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Knowledge creation and play – a phenomenological approach

Knowledge
creation
and play

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Abstract

Purpose – The purpose of this paper is to examine the experiential nature of knowledge creating interaction and to introduce a framework to explore it theoretically coherently with hermeneutic phenomenology and Hans-Georg Gadamer's concept of play.

Design/methodology/approach – This paper presents a literature-based conceptual analysis of the concept of play. Gadamerian conception is related with the descriptions of knowledge creating interaction in the research of knowledge management and with the uses of the concept of play in the field of Library and Information Science (LIS). Theoretical analysis is applied in this study to structure the argumentation.

Findings – This study illustrates how the preconceptions of experiences and different modes of being in interaction are implicitly present in the research of knowledge creation (KC) in the descriptions of interaction and human factors enhancing KC. A framework for examining KC in organizational circumstances is developed based on the hermeneutic phenomenology and Gadamer's concept of play, which provide a basis for understanding KC as being together in interaction.

Research limitations/implications – This theoretical study develops a framework for examining the process of KC also empirically. In this study the examination of hermeneutic phenomenology is limited to the conceptions of play, authenticity and everydayness; phenomenology offers means for further explication of human being and experience.

Originality/value – This study provides a new view on KC based on hermeneutic phenomenology and play, and contributes to the examination of interactive knowledge processes in the field of LIS.

Keywords Interaction, Knowledge creation, Knowledge management, Knowledge processes, Play, Phenomenology

Paper type Research paper

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Introduction

Competition and turbulence in organizational environments have led to ever increasing research into knowledge creation (KC) in the field of knowledge management (KM) (Choo, 1998; Mehta, 2007). The essence of the phenomenon of organizational KC is in sharing know-how and experiences within the working community in order to accomplish something new, be it a product, service or a process (Mitchell and Boyle, 2010). Interaction is seen as a real place where the KC happens (e.g. Nonaka, 1994; Cook and Brown, 1999; Gourlay, 2006; Tsoukas, 2009).

Successful, knowledge creating interaction is described as an open, critical and self-conscious process, where past experiences provide a basis for creating something new (e.g. Tsoukas, 2009; Morner and von Krogh, 2009; Suorsa and Huotari, 2014a). Thus, the foci of inquiry into this phenomenon are the experiences of human beings. Despite this, modes of being and experiences have not been at the core of the research this far. This paper fills this gap by introducing a novel viewpoint to explore the experiential aspects of KC based on a phenomenological approach and Hans-Georg Gadamer's concept of play (*das Spiel*) (Gadamer, 1999a, 2004). The potential for understanding aspects of information work with phenomenology have been acknowledged in the field of Library and Information Science (LIS) (see Budd, 2005; Hjørland, 2005a; Budd *et al.*, 2010).



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Playing as such is a unique way of experiencing and being, which is usually linked with children's behavior. It is considered to be a way of being which relates to being free, creative and openly interactive with other people and the environment. This paper explores the concept of play in the field of LIS and explicates the uniqueness of Gadamer's conceptualization of play in relation to it. Gadamer offers a coherent and explicit way of understanding play as a form of collaboration and the process of creating something together.

In recent years playing and games have been of increasing interest in the field of LIS. They have been developed to help in work tasks such as indexing and searching (Goh *et al.*, 2011). Additionally, information behavior (IB) in players has been examined, as playing as a phenomenon has become more popular in everyday life in general (Adams, 2009). Furthermore, playing and games have been seen as a way to increase learning and creativity in communities and knowledge-based organizations (e.g. Sukovic *et al.*, 2011; Anderson, 2013).

KM is a multi- and interdisciplinary field, involving the fields of LIS, organizational science, other social sciences, educational sciences, information systems science and computer science and technology (Orzano *et al.*, 2008). Thus far, the phenomenon of KC has mostly been researched in the fields of organizational science and management studies. This paper strives to increase the understanding of the phenomenon of KC in the field of LIS in general. The approach applied can be viewed from a larger perspective as a way of examining interactive processes between human beings in any context, also in relation to IB. Communication and interaction have become an essential part of information work (Burns and Bossaller, 2012), and this view strives to increase understanding of these interactive processes as well.

Research questions

The aim of this paper is to explore, how the experiential nature of KC can be explicated theoretically, in order to develop a framework for studying it in organizational environments. The purpose is threefold: first, to examine how the research of KC is devoted to the idea of nourishing certain modes of being in interaction; second, to introduce the Gadamerian concept of play in order to explore these modes; and third, to define, how the Gadamerian concept of play is to be understood in the field of LIS, in relation to the research into play conducted in the field so far. The research questions are:

- RQ1.* In which ways is the research on KC based on the idea of experience and certain modes of being in the interaction between human beings?
- RQ2.* How can the Gadamerian concept of play be used to understand and explore the aspects of the different modes of being in interaction in the event of KC?

This paper claims that the mode of being in interaction which is implicitly proposed in the research of KC can be better understood with help of the phenomenological idea of being and Gadamerian concept of play, which reveal the fundamentality of the phenomenon. The phenomenological approach used in this study connects the human being inseparably to its context and concentrates on the human being experiencing the event of perception. The Gadamerian idea of play is based on the phenomenological idea of a human being defined by Heidegger, which provides an explicated and coherent basis for understanding the phenomenon (Suorsa and Huotari, 2014a; see also Day, 2011). Thus, play as a conception also provides a rich landscape for examination of the experiential and collective features of KC.

KC has since the 1990s widely been studied using Nonaka's model, which views KC through interactive processes of socialization, externalization, combination and internalization (SECI) (Nonaka, 1994; Nonaka and Takeuchi, 1995; see also Huotari, 2010). However, this conceptualization has been seen to oversimplify the process of KC and a need for optional and more profound explications has been acknowledged (see Cook and Brown, 1999; Gourlay, 2006; Tsoukas, 2009). This study aims to create alternatives for SECI bound comprehension of KC, in order to increase the understanding of interaction in knowledge processes.

KM as a field has to some extent become divided into two different views, one emphasizing the role of technology, information tools and resources, the other human factors like trust and human relationships (Orzano *et al.*, 2008, p. 491). This study represents the latter view. In this paper KC is understood as a knowledge process, in which sharing information and knowledge, and seeing new connections and meanings in interaction between human beings create new knowledge (e.g. Tsoukas, 2009). KC can take place in any context where human beings interact. This paper focusses on the KC in organizational settings. The focus is on the event of interaction between human beings – an event emphasized as a crucial point of KC in the majority of studies (e.g. Cook and Brown 1999; Tsoukas 2009), but despite this has remained rather poorly examined.

Research methods and materials

The research method applied is theoretical analysis (Niiniluoto, 1984). It consists of three phases: problematization, explication and argumentation, which by giving a structure to the analysis enhance the argumentation. This method is suitable when exploring the premises of research and striving to examine new possible ways of viewing a phenomenon. In the problematization phase, the key problem is stated. The explication phase exposes the implicitly present views concerning the key problem and makes them explicit. Also an optional solution to the problem is presented. In the argumentation phase, the explications and offered solutions are critically reviewed (Niiniluoto, 1984).

In this paper the problematization phase presents the key problem concerning the relevance of concentrating on the experiential side of KC. In the explication phase we examine, how experiences and being are implicitly presented in the descriptions of knowledge creating interaction in the research of KC and expose the contradiction in the endeavors to enhance individuality and collectivity. As a way of addressing these problems we examine the concept of play used in the field of LIS and especially in the hermeneutic phenomenology of Gadamer. We also explicate the phenomenological way of exploring modes of being. In the argumentation phase we examine, how the Gadamerian concept of play could be used to increase an understanding of KC.

This study is also an analysis of the conceptualization of play: it is related in its content to the descriptions of knowledge creating interaction, and semantically with the uses of the concept of play in the field of LIS. The examination is based on two literature reviews. The first review analyzes how the aspects of being and experiencing interaction are defined in KC research in order to find the places where Gadamerian play as a conception is suitable. The second review identifies the different ways in which play is used in the field of LIS in order to clarify the similarities and differences of the concept of play introduced in this paper. The data collection is organized systematically and a content analysis is performed in order to coherently establish the place of the concept of play in the LIS field and KC research. The main structure and the areas of interest of the conceptual analysis are illustrated in Table I.

The sample for the first literature review which examines the human relationships and experiences in the event of KC was collected from the following databases in order to include a broad body of research on KC in different disciplines of KM: Library and Information Science Abstracts (LISA) (ProQuest), Information and Science and Technology Abstracts (LISTA) (EBSCO), and ABI/INFORM Complete (ProQuest). The keywords used were “knowledge creation,” “creation of knowledge” or “creation of new knowledge” in title, subject or abstract. The sample was supplemented by studies relevant to the subject matter and by studies retrieved by the so-called chaining strategy, to find important articles cited in other articles. A sample of 14 articles was selected. Articles were excluded if they: first, did not concentrate on the human side of KC in organizations; second, did not explore the bases for human interaction in KC explicitly; or third, based their exploration mainly on the SECI model. In the content analysis of the sample the focus was in examining the elements specific to the interaction in KC and the attributes given to the effective interaction (see Table I).

The sample for the second literature review which analyzes the research conducted around the theme of playing in LIS was collected from the following databases: Library and Information Science Abstracts (LISA) (ProQuest) and Information and Science and Technology Abstracts (LISTA) (EBSCO). The keywords used were “play*”, “game*” or “gaming” in the title or subject. Articles connected to LIS were selected by acknowledging the affiliations of the researchers and the fields of the journals. This sample was supplemented by studies relevant to the subject matter. Based on this sample the areas of research in which play is used were formed and a representative sample of 18 articles was selected for profounder analysis. Articles were excluded, if they did not explicate the conception of play or games to some extent. In the content analysis of the sample the focus was in examining in which research areas the concept of play is used and how (see Table I).

Problematization: from knowledge to being

The exploration of KC in organizations has until recently widely relied on the models of Nonaka and his colleagues, based on the idea of tacit and implicit knowledge converted into explicit knowledge in knowledge processes (e.g. Nonaka, 1994; Nonaka and Takeuchi, 1995). However, since the 1990s a vast amount of conceptual exploration has been conducted to challenge Nonaka’s views, and the interest has shifted from conversion of knowledge to the event of knowing and interpersonal relationships in working communities (Cook and Brown, 1999; Orlikowski, 2002; Küpers, 2005). The social and contextual aspects of knowledge processes have been studied in the

Play as a concept

<i>Places of play in KC – implicit</i>	<i>Play in Gadamer’s hermeneutics</i>	<i>Concept of “Play” in LIS – explicit</i>
In descriptions of experiences	Describing being together	Areas and focusses of research
In descriptions of modes of being	Describing change and learning	Elements of play
In descriptions of interaction	Connected with the phenomenological idea of being	Use of the concept of play

Table I.

Structure of the conceptual analysis of play

Gadamerian play in the research of KC, as a research field of LIS
Differences
Similarities

field of LIS in recent years, and the importance of collaboration and context have been acknowledged (see, e.g. Ingwersen and Järvelin, 2005; Talja *et al.*, 2005; Hansen and Jarvelin, 2005; Savolainen, 2009). Nevertheless, in the research into KC the process of KC is still often formulated around the idea of tacit and explicit knowledge (see Suorsa and Huotari, 2014a). In other words, the research into KC still emphasizes the concept of knowledge as an asset inside the human mind, though the paradigms are changing. This has resulted in problematic positions concerning eclecticism, as quite cognitive ideas of the individual processing knowledge are combined with the idea of interaction as a hermeneutic process (Hjørland, 2005a; Day, 2011; Suorsa and Huotari, 2014a).

The essential role of experience in KC research is connected with the conception of interaction as the core element in creating knowledge, acknowledged by the majority of researchers (see Suorsa and Huotari, 2014a). The fundamental point at which KC occurs is the actual event of interaction between human beings in a certain context. The research on KC is quite unified on the idea of historical experience and a contextual interpretation at the center of every KC event (e.g. Cook and Brown, 1999; Morner and von Krogh, 2009; Tsoukas, 2009). During interaction people share their experiences and create new knowledge based on their previous experiences. Information gained from one person is always changed as the other person interprets it from his own perspective in a certain situation and in these kinds of events new knowledge is also created (e.g. Cook and Brown, 1999, p. 393). However, a deeper analysis of what is meant by the conception of experience is still missing.

Knowledge creating interaction is often awarded epithets like trustful, safe, open and critical (e.g. von Krogh, 1998; Tsoukas, 2009). Though KC is based on the idea of human beings with various potential states of being, this aspect has not been explored and conceptualized in detail. Despite the fact, that the human factors affecting the interaction in KC are well acknowledged and researched, being and experience have not been at the core of the research this far. Thus an epistemological and ontological exploration is needed (see Day, 2005, 2011) to find the premises which might affect the research into KC. Figure 1 illustrates the starting point of this line of examination.

Insightful explorations of epistemological and ontological premises of the discipline have been conducted during past decades in the field of LIS (e.g. Hjørland, 2004, 2005b; Talja *et al.*, 2005; Bates, 2005). Also hermeneutics and phenomenology have been explored in order to illustrate the nature of the phenomenon studied (see, e.g. Hoel, 1992; Budd, 2005; Hjørland, 2004, 2005b; Hansson, 2005). Similarly, this kind of exploration

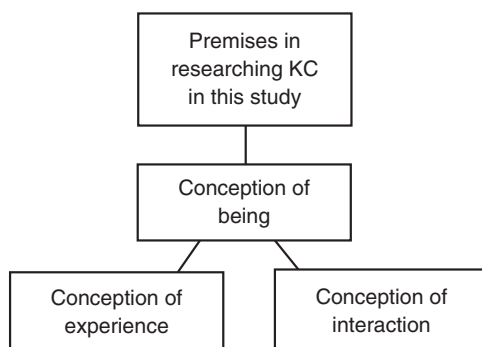


Figure 1.
Premises in
researching
knowledge creation
in this study

is needed in the research into KC. Hermeneutics and phenomenology have to some extent been seen as vital grounds to explore KC (e.g. Küpers, 2005; Larsen, 2009; Tsoukas, 2009; Yanow and Tsoukas, 2009), but little work has been done to explicate the premises of this approach. First, however, we have to further explicate the problems in the descriptions of being and interaction in KC research, to make visible the need for a phenomenological option.

Explication 1: implicit presuppositions concerning modes of being in interaction in KC research

In the first phase of the explication the nature of KC as a phenomenon connected with experience and different modes of being in interaction is examined. This exploration is based on the literature review.

Human factors enhancing KC

As noted, the interaction between human beings and the experiences of the participants are at the core of KC according to the research analyzed in this study. According to the research, the natural process of KC can be enhanced by acknowledging the process and consciously trying to develop it (e.g. Tsoukas, 2009, p. 943). From the perspective of enhancing KC in organizations it is thus relevant as to what the means are by which interaction can be enhanced to produce something new. The review of the research into KC reveals, that there is a constant strive within the research toward defining the “creative” state of being or atmosphere where knowledge is created in organizations. The human factors affecting this knowledge process are seen as a crucial area of investigation (Orzano *et al.*, 2008).

Our analysis implies that the elements suggested to enhance KC concentrate on three dimensions: human relationships, the subject’s behavior and actions, and the organizational context. This is illustrated in Table II. All the dimensions imply a certain presupposition of a human being having the capacity to act in different modes of being, though it is not explicated. Next we explore these elements in detail. The studies of KC analyzed emphasize the nature of relationships between people in the workplace. The ideal mode for this relationship is described as trustful (Cross *et al.*, 2001; Bligh *et al.*, 2006), open (Mitchell *et al.*, 2009), familiar (Chua, 2002; Adenfelt and Lagerstrom, 2006), committed (Lubatkin *et al.*, 2001; Bligh *et al.*, 2006) and equal (Herman and Mitchell, 2010). The interaction has to support taking risks and sharing contradictory knowledge, and thus trust is seen as a fundamental element related to KC (Rutten, 2004; Herman and Mitchell, 2010; Nold, 2012).

In the KC research analyzed here, the importance of human relationships is linked to the organization as the context of KC. Trust (Kelly, 2007; Sankowska, 2013), flexibility (Richtner and Åhlström, 2010; Mitchell *et al.*, 2009), diversity (e.g. Tsoukas, 2009) and safety (Cross *et al.*, 2001; von Krogh, 1998) create an atmosphere and organizational culture, where knowledge creating interaction is possible.

The elements describing the relationships between each other and the context concern almost exclusively positively connoted factors like commitment, trust, flexibility or equality. However, in the descriptions of the subject’s own behavior and actions there are more differences. The mode of being for a knowledge creating subject is described as open and reflective, but also as being critical and capable of taking risks. Self-reflection is seen as a major contributing factor in the overall process of KC. In other words, a person recognizing his own prejudices, habits and ways of thinking can distance himself from the usual and not so productive lines of action and consciously choose another course of action or communication (Topp, 2000; Gourlay, 2006; Verdonschot, 2006; Tsoukas, 2009).

Elements		Function in the process of KC
Relationships between people	Trust	One has to trust in the colleagues and managers in order to reveal the lack of knowledge (Cross <i>et al.</i> , 2001, p. 116) One has to trust that the colleagues are honest and are able to uphold commitments in knowledge creating teamwork (Bligh <i>et al.</i> , 2006) Trustful relationships between people are needed, so that knowledge is shared and thus also created (Merx-Chermin and Nijhof, 2005, p. 146)
	Openness	KC needs debates and open communication, so it is important that the group members value each other's different ideas (Mitchell <i>et al.</i> , 2009)
	Commitment	KC requires certain commitment between colleagues – meaning being a part of the team with same values and goals (Bligh <i>et al.</i> , 2006) Opportunism and self-seeking can erect barriers to KC (Lubatkin <i>et al.</i> , 2001)
	Familiarity	Knowing how the colleagues communicate and act enhances KC (Adenfelt and Lagerstrom, 2006, p. 196) The history of interactions in personal relationships affects KC (Chua, 2002, p. 376) Promotion of “a culture of respect, friendship and bonding among organisation members” enhances KC (Chua, 2002, p. 386)
	Equality	Social categorization in workplace reduces the will to share and thus create knowledge, because it is associated with distrust, conflict and information-withholding (Tse and Mitchell, 2010, p. 86) Highly individualistic incentive systems increase competition and reduce care (von Krogh, 1998, p. 142)
Organizational context	Trust	Trust in creating organizations in which authority is exercised in a transparent and legitimate manner enhances KC (Kelly, 2007, p. 131) Trust on an organizational level leads people to take risks, which means, for example sharing knowledge and delegating (Sankowska, 2013)
	Flexibility	Flexibility in time, personnel, top management control and financial resources has a positive impact on KC (Richtnér and Åhlström, 2010, pp. 428-429) There should be room for critical consideration of different perspectives (Mitchell <i>et al.</i> , 2009)
	Diversity	People from different knowledge domains create differences, which creates unsettledness, which may be removed by creating new knowledge (Tsoukas, 2009, pp. 951-952) Diversity in personnel, meaning people from, e.g. different backgrounds, cultures and organizations, often increases KC Different views and opinions foster KC (Mitchell <i>et al.</i> , 2009)
	Safety	As KC requires acknowledging that one does not know something and need help, there is a need for safety in environment (Cross <i>et al.</i> , 2001, pp. 116-117) Safe atmosphere in organizations is caring. Care gives rise to behaviors like mutual trust, active empathy, access to help, lenience in judgment and courage in relationships. They increase the courage needed to experiment and voice out opinions (von Krogh, 1998, pp. 137-138)

(continued)

Table II.
Elements describing
the dimensions
of the human
factors of KC

Elements	Function in the process of KC	
Subject's behavior and acts	Open	KC means always challenging old knowledge, thus there is a need for being open to new knowledge – old habits and formal procedures can be barriers to it (von Krogh, 1998, pp. 135-136)
	Critical	Questioning old habits and overcoming subconscious pressures of doing something which is accepted leads to KC (Mitchell and Nicholas, 2006, p. 311) One has to be critical toward one's own actions and ideas (Tsoukas, 2009), but also in communication in general (Mitchell <i>et al.</i> , 2009, p. 539) Self-distanciation gives critical insight into one's actions and thoughts (Tsoukas, 2009, p. 943)
	Reflective	Acknowledging one's "customary and unreflective ways of understanding and acting" creates new paths and thus new knowledge in dialogue (Tsoukas, 2009, p. 953) Reflective ways create new thoughts in conversations with language games and combinations create new knowledge (Topp, 2000, p. 338)
	Risk-taking	Safe relationships increase the ability to take risks, which often results in more creative solutions (Cross <i>et al.</i> , 2001, p. 116) KC process includes failures – thus it is important to increase employees' self-esteem and self-worth (Tse and Mitchell, 2010, p. 86)

Table II.

Self-reflection demands a certain criticality toward oneself and the others (Verdonschot, 2006; Tsoukas, 2009). Being critical is needed in order to cross-boundaries in the working community, which may mean overcoming subconscious pressures about doing something which is not accepted (Mitchell and Nicholas, 2006). To create new knowledge means thus questioning old traditions and taking risks (Cross *et al.*, 2001). This kind of generative conversation reflects quite a conscious way of being in interaction by managing it using a variety of techniques (Topp, 2000; Tsoukas, 2009).

It should be pointed out, that most of the elements describing effective atmosphere and human relationships surrounding KC simultaneously implicitly describe the subject, and vice versa. For instance, if a trustful atmosphere is implied as being useful and able to enhance KC, naturally this means, that the subject should be capable of being trusting and trustworthy in his relationships. Thus, there is a need for exploring these human factors as a unity, which underlines the relevance of a coherent theoretical basis.

Why a novel conceptualization is needed?

All in all, the dimensions explored above all underline the importance of the actual interactive event as a point where new knowledge is created. Thus, it is surprising, that the event of interaction has remained in the background, while the circumstances of the KC are emphasized. The analysis conducted shapes quite a rich field for describing and researching experiences of interaction in KC, though it has not been acknowledged in previous studies. When examining the descriptions of the human factors which enhance KC, we can distinguish two categories. On one hand, KC seems to flourish if the experience of interaction is open and communal, and on the other hand if the individual is able to act consciously as a subject. In the research both the individual and

the community are emphasized; often even simultaneously (Cook and Brown, 1999; Tsoukas, 2009).

This basic configuration is reflected implicitly in the understanding of experiences and the nature of interaction in the studies analyzed. As seen, when examining interaction the phenomenon is first and foremost an experiential – interpersonal or intrapersonal event not to be grasped without explicating being and experience. When exploring the event of interaction and especially when awarding it adjunctive qualities such as open, critical and self-conscious, we have to ask the premises for this kind of conceptualization. However, this fundamental premise has been neglected in the research (Suorsa and Huotari, 2014a). The analysis has revealed two basic viewpoints to the conception of experience, which emphasize both quite different premises (see Figure 2).

This analysis has explicated some implicitly present presuppositions in the research of KC examined:

- (1) The human factors effecting KC are connected with the experiences and modes of being in interaction in various ways; however, this fact remains mostly unexplicated.
- (2) The event of interaction is considered as playing a crucial role; however, the structure of this process remains usually unexplicated.
- (3) Being in interaction is described as an individual accomplishment, where one can manage the course of events. Little emphasis has been placed on the fact that in the event of this kind of interaction there is always also the other party, whose mode of being in that case would be quite passive. There is room for exploration of this event in terms of being together.
- (4) A successful interaction seems to require being open and trusting, and at the same time being capable of managing the event. The dialectics of this presupposition require further exploration.

Exploration conducted in this chapter has revealed some areas of concern and contradictions in explicating the aspects of knowledge creating interaction. Next the idea of play and phenomenological approach is examined in order to answer to the problems raised this far.

Explication 2: play explicating the event of interaction

In this chapter the concept of play used in LIS and in the thinking of Gadamer is introduced. The exploration in this study is based on the idea of phenomenology as a philosophical starting point, which provides an understanding of “the experience-perception aspect of being” on two levels: “(1) as an ideal of being to which human action should be directed so that life can be most fully understood, and (2) as the lived

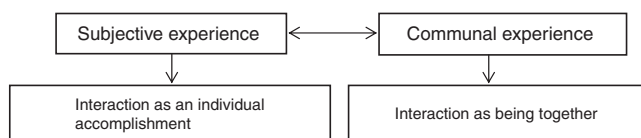


Figure 2.
Conceptions of
experience in the
event of KC and
their effect on the
conception of
interaction

experience of people, examined as people experience and perceive, without a priori imposition or regulation" (Budd *et al.*, 2010, p. 273).

Play as a concept in the field of LIS

The experiential side of KC is connected with the ideas of being creative and finding new paths in collaboration with the working community. Play and playful action have occasionally been seen as a means of increasing the creative atmosphere in an organizational settings (e.g. Desouza, 2003; Sukovic *et al.*, 2011; Anderson, 2013), and play provides some promising opportunities for understanding the communal experience of the KC analyzed above. It can also enhance the understanding of the dynamics and structure of the event of interaction itself. A systematically oriented examination shows, that play is presently used in many areas in the field of LIS and the research conducted is quite heterogeneous, as illustrated in Table III.

In the research conducted around IB and information retrieval (IR), playing and games have recently been seen as phenomena of interest: they are a field in which people act and interact more and more, and thus studying IB and IR in these contexts is relevant (Harviainen, 2007; Adams, 2009). Games have also been seen as effective tools for developing new solutions for IR, for example for indexing and searching (Halttunen and Sormunen, 2000; Bodoff, 2009; Goh *et al.*, 2011; Goh and Lee, 2011). The relevance of playing and games is seen in their ability to entertain – playing is an action human beings do voluntarily in order to gain pleasure (Goh *et al.*, 2011). The goal of these studies is to explore, how this feature could be used to do something useful: such as image tagging (Goh *et al.*, 2011) or generating keywords (Goh and Lee, 2011). Playing in this field of research is considered in terms of entertainment, collaborative work and/or competition, but on the whole it playing can be considered an experience where pleasure and work may be combined.

Playing and games are also being researched as means for educating and enhancing skills related to the field of LIS, for instance information literacy (IL) (Halttunen and Sormunen, 2000; Markey *et al.*, 2011; Gumulak and Webber, 2011). The basis for these studies is the notion of gaming and playing as an action, which enhances learning (Halttunen and Sormunen, 2000). Thus, they are explored as actions which have the element of interaction and some kind of collaborative way of working in their essence – in opposition to some more traditional ways of teaching or learning. However, often the analysis of the experience of playing remains in the background, as the ideas from educational sciences are taken as they are (e.g. Halttunen and Sormunen, 2000). Games and playing are thus considered more as concrete programs and technological solutions than explicated experiences or actions. Play is, however, understood as an experience, which has quite powerful elements concerning change and development, connected with the ideas of entertainment, engagement and reward (Markey *et al.*, 2011, pp. 47-48).

In recent years, the multidisciplinary field of game studies has become a part of LIS and a vast amount of research has been conducted around the themes of playing and games related to information technology and behavior. The individual's motivations for playing have been considered as an important field of research when developing new games (Lee, 2009; Sánchez *et al.*, 2012). Playing and the experience of flow (see, e.g. Csikszentmihalyi, 1991) has been of interest, as flow has been seen as a mode of being, which is related to the motives of playing (Lee, 2009). In this body of research, playing is often seen as something which is detached from the real life (Stenros, 2012).

In the research connected with KM, playing and games have to some extent been studied (Desouza, 2003; Chua, 2005; Sukovic *et al.*, 2011). The experiential potentiality

Areas	Focus of research	Use of the concept	Aspects of play	Researchers
Library studies	Children and libraries: plays and games as materials, playing in the space of libraries	Games as rule-based play with goals and objectives	Free Voluntary Rule based	Kirriemuir (2006), Bane (2008)
Information behavior	IB in play: playing as a context for different phenomena of IB	Playing as an action of children and adults, which includes information use	Game world as opposed to the real world Based on a social contract	Harviainen (2007), Adams (2009)
Information retrieval	Playing and games as tools for developing IR and new solutions	Playing as a mode of being, which can be used for useful purposes through technological solutions	Entertaining Engaging Learning	Goh <i>et al.</i> (2011), Goh and Lee (2011)
Education and LIS	Educating by using playing and games: playing as a way to enhance learning in the context of libraries, information organizations and phenomena connected to LIS (e.g. information literacy)	Playing as an action, which can enhance learning both as an experience and as a form of presenting information	Learning Collaborating Engaging Problem solving Rewarding Safe environment for exploring	Halttunen and Sormunen (2000), Song (2008), McCabe and Wise (2009), Markey <i>et al.</i> (2011), Gumulak and Webber (2011)
KM and organizations	Play as a mode of being, which gives room for exploration and experimentation with new ideas in an organizational environment	Playing as an attitude of doing things differently, play and games also as an action which can be used, e.g. to simulate real life situations	Informal, as opposed to official social exchange Flow-like state Collaborating Rule based	Desouza (2003), Sukovic <i>et al.</i> (2011), Chua (2005)
Game studies	Players and the internet: playing as a phenomenon especially occurring on the internet, play and games as products	Play and games both as experience and technological solution	Collaborating Entertaining Competing Play world as opposed to the real world	Grimes and Feenberg (2009), Lee (2009), Sánchez <i>et al.</i> (2012), Stenros (2012)

Table III.
Research into play
in the field of LIS

of playing has been used to develop the working community – play in this context is understood as being in opposition to official modes of interacting and taking on unconventional roles, for instance, or doing things differently (e.g. Sukovic *et al.*, 2011). In organizational settings playing has also been explored as a way of simulating interactive situations (Chua, 2005) in a manner which indicates playing as a safe environment for exploration.

As this examination has illustrated, the research around playing in LIS is heterogeneous. The use the concept of play has illustrated different motives in research: for some it raises

the possibility of introducing different technological solutions which use the forms and norms of playing to develop new IT software, for others it introduces a novel way to enhance learning, and for some it is an interesting action worth studying *per se*. Thus, play as a concept is used in the field of LIS on different levels: as an action which has a value of its own, for example as child's play in the library or adults playing on the internet, or as an action which has some instrumental value, for example in enhancing learning IL or indexing in the context of libraries.

Furthermore, play can be considered as a technological solution or as an experience. Understanding of play can thus be divided into two basic categories. Play can be defined according its structural elements in terms of its rules, roles or special techniques (e.g. Kirriemuir, 2006), or according to its experiential features, such as its entertainment aspect, collaborative function (e.g. Goh *et al.*, 2011) or its detachment from the real world (Adams, 2009; Stenros, 2012). Both of these categories could be useful when exploring the collaborative nature of KC as play. Next the Gadamerian conception of play, which connects the idea of the play to the conceptions of experience and being, is introduced and examined.

Definition of the Gadamerian play

Gadamerian play describes an experience of authenticity and being present in a course of actions in general (Gadamer, 2004, p. 87). "Play, for Gadamer, is a fundamental ontology – a context for understanding all forms of presentative and communicative activity. As such, it represents the deepest reality of conversations" (Martin and Fonseca, 2010, p. 261). With Gadamer's conceptualization of play we can explicate the being in interaction as being together in a way which contains a detailed phenomenological basis. In his study the concept of play is used instead of, e.g. game, in order to emphasize the idea of being together, not competing against each other.

Play as a Gadamerian concept is to be understood through its usual meaning in everyday life: playing is in human nature and children play in order to learn to act in the world (Gadamer, 2004, p. 105). This sort of play has certain rules, forms and regulations, but they do not restrict the free element of the play. On the contrary, they create means for the play to exist (Gadamer, 1999a). Play is always intentional, in other words the player has a desire to open up and act (Gadamer, 2004, p. 107). Playing in this sense can also be an individual activity – what is important is the movement between at least two elements, be it another human being or for instance a ball (Gadamer, 2004, pp. 104-105). Hence, play is understood in terms of being within an action familiar to everyone.

However, at the same time Gadamer defines play as a concept not bound to human beings, referring to sayings like "play of light" or "play of waves" (Gadamer, 2004, p. 104), which formulate the idea of play as movement to-and-fro in general. With this Gadamer distances himself from subjectivism on a large scale: "Hence the mode of being of play is not such that, for the game to be played, there must be a subject who is behaving playfully. Rather, the primordial sense of playing is the medial one" (Gadamer, 2004, p. 104). At this point the whole concept of interaction is challenged, as it could be understood to maintain the borderlines between individuals (Arthos, 2000; see also Gadamer, 1999b).

Furthermore, the concept of play gives a description of being present in the course of actions as a flow-like mode of being (see, e.g. Csikszentmihalyi, 1991) and this could be seen as a mode of truly creating and learning together. "Play fulfills its purpose only if the player loses himself in play" (Gadamer, 2004, p. 103). In a sense this kind

of interaction requires the persons interacting to forget their own subjectivity and to surrender to the course of events. "The players are not the subjects of play; instead play merely reaches presentation (Darstellung) through the players" (Gadamer, 2004, p. 103). However, this does not mean that play would be a place of retreat from the real life, on the contrary: Gadamer (2004, pp. 102-103) describes play as a serious experience of being present in real life.

Thus, the event of play can be seen to consist of several elements: play has its form, certain rules and goals, and it exists only if the participants take it seriously and are present in the course of its actions. Through fundamental experiences of authenticity like in play something from the truth can be revealed (Gadamer, 1999a), and in this kind of experience also some profound change and learning occurs.

Play, modes of being and experience

Play as a Gadamerian concept throws a light on the concepts of experience and being, which are in a pivotal position when trying to understand the process of interaction in KC. An essential statement of Gadamer is that playing requires authenticity. Observing and creating a distance from the action could thus be seen as an opposed mode of being in interaction. "The mode of being of play does not allow the player to behave toward the play as if toward an object" (Gadamer, 2004, p. 103). This feature of play becomes understandable with the phenomenological idea of being as a form of tension between everydayness and authenticity, as explicated by Martin Heidegger (1985; Dreyfus, 1991), whose conceptions of being have influenced Gadamer's rather anti-subjective thinking of being together and play (see, e.g. Weinsheimer, 1985; Tietz, 2000).

Everydayness is one of the Heideggerian concepts clarifying the theme of modes of being. Most of the time a human being lives his life safely and self-indulgently without questioning his choices. He goes with the flow passively, without ostensibly choosing, even though this mode of being is actually already a choice. This mode of being in everydayness Heidegger calls *das Man* (the "they") and it refers to others as an anonymous somebody, who we all are and at the same nobody in fact is. This mode of being gets its strength from its anonymity and indefinability, and it is strengthened as human beings fear standing out from the crowd (Heidegger, 1985, p. 164). This takes away the responsibility of one's actions, and is thus an understandably appealing mode of being.

However, one can actively work against the power of everydayness, because a human being has the capacity for being authentic (Heidegger, 1985, p. 167). An authentic mode of being is possible because each moment is not already fixed but open. It is a question of grasping the possibilities: "If Dasein discovers the world in its own way [eigens] and brings it close, if it discloses to itself its own authentic Being, then this discovery of the 'world' and this disclosure of Dasein are always accomplished as a clearing-away of concealments and obscurities, as a breaking up of the disguises with which Dasein bars its own way" (Heidegger, 1985, p. 167). In other words, approaching the authentic mode of being is approaching the world, unveiling and eliminating obscurity. This is the nature of play as well (Gadamer, 1999a, 2004).

In Gadamer's thinking authenticity also defines the concept of experience. With the concept of play Gadamer is trying to escape this idea of subjective experience. At the center of attention is play as such, not the subjectivities of individual "players." The experience (*Erfahrung*) is not a private but rather a communal and social phenomenon (Arthos, 2000, p. 19). Thus, by emphasizing the event and communal experience, the emphasis is shifted from individual cognitions and human relationships

to the subject matters themselves. As a basis for organizational KC this communal mode appears fruitful, as the factual content of the communication is thus emphasized.

As a whole, this experiential basis of play gives us a means to explicate the elements of being in play, such as openness, trust and risk-taking. The phenomenological approach in general is also really well in line with the ideas of caring, trusting and safe relationships as the basis for successful interaction, promoted in the research of KC analyzed earlier. The basic duality of authenticity and everydayness can thus be used to understand the elements of knowledge creating interaction analyzed in the previous chapter. Playing, understood as actively being present in a course of actions is contrasted with the passive mode of being explicated by the conception of everydayness.

Argumentation: play in the context of KC

In the argumentation phase of this study the possibilities of using the Gadamerian concept of play when conceptualizing human interaction in KC research is examined. At the end of the first explication phase, implicitly present premises, which needed clarification, were brought to light. The phenomenological alternative provided answers to these needs to some extent. First of all, the examination of the hermeneutic phenomenology answers the need for an epistemologically and ontologically coherent conceptualization of being and experiences in KC. The conception of authenticity (Heidegger, 1985) clarifies the basic idea of being in an ideal state of interaction, also described in KC research with terms like open, trusting and reflective.

Also the structure of the actual event of interaction and the limits of exploring this kind of experience are explicated by Gadamer. The dialectics between being open and trusting, and simultaneously being capable of managing the event of interaction, is at the first sight in contradiction with the phenomenological approach, which emphasizes the authentic being in the event. However, the use of some knowledge creating techniques (e.g. Tsoukas, 2009) becomes understandable as tools, which are to be learned and which thus are part of peoples' experiences. As a whole the examination of Gadamerian play forms an explicit and more structured view of the elements of knowledge creating interaction.

Thus, it can be concluded, that play as a Gadamerian concept can provide a fruitful starting point for understanding the complex phenomenon of KC. In the explication phase the dimensions of human factors enhancing KC were examined. Those dimensions become even more understandable in a phenomenological context, where the relevance of trust, openness and commitment is validated by the idea of being. Some similarities and differences can be noted when exploring the conceptions of play in LIS. Thus, the results of this analysis of the concept of play can be illustrated as in Table IV.

In addition to the fact that using Gadamerian concept of play is not in contradiction with the research into KC and LIS analyzed in this paper, the idea of Gadamerian play can expand our understanding of the phenomenon of KC in various ways. Based on the analysis conducted, a framework for studying being in knowledge creating interaction, seen through the concept of play can be formed. This framework is based on the phenomenological exploration conducted in this study. It also integrates the research of play in LIS and the research of KC in KM which is not in contradiction to the phenomenological orientation. The framework is illustrated in Figure 3.

The framework consists of two levels: the actual event of interaction and the organizational circumstances of this event. The Gadamerian conceptualization of play gives us three dimensions with which to explore knowledge creating interaction: the

Table IV.
Results of the
conceptual
analysis of play

Play as a concept

Places of play in KC – implicit

In relationships: trust, openness, commitment, familiarity, equality
In the creative subject: open, critical, reflective, risk-taking
In organizational context: trust, flexibility, diversity, safety

Play in Gadamer's hermeneutics

Describing being together
Describing change and learning
Connected with the phenomenological idea of authenticity and everydayness

Concept of "play" in LIS – explicit

Experience or technology
Learning or entertainment
Absolute or instrumental value
Entertainment, collaboration and being in the "play world," or rules, roles and techniques

Gadamerian play in the research of KC, as a research field of LIS

Similarities: collaboration, engagement, learning, voluntary, rule based
Differences: seriousness, not competitive, not only entertainment, real

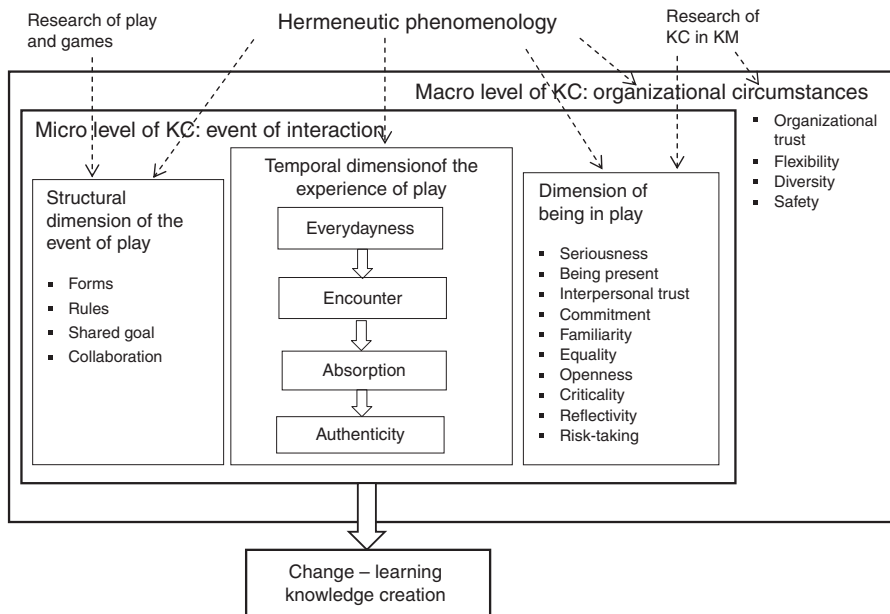


Figure 3.
Structure of the
event of play and
its relation to
the research
into KC and LIS

structural dimension of the event of play, the temporal dimension of the experience of play and the dimension of being in play. The division of these dimensions is based on the notion of play being both an event and an experience. With these dimensions we can explore the knowledge creating interaction as an experience and an event. They also express some fundamental points of concern for the organization as a place of KC.

Structural dimension of the event of play

Dimensions describing the actual event of play can be formed by comparing the conceptions of play in LIS and in Gadamer's thoughts. The notion of collaboration and doing things together as an essential feature of play, explored by Goh *et al.* (2011) and Goh and Lee (2011) when developing a means to enhance indexing, comes close to the Gadamerian view. However, the assumption of play as a form of entertainment or competition is quite opposite to Gadamer's ideas. In the research conducted around the experience of flow within play

(e.g. Lee, 2009) there are similarities with the conceptualization of Gadamer and this is a feature worth further research. The research defining play as something unreal (Stenos, 2012) is in opposition to the Gadamerian view, where play is not a closed experience, but being in true connection with the real world (Gadamer, 2004). All in all, the event of play is seen as a structured event with forms, rules, a shared goal and the element of collaboration. Gadamer's ability to explicate the experience also justifies its use in the research of KC.

Temporal dimension of the experience play

The notion of play as authentic being present in the course of action gives a temporal structure to the event of KC. Play describes a dynamic action which constantly renews itself (Vilhauer, 2009, p. 359). The structure of play can be seen as a movement back and forth (Gadamer, 2004, p. 104). What is fundamental is that the movement of play is natural rather than forced – it happens without a struggle when it is started. This implies there is something special in the beginning – at the moment of decision as to whether to participate or not. In the study and development of interaction this is the moment we should pay attention to. Play acknowledges the fact that the actual being together in interaction is not the moment of objective development – in fact it is impossible to get hold of. However, the experiences of the encounter and absorption are open to discussion afterwards.

Dimension of being in play

Being in the event of play is formulated by combining Gadamerian ideas with the KC research analyzed in the explication phase one of this research. The elements describing relationships between people and the behavior and actions of the subject can be seen as describing the modes of being in play. Elements like trust, openness and commitment are consistent with the phenomenological view of an aspired way of being together. In the Gadamerian sense reflectivity is seen as being open and responsive to the course of events. Criticality is understood as being aware of the power of everydayness, and thus also being able to take risks. Gadamerian conceptualization sharpens the conception, as it explicates the premises of different modes of being and illustrates, how profound the state the mode of being in knowledge creating interaction is. The importance of being present in the course of actions and the seriousness of the orientation are emphasized in the Gadamerian conceptualization.

Circumstances of play

The importance of circumstance is highlighted both in the KC research and in phenomenological philosophy, as the roots of the event of interaction lie in the past experiences in the context of work. Elements of the context which enhances knowledge creating interaction, like trust, flexibility, diversity and safety are compatible with the phenomenological idea of authentic being and hermeneutic conversation (see also Suorsa and Huotari, 2014a). The phenomenological approach, however, removes the borderlines between the context and individual human beings in the course of events, which explains in its part the importance of good circumstances and working communities.

One of the fundamental questions raised by this exploration is how to combine the ideal mode of open and playful being together with the everyday life of organizational work. These aspects cannot be explored separately, which means that both the human interaction and the environment where it takes place should be taken into account when further studying KC both conceptually and empirically.

Discussion and conclusions

The aim of this paper has been to examine, how the concept of play could be used to understand the aspects of different modes of being in interaction in the event of KC. The purpose was to explore, in which ways the research into KC is based on the idea of modes of being of human beings. Furthermore this study aimed to explicate how the Gadamerian concept of play can be used to understand and explore the aspects of the different modes of being in the event of KC.

The conceptualization of this paper explores knowledge as a communal and shared phenomenon and in its way this paper contributes to the discussion around the topic of understanding knowledge as a concept and knowledge processes in the field of LIS (e.g. Buckland, 1991; Wilson, 2002; Hjørland, 2004; Day, 2005; Zins, 2006). This paper is focussed on the exploration of KC in organizational environments. KC as a phenomenon of being together in interaction could be further explored as related to the field of collaborative IR (Ingwersen and Järvelin, 2005; Hansen and Jarvelin, 2005). Also the understanding of interactive processes in information work (see, e.g. Burns and Bossaller, 2012) could benefit from the explication conducted in this paper.

As the analysis of the research of KC has indicated, the idea of different modes of being is implicitly present in the studies in various ways: in the descriptions of knowledge creating interaction (e.g. Cook and Brown, 1999; Tsoukas, 2009; Morner and von Krogh, 2009) and in the descriptions of the human factors enhancing KC like trust (Cross *et al.*, 2001; Bligh *et al.*, 2006), openness (Mitchell *et al.*, 2009), familiarity (Chua, 2002; Adenfelt and Lagerstrom, 2006), commitment (Lubatkin *et al.*, 2001; Bligh *et al.*, 2006) and safety (Cross *et al.*, 2001; von Krogh, 1998). The elements of KC analyzed in the explication phase of this study come quite close to the Gadamerian conceptualization of play.

Gadamerian playfulness, meaning total presence in the event and absorption in the conversation, can explain the mode of being in knowledge creating interaction. With Gadamer's conceptualization the power of this kind of action is emphasized: play leads to true change and learning; these aspects of play are also emphasized in the research conducted around the theme of play and learning in LIS (e.g. Halttunen and Sormunen, 2000). The phenomenological conceptualization of being makes these claims more understandable and coherent. The division into authenticity and everydayness can be used to understand the aspects of desirable modes of being connected to the human factors enhancing KC. With the concept of play the emphasis can be placed on the whole event of being together as such, not on the individuals behaving in certain ways. Play offers us a means of understanding the way of being absorbed in the event of creating knowledge together.

The exploration of the research into KC and phenomenological philosophy has revealed a tension between claims on being authentically present in the event of interaction and at the same time capable of using techniques managing conversations (Topp, 2000; Tsoukas, 2009). The Gadamerian idea of play can for its part clarify this contradiction. The actual being in interaction, seen as an open, creative and flow-like experience, is not controllable as such, thus the place of conscious action is in the beginning and in-between the events. Thus, the capacity to act in those interactive situations could come from the historical experience and lived situations, which would provide skills to improvise (see Yanow and Tsoukas, 2009; Suorsa and Huotari, 2014a). Understanding this temporal structure could be helpful when developing the skills and processes of KC in organizations.

Though play as a Gadamerian concept is fully understood within the phenomenological framework, it can also be understood in the context of playing in everyday life – an experience which every human being has. The Gadamerian concept

of play has to some extent been used to promote playful engagement in quite practical ways: changing clothes, acting not-seriously or developing playful spaces in organizational settings (see, e.g. Sukovic *et al.*, 2011). Also the review of the uses of play in LIS revealed how playing as a structured action or a way of acting unconventionally can be seen as a means for developing something new (Desouza, 2003). Though Gadamerian understanding emphasizes the seriousness of play, the view provided in this study does not exclude these kinds of actions if they are seen as means to question old ways of working within organizational settings. This relationship is worth further exploration.

Both the descriptions of interaction in the research into KC and Gadamerian play emphasize the role of experience. However, in the KC research, experiences are handled as rather private and individual background elements, which are reformulated in the event of interaction (e.g. Cook and Brown, 1999). The Gadamerian anti-subjective approach allows us to understand the communal and historical nature of experience. Additionally, it provides a means to examine KC as an event. The framework developed in this paper further explicates these dimensions by differentiating the organizational circumstances, structural dimension of the event of play, the temporal dimension of the experience of play and the dimension of being in play. One of the questions calling for further examination is how to combine the ideal mode of open and playful being together with the reality of the organizational world.

The framework illustrated in this study also provides a starting point for an empirical exploration of the process of KC, and it should be tested in organizational contexts by examining the actions and experiences of a knowledge creating working community. According to this exploration, KC should be explored on two levels: on the macro level, meaning the circumstances which enable knowledge creating interaction, and on the micro level, meaning the actual events of the interaction. Both of these levels can be explored and developed by taking notice of the human factors affecting the modes of being in interaction in the organizational context. As the analysis conducted in this study has indicated, KC is an experiential phenomenon and as such it can be empirically studied in relation to that, meaning that qualitative methods such as interviews should be emphasized. The strength of the framework provided in this study is that this view explicates this micro level of KC in detail as an event of play. It also provides the means to examine the events of interaction using observational methods (see Suorsa and Huotari, 2014b).

In this paper the examination of phenomenology has been limited to the exploration of authenticity and everydayness; the phenomenological philosophy offers a means to go further in this explication of human being and experience (see Suorsa and Huotari, 2014a). However, one has to keep in mind that the emphasis of both Gadamer and Heidegger is not in the subjectivity or even inter-subjectivity, but in being together as a fundamental characteristic of human beings. Thus further examination of the concept of play and Gadamerian hermeneutics is needed in order to understand the potential and limitations of this premise. Altogether this study has indicated that a phenomenological approach would be especially suitable for understanding and exploring the phenomena connected with experiential knowledge and interaction.

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