Daniel Diemers

Culture and Knowledge
Introducing the Cross-Cultural Dimension of Knowledge Management

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introduction

The aim of this article is to investigate the issue of culture within the context of knowledge management. This aim sounds admittedly vague and the same goes for the term „culture". While we are slowly starting to have a more or less clear idea of what knowledge management is about and which scientific disciplines are supporting practical efforts to manage intellectual capital in firms, our understanding of culture is obscure and the term is often used to represent »the unexplained residuum of rigorous empirical analysis, an area of darkness beyond the reach of currently available scientific searchlights« (LeVine 1984: 67). Apparently we are using the term culture in our everyday life with very divergent meanings, depending on the respective context. We use culture when we talk about qualitative forms of entertainment, arts, theatre, cinema, concerts, art galleries; when we refer to folklore, poems, books, traditional costumes; when we talk about foreign countries, its inhabitants with different, foreign habits; when we are addressing the "soft" factors in companies and the business world; or when we talk about crops and bacteria, which are growing in a specific environment. Looking at the etymological roots of the term culture leads us to the Latin *colere, colo, colui, cultus*, which means to take care of, to cultivate, to till, but also to worship someone or something. The second, more religious meaning is reflected in our use of the term cult, while the first meaning stresses already our common sense use of the expression culture. Both semantical spaces, however, can be traced back to one origin: to grow crop in soil and to worship deities is a typically human behavior, which differentiated us in ancient times from the behavior of animals. At this stage in evolution, humanity began to transform nature and create a second living space, which was formed by our distinct culture. This original meaning – the emancipation from inner and outer nature by creating a culture both in geographical and epistemic space – is still reflected in our heterogeneous, contemporary uses of the word culture (see Hansen 1995: 12 ff).

Within the scope of this article we apparently need a common interpretative space in respect to a definition of culture. This semantical space may include different, elaborated perspectives on culture, in order to offer a set of connection points for different types of readers. For that purpose three different conceptualizations will be introduced: an anthropological view, which defines culture as symbolic systems of meaning and stresses the semiotic aspects of culture, a more generalized perspective, which regards cultural systems as consensual systems of standardization, and the thematic conceptualization within the discipline of business administrations, where classificatory frameworks have been elaborated to focus on relevant aspects of cultural differences in the context of business processes.

The basic research question that guides the line of argumentation within this article is

> How and to what extent is the cross-cultural dimension of interaction in business environments represented and embedded in contemporary knowledge management theories.

The focus, thus, is put on cross-cultural aspects – which is typically translated into German as *interkulturelle Aspekte* – of knowledge management, starting out from the assumption that people with different cultural backgrounds are the subjects within knowledge management theories. Please note that cultural backgrounds within the scope of this article refers not to differing "corporate cultures" – someone from company A interacts with someone from company B, who have each undergone different secondary socializations and thus come from different corporate cultures – but to different national or regional cultures, where people differ as a result of non-complementary primary socialization.

This specific terminology about socialization leads us to the necessary remark that every article is obviously written under a specific perspective, an encompassing paradigm that implicitly influences the line of argumentation and the selection of topics and references by the author. This paper is no exception to that rule and therefore I consider it my duty and obligation to disclose this implicit perspectivity. In general, I try to align my thinking with the interpretative paradigm of a newer sociology of knowledge, especially social constructivism of Peter L. Berger and Thomas Luckmann (Berger/Luckmann 1966, see also Maffesoli 1996). On epistemological questions I have taken the thoughts of Alfred Schütz and Thomas Luckmann as a baseline theory, inspirative source and main reference (Schütz/Luckmann 1974; 1983, see also Schütz 1982, Eberle 1984).

concepts of culture

Before we are able to assess the cross-cultural dimension of knowledge management theories, we first have to delineate precisely, what is meant by the term culture within the scope of this article. For, culture is knowingly a very ephemeric expression with a wide range of attributed meanings. Without a conceptualization the term would remain too vague and not directly applicable within the context of knowledge management.

In cultural anthropology or sociology – as two typical representatives of cultural sciences – the term culture stands at the very heart of its own ontology. The first scientific impetus of the term „culture" is attributed to the founder of modern cultural anthropology, Edward Burnett Tylor, who defined the term in his seminal work *Primitive Culture* (1871) as the embodiment of knowledge, belief, art, moral, law and habit and all other abilities and uses, which man has acquired as a member of society (Hansen 1995: 15). Leslie A. White, another cultural anthropologist, stated in his work *The Science of Culture*: »All civilizations have been generated, and are perpetuated, only be the use of symbols. (...) All human behavior consists of, or is dependent upon, the use of symbols. Human behavior is symbolic behavior; symbolic behavior is human behavior. The symbol is the universe of humanity.« (White 1949: 22). This definition puts an emphasis on the culturally specific use of symbols for human interaction. In this view – which we could call a semiotic perspective – one culture is differentiated from another by its distinct shared meaning systems. One of the most influential, recent definitions in this semiotic tradition came from Clifford Geertz, who defined culture as

> »historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic form by means of which men communicate, perpetuate and develop their knowledge about and attitudes towards life.« (Geertz 1973: 89).

LeVine (1984) elaborates several aspects of culture from an ethnographic viewpoint; two of them are the collective and organized nature of culture. From the collective perspective culture is seen as a

> »shared, supraindividual phenomena, [in] that culture represents a consensus on a wide variety of meanings among members of an interacting community«. - »every human community functions with a group consensus about the meanings of the symbols used in communications that constitute their social life, however variable their behavior and attitudes in other respects, because such a consensus is as necessary for encoding and decoding messages in social communication in general as agreement about speech rules is to encoding and decoding in the linguistic mode.« (LeVine 1984: 68, 69).

A second feature of culture is its organized nature in that »it is an organized set of contexts from which customary beliefs and practices derive their meaning« (LeVine 1984: 72). Seeing Culture as an organization of ideas and concepts emphasizes the fact that any symbolic meaning involves both specific knowledge about the symbol under consideration and more general knowledge of related, but „higher-level" symbols. From that perspective we already get a first impression of the imputed relevance of culture for any form of knowledge management that extends over cultural boundaries.

In another conception and terminology we could say that culture has something to do with standardization within a confined group of people, in the sense that certain standards have been established over time and have to be acquired by new members of that group (Hansen 1995: 30 ff). These standards define the way how people within closed boundaries interact, and what communication protocols they use to do so. Our language system is basically a system of standardization for symbolic signs and a consensual standardization of meanings, which are attributed to these signs (see Hall 1997). But the idea of culture as a standardization extends also over the ways of thinking, feeling and acting. Norms and values within the cultural boundaries are standardized in that there are clear standards about what is right and what is wrong in a specific context. In this view on culture the aspect of closed boundaries and the consensual elaboration of standards are apparently most prominent and offer a good conceptualization of problems that are also relevant to knowledge management.

In the field of business administration the term culture came to a certain popularity as a consequence of the changing business environment and the growing public attention and awareness of the so-called process of globalization, which is – according to Magala – basically a mode of imposing globally relevant values and norms on regional business environments and thus a procedure of value-formation in itself (Magala 1996: 10). While trade barriers between nations can be abolished through political agreements, cultural barriers between people may still resist globalization efforts. But in order to generate more commerce on an international scale, evidently both barriers have to be overcome. This simple insight led to an increasing interest of managers and management theorists in cultural sciences. The term „culture" became *en vogue* and new fields of study within business administration emerged, namely international management or cross-cultural management (see for example Adler 1980; 1991; Mead 1992; 1994, Ball/McCulloch 1982, Ferraro 1994, Mendenhall et al. 1995, Macharzina/Oesterle 1997, Hasenstab 1999).

This field of research and practice generally has a very pragmatic attitude towards culture, in that cross-cultural differences are seen as a problem, as an impediment to successful business activity, which can and has to be resolved in a certain way. With this rather instrumental and reificated view on culture – culture is an external „something" that influences business processes – a certain normative dimension enters the discourse, as there are apparently more problematic cultures in a specific context than others. Typical definitions in this field regard culture as

> »the learned actions, attitude, and beliefs of a people. It includes greeting and parting ceremonies, attitudes towards time, gender, and money, and beliefs in the value of individual effort.« (Katz 1988: 3).

Geert Hofstede has laid the most influential theoretical foundations for a business administration perspective on culture in his seminal work *Cultures Consequences* (1980b, see also 1980a, 1988). In his model culture goes along with normative values, which can be defined as »a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means and ends of action« (Kluckhohn 1951: 395). Hofstede established – based on his empirical observations in many different countries – a classificatory scheme along the dimensions of power distance, uncertainty avoidance, individualism and masculinity. This approach to operationalize culture by creating classifications has led to a wide range of business administration frameworks for analysing cultural differences in business processes. For example, Harris and Moran deliver a »broad« 10 point classification that comes with an interesting disclaimer that speaks for itself: »an effort to help interested parties assess any culture and examine its people systematically. It does not consider every aspect of culture, and by no means is it the only way to analyse culture. Rather it should serve as a useful beginning« (Harris/Moran 1990, cited after Cascio et al. 1992: 4).

So far culture has been discussed solely in an international context, but another, related discourse within business administration theory is the idea of a corporate culture, a neologism which Fung reformulates to the dichotomy of societal culture vs. corporate culture (Fung 1995). The term „corporate

culture" – derived from the older „organizational culture", which itself dates back to the 1960s – gained for the first time attention with the identically named book of Deal and Kennedy *Corporate Cultures* (1982) and led to a new, distinct perspective on companies (Hofstede 1991: 179). This second cultural aspect of „doing business" describes the specific ways and means of how organizational members interact and communicate with each other within a confined setting. Basically every corporation is assumed to have an own, distinct corporate culture, or at least a certain congruency of various local cultures of parts of the organization.

Within this article, however, this second, strongly related view on culture, business and knowledge shall not be explicitly examined further. On the contrary, the multi-cultural nature – in the sense of several differentiated (sub-)cultures within one corporate culture – of business enterprises is not a cross-cultural phenomenon in itself, as it can be observed in any part of the world, and thus shall not be considered within the scope of this article.

the cultural dimension of business interaction

The research question introduced above focuses explicitly on interaction in business environments, a mode of high cross-cultural potentiality that will be examined in this section, in order to lay theoretical foundations for our assessment of contemporary knowledge management theories in the next section. From empirical and theoretical works in the field of business administration we know that interaction in a cross-cultural context often has a problematic dimension (see Adler 1983a; 1983b, Hjelholt 1976). Typical issues in business administration theory are gender issues, negotiation styles, differences in leadership and motivation, training for international assignments or expatriate managers (Mendenhall et al. 1995).

Empirical examples often stem from the field of business negotiations (Graham 1985, Fisher 1990), or from comparisons between Japanese and Western styles of management (Drucker 1971, Pascale 1978, Puffer 1996). Similar findings yield other disciplines, such as psychological or sociological research, or the specialized field of cross-cultural small group research (see Shuter 1977, Mann 1980). Anderson, for example, examined cross-cultural workgroups and discussion groups with respect to leadership, members' attitudes and task performance (Anderson 1966; 1983). Hare, on the other hand, made an analysis of personal communication networks in a comparison over three continents in respect to interactional patterns (Hare 1969). Most of these studies, however, start off from the assumption that misunderstandings, conflict and contradiction are negative factors for business performance, which on a whole is a legitimate view if we consider the importance of good relations between interaction partners in a business context. But nowadays the alternative view is also commonly accepted that – let the issue of misunderstandings alone – contradiction and opposed views in interaction need not necessarily have an adverse effect on business processes, because the act of overcoming recesses or impasses and the coordination of differing perceptions are indispensable for creating new concepts and ideas, and thus fostering innovative thinking in organizations (see Piaget 1974, cited after Nonaka/Takeuchi 1995: 93).

In general, however, one main problem of cross-cultural interaction are phenomena that could be subsumized under the notion of "cultural bias". When looking at foreign cultures it is almost impossible not to use consciously or unconsciously own patterns of thinking and conceptualization. Even if there are methodologies to reduce this »self-reference criterion« (Lee 1966), it is likely that misreading results will occur due to the cultural bias in the phenomena focused on, in the ideas measured, or in the measurement instruments (Adler 1984). Stronger forms of such cultural bias are managerial phenomena of ethnocentrism, parochialism, xenophilia and xenophobia. Ethnocentrism is an attitude towards seeing one's own culture as superior compared to other cultures, especially when it comes to business processes. Related to the concept of ethnocentrism is parochialism, which can arise when

people believe in the superiority of their own culture not because cultures have been compared, but differences between cultures are simply not recognized as a result of ignorance and lack of knowledge (Mendenhall et al. 1995: 74). Another strong form of cultural bias is xenophilia, which includes the view of estimating a foreign culture highly and seeing it as superior to one's own culture (Hofstede 1991: 211). The opposite bias can also be observed in cross-cultural encounters, which is the phenomenon of xenophobia, a strong aversion against anything and anyone from different cultures.

All these effects of cultural bias are related to the concept of prejudice, which means that people have fixed patterns of meaning – Walter Lippmann (1922) coined and introduced accordingly the term of »stereotypes« - that is applied to people and their behavior from foreign cultures (Allport 1954). Hofstede stresses the fact that a »culture shock« - followed by a process of acculturation – can be observed with people, who are suddenly confronted with interaction partners from other cultures and who realize that their stereotypes are no longer an apt instrument to structure social situations and reduce uncertainty in cross-cultural interaction (Hofstede 1991). If we consider now the problematic dimension of cross-cultural interaction in respect to misunderstandings, we tackle a second aspect of culture – so far we have mainly investigated into differences of value systems across differing cultures – that are the systems of symbols and meanings, which form an important part of any culture according to our definitions above.

In cross-cultural confrontations – for example a brand manager from country A meets a chief knowledge officer from country B – it is likely that problems of understanding each other will arise. Without any cultural similarities or a congruent, secondary socialization process, this effect can be explained with the absence of a common language, a common history and no shared social standardizations and institutions. As Hansen remarks, such hermeneutical gaps – one subject doesn't understand what the other one is talking about – can already be observed within the same culture, when an academic professor of philosophy meets a wandering carpenter and a computer-freak (Hansen 1995: 179). But If we consider the context of cross-cultural interaction, the hermeneutical gap is likely to be even larger. Of course it is often the case – especially as we have assumed a business environment – that in secondary socialization processes a common language like English or Spanish has been acquired and specific business rules and behavior norms have been internalized by our two interacting subjects. But with the following epistemological model it will become evident that such secondary socializations are likely not to eliminate the problematic dimension completely.

According to Berger and Luckmann people engage in modes of interaction, in which course they are constantly internalizing the socially constructed reality of others and externalizing their own reality according to their own cognitive structures or, we could say, according to their knowledge. As a consequence of this dynamic process of internalization and externalization both the individual, inner picture of reality, and the reality of others are being kept valid. Our knowledge of the world, then, is acquired as a result of such processes of primary and secondary socialization, where we are internalizing new confined spaces of meaning – *Subsinnwelten* that is – as a part of a larger, constructed ontology of the society we're living in (see Berger/Luckmann 1966). Alfred Schütz defined accordingly the »acquisition of knowledge as a sedimentation of current experiences in meaning-structures according to relevance and typicality. These in turn have a role in the determination of current situations and the explication of current experiences. (...) This acquisition, as a sedimentation of experiences, results from situations and is biographically articulated.« (Schütz/Luckmann 1974: 119).

In extension to this fundamental theory of how people construct their reality through language and social practice, Stuart Hall (1997) developed a theory of a dual system of representations, which tries to explain how our cognitive structures function in the context of the processes of internalization and externalization. According to Hall our cognitive structures represent two interlocked systems: first, a conceptual map with typifications or conceptions of phenomenological objects of our "outside world",

and here we become aware of the philosophical foundations of social constructivism, which are strongly laid by Edmund Husserl's phenomenology and Alfred Schütz' translationary bridging of Husserl's thoughts into sociology. Second, a respective system of signs or symbols to externalize and internalize these typifications, which are represented on the conceptual map.

One main problem of interaction across cultural borders lies obviously in the fact that the originary systems of signs – we could also call this the cultural language system, with the understanding that non-verbally transmitted signs make also part of this system – are highly differentiated across different cultures, sometimes even to a degree of complete incomprehension. The second problem is that the various conceptions, independently of their representation through signs, may not exactly be the same or may have been attributed a different valuation and context in the course of socialization. A small example can illustrate this aspect easily: If two managers from completely different cultural backgrounds talk in English about "urgent delivery" or "loyalty of employees", they obviously seem to have found a congruency of their respective systems of signs, in that both use the same signs to denote social constructions. But it is far from clear that the specific meaning of these signs in the current context will correspond, when traced back to the conceptual map, where both have a network of meanings attached to the conceptions of "urgent", "delivery", "loyalty" and "employees".

Beyond this semiotic level, there is also the social fact that certain cultural institutions – greeting ceremonies, eye contact, dressing conventions, etc. – vary greatly from one culture to another. It can thus be that even if signs and meanings, which are being exchanged during interaction, aren't problematic, the interaction process as a whole will fail due to a misconception of the interactional setting or an inappropriate behavior of one interaction partner. As has been described above, these social institutions have been learned during socialization processes and determine the way we interact with members of our own culture; in another terminology we could name these implicit social rules concerning interaction *codes of conduct*. However, this specific problematic dimension is reduced by the mode of interaction, which is by definition a business setting. For, if we define „doing business" as a social form of interaction where two parties engage in direct or mediated exchange of material or immaterial goods, we can assume that certain institutionalized, interactional patterns will be highly similar across different cultures. A second mechanism that can reduce the problematic dimension is the mode of repeated interaction. Through repeated interaction a *common interpretative space* between two or more interaction partners is being created and allows for successful interaction, even if certain institutions or semantic meanings have varied originally (Diemers 1999).

These two problematic levels, the semiotic particularity and the differences in social institutions, are in the end rooting in the epistemological dimension, which leads us directly to the next section of this article. Hofstede, by the way, summarizes this aspect of business interaction in his conception of »mental programs«, which are like a software of the mind carried around by people and contain a component of national culture (Hofstede 1980: 14). If we enter a field of different terminologies and look at Clifford Geertz genuine definition of culture, the here postulated relevance of culture for epistemological questions and concepts becomes even more evident:

> »[culture is a] historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic form by means of which men communicate, perpetuate and develop their knowledge about and attitudes towards life.« (Geertz 1973: 89).

assessment of contemporary knowledge management theories

As a beginning, let us look at different business cases where the issue of cross-cultural differences may influence the processes and methodology of knowledge management. In case one a global consumer products firm strives for an enhanced management of its intangible assets – the methodology speaks of

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brands, goodwill and the knowledge of the firm's employees – and has consequently established regional competence centres, where the specific knowledge about their brands, their respective markets and the knowledge of employees is collected, analysed and centrally stored on an IT platform. A corporate knowledge centre then has the task to look into the various regional competence centres and make the appropriate knowledge transfers from one centre to the other. As the company aims for establishing global brands, this knowledge transfer can be of high importance for successful marketing and sales on a regional level.

In case two a European nutrition and pharma company initiated an IT platform called „FutureObserver", with the aim of bringing together internal and external experts from different fields of research to engage in lively discussions about future trends and forecasts. The platform is moderated by a central group of researchers and comprises asynchronous discussion forums and weekly, interactive chat conferences. The idea behind „FutureObserver" is obviously to increase the company's awareness towards weak signals and to install a brainstorming facility, where new product ideas can be innovated and discussed in a competent environment.

In case three a global consultancy established an IT platform, where both „Yellow Pages" and project reports are combined. The profiles of all active consultants have to be updated monthly and every project has to be evaluated and reported on a weekly basis. In a special „best practice" section the lessons learned from different projects are assembled, while a „think tank" section incorporates focused research papers from renowned think tanks and academic researchers. A central group has the duty to check all entries on a regular basis, inform people of inconsistencies or incomplete entries, and erase obsolete data from the platform.

In all three cases we have the situation of a company with international operations and employees in different corners of the world. Another mutuality is the use of IT platforms to store relevant data. In cases two and three the platform is even globally accessible, while case one establishes confined regional platforms, which are then investigated by a globally active team. Case two is a special case in that not only stored documents make part of the knowledge platform, but also interactive chat rooms have been installed, where participants engage in synchronous conversations during special „conference hours". If we look at the three cases from a cross-cultural perspective it becomes obvious that there is a high potential for cross-cultural interaction and interpretation. This potentiality becomes more concrete if we imagine certain notions like „deadline", „problems" or „quality" to be used during interaction and especially within the global knowledge management architecture. Our conclusions from the section above on the cross-cultural dimension of business interaction are thus also relevant for such attempts of cross-culturally established interaction platforms.

Let us now turn to contemporary knowledge management theory and restate the question of how and why cross-cultural aspects of interaction in business contexts are embedded into the theoretical apparatus. For that purpose I have chosen three distinct theories from the field of applied business administration or knowledge management: a Japanese approach, a European approach and an American approach, namely Nonaka's knowledge spiral, von Krogh's organizational epistemology and Davenport/Prusak's working knowledge theory. It is obvious that within the limited length of this article only a brief assessment of these theories can be achieved. This assessment focuses on the question if, how and why the cross-cultural dimension of interaction in business contexts is embedded within the respective theory. For practical reasons I omit detailed introductions of the theoretical apparatus and leave the reader with references to appropriate sources. Evidently it is also not the aim of this article to compare the presented theories to each other and attest higher or lower relative levels of "cultural awareness" or cross-cultural compatibility.

THEORY 1: Nonaka/Takeuchi's Knowledge Spiral

Surely one of the most influential and appraised concepts within the field of knowledge management theory is Ikujiro Nonaka's knowledge spiral model (Nonaka 1991, Nonaka/Takeuchi 1995). Nonaka identifies in his model four different modes of knowledge creation, namely socialization, internalization, externalization and combination, which describe the different knowledge transfer modes within the dimension of implicit and explicit representations of knowledge (Nonaka/Takeuchi 1995: 71 ff). These four modes are then integrated into a knowledge-creation process that follows five phases: sharing tacit knowledge, creating concepts, justifying these concepts, building an archetype and the cross-leveling of knowledge (ibid.: 83 ff). In a second step Nonaka proposes seven guidelines for practitioners, who are implementing organizational knowledge-creating programs in their company: 1. Create a knowledge vision, 2. Develop a knowledge crew, 3. Build a high-density field of interaction at the front line, 4. Piggyback on the new-product development process, 5. Adopt a middle-up-down management, 6. Switch to a hypertext organization, 7. Construct a knowledge network with the outside world (ibid.: 227 ff).

The cultural dimension in Nonaka's conception is very dominant in that the main theoretical part of the book *The Knowledge-Creating Company* starts with a broad comparison and assessment of differences between Japanese and Western culture and philosophy (ibid.: 8 ff, 20 ff). Nonaka especially focuses on the different views on knowledge in general and on how knowledge can be created and managed within companies. As a consequence of this confrontation the whole theory already appears under a certain cross-cultural perspective in that the specific ways and means of "managing" knowledge in successful Japanese companies are presented to a mainly Western audience. In a footnote on Schein's *Organizational Culture and Leadership* (1985) the epistemological relevance of cultural factors is explicitly mentioned: »a key part of every culture is a set of assumptions about what is "real", how one determines or discovers what is real, and "how members of a group take an action, how they determine what is relevant information, and when they have enough of it to determine whether to act and what to do" (p. 89).« (Nonaka/Takeuchi 1995: 54). One footnote below the authors even give a clear, normative statement on the same issue:

> »From our viewpoint, culture is important to organizational knowledge creation. A good part of our knowledge has been learned as culture from older generations.« (ibid.).

In a case on Nissan's Primera car Nonaka goes into detail of what he – following the model of the knowledge spiral – calls "cross-cultural socialization". He describes how Nissan exchanged large teams of Japanese and European engineers in order to gain specific knowledge about either European markets, motoring culture and road conditions, or Japanese manufacturing practices and concludes with the following statement: »The case highlights the much more vital importance of socialization for global knowledge creation than for domestic knowledge creation (...) It provides a good example of "cross-cultural socialization", a time-consuming and costly process that is indispensable to carrying out organizational knowledge creation across national boundaries.« (ibid.: 209). In a later article Nonaka introduces his concept of *originating ba*, where the issue of cross-cultural socialization is taken up again and put into a working model of knowledge and interaction (Nonaka/Konno 1998).

THEORY 2: von Krogh/Roos' Organizational Epistemology

Georg von Krogh and Johan Roos presented in 1995 a quite different approach to knowledge management, which they coined *Organizational Epistemology*. This theory is not presented as a complete, closed text-body, but rather as a »conceptual system« or a »scheme of organizational knowledge development« that has been and will be further elaborated in an ongoing theory development process (Von Krogh/Roos 1995: 1). The authors locate their theory in opposition to representationism, a key idea in cognitivist epistemology, which states that our minds logically create

inner representations of our outside world, which appears to us as fixed points of reference along the dimensions of "reality" and "truth". Von Krogh and Roos, however, align their theory with a so-called »anti-representationism«, as a concept from connectionist epistemology, where the mind functions according to self-organizing principles and the recognition of representations is achieved through familiarity and practice: »knowledge is a state in a system of interconnected components, that interacts with its environment. (...) As new experiences are gained new global states emerge in the cognitive system. At every moment in time, human thoughts are the result of self-organizing properties, some similar to previous states and others quite novel.« (ibid.: 24).

The conceptual system of Von Krogh/Roos distinguishes between individual and social knowledge and puts a strong emphasize on the aspect of language as a structural coupling between the individual and the social world around him. Here the authors formulate a conception that has several theoretical assumptions in common with the basic ideas presented in this article, and especially with the conception of culture as an important criterion in business interaction:

> »In listening to somebody talking the observer must be able to distinguish words and their usage. For example, 'sense' can refer to two different usages: 'my body senses' and 'this makes sense'. In a social system with its own history of interaction among its members, these double distinctions can be made by members who have participated for some time. The newcomer, however, does not necessarily possess the knowledge necessary for adequate descriptions of what is going on« (ibid.: 97).

As a consequence of these basic theoretical similarities the cross-cultural dimension – even if it is rarely mentioned explicitly – is embedded into the theoretical conception, and many propositions and observations made in this article do also hold for this approach to knowledge management. In later contributions to the theoretical development process a first approach to an »epistemology of globalizing firms« is introduced, where »language confusion«, »language games« and a resolving meaning matrix are discussed and integrated into the theoretical scheme of a corporate epistemology (Von Krogh et al. 1996). In a recent collection of knowledge management articles, where the two authors figured as editors and contributors, the topic of culture, context and knowledge is also highlighted in various contributions (see Bertels/Savage 1998, Blackler et al. 1998, Huemer et al. 1998).

THEORY 3: Davenport/Prusak's Working Knowledge

Thomas H. Davenport and Laurence Prusak presented in 1997 *Information Ecology*, a widely acknowledged book where the question of how people create, distribute, understand, and use information has been put at its centre. The a little bit confusing term of *ecology*, from the science of understanding and managing whole environments, is used »only as a metaphor«, and could also be translated into »holistic management of information« or »human-centred information management« (Davenport/Prusak 1997: 11, see also Davenport 1994). Already in this first book, the authors make a clear statement that »technology is not enough« and emphasize the cultural aspect of human embeddedness of information (Davenport/Prusak 1997.: 6), an aspect which they are also addressing to as »information behavior« or »information culture« (ibid.: 33 ff):

> »Particular information cultures determine how much those involved value information, share it across organizational boundaries, disclose it internally and externally, and capitalize on it in their businesses« (ibid.: 35).

This definition by the authors implicitly postulates that different information cultures may exist and thus different ways of "information behavior" may cause conflict or frictions within business interactions. The cross-cultural aspect, however, mostly remains within the boundaries of this information focused view on cross-corporate culture differences in a prevailing North-American context. Exceptions to this can be found especially in the chapter on information behavior and culture. Here the often mentioned cultural gaps between Japanese and Western ways of doing business are emphasized and thus create a certain cross-cultural dimension of the concept of information culture (ibid.: 87 ff).

One year later Davenport and Prusak presented *Working Knowledge* (1998), where the technology vs. human discourse from the earlier work is taken up again, but a strong focus is now made on *knowledge* instead of information. In their proposed definition of the term knowledge, several aspects of culture are included and obviously considered to be important:

> »Knowledge is a fluid mix of framed experiences, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices, and norms.« (Davenport/Prusak 1998: 5).

In later sections different culturally relevant concepts are popping up, such as values and beliefs (ibid.: 11), mutual trust (ibid.: 34 ff), or the idea of an internal, corporate information culture, which is now labeled a »knowledge-oriented culture« (ibid.: 153 ff). Compared to the first book, however, there is now a much stronger cross-cultural dimension included in the presented theory on knowledge management: in a chapter about knowledge transfer, an important »friction« are »different cultures, vocabularies, frames of reference«, which have to be solved by creating »common ground through education, discussion, publications, teaming, job rotation« (ibid.: 97). This theoretical inclusion of cross-cultural aspects in knowledge transfer is furthermore illustrated by practical examples from business experience (ibid. 98 ff).

conclusion

Throughout this article we assumed that in a globalized setting of business interaction there apparently exist cultural borders – which by the way need not necessarily be identical with national borders – which have to be overcome in the case of two business partners interacting. After having introduced some thoughts on the cross-cultural dimension of interaction in a globalized business environment, a descriptive analysis of three knowledge management theories has been made, following our research question of *how and to what extent is the cross-cultural dimension of interaction in business environments represented and embedded in contemporary knowledge management theories*. The findings revealed that all three approaches to knowledge management have found a specific way of integrating this cross-cultural dimension into their theory. Although we could also see that certain theories regard the cross-cultural dimension as an external object, as a sort of »theory plug-in«, which can be added to one's theoretical conception, while others have already an implicit inclusion of the cross-cultural aspect of interaction in their basic theoretical foundations and assumptions.

At the UC Berkeley 1998 forum on knowledge management, Hirotaka Takeuchi, the co-author of *The Knowledge-Creating Company* stated:

> »In a different culture we would be having a different conversation. The natural place for knowledge to reside is in the individual. The important question is how to convert individual knowledge to organizational knowledge. The Japanese view is to give people a process to create new knowledge. It is very human, based on socialization. It is individual-to-individual and tacit-to-tacit. In this meeting, we're looking at the end result and forgetting about the process.« (cited in Cohen 1998: 23).

Obviously, no solution is given in this article towards an implementation of cross-cultural aspects into other contemporary concepts and practices of knowledge management. But as a first step, the mere awareness of the fact that cross-cultural aspects may play a role in establishing knowledge management processes and institutions may already enrich the practitioner's approach towards knowledge management. And from an academic point of view the finding that few knowledge management theories give an extensive weight to cross-cultural issues by integrating them into the core methodology is very interesting, especially if we recall the forces of globalization, who bring together

people from all different cultural backgrounds to work for the same company and sometimes even within the same teams. From this point of view, to conclude with a personal remark, there is ample space for more research into this direction - both on theoretical and empirical grounds, and especially from any scientific discipline that considers itself capable of adding knowledge to that issue.

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