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A. Understanding as a Basis of Knowledge Management

Dr. Martin Elbe

University of the Federal Armed Forces of Germany Munich, Department of Education, Institut of Sociology and Social Policy, Werner-Heisenberg-Weg 39, 85577 Neubiberg, Germany
e-mail: Martin.Elbe@unibw-muenchen.de

Abstract

Although the tacit side of knowledge plays an important role in the field of knowledge management, the epistemological background to such a perspective is very often ignored. In this paper the scientific tradition of understanding is introduced as a basis of knowledge management. The ambivalence of epistemological positions in social sciences is thus to be discussed with focus on the consequences of an understanding concept for the analysis of organizational knowledge. From this perspective, organizations are institutions that must be approached from a phenomenological point of view. Understanding approaches to organization theory and knowledge management can be found in the past and present but the main question seems to remain unsolved: how are the assumptions of actors connected to social action? The paper ends with a methodological concept of an understanding knowledge management approach by using language games.
For further reading please see: Elbe, Martin (2002): Wissen und Methode: Grundlagen der verstehenden Organisationswissenschaft. Opladen: Leske+Budrich. ISBN 3-8100-3671-4

1. Organizational Science and Epistemological Positions

Knowledge management has been one of the major topics in organizational sciences in at least the last decade and with this »tacit knowledge« came back into focus of management theory (e.g. Nonaka, Takeuchi 1995). Although tacit knowledge, soft skills or cultural aspects of organizations have been discussed since management had become an academic disciplin, the epistemological basis to concepts as these often remained unclear. And although a paradigm shift was declared towards an “interpretive paradigm” (Wilson 1970) or a “social constructionist paradigm” (Kasper 1987) organizational science was and still is dominated by

positivistic positions. As a result to this there is a strong need (as probably in every new generation of scientists) to reopen the discussion on the epistemological background of management research in general and knowledge management in particular – or as Burrel put it: "I maintained […] that sooner or later organization studies must enter an area where only the foolhardy dare to tread - the place where philosophy and social science meet." (Burrell 1994, p. 15). Entering this area, one soon finds out that there are principally two dimensions of ambivalence in social science that have to be dealt with (Hollis 1991, p. 32; 1995, p. 36):

Figure 1: Dimensions of Ambivalence in Social Science

	Explanation	**Understanding**
Holism	System → Function	»Games« → Rules
Individualism	Agents → Benefits	Actors → »Duties«

As shown in Figure 1 *different epistemological perspectives* lead to different approaches to social phenomenon, all of which are of relevance to knowledge management. The new systems theory as a functionalistic approach explains macro phenomenon on macro causes and goals (Luhmann 1994) whereas the principal-agent theory (rational choice theory in general) uses the macro-micro-macro link to explain social findings as a result of individual actions (Coleman 1991). In understanding approaches social action takes place in accordance to rules and games played (as Wittgenstein 1997 put it: language games) or actors have to fit roles and fullfill duties (Dahrendorf 1977). Although the distinctions in both dimensions of Figure 1 lead to an analysis of different aspects in knowledge management, the separation of holistic and individualistic approaches is stronger in theories that aim for explanation only. Explanations in functionalistic theory occur as metaphysical answers whereas individualistic explanations are supposed to lead to positive findings. As functionalistic theory is not truly connectable to a positivistic perspective (Giesen, Schmid 1976, p. 246) nor to an understanding perspective (Weber 1980, p. 7) and as the focus of this paper is on the epistemological approach of understanding the dominant distinction is to be found between the positivistic and the understanding perspective (Wright 1991; Apel 1979; Esser 1991).

According to Helle (1999: 2) there are six categories marking the poles of the *epistemological continuum*: knowledge, the locus of reality, the meaning of theories, the scientist's role, the nomological position and the differentiation between content versus frame.

Table 1: Understanding vs. Positivistic Perspective

	Understanding Perspective	**Positivistic Perspective**
Knowledge	there's no such thing as absolute knowledge, knowledge is a social and individual construction	artifacts in the world are positively in existence, knowledge increases encyclopaedically
Locus of Reality	in the mind: the subject constructs his own reality	in the world: reality is positively existent
Meanings of Theories	theories are constructions that help to understand the world	theories are projections of reality that show causal effects
Scientist's Role	scientists with their subjectiveness, goals and presumptions necessarily influence research results	science is clinical, the scientist as a person may not have any influence on research results
Nomological Position	there are no laws of nature – the question is what effects scientific findings have on people's action and thinking	laws of nature describe causal effects in the world – they have to be revealed
Content vs. Frame	content and frame have to be distinguished: content characterizes the phenomenon percepted, frame characterizes the perspective (reference to meaning)	a differentiation between content and frame is unnecessary: facts are positively in existence, coherences are to be detected objectively

Neither of the approaches mentioned fully fit either of the poles. Phenomenology or hermeneutics on the more understanding side of the continuum nor critical rationalism or rational choice theory on the more positivistic do not side stand for one of the poles, but still there are tendencies. The analysis of tacit knowledge is quite clearly on the understanding side of the epistemological continuum, and the frame for an understanding approach to knowledge management is to be found in phenomenology.

2. The Phenomenological Perspective on Organizations

The starting point for a *phenomenological approach* to organizations might be found in Husserl's phenomenology (Husserl 1986; 1992) but more clearly so in Heidegger's "Being and Time": "Phenomenology is the approach to and the revealing determination form of what shall be subject to ontology. Ontology is only possible as phenomenology." (Heidegger 1993, p. 35). The question to start with on our way to an understanding basis of knowledge management is: "What is the framework we are talking about?" or to put it more clearly: *"What are organizations?"* From a phenomenological point of view we cannot start with an academic definition because this has no meaning for our everyday life – but organizations do. We are born in hospitals, visit kindergarden and school, go to university and work in organizations. We are members of sports clubs, political parties and health insurance companies. We eat at Mc Donalds. Organizations are everwhere in our daily lives but each and every organization does only concern a part of it. We know this and we know how to behave in organizational contexts and what expectations to have towards the behavior of people we meet in these contexts. This is what is meant by "tacit knowledge".
Organizations can therefore be characterized as *institutions*, as habitualized expectations towards others, as social rules (Berger, Luckmann 1997; Esser 2000). In a principle categorization of institutions organizations can be labled as partial and stable (figure 2).

Figure 2: Organization as Institution

	fragile	**stable**
total	e.g leadership	e.g. religion
partial	e.g. contracts	e.g. organizations

The existence of institutions may be fragile or stable, their scope total or partial. Leadership for example is only accepted as long as it fulfills its coordinative function and therefore it is fragile, on the other hand its scope is total as leadership tends to ignore role boundaries. Whereas organizations are rather stable and role bounderies are crucial, especially membership roles (Luhmann 1964). From a historic point of view organizations are institutions that emerged in the process of increasing rationalization in occidental societies. They help to coordinate human action in routine situations (in different aspects of everyday life). The ongoing rationalization process shows in the organizational differentiation of

society and the increasing use of technology. This makes habitualized action programmable and principly enables organizations to act independently from human action. As corporate bodies this is part of the principle idea of organizations, in our social reality this has become an everyday experience due to technological innovations especially in computer science (e.g. cash dispensers, expert systems). Organizations as social facts are in existence when perceived, labeled and believed in as real entities. All of this is founded in tacit agreements on our social reality, it is tacit knowledge we take for granted as we act in accordance with organizational roles as members, customers or applicants for social benefits.

3. Knowledge, Language Games and Socialization

On this basis organizational knowledge can be understood as shared expectations towards one's own action and actions of others in reference to social rules connected with organizations. Action is not determined by organizations as institutions and institutions in organizations, but its meaning is shown with reference to them. Knowledge is characterized by the certainty of success criteria in organizational *language games*. Actions are communicative acts (Wittgenstein 1997; Searle 1977; Habermas 1997) and, according to Wittgenstein, communication can only be understood in its everyday life performance. The meaning of signs used to communicate reveals itself with reference to a set of rules that together form a kind of game, the language game. This is not to be taken metaphorically but quite literally. We act and communicate in language games which (again) are expectations of social rules. In the end it is language games that are the everyday life form that shows the institutions we refer to in our actions. Knowing the rules of language games and thus the principle ideas of institutions makes our actions comprehendable to others (and ourselves). Through this we know what kind of behavior will be socially acceptable and successful. I said before, however, this does not determine our actions but instead gives us a principle degree of freedom in our actions. Since we know what kind of behavior is unacceptable or does not refer to any language game, we have success criteria for routine situations. Again, we may be wrong in our success criteria or expectations toward social rules if we haven't understood the language games we try to refer to.

Ideas, as I mentioned above, are not new to organizational science. In *Dilthey*'s 1927 posthumously published "Construction of the Historical World in the Human Studies" organizations are designed to have a transcendent foundation – which leads to the idea of organization. Organizations can therefore not be explained in causal terms, they must be

interpreted and thus be understood – which leads to the hermeneutics of organizations. And, last but not least, organizations result from the interdependent and sensemaking determination of structure and goals, which is why teleological explanations are dominant to causal explanations. Although Dilthey's conception was hardly noticed in organizational science in the late 20th century, the *interpretive approaches* in organization theory (Wollnik 1995) came to similar conceptions for the problem of understanding in organizational context. With the rise of knowledge management theory aspects of understanding were even more intensly considered, such as

- knowledge management as sensemaking in organizations (e.g. Choo 1998; Dervin 1998; Shariq 1998; Weick 1995),
- intuition as foundation of knowledge application (e.g. Jankowicz 2001; Schanz 1998),
- cognition and tacit knowledge (e.g. Augier, Vendelø 1999; Bohnenkamp 1998; Sackmann 1991),
- language and language games as foundations of self definition and rules of action (e.g. Fliaster 2000; Kirsch 1997, 1996, 1991; Krogh, Roos 1995),
- cyclic development of organizational knowledge on the basis of organizational socialization (e.g. Bhatt 2000; O'Donnell et al. 2000; Nonaka, Takeuchi 1995; Krogh, Roos 1995).

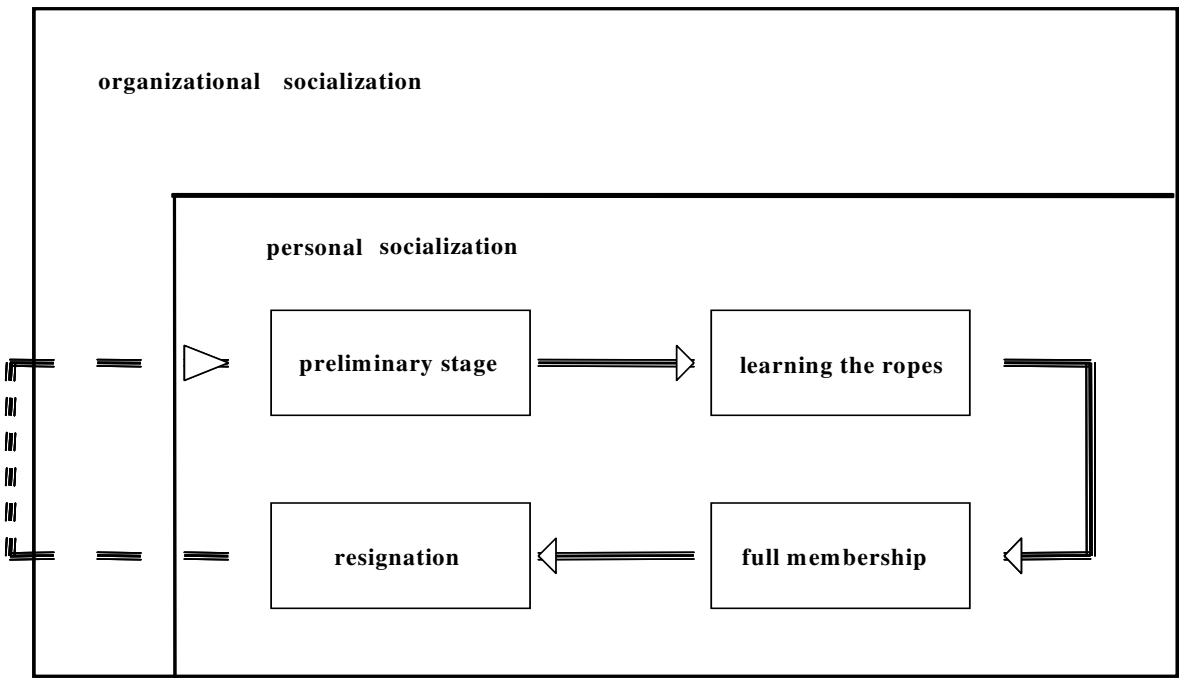
In principle, this refers to all knowledge in and about organizations. In order to systematize knowledge in the management of understanding I shall follow and adapt Sackmann's categorization (Sackmann 1991), which differentiates between dictionary knowledge, directory knowledge, recipe knowledge and axiomatic knowledge. *Dictionary knowledge* characterizes knowledge about scientific findings. *Directory knowledge* is knowledge about how social facts are defined in organizations' everyday life and their causal integration. *Recipe knowledge* is about language games in the organization and the relevant social environment (e.g. on markets). *Axiomatic knowledge* characterizes knowledge about the essence and idealtypes of a specific organization and their teleological integration. These forms of knowledge refer to all the institutions connected with organizations or to put it differently, to culture. Organizational knowledge is cultural konwledge (e.g. about the use of technology).

Organizational knowledge is reproduced and adapted by the process of *socialization*. This refers to the education of individuals in society and their "learning the ropes" in organizations as well as for organizations themselves. It is not only population ecology that teaches us that organizations go through an aging process (Kieser, Woywode 1999) or life cycles.

> "Once created, organizations go through a variety of transformations. Some die relatively quickly. Others prosper and continue relatively unchanged for decades, even centuries. Still others undergo one or more relatively dramatic changes in mission or structure or both. The range of possibilities is vast, but the central question is what happens to organizations as they 'mature' and how we can begin to understand the process." (Kimberly, Miles 1980: 161).

The answer to this may be found in *organizational socialization* theory. In most research, organizational socialization is considered to be "the process by which an individual acquires the attitudes, behavior and knowledge needed to partizipate as an organizational member" (Bauer, Morrison, Callister 1998, p. 150 refering to Van Maanen, Schein 1979). In this process newcomers aquire cultural knowledge in and about organizations which makes it possible for them to participate in organizational language games. But the process of organizational socialization does not end once the 'ropes have been learned' – it lasts at least until one's resignation from a specific organization (Elbe 1997). As shown in Figure 3, personal socialization in a specific organization leads from a *preliminary stage* (where the assumptions and expectations a potential member has towards the organization are aligned with organizational expectations) to a second stage (*learning the ropes*) where the newcomer learns how to play the basic language games in the organization and especially in his or her direct working environment. In a third stage the individual has become a *full member* of the

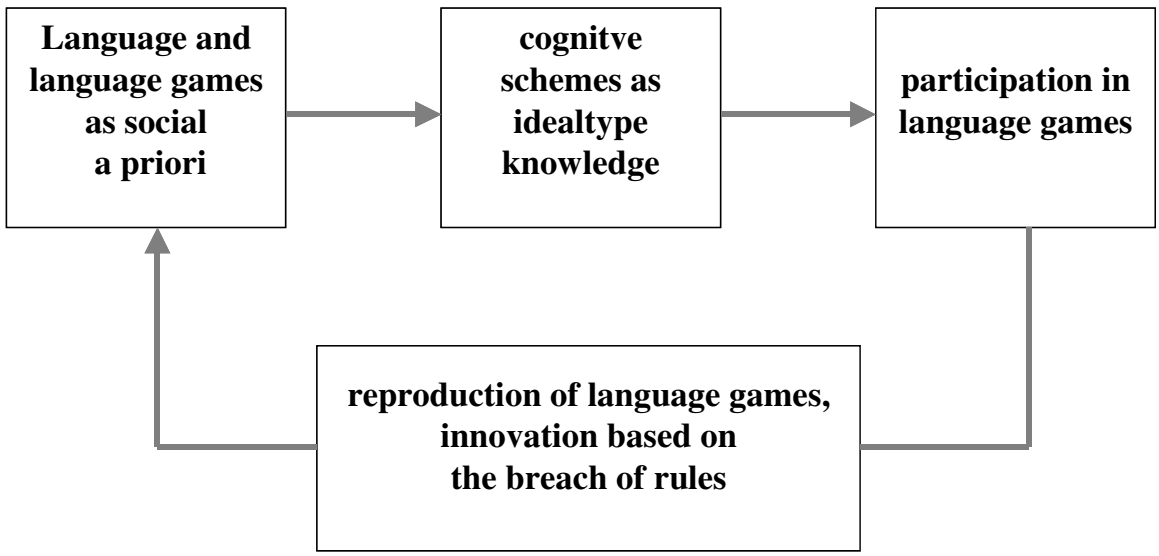
Figure 3: Organizational Socialization



organization, who knows the expectations and how to play the language games but still there are forms of learning and unlearning of cultural patterns. Embedded in the membership role are several partitions (such as colleague to some co-workers and superior to others). Even if an individual has been a full member to an organization for quite a while promotions change participation in language games – it is not the institution that is changed but the application of a social rule towards the expected behavior. The last stage of personal socialization is *resignation*, this is knowledge about leaving an organization, knowledge that again changes expectations, behavior and the participation in language games. These adaptions to organizational culture are not unidirectional; as we participate in language games we change them and thus little by little contribute to cultural change in organizations.

Organizational culture, however, does not only change because of the contribution of the members. It is embedded in wider cultural patterns, such as regions, nations, branches or even profession (Sackmann 1997, p. 3). Organizations adapt to their environment; they themselves are subject to socialization. Organizational culture is also a result of this adaption in life cycles and is comparable to the socialization processes an individual lives through. Organizational culture on the one hand is thus a result of and a contributor to cultural change in the surrounding society and, on the other hand, it is a determinant of and a result of personal socialization processes inside the organization. Cultural change is a change of

Figure 4: Innovation in Language Games



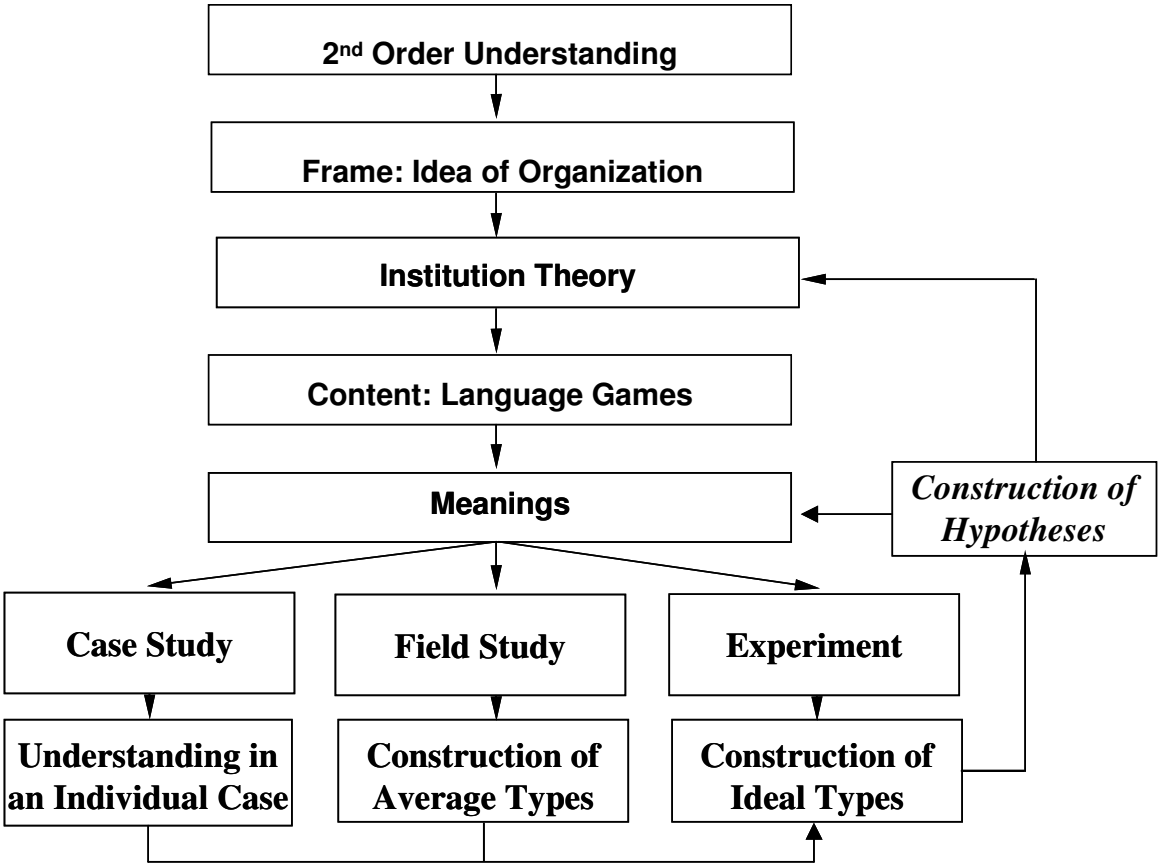
institutions and the knowledge about institutions, which manifests in artifacts and language games. *Innovation* in this perspective is a change in rules, or to be more concrete, innovation is based on the breach of rules and the acceptance of this by a group of people that participate in one or more sets of language games.

As shown in Figure 4, innovation is based on social interaction and individual cognitve processes. Language itself and language games, as the everyday life form used to communicate, are the social a priori we learn to accept as implicit in socialization processes. This helps us to build up cognitive schemes organized around ideas as principle concepts of reality. Thus our participation in language games is based on idealtype knowledge. *Idealtype* does not mean that a concept is good but that associations specify an abstract idea in the ontological sense. It is a reference for our construction of reality but cannot be found in reality. As a scientific instrument (Weber 1980) the idealtype is a construction that helps to build hypotheses about reality by comparing social action or social structure to the principle idea in its purest form and thus makes it possible to understand the underlaying motives. In language games it gives us a reference to expected and accepted behavior. *Innovation* is a change of rules, i.e. behavior that bends or even breaches the rules of language games (and this refers to technical innovation as well as to administrative routines or any other social innovation). The question here is whether this irregularity refers to the principle idea, to the idealtype, to the wit (as Wittgenstein 1997 put it) of the language game. Irregularities might be accepted or even integrated in language games, when they can be understood by the fellow players. This is the condition sine qua non and this is the basis of tacit knowledge. Whether or not innovation will take place depends on the interaction of the participants and is subject to scientific understanding (2^{nd} order understanding).

4. Second Order Understanding

Thus far, understanding as a basis of knowledge management has been discussed in regards to the content. In the following the scientific approach to an understanding in knowledge management will be outlined (Figure 5).

Figure 5: An Understanding Approach to Knowledge Management



Understanding as a scientific approach to social reality is a *2nd order understanding*, since it is not embedded in participation in everyday life language games but rather in language games of the scientific community. Its purpose is to explain social action. In understanding approaches, framework and content are distinguished. The *framework* for knowledge management from a phenomenological point of view is the idea of organization in principle. In concrete terms, organizations are considered as *institutions* in partitions of everyday life. The c*ontent* of the analysis from this perspective are language games in organizations, which show the social practice in reference to the idea of institutional rules. Thus the *meaning* of social action can be disclosed.

> The term meaning "… may refer first to the actual existing meaning in the given concrete case of a particular actor, or to the average or approximate meaning attributable to a given plurality of actors; or secondly to the theoretically conceived pure type [or: idealtyp; M.E.] of subjective meaning attributed to the hypothetical actor or actors in a given type of action." (Weber 1980: 1; translation by Henderson, Parsons: Weber 1964: 89).

There are three emerging forms of meaning that can be disclosed: in the *individual case* the meaning of social action may be understood with the help of case studies. The *average*

meaning may be interpreted via field studies, which leads to the construction of average types. This is what Weber refers to when he talks about sociological statistics (Weber 1980, p. 6). And the meaning of *idealtypes* can be disclosed with the help of experiments; this refers to imaginary experiments as well. In the end, all idealtype constructions are imaginary experiments, since pure meaning is constructed, the pure form of the principle idea. In order to construct a hypothesis as a basis of theory we need an idealtype.

In the end, knowledge management is an idealtyp that helps us to understand the meaning of social action in organizations and enables us to explain actual or average behavior. Thus the assumptions of actors can be revealed and linked to social action, and the mode of operation in knowledge mangement may be explained. Or, as Charles Handy put it:

> „Organization theory … should:
>
> Help to *explain* the Past which
> in turn
> Helps one to *understand* the Present
> and thus
> To *predict* the Future which leads
> to
> More *influence* over future events
> and
> Less *disturbance* from the Unexpected."
> (Handy 1999: 16)

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