlike in Germany where the diffusion of high-level scientific and technical education in the *Technische Hochschulen* from mid-century and the network of *Ingenieurschulen* for more practical skills created in the 1890s a competitive edge in particularly chemicals, metals, and electrical and heavy machinery, the inheritors of these enterprises in Britain are less likely to have a thorough technical training (Dore *et al.*, 1999). The features of the British education system suggest reasons as to why British Sub implemented continuous improvement in the form of a temporary project. The project groups served only to bridge high horizontal and vertical demarcations on a temporary base. Moreover, the stronger reliance of British Sub on external training of its work force reflects the UK’s strong reliance on formal qualifications and off-the-job skills development (Boisot, 1995). While German Sub was also shifting towards using more and more unskilled temporary workers, it still had a high rate (70 per cent Chemiefacharbeiter/Chemical Crafts Worker) of workers that had undergone apprenticeship training. Thus, the stronger reliance of British Sub on external training programmes served as the means to compensate for skills deficiencies, which are seen as relatively common in the British institutional setting (Lane, 1996).

6. Conclusion

This paper highlighted the two core weaknesses that dominate the current debate on learning in MNEs. These are the inattentiveness to the transformational nature of knowledge, and the limited attention given to social constitution of learning at the organizational level and its embeddedness in the wider national institutional context.

In comparing the case of a German and British subsidiary of a Dutch multinational, we tried to show that learning is intimately connected to translation. As the German case showed, the institutionalization of the new practices meant that local actors needed to translate these practices into their own language, meanings and practices to identify with them and render them their own. Paradoxically, this meant that successful transfer went hand-in-hand with the transformation of the transfer content, i.e. transformation beyond recognition of original meanings and practices. As a result of the successful implementation, both the transfer content as well as the receiving context of meaning and practice transformed into something novel.

We showed that these different translation patterns relied on the participation of local actors and that the translation of practices remained limited when only certain actors were empowered and able to participate. Hence, a closer look at organizational level conditions may be crucial to understanding how translation is enabled or constrained. Specifically, we suggested that organisational conditions which facilitate the participation in translation work of a wide range of actors, such as authority sharing and limited structural demarcations strongly influence the translation of continuous improvement ideas into institutionalized practices. Furthermore, we highlighted the embeddedness of participation patterns in the wider national institutional context. Here, we showed that skill formation and industrial relations systems of the host context enhanced our understanding of the variation in the sustainability of new practices. We suggested that the difference in participation pattern can be associated with different degrees of compartmentalization/continuity and the valuation of the practical/technical knowledge in different institutional systems.

These findings support the contributions of comparative institutionalists who have argued for diversity in practices owing to the constraining effects of home and/or host institutional contexts (e.g. Almond *et al.*, 2005; Ferner *et al.*, 2005). Furthermore the study suggest that more attention needs to be paid in the context of IB to the extent that different institutional contexts enable and constrain organizational learning by allowing social actors to participate and interact to different degrees. That said, to assume that the actions of local actors are strictly the product of structural and institutional factors would be overly

deterministic (Dörrenbächer and Geppert, 2008). Clearly, agency matters, as does the actual *extent* of institutional embeddedness (Geppert and Williams, 2006). Hence, future research should also examine the extent to which the translation of practices depends on the power and motives of local actors.

Moreover, accounts of learning in international settings that recognize the link between transferred practice and action in institutionalizing it require more empirical research, particularly given the emphasis on international diversity as a significant determinant of learning within MNEs (Zahra *et al.*, 2000). Future research, in an effort to strengthen our findings, can shed light on the interactive and contentious nature of learning in other forms of national governance as well as in settings undergoing institutional change. This would address some of the failings in mainstream international business scholarship, as outlined by Redding (2005), in particular the privileging of context-free rational agency and the determinacy over subtle and less explored influences of history, context and social meaning systems.

We recognize two important limitations of our work. The first concerns the potential attribution difficulty with regard to organizational conditions that are firm-specific idiosyncrasies and those that are reflective of the wider institutional context. While our findings suggest that many of the differences found in organizational conditions reflect the respective institutional context, there were also organization idiosyncrasies at work. For example, the reduction of functional demarcations (integrating production and maintenance and introducing an incentive system) by German Sub's management may be only partly attributable to institutional background. To disentangle these organizational effects from institutional effects would involve a wider comparative study that compared more subsidiaries in the same institutional context.

The second limitation concerns the assumption that Germany is a collaborative business system (Whitley, 1999) or, as labeled by Hall and Soskice (2001), a coordinated market economy. We recognize that while some scholars find this classification still highly useful (e.g. Hall and Gingerich, 2004), it has been called in to question by others. For example, Lane (2005) argues that the German market economy is converging towards a more liberal type of market economy. Similarly, Seeleib-Kaiser and Fleckenstein (2007) argue Germany's labour market policies saw a substantial shift towards a 'liberal welfare state approach'. While we do not wish to deny that such shifts haven taken place in certain institutional domains of the German economy, we side with contributions that emphasize a differentiated perspective and see the need for a "more nuanced analysis of what might be

described as non-trivial movement within the broad categories of ‘coordinated’ and ‘liberal’ market economies” (Hall and Thelen, 2009, p. 25). Also calling for a more fine-grained perspective, Allen (2004) argues that the comparative institutional literature wrongly assumes institutions “to be uniformly spread across firms within a national economy” (p. 87). Interestingly, even Lane (2005) does not deny differences among sectors and firms and admits that many features of the old system of corporate governance persist (see also Almond et al. 2003). Such views suggest, on the one hand, that there maybe continuity because or despite of change and on the other that there may be more variety within business systems across firms and industries than the reified ideal types suggest. With regard to empirical research, this calls for a careful use of the ideal types, asking to what extent they apply to a firm operating in a particular industry in a particular country.

In our case we did see typical features of the ‘German Model’ at work. This was particularly the case because the workforce at German Sub was rather old and was for the most part professionally socialized before the 1990s. It was also the case, because central components of the German vocational training system were still in place in the company. While German sub was increasingly operating with temporary workers to buffer variation in production levels, it still held on to its apprentice training system. In spite of the liberalization of labour market policies in Germany, employment security for the long standing workforce has not changed much in recent years (see also Harcourt *et al.*, 2006). Although comparative institutionalists have recently argued that the dual system of employee representation has eroded (Hassel, 2002, Lane 2005), our findings did not point to such a development for the core workforce in our case. This is not to deny that we saw an increased dualism (core vs. temporary) of the workforce (Carlin and Soskice, 2009). However, this dualism did not interfere much with those elements of the ‘old’ German Model (vocational training, authority sharing, low demarcation, participative labour relations) that were conducive to learning efforts at the German Sub.

In terms of practical implications, first, our findings highlight that in order for the transfer of new practices to be successful, it is essential to actively involve local actors. The successful institutionalization of new practices, where local actors eventually accept new practices and perceive them as their own, rests heavily on the extent to which new practices are translated to the local language and to local meaning systems. This demands active participation of the actors involved. Local actors should therefore be actively encouraged and enabled to participate in the translation of new practices, even though this may paradoxically lead to significant changes of the original transfer content. Second, our findings imply that the

successful transfer of practices requires organizational conditions that facilitate the active participation in translation work. In particular, the participation of local actors in translation work benefits both from authority sharing and relatively low levels of structural demarcation. Here lies a key challenge for MNEs. Different host countries may differ markedly in the extent to which the local institutional context encourages authority sharing and long-term organizational careers. In institutional host contexts where enabling institutional conditions such as relatively integrated skill formation systems are absent, a more consciously 'high road' (Tüselmann et al., 2006) or direct involvement approach to employee relations may be necessary in order to ensure employee participation in learning activities.

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Table 1: Different learning patterns and their organizational constitution

	German Sub	British Sub
Learning pattern	Extensive translation across different organizational levels	Limited translation across different organizational levels
Participation pattern	Extensive participation across the hierarchical range	Participation limited to management and external consultants
Organizational conditions	High authority sharing; High commitment to and of staff; Low horizontal and vertical demarcation	Low authority sharing; Low commitment to and of staff; High horizontal and vertical demarcation