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INTERACTION FOR KNOWLEDGE CREATION

A PHENOMENOLOGICAL STUDY IN KNOWLEDGE MANAGEMENT
ANNA SUORSA

INTERACTION FOR KNOWLEDGE CREATION
A phenomenological study in Knowledge Management

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Abstract

The aim of this thesis is to present a theoretically consistent conceptualization of knowledge creation as an interactive event and to test this in a working community in a methodologically coherent manner.

This thesis examines the key problems in the body of research of knowledge creation in the field of Knowledge Management, which is attached to the idea of knowledge as an asset inside a human mind, but simultaneously promotes a view of interaction, based on hermeneutic understanding. The study proposes an alternative way to conceptualize and examine knowledge creation, based on hermeneutic phenomenology of Hans-Georg Gadamer and Martin Heidegger. The foci are on the conceptions of a human being and interaction as play. On the basis of the research literature, a framework for examining knowledge creation was developed. The framework was empirically tested in a multi-organizational and multi-professional working community of librarians and teachers, participating in The Joy of Reading Program in Finland. Along with the research literature, the triangulated data consist of ethnographic observations and video recordings of the community’s gatherings, its members’ interviews and produced documents. The data were analyzed through a qualitative approach.

The results show that the phenomenological conceptions of temporality of a human being and play are suitable for understanding being in the knowledge-creating interaction, as they give means to understand the meaningfulness of past experiences, but promote an open attitude towards future possibilities in a way which promotes knowledge creation. Studying interactive events allows for an understanding of how the phenomenon of knowledge creation can be examined as a collective accomplishment. The importance of flexible circumstances is emphasized to promote interaction. The playful mode of being in the event, meaning seriousness and the tendency to be present in the event, was seen as a way to use the time available effectively. The results may be utilized to develop organizational circumstances, which promote knowledge creation by acknowledging the meaningfulness of interaction.

In the future, theoretical sampling will be used for testing and developing the framework further in a Finnish Academy’s Strategic Research Council’s consortium BCDC Energy aiming at developing a cloud computing based market place on renewable energy markets.

Keywords: hermeneutic phenomenology, interaction, knowledge creation, Knowledge Management, play
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Tiivistelmä
Tutkimus esittää teoreettisesti yhtenäisen käsitteellisyyksen tiedon luomisesta vuorovaikutteisena tapahtumana. Tätä käsitteellistyksen perustuvaa viitekehystä testataan empirisesti tarkastelemalla tiedon luomisen edellytyksiä ja uuden tiedon luomisen mahdollistavaa vuorovaikutusta moniammatillisessa työyhteisössä.

Tiedon luomisen tutkimus on perinteisesti kiinnittynyt ajatuksesta en tiedosta mielen sisäisenä varantona. Samanaikaisesti tiedon luomisen tutkimuksessa korostetaan vuorovaikutusta, joka on usein käsitetty varsin hermeneuttisena tapahtumana. Tässä tutkimuksessa tarkastellaan näiden kahden lähtökohtan yhdistämisestä muodostuneita ongelmia tietojen luomisen alalla. Tutkimus esittää vaihtoehtojen, Martin Heideggerin ja Hans-Georg Gadamerin hermeneuttiseen fenomenologiaan perustuvan tavan käsitellä ja tutkia tiedon luomista siten, että hermeneuttinen käsitys vuorovaikutuksesta ei ole ristiriidassa tiedon käsittelyn kanssa. Tutkimuksen keskeisinä tarkastelemuina ovat fenomenologinen ihmiskäsitys ja ajatus vuorovaikutuksesta leikkineen.

Tutkimuksessa tarkasteltiin hermeneuttisen fenomenologian suhdetta tiedon luomisen nykytutkimukseen ja kehitettiin hermeneuttiseen fenomenologiaan perustuen viitekehys tiedon luomisen empirististä tutkimusta varten. Viitekehystä testattiin empirisesti valtakunnalliseen Lukiinto-ohjelmaan osallistuneen kirjaston työntekijöiden ja opettajien muodostaman moniammatillisesta työyhteisössä. Tutkimuksen aineisto koostui etnografiasta, työyhteisönläisestä videointeesta, yhteisön jäsenten haastatteluista ja hänen tuottamastaan dokumenteista. Aineisto analysoitiin laadullisella otteella tarkastelemalla sekä työyhteisössä käyttöä ja keskustelua että työyhteisön jäsenten kokemuksia tiedon luomisesta Lukiinto-ohjelmassa.


Jatkossa tässä väitöskirjassa esiteltävä lähetysmistapaa ja viitekehystä tullaan edelleen kehittämään ja testaamaan teoreettisen otaman avulla Suomen Akatemian Strategisen Tutkimuksen Neuvoston rahoittamassa BCDC Energia -konsortiossa.

Asiasanat: hermeneuttinen fenomenologia, tiedon luominen, tietojohtaminen, vuorovaikutus
Acknowledgements

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Abbreviations

ICT     Information and Communication Technologies
JOR     Joy of Reading
KC      Knowledge creation
KM      Knowledge Management
LIS     Library and Information Science/Studies
List of original publications

This thesis is based on the following publications, which are referred throughout the text by their Roman numerals:


In addition, unpublished data have been added to this doctoral dissertation.

Description of the author’s role in the sub-studies:

The author conducted all the sub-studies of this thesis. Professor Maija-Leena Huotari was the author’s supervisor and guided the work in all phases. As an expert in the fields of Information Management, Knowledge Management, and information behavior, she provided insight into those fields. In Study III, Huotari wrote a paragraph about paradigms and discourses in the field of KM, and in Study IV, she provided insight in the paragraphs concerning information and knowledge use.
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1 Introduction

1.1 Background of the thesis

In Western societies, the rapid development of new information and communication technologies (ICT) and globalization has changed the ways of working during the past decades. The post-industrial era has created new challenges to the management of work in the organizations, as less and less work is conducted in a traditional manner. (Drucker 1982, 1993, Newell et al. 2002.) The development has led to the rise of knowledge-based economies, where information and knowledge are both the input and the outcome of the work (Drucker 1982, Grant 1996). Thus, the role of knowledge in almost every field of work has increased. Also, in Finland, the majority of jobs are in the service branch, and working in all fields increasingly includes tasks of an expert (Laihonen et al. 2013). The work in knowledge-intensive fields has increased, as the economic growth is seen to be gained best by developing new products and services based on information and knowledge (Alvesson 2002: 5).

In this development phase of society, innovation and knowledge creation is considered to be fundamental for coping with the ever-increasing competition and changes (Nonaka & Takeuchi 1995, Spender 1996, Choo 1998, Tsoukas & Mylonopoulos 2004, Mehta 2007). It is acknowledged that the organizational circumstances, as well as the relationships within the working community, affect the productivity of the work. Employees are expected to share their knowledge and collaborate in order to cope with the changing environment. (Cross et al. 2001, Bligh et al. 2006, Mitchell et al. 2009.) Additionally, the development of new ICT solutions has changed the ways in which people interact (Wagner, Vollmar & Wagner 2014, Backer 2015, Baralou & Tsoukas 2015). Thus, it is essential to understand the phenomenon of organizational knowledge creation in order to enable the accomplishment of something new, be it a product, service, or a process (see e.g. Mitchell & Boyle 2010). Consequently, since the 1990s, there has been an increasing interest in research into knowledge creation, organizational learning, and innovation in the multidisciplinary field of Knowledge Management (KM), which is viewed as the primary field of this thesis.

process, where past experiences provide a basis for creating something new (e.g. Tsoukas 2009, Morner and von Krogh 2009). In the field of KM, knowledge creation has often been connected to the idea of different types of knowledge – tacit, implicit, and explicit – which through interaction can be converted from one type to the other (Nonaka 1994, Nonaka & Takeuchi 1995). However, in this body of research, there has been a tendency to combine quite cognitive thoughts of knowledge procession inside a human being with hermeneutic thoughts of interaction in a way that lacks coherence and remains unexplicated. Moreover, thus far, the concept of interaction has been seldom defined.

In this thesis, I will explicate the key problems of this kind of an approach and propose an alternative way to conceptualize and examine knowledge creation, based on hermeneutic phenomenology of Hans-Georg Gadamer (1999a–d) and Martin Heidegger (1985a). In particular, the conceptions of the human being and interaction based on phenomenological philosophy are the essence in this study. The phenomenological conception of the human being differs substantially from the subject presumed in knowledge creation research, which often reflects more cognitive or socio-cognitive views of a human being, whose mind and body are separate (see e.g. Värlander 2008a, 2008b). In this thesis, it is suggested that the phenomenological view provides a consistent basis for defining knowledge creation, including the interpersonal relations and the context. This is possible, because the phenomenological approach inseparably connects the creator to the context and concentrates on the human being experiencing the event.

In this thesis, interaction is examined in relation to the hermeneutic phenomenology of Gadamer, who has been one of leading developers of hermeneutics in the twentieth century. Gadamer (1999a, 1999c, 1999d, 1999e, 2004) has explicated the act understanding and being together in his profound works, and also critically considered the means and methods of human sciences. In this thesis, Gadamer’s conception of play in particular is viewed as an ideal mode of collaboration (Gadamer 2004) and as a promising concept to get hold of the phenomena related to knowledge creation in organizational settings. 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. Playing as such is a unique way of experiencing and being, and 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 the others. Playing has been studied and used as a way to increase learning and creativity in communities and knowledge-based organizations (e.g. Sukovic et al. 2011, Anderson 2013). In this thesis, the use of the concept of play
in the field of Library and Information Science (LIS) is examined. The uniqueness of Gadamer’s conceptualization of play in relation to the previous studies on knowledge creation is explicated. First, I study the possibilities of play theoretically and then use this conception to examine knowledge-creating interaction in an empirical organizational setting. In the field of KM, there is little empirical work conducted to examine and explicate what really happens in the interactive events between human beings (Mengis & Eppler 2008, see also Cooren et al. 2014). In this study, the suggested methodology for studying knowledge-creating interaction empirically takes into account both the experiences of interaction and the interactive events in a novel way (see Budd 2006, Epperson & Zemel 2008, McKenzie 2009).

Hermeneutics and phenomenology have been explored and discussed in LIS as related to the foundations of the discipline (Capurro 1992, 2000, Budd 1995, 2005, Hjørland 2004, 2005, Hansson 2005, Budd et al. 2010, Vamanu 2012, Kelly 2016, Suominen 2004, 2016). They are seen as philosophies that explain the interpretative nature of the phenomenon studied in LIS in a conceptual manner (e.g. Hansson 2005). They are also used when developing, for example, technological solutions to issues related to LIS (e.g. Butler & Murphy 2007). However, hermeneutics and phenomenology are not widely used in the research of knowledge creation, though they have been considered to offer a useful basis for examining human interaction (Värlander 2008a, Tsoukas 2009). In addition, thus far, research in the field of LIS has seldom focused on the concept of a human being as the premise of the study (see Day 2011).

As this thesis focuses on the human being creating knowledge in his or her context, my approach is related to such concepts as sense-making (Dervin 1983, 2003), information grounds (Pettigrew 1999, 2000), information-as-knowledge (Buckland 1991), enactment (Weick 1979, Daft & Weick 1984), and situated practice (see e.g. Lave & Wenger 1991, O’Farrill 2010). However, in this thesis, I place the emphasis on the basic premises behind the conceptualizations, and thus, on the philosophical texts per se.

Knowledge creation is a phenomenon connected to the phenomena of human information behavior (HIB) and practices like information needs, information seeking, searching, and information sharing and use. In the field of HIB, these are examined on the micro level as information activities. (Wilson 1999, Kuhlthau 1991, 1993, 2004, Dervin 1998, Case 2012, Choo 2016.) However, in the field of organizational information behavior (OIB), these phenomena are viewed on a macro level as information processes (Choo 2016, see also Huotari & Chatman
In my thesis, these levels are connected in interaction, which is understood as an event. My examination is especially related to the studies which examine the elements of interaction and communication related to these phenomena (see Sonnenwald & Pierce 2000, Ingwersen & Järvelin 2005, Hansen & Jarvelin 2005, Foster 2006, Savolainen 2009, Robson & Robinson 2013, Huotari et al. 2016, see also Budd 2001a). Thus, this thesis contributes to the understanding of the interactive nature of knowledge and information processes examined in these sub-fields of LIS.

1.2 Aim of the thesis

The aim of this thesis is twofold; namely, to present a theoretically consistent conceptualization of knowledge creation as an interactive event and to test this in a working community in a methodologically coherent manner. To achieve this aim, I introduce hermeneutic phenomenology of Hans-Georg Gadamer: his idea of a hermeneutic circle of communication and his conceptualization of play (Spiel) as a mode of being together in the event of shared experience. Moreover, I combine the hermeneutic ideas of communication by Gadamer with the phenomenological conceptualization of a human being by Martin Heidegger to better theoretically understand and empirically study interaction for creating new knowledge in different contexts.

The purpose of the study is a) to develop a framework for studying knowledge creation as an event and experience of interaction and b) to test this framework by examining the interactive events where knowledge is created in a multi-professional and multi-organizational community.

In the background of this study, there are the development and paradigm changes in the field of KM and LIS. A cognitive approach, which emphasizes an individual’s inner processing of information and knowledge, has been in a quite dominant position until the 1990s (Ingwersen 1982, Belkin 1990, Koskinen 2010, Budd 2011b, see also Budd 1995). Gradually, the emphasis has moved towards approaches emphasizing human interaction with the context and each other (Vakkari 1997, 2008, Capurro & Hjørland 2003, Talja et al. 2005). This social nature of information and knowledge is reflected, for example, in research on human information behavior and practices (Savolainen 2007, 2008, 2009). Even in the field of information seeking and retrieval, it is recognized that instead of acting individually, people collaborate and work in teams when retrieving information (e.g. Ingwersen & Jarvelin 2005). Also, in the research of
organizational knowledge creation, the socio-constructivist and constructionist approaches have come to surpass strictly cognitive approaches. However, this has created problems when the cognitively oriented view of a human being is combined with hermeneutic ideas of interaction, as mentioned above (cf. Hjørland 2004). My thesis relates to the research which pursues alternatives to the more cognitive approaches by acknowledging the interactive nature of human information behavior and related processes at the organizational level. Moreover, the study strives to provide alternatives for socio-cognitive approaches, which are still attached to the idea of human beings being separable from the context (Värlander 2008a, 2008b, see also Day 2011). The research questions of this thesis are presented in Chapter 3.

1.3 Empirical research environment

The community where I conducted the empirical study was a group of librarians and teachers participating in The Joy of Reading Program in Finland. The Joy of Reading was a three-year program (2012–2015) launched by Finland’s Ministry of Education and Culture and implemented by the University of Oulu, Faculties of Humanities and Education. It aimed to improve the reading and writing skills of children aged six to sixteen by promoting reading for pleasure. Thirty-two (32) school and public library pairs were chosen to pilot their developmental ideas of improving literacies within their communities, of which 30 pilot communities participated in the Program. I conducted the empirical testing of my theoretical framework in one of the pilot communities, which worked together as a team from August 2013 to May 2014, in order to develop new means to get children and youths to enjoy reading.

The topic of knowledge creation in this context has seldom been studied (Ohlsson 2014, see also Leithwood et al. 1997, McCotter 2001, Merinik et al. 2010). However, the work both in libraries and in schools is increasingly based on collaboration in projects involving external organizations, as well. The nation-wide study of the partnerships of Finnish public libraries shows that schools are the most important external strategic partner for most of the public libraries (Lindberg 2014). Thus, it is important to understand what the premises of this collaboration are and to examine how the collaboration between these two professional fields could be enhanced.
1.4 The structure of the thesis

This thesis consists of four phases: 1) theoretical analysis of the conceptual challenges in recent research of knowledge creation related to the premises of studying interaction (Studies I, II, and III), 2) theoretical analysis of how these challenges could be tackled with the help of hermeneutic phenomenology along with proposing a framework (Studies I, II, and III), 3) testing the proposed framework empirically in a multi-professional and multi-organizational setting (Studies IV and V), and 4) refining the framework on the basis of the results of the testing, along with its further elaboration.

The thesis consists of six chapters. After the Introduction (Chapter 1), I present the background (Chapter 2), as organizational knowledge creation and hermeneutic phenomenology are introduced from the viewpoint of this study. In Chapter 2, the methodological issues concerning empirical research of knowledge creation and interaction are outlined. In Chapter 3, I describe the research methodology, including both the theoretical and the empirical research methods. Chapter 4 presents the main results of the five sub-studies of my thesis, including a detailed presentation of the key concepts. In Chapter 5, I examine the contributions of this thesis to theory and practice as well as the limitations and the further empirical testing and development of the proposed theoretical framework. I make concluding remarks in Chapter 6.

1.5 An overview of the publications

My thesis is based on four original publications and one manuscript submitted for the review process. These are referred to as Studies I, II, III, IV and V. The sequence of the examination is outlined in Figure 1.
Study I examines the concept of interaction in research on knowledge creation (KC) and its dependence on the conceptualization of a human being. A framework for understanding knowledge creation with hermeneutic phenomenology is developed, based on a literature analysis of recent knowledge creation research and key texts on hermeneutic phenomenology. This is called Framework I in this thesis.
Study II examines the experiential nature of knowledge-creating interaction and introduces a framework to examine it theoretically coherently via hermeneutic phenomenology and Hans-Georg Gadamer’s concept of play. Study II presents a literature analysis of the concept of play: the Gadamerian conception is related to the descriptions of knowledge-creating interaction in the research of KM and to the uses of the concept of play in the field of LIS. This is called Framework 2 in this thesis.

Study III provides a theoretically consistent methodology for empirically examining knowledge creation in organizational settings. The phenomenological methodology proposed in Study III is based on the combination of Frameworks 1 and 2 presented in Studies I and II. In Study III, the connections between the phenomena of knowledge creation, knowledge sharing and use are also examined further. As a result, a methodology is presented for examining the knowledge-creating interaction as an experience and an event.

Study IV tests the framework developed in Studies I and II and methods suggested in Study III to examine interaction and its circumstances in which information and knowledge are shared, used, and created in a multi-professional and multi-organizational setting. A qualitative approach is applied to examine the phenomenon of knowledge creation by focusing on the events of interaction. The empirical data are from The Joy of Reading Program in Finland.

Study V continues the empirical examination of knowledge creation by testing the framework developed in Studies I and II and methods suggested in Study III. In Study V, knowledge interaction for creating new knowledge is examined as an event and an experience in The Joy of Reading Program in Finland. In this study, ethnographical data are used to examine how the phenomenological idea of a human being and Gadamerian concept of play can be used to study knowledge-creating interaction.

It should be noted that in this compilation part of the thesis, an overview of the main results is presented. A detailed examination is presented in Studies I to V. In addition, the results contain material which is not included in the Sub-Studies.
2 Organizational knowledge creation and phenomenology

In this chapter, I aim to provide a background to help understand the sub-studies and the significance of this thesis as a whole in the field of LIS. The theoretical framework suggested is based on examining the research conducted on organizational knowledge creation and reflecting this body of research in light of the ideas of hermeneutic phenomenology of Gadamer and Heidegger. My examination of the phenomenon of knowledge creation integrates conceptions from three fields for proposing a theoretical framework and empirically testing it in order to assess how appropriate the conception is in the field of LIS. In the field of Knowledge Management, the thesis concentrates on: a) research of knowledge creation as a process and action, b) research emphasizing interaction, and c) research which has pursued to present alternatives to Nonaka’s models of knowledge creation. In the wide field of phenomenological philosophy, the study concentrates on: a) the hermeneutic phenomenology of being, b) the hermeneutic communication, and c) the phenomenology of play.

In this chapter, I introduce the basic conceptions of my thesis. At first, the starting points of studying organizational knowledge creation are examined. Then, these are located in the field of Knowledge Management, and also, the conceptions of information and knowledge are explicated to identify the need to study knowledge creation more thoroughly from a critical viewpoint. Subsequently, the phenomenological philosophy is presented as a way to understand human beings and being together and to examine the use of phenomenology in the fields of LIS and KM. Finally, some key issues related to empirical research of knowledge-creating interaction are outlined. However, a majority of the theoretical examination of the concepts and orientations is presented in the result part of the thesis in Chapter 4.

2.1 Organizational knowledge creation and Knowledge Management

In the past 20 years, the phenomenon of knowledge creation has become a major issue in the field of Knowledge Management. It is tightly connected to the conceptions of interaction and also related to the other organizational knowledge and information processes such as information and knowledge use, dissemination, transfer, and sharing.
2.1.1 Organizational knowledge creation

As an object of research, knowledge creation is demanding, since measuring and recognizing its effects is difficult (Mitchell & Boyle 2010). The definitions of the phenomenon vary, which has led to the fact that recent research has studied various phenomena in the organizational environment as manifestations of knowledge creation (Mehta 2007). The exploration of knowledge creation has until recently widely relied on the models based on the idea of tacit and implicit knowledge converted into explicit knowledge in knowledge processes (e.g. Nonaka, 1994, Nonaka & Takeuchi 1995). However, since the 1990s, a vast amount of conceptual exploration has been conducted to challenge this view, and the interest has shifted to the event of knowing and interpersonal relationships in working communities (Cook & Brown 1999, Orlikowski 2002, Küpers 2005). In the field of LIS, this is related to a wider development, where the social and contextual aspects of knowledge processes have been studied increasingly in recent years, and the importance of collaboration and context have been acknowledged (see e.g. Ingwersen & Jarvelin 2005, Talja et al. 2005, Hansen & Jarvelin 2005, Savolainen 2009). In this development, phenomenological philosophy has also been regarded to offer possibilities to understand knowledge processes in a deeper manner (Värlander 2008, Tsoukas 2009, see also Küpers 2005, 2015). This aspect is discussed more thoroughly in Subchapter 2.2.

The research of organizational knowledge creation has been extensive in KM in the past decade. The phenomenon is approached from several angles, one part of the research concentrating on the macro level of knowledge processes in the organizational settings and the other concentrating on the micro level, examining the processes of knowledge creation in certain communities. A vast amount of research has been conducted to explore the processes in working communities in which the experiences and information of an individual are shared with the whole organization (e.g. Alberts 2007, Eliufoo 2008, Martin-de-Castro et al. 2008, Anand et al. 2010, Olsen 2009, van Helden et al. 2010). These processes are often conceptualized by using Nonaka’s model of strategic knowledge creation (Socialisation, Externalisation, Computation, Internalisation, SECI-model), which is based on the notion of tacit and explicit knowledge as convertible elements (Nonaka 1994, Nonaka & Takeuchi 1995). Research has thus concentrated on identifying the types of knowledge and its flows in different contexts and communities on a macro level (e.g. Eliufoo 2008, Martin-de-Castro et al. 2008, Anand et al. 2010, van Helden et al. 2010, Ramírez et al. 2012).
One crucial issue in knowledge creation research has been the connections between creating knowledge and creating value for the organization (Li et al. 2009, Mitchell & Boyle 2010, Shih et al. 2010). Although some attention has been paid to management and leadership of knowledge creation processes (Kodama 2005, 2007, Yeo 2006, Mitchell & Boyle 2009, Richtnér & Åhlström 2010), the focus of the research has been on the action of individual employees and working communities (Alberts 2007, Jakubik 2008, Olsen 2009, Wang et al. 2011). Knowledge creation has also been conceptualized in relation to creativity and innovation, and even more attention has been paid to the question of productivity combined with the fact that creating something new usually requires some flexibility and risk-taking both on the organizational and individual levels (Merx-Chermin & Nijhof 2005, Verdonschot 2006, Schulze & Hoegl 2008).

One body of research has explored the concepts of knowledge, interaction, and experience more thoroughly at a micro level (Kodama 2005, 2007, Jakubik 2008, 2011, Tsoukas 2009, Morner & von Krogh, 2009, see also Cook & Brown 1999, Gourlay 2006, Akehurst et al. 2011). This also allowed for the understanding of the concept of the human being more thoroughly. In this thesis, I start the examination with the analysis of the state of recent research on knowledge creation and proceed to examine the preconceptions behind this research (see Subchapter 4.1). The focus is placed on the research conducted after Nonaka’s influential model of strategic knowledge creation (SECI model) (see e.g. Nonaka, 1994, Nonaka & Takeuchi 1995, see also Huotari 2010), which has inspired scholars to criticize and further develop the ideas of knowledge creation in interaction (Cook & Brown 1999, Gueldenberg & Helting 2007, Morner & von Krogh, 2009, Tsoukas 2009). This is meaningful, because while the SECI model has been thoroughly analyzed and critically reviewed (Cook & Brown 1999, Schultze & Stabell 2004, Gourlay 2006), and Nonaka with his colleagues have also themselves developed and reviewed the SECI model critically (e.g. Nonaka et al. 2000, Nonaka & Toyama 2002, 2003, 2005, 2007, Nonaka et al. 2008), the theoretical bases of the new critical approaches have not yet been thoroughly explored.

2.1.2 Knowledge creation in interaction

The starting point of my thesis is the notion of knowledge creation as a knowledge process, in which sharing information and knowledge and seeing new connections and meanings in interactions between human beings create new knowledge (e.g. Tsoukas 2009). My focus is on the micro level, on the event of interaction between
human beings, which is emphasized as a crucial point for creating knowledge in the majority of studies (e.g. Nonaka, 1994, Cook & Brown 1999, Tsoukas 2009), but despite this has remained rather poorly examined. Even in the SECI model by Nonaka and his colleagues, interaction plays a major role in the process, where tacit knowledge is converted into explicit knowledge and vice versa. However, interaction as a concept in knowledge creation research is still not well-established. It is often inseparably used with concepts like communication, dialog, and conversation. The same concepts can mean either concrete acts of speech between people or a more abstract movement between the elements of knowledge (Cook & Brown 1999, Morner & von Krogh 2009, Tsoukas 2009). In addition, the ways to define the concept of knowledge, also in relation to the concept of information, vary, and in some studies, it is viewed quite instrumentally as an asset to be converted in the process of practical development (see Subchapter 2.1.4).

Despite the diversified use of the concept of interaction, knowledge creation research is quite unified on the idea of historical experience and a contextual interpretation being at the center of every knowledge-creating event (e.g. Cook & Brown 1999, Morner & von Krogh 2009, Tsoukas 2009). Whereas many studies leave the concept of interaction totally undefined, some researchers have concentrated on examining it more thoroughly. In Study I, three ways to conceptualize interaction in knowledge creation research are examined, and in Studies I and II, a phenomenological alternative for interaction is described (see Subchapters 4.1 and 4.2).

The presuppositions made concerning the concept of knowledge inevitably affect the understanding and use of the concept of interaction. Typically, the conceptualization of knowledge in knowledge creation research has concentrated on the ideas of Michael Polanyi (1966), which have resulted in more explicated but rather individualistic views on knowledge creation (see Subchapter 2.1.4). The examination in Study I illustrates the problem of unspecified terminology and implicit cognitive presuppositions behind it. It also provides a common ground for defining interaction by showing some similarities in different orientations (see Subchapters 4.1 and 4.2).

In the early days of KM, the research was concentrated on knowledge processes in organizations. However, in recent years, collaboration between different communities has been seen as a major area for study, as organizations are more and more networked. There is a need to understand how to interact and work together in communities which are formed by people from various kinds of backgrounds. (Kodama 2005, Balestrin et al. 2008, Weeks & Veltri 2013.)
knowledge creation research this has been seen as a fruitful platform for creating new ideas. However, it has also been acknowledged that this has created new kinds of challenges related to interaction. The development of ICT has affected the ways in which knowledge-creating interaction is studied, also by taking into account that meaningful interactions can be conducted in virtual environments (Wagner, Vollmar & Wagner 2014, Backer 2015, Baralou & Tsoukas 2015). In the empirical studies (Studies IV and V) of my thesis, a networked community consisting of members from schools and libraries is examined (see Subchapter 3.2).

In this thesis, I focus on the interaction of a multi-professional and multi-organizational community. This is an area studied in many fields, including communication, psychology, education, linguistics, and organizational sciences. Thus, it should be noted that the research conducted in these fields can handle the same phenomena while talking with different concepts (see e.g. McKenzie 2009, Barron et al. 2013). This study concentrates on the research of knowledge creation in the field of LIS and does not cover research conducted in other fields, although they have inspired my study (see Subchapter 2.3.3). In previous research, the actual events of interaction have thus far been overlooked, as Tsoukas (2009: 942) states: “...although dialogue has been suggested (or implied) by several organizational knowledge researchers to be an important mechanism through which conceptual change and, thus, new knowledge emerges, it has not been adequately theorized. We do not know enough about how dialogue works to generate new organizational knowledge.” My thesis fills in this gap in the research of organizational knowledge creation.

2.1.3 Knowledge Management

Since the 1990s, knowledge creation has been studied in the multidisciplinary field of Knowledge Management, which involves the fields of LIS, Organizational Science, other Social Sciences, Educational Sciences, Information Systems Science, and Computer Science and Technology (Orzano et al. 2008). Therefore, Knowledge Management as a concept and a field of study is complex. There is a vast amount of different definitions of the concept, each understanding the terms of knowledge and management, as well as the context of organization, in its own ways.

KM can narrowly be viewed as an information technology system, which distributes organizational knowhow, or broadly – as including everything, which is connected to knowledge in organizations (Dalkir 2011: 7). On a large scale, the
research on KM can be viewed from two different starting points. One view emphasizes the role of technology and focuses on the management of information tools and resources, whereas the other view underlines the human factors in creating and maintaining a productive environment. (Orzano et al. 2008: 491, Huotari & Iivonen 2004.)

One way to understand the conception of KM is to examine how it has evolved and gained more and more definitions in recent decades, as McInerney and Koenig (2011) point out. In the early days of KM, the definition was simple and precise, as Knowledge Management was seen as a process of capturing, distributing, and using knowledge effectively (McInerney and Koenig 2011: 1). A few years later, Gartner Group created an often-cited definition: “A discipline that promotes an integrated approach to identifying, capturing, evaluating, retrieving, and sharing all of an enterprise’s information assets. These assets may include databases, documents, policies, procedures, and previously uncaptured expertise and experience in the individual workers.” (Duhon 1998, cited by McInerney and Koenig 2011: 1) In this definition, the tacit aspect of knowledge is emphasized and is comparable to the more obvious forms of information needed in organizations. And further, a few years later, the processual and interactive nature of the KM was emphasized in the third definition by McInerney (2002): “KM is an effort to increase useful knowledge within the organization. Ways to do this include encouraging communication, offering opportunities to learn, and promoting the sharing of appropriate knowledge objects and artefacts.” (See also McInerney and Koenig 2011: 1). In these definitions, the used term “knowledge” is quite indefinable, and its relation to the concept of information is ambiguous (see Subchapter 4.1.2) In this thesis, however, I acknowledge the value of all three definitions, though the last definition comes closest to the approach of my study, which emphasizes interaction and learning in organizational knowledge processes.

Knowledge Management is often argued to be developed because of the need to manage and organize knowledge processes in organizations in order to succeed and evolve in the ever-changing world. Becerra-Fernandez and Leidner (2008, 3–4) state: “It has been argued that the most vital resource of today’s enterprise is the collective knowledge residing in the minds of the organization’s employees, customer’s, and vendors.” Thus, a vast amount of research has been conducted to develop the means to converge the knowledge residing in the minds of human beings to benefit the whole organization. This is connected to the concepts of tacit and explicit knowledge (see Nonaka 1994). Day (2005: 630) explicates the problematics of KM as follows: “The idea of a dichotomy between “implicit” or
“tacit” and “explicit” knowledge has been one of the guiding concepts in Knowledge Management (KM). This dichotomy has provided a theoretical base, but it has, arguably, acted as a limit to Knowledge Management’s further theoretical and practical development. In the KM literature the term, implicit knowledge is often treated as synonymous with Michael Polanyi’s term, tacit knowledge (Polanyi 1969), but then both are further dealt with as a form of private knowledge that is treated as “informal,” and even, in a sense, “unconscious” knowledge. This is a problem of psychological modeling.” In my thesis, these problematics has been one of the starting points of the examination (see Subchapters 4.1 & 4.2).

Even before Day’s (2005) views, there has been a debate on the relevance of the concept of knowledge management as a field of LIS (e.g. Streatfield & Wilson 1999, Wilson 2002b, 2005, Bouthillier & Shearer 2002). This debate has focused on the question of whether knowledge can be managed or not. It has been argued that knowledge as a phenomenon is unmanageable (Streatfield & Wilson 1999, Wilson 2002b), and that knowledge is so personal and private a phenomenon that it is unethical to handle it as a resource of an organization (see e.g. Wilson 2002b, Keen & Tan 2007). My thesis contributes to this body of research by introducing a way to conceptualize the collaborative nature of knowledge creation, therefore, clarifying the fundamentals of the debate. I pursue to reveal the principal contradictions of studies striving to enhance knowledge creation without acknowledging the depth of the phenomenon. Thus, the ontological and epistemological premises of the research of knowledge creation in the field of LIS are examined. Moreover, the preconceptions and presuppositions behind the common concepts and conceptualizations of the human being, experience, and interaction used in the research of knowledge creation and in LIS in general are explicated in this thesis to increase understanding of the phenomenon. The hermeneutic phenomenology introduced in this thesis also offers the means to understand and take into account the ethical concerns connected to knowledge work (see Wilson 2002b).

Day (2005: 634) has investigated the possibilities of the conception of KM related to its weaknesses in defining the concepts of knowledge and understanding of a human being: “Knowledge Management’s attempt to discuss a “knowledge economy” as distinct from an “information economy” was confused by its uncritical appropriation of folk-psychology and its very incomplete and problematic appropriation of source texts such as Polanyi’s”. Day (2005: 630) connects this problem with the troubled understanding of a human being: “The folk-
psychology notion of individuals as “repositories” for knowledge, information, and for other forms of mental “content” or their “states,” and as agents for “sharing” these contents along lines of simple representational expression and the conduit model of communication, is quite problematic (...). Day himself looks for answers to the ideas of Harré and Witgenstein (see Day 2005). I share the problems of understanding the human being as well as knowledge and pursue the answers to the questions raised with the help of hermeneutic phenomenology, which is suggested to be suitable for understanding the phenomenon of knowledge creation.

In this thesis, change and understanding one’s own responsibilities in the development of the community are also underlined. Orzano and his colleagues have defined KM in a way which outlines these elements: “The essence of knowledge management (KM) is a change in attitude about how work is done, an understanding that the capacity to change and innovate resides within everyone associated with the organization through the knowledge they hold.” (Orzano et al. 2009: 225). This idea of self-reflection and development has a key role in knowledge-creating interaction research, which I examine in detail in this thesis with the Gadamerian concept of play.

Even though a vast amount of research on KM has been conducted in the private sector, and the beginning of the KM can be seen to be related to the consulting firms, as Bouthillier and Shearer (2002) point out, there are many other types of organizations and communities which benefit from the ideas manifested in the field of Knowledge Management. My thesis contributes to the body of research on KM in the field of libraries and schools (Ohlsson 2014, see also Leithwood et al. 1997), as in the empirical part of my study, I examine a community of teachers and librarians, the scope being multi-professional and multi-organizational collaboration.

2.1.4 The concepts of information and knowledge in Knowledge Management

To make the need for managing knowledge more understandable, the studies on KM usually start from the definition of knowledge (McInerney 2002: 1009). Often the value chain of information is the point of departure in these views. For example, Becerra-Hernandez and Leidner (2008) start their introduction to KM by examining the concepts of data, information, and knowledge and point out, that “Early papers in KM described the differences among data, information, and knowledge in terms of a richness hierarchy”, meaning that knowledge would be the richest and deepest
of these three concepts. Bouthiller and Shearer (2002) add intelligence to the list and state: “To differentiate the management of information from the management of knowledge, one must examine the distinctions drawn between the related concepts: data, information, knowledge and intelligence.” Yates-Mercer and Bawden (2002: 20) have described the relations between the conceptions of information and knowledge and KM and state: “Understanding how information and knowledge may be managed and valued, however, requires some understanding, preferably explicit rather than implicit, of what information and knowledge are.”

Yates-Mercer and Bawden (2002) give both a scalar model and a cognitive model to understand the concepts of knowledge and information. The scalar model is based on the idea of a value chain of information, and what “… regards information, knowledge and related concepts as closely related entities which can be transformed into one another, outside the human mind. It is a common sense model, relying on an appeal to the intuitive difficulty of distinguishing between information and knowledge in normal discourse.” (Yates-Mercer and Bawden 2002: 20). This kind of conception leads to understanding KM as a certain kind of information management, as knowledge is always something that can be explicated (Yates-Mercer & Bawden 2002: 21). The cognitive model, in turn, “…. regards knowledge as something intrinsic to, and only existing within, the human mind and cognition. Knowledge, being subjective, cannot be directly transferred or communicated from one person to another; but must be converted into information first. Information is then regarded as the objective – and therefore communicable and recordable – form of knowledge. Information is thus the bridge between the subjective knowledge in people’s heads.” (Yates-Mercer & Bawden 2002: 21.) This kind of understanding has effects on the conception of KM: “An organization which believes in the cognitive model will believe that knowledge resides in the minds of its employees, and cannot realistically be ‘captured’. Instead, such an organization will implement knowledge management largely by cultural means, by organizing their physical space appropriately, and by using appropriate communication tools – thus encouraging and enabling staff to share their knowledge.” (Yates-Mercer & Bawden 2002: 21.) These notions are significant to understand the premises of my thesis: the way we understand a human being forms a basis for understanding the conceptions of, e.g., knowledge and knowledge management, and thus, shape the understanding of the possibilities of development in organizational settings (see Day 2005, 2011, see also Budd 1995).
The differences between knowledge and information have often remained unclear in the research of KM, as Bouthillier and Shearer (2002) state: “As demonstrated by the variety of definitions, it remains unclear what knowledge is and how it can be managed. The KM literature tends to subscribe to fairly inclusive definitions of knowledge and in practice concepts of knowledge and information are often used interchangeably”. (See also Kakabadse et al. 2001.) Also, Savolainen (2009) has pointed out this phenomenon in his studies. One conclusion could be to question the relevance of the concept of information as a whole, according to Buckland (2012: 2): “(...) for each of the multiple meanings of the word information there is already another satisfactory more specific word. Information studies does not require use of the word information”. However, Buckland continues by giving us an optional possibility and refers to the different categories of information based on the use of the word in different settings, e.g., information-as-knowledge meaning what was learned as result of being informed, information-as-process – for learning, and information-as-thing – for any physical signals perceived. (Buckland 2012: 2)

Another discussion concerns the widely-used conception of knowledge being a “justified true belief”. Buckland suggests, that: “Enabling people to become better informed (learning, becoming more knowledgeable) is, or should be, the central concern of information studies and information services are, in practice, more directly concerned with knowing about than with knowing how or knowing that. Knowledge in everyday life is belief, is cultural, and is not necessarily well justified or true in any strong sense. One consequence is that the niceties of analytical philosophy provide an unsuitable basis for theorizing information science”. (Buckland 2012: 5) In the phenomenological approach suggested in my thesis, the element of truth is also present (Gadamer 2004, Heidegger 2005, see also Budd 2011a). However, as the debate on the concepts of knowledge and information has been long and flourishing, I do not have the need to concentrate on it in this study (see e.g. Capurro & Hjørland 2003, Wilson 2002, Miller 2002, Yates-Mercer & Bawden 2002, Buckland 1991, 2012). Instead, in my thesis, I attempt to open up a new way to approach the phenomenon of knowledge creation by suggesting that we should first stop to examine what kind of idea of a human being is behind our views of information and knowledge, in order to properly understand the knowledge processes we are examining. This is done in Study I, followed by Studies II and III.

The understanding of the concept of knowledge in my study is related to the debate concerning the definitions of tacit and explicit knowledge (e.g. Cook &
Brown 1999, Wilson 2002b, Gourlay 2006, Day 2005, Tsoukas 2011, see also Subchapter 2.1.3). KM research often refers, explicitly or implicitly, to the idea of different modes of knowledge, as defined by Michael Polanyi, who has explicated the experiential process of knowing, starting from the perception and the bodily functions behind the process of understanding (see Polanyi 1966). For example, Miller (2002) suggests that Polanyi has been widely misinterpreted by researchers, who claim that he defined knowledge as tacit and explicit, whereas Polanyi really only talked about tacit knowledge (see also Wilson 2002b). Miller (2002) states: “Once we attempt to make knowledge (i.e., what we ‘know’) explicit, it reverts immediately to an ‘information’ state again and requires human intervention anew for sense to be made of it.” In this way, knowledge is viewed as something inside a human being, which is converted into information when said out loud or explicated in some other way. Information, however, can never fully explicate this knowledge, as it is in many respects extra-linguistic and related to the conceptions of experience. This theme is examined in Study III. In my thesis, the conceptions of Polanyi are not under investigation as such, but his notions of knowledge and knowing are often starting points in the studies that examine the origins of these concepts in detail and are thus also of interest to this study (Tsoukas 2009, 2015, Day 2005, Gourlay 2006). The debate over the forms of knowledge, but also over the use of the concept of knowing (Blackler 1995, see also Blackler 1993, 2002), is present in Studies I and III, as the phenomenological orientation in my thesis leads to questioning the primary nature of these conceptions.

2.2 Phenomenology

The theoretical and methodological premises of my thesis are based on hermeneutic phenomenology of Hans-Georg Gadamer and Martin Heidegger. I limit my scope to the ways to understand being and the interaction of human beings and the conceptions we need on a very basic level in order to start to understand the event of knowledge creation with hermeneutic phenomenology.

2.2.1 Phenomenological philosophy

The term phenomenology has a long and complex history in the field of philosophy, and going through it is not in the scope of my thesis. However, an overview of the development of phenomenological philosophy in the 20th century is important to understand the ideas examined. Even though Immanuel Kant, Johann Gottlieb
Fichte and G. W. F. Hegel already used the term “phenomenology” in different ways in their philosophies in the 18th century and the early 19th century, Kant and Fichte were describing something to be apparent or ostensible rather than real, Hegel examining the experience of consciousness in Phänomenologie des Geistes in 1807 (see Bonsiepen 2006). The use of the term in a way that is known today has its origins in the writings of Edmund Husserl (Husserl 1975, 1984, Moran 2002, Zahavi 2007), supplemented and criticized by Martin Heidegger some decades later (Figal 2009).

From a phenomenological perspective, the conception of knowledge and knowing as separable elements is derived from the idea of a consciousness and a body, subjects, and objects as separate items in the world (Zahavi 2007: 19, see also Husserl 1972). The presuppositions based on a Cartesian view of the world have been criticized by the phenomenological tradition based on the philosophy of Husserl (Moran 2002: 1). In his statement for rigorous science Husserl proposes that scientific knowledge should pay attention to its premises and question natural attitudes (Husserl 1981, 1995), which are actually based on the structures and presuppositions that are taken for granted (Heinämaa 2000: 80, see Husserl 1981, Gadamer 2004). As consciousness and strictly limited objective subjects cannot be proven to exist as such, should the rigorous philosophy, as all sciences, start from things that can be proven, meaning the phenomena that are perceived. By starting from the phenomena, the world and human beings living in the world are to be described differently, according to phenomenological philosophy. Simultaneously, according to Husserl, the ambiguity of knowledge that can be reached is illustrated thusly: all knowledge is actually based on what is perceived and is thus dependent on the perspective of the perceiver (Heinämaa 1996: 71–77). Thus, the starting point of phenomenological philosophy is understanding how being in the world is connected to time, place, and experiences. In the phenomenological description, the human being is first and foremost a being in the world, who is not to be separated as an individual, object, or subject (Heidegger 1985a). This thesis as a whole is based on this notion and on the examination of how this premise affects the other conceptions and methods used to examine knowledge creation.

Phenomenological philosophy has strived to describe the being of a human being starting from experiences and perceptions and questioning the idea of individuals acting with the help of one’s mind, being a subject or an object in a certain context (Moran 2002: 2, see also Husserl 1972). Based on a phenomenological approach, Pylkkö (1998: 180), for example, asks if we, when perceiving a human being in action, can see something other than the action itself,
something that could be called the self or the soul of mind or are the subjects in fact the actions as such. If we rely only on what can be perceived, the human being is always conceptualized by his actions in relation to something, not as a subject with clear borders. Thus, a phenomenological view of a human being is always changing, existing in his actions. However, this does not mean that everything is relational and in the relationships, on the contrary, a human being is a material entity, and embodiment is a vast topic in the phenomenological philosophy of Husserl and Maurice Merleau-Ponty, in particular. However, I do not focus on the topic of embodiment in this thesis, but concentrate on the very basic concepts of being and interaction by Gadamer and Heidegger. I suggest that the strength of phenomenology is in the way it describes the subject of knowledge-creating interaction, but does not view it as a psychological individual. Instead, the human being is understood in terms of its being creating the world and being created through the world simultaneously.

Phenomenology as a philosophical movement is based on Husserl’s writings in the beginning of the 1900s (Moran 2002: 1, Husserl 1975, 1984). The origins of the word are in the Greek word “fainomenon”, which means “phenomenon”. The latter part of the word comes from the Greek word “logos”. However, Martin Heidegger re-conceptualized the word, starting from the Greek and defined the meaning of phenomenology as “to let that which shows itself be seen from itself in the very way in which it shows itself from itself” (Heidegger 1985a: 58). Thus, phenomenology is studying the way things show themselves. However, Heidegger points out that the very essential theme when something is exhibited explicitly is “something that proximally and for the most part does not show itself at all: it is something that lies hidden” (Heidegger 1985a: 59). However, he underlines, that “at the same time it is something that belongs to what thus shows itself, and it belongs to it so essentially as to constitute its meaning and its ground” (Heidegger 1985a: 59). For Heidegger, this “hidden” is not some entity, but the Being of entities, which “can be covered up so extensively that it becomes forgotten and no question arises about it or about its meaning” (Heidegger 1985a: 59). In that sense, phenomenology for Heidegger is ontology and his conceptualizations should also be understood in that light – this is a theme examined in Study I. I follow this Heidegger’s conception of phenomenology in this thesis.

In phenomenology, to concentrate on the phenomena means that the relationship between the perceiver and the perceived is essential, as the reality opens up to the senses of the human being as phenomena (Hankamäki 2004: 26, see also Sokolowski 2000). Thus, only the phenomenon can really be proved to
exist in a certain time and place, and only it can be reached, physically or mentally. Hence, phenomenological research does not search for some truth behind what is perceived. Instead, phenomenology examines what is revealed in the perception as a phenomenon (Zahavi 2007: 15). Thus, the phenomenon is not a fixed object, but rather a way of encountering (von Herrmann 1981). Husserl developed the conception of reduction, a way to philosophically examine the experiences gained in the event of perception (Heinämaa 2000, see also Subchapter 2.3.4). However, the question of reduction has divided the phenomenological philosophers (Figal 2009). In this thesis, the emphasis is on the hermeneutic phenomenology developed especially by Martin Heidegger, Hans-Georg Gadamer, and Paul Ricoeur, which understands the human being and experience differently, without the possibility to reduce the world and past experiences.

2.2.2 Hermeneutic phenomenology

Hermeneutic phenomenology refers to the phenomenological tradition, which highlights the interpretive nature of human beings and their experiences. As such, the traditions of hermeneutics and phenomenology are somewhat intertwined in the early writings of Martin Heidegger and Hans-Georg Gadamer. However, hermeneutics has a long and manifold history as a philosophical tradition, as well as a methodological approach, which as such is not the focus in this thesis. (See Malpas 2015, Dostal 2015.) Instead, I aim at presenting how the hermeneutics of Gadamer, viewed as hermeneutic phenomenology, is to be understood in context, in connection to Heidegger’s phenomenological thinking (Tietz 2000, Sallis 2007). Besides Gadamer and Heidegger, Ricoeur (1991, 1992) has also been influential in the development of hermeneutic phenomenology (Ihde 1978). He has examined the theme of otherness in being and the development of identity of a human being in a way that is related to the themes of Mitesin and authenticity in Studies I and II. However, as this thesis concentrates on the hermeneutic phenomenology of Heidegger and Gadamer, the phenomenology of Ricoeur is out of the scope of this study.

While Husserl developed his phenomenology in the direction of reduction, Martin Heidegger developed his own idea of phenomenology, time, and being in a way which was partly in contradiction to Husserl’s ideas (Figal 2009, Hopkins 1993, Dostal 2015). Heidegger reformulated the idea of hermeneutics and stated that hermeneutics is not about interpretation, but a mode of interpreting, which takes into account the interpreter’s own being (see Heidegger 2010, Malpas 2015, 2). In
this way, he created the idea of hermeneutic phenomenology, which is shaped by the notion that a human being is capable of understanding his own being, and the basis for all examination is to understand what being is (Heidegger 1985a). Thus, in his works, Heidegger strived to move the center of attention from human beings into the being as such. This was manifested in his conception of Dasein: “Looking at something, understanding and conceiving it, choosing, access to it – all these ways of behaving are modes of Being for those particular entities which we, the inquirers, are ourselves. Thus to work out the question of Being adequately, we must make an entity – the inquirer – transparent in his own Being. The very asking of this question is an entity’s mode of Being, and as such it gets its essential character from what is inquired about – namely, Being. This entity which each of us is himself and which includes inquiring as one of the possibilities of its Being, we shall denote by the term “Dasein”.” (Heidegger 1985a: 26–27.) This is the starting point of the phenomenological examination in my thesis and is also explicated in Study I (see Subchapter 4.2.1).

Whereas Heidegger ultimately moved away from the terminology of hermeneutics (Heidegger 1985b, Figal 2007, Dostal 2015), Gadamer developed his view of hermeneutics in relation to Heidegger’s phenomenology and referred to his own philosophy in hermeneutic terms. Thus, it is important to understand that Gadamer hermeneutics are expanded to mean not only interpretation of texts, but first and foremost a way a human being can understand his world and his being in the world as such (see Tietz 2000, Wernet 2014). The hermeneutic circle, examined in Study I, is thus explicating the way of being in the event of encountering others (e.g. Wachtenhauser 1986). This encountering, in light of Heidegger’s phenomenology of being, differs from the more traditional idea of hermeneutics by Dilthey (1990) and Friedrich Schleiermacher (1977), as in Gadamer’s view, the aim is not to try to understand what the other is thinking, but to create a shared state of interaction where the issue as such is in the center of attention. (Gadamer 2004, 1999a, 1999c.) This notion is crucial for the research of knowledge creation and forms the basis for the development of the framework suggested in my thesis. However, one has to keep in mind that the emphasis of both Gadamer and Heidegger is not on the subjectivity or even inter-subjectivity, but on being together as a fundamental characteristic of human beings, which also gives means to understanding the ethics of organizational knowledge creation. In addition, it should be noted that Gadamer developed his ideas in relation to the philosophical and aesthetical tradition, deriving not only from Heidegger, but also from Plato and Aristotle (Coltman 1998, Dostal 2015, see e.g. Gadamer 1986).
Another essential feature in hermeneutic phenomenology is understanding the temporality of being, as the past, present, and future are continuously present: “In the metaphysical tradition stemming from Plato and Aristotle, Being has been understood as presence (Anwesenheit, which contains the word ‘Wesen’ which means ‘essence’, the Greek ousia), understood as static permanence. Heidegger, on the other hand, sees human existence as essentially taking place in time, spread out between past and future and radically limited by death. Being must be understood in terms of time.” (Moran & Mooney 2002: 246–247.) This temporality of being is a premise in understanding the event of conversation as a hermeneutic circle and especially the concept of play, which I focus in this thesis. The primary nature of the present moment, as well as the asubjective view, is highlighted in this view (Wachtenhauser 1986: 36). In addition, Gadamer’s emphasis on language and interpersonal conversations (Linge 2008) has affected the way of conducting the empirical studies in my thesis, as the methods used take into account the dialogical nature of understanding (see Subchapters 2.3.4 and 3.1).

Gadamer developed his conception of play as an ideal mode of being in the shared event (Arthos 2000, Vilhauer 2009, 2010). His conceptualization can be seen to have connections with the ways in which the modes of being in knowledge-creating interaction are described in the field of KM (see Subchapter 4.1.4). His phenomenological conceptualization of play can be seen to be related to the views of play in the aesthetic tradition of Kant and Schiller. In the traditional view, however, play was seen as a way to escape reality. (Grondin 2001, Figal 2002.) However, play for Gadamer was something which requires being present in the reality of the event, and it is thus not imagination, but the total presence in reality. For Gadamer, play was thus a way of being which was closer to the truth than the everyday way of being. (Gadamer 2004, 1999d.) In my thesis, a specified conceptualization of play is provided. I also investigate its relations to the research conducted around the themes of playing and games in the field of LIS in Study II (Subchapter 4.2).

The goal to form a coherent entity from concept to use in empirical research sets some challenges when talking about phenomenology in general. Thus, it should be noted that the emphasis of my study is on Gadamer’s views of interaction and play – I read Heidegger’s philosophy through those lenses. (Tietz 2000, Sallis 2007.) In addition, Gadamer and Heidegger themselves developed ideas in the course of time, and it is thus not meaningful to refer to the works of Heidegger, in particular, as one entity (Olafson 1993, Dreyfus & Hall 2002). Thus, when I refer to phenomenology in the Sub-Studies of this thesis, I concentrate explicitly on certain
texts (Heidegger 1985a, Gadamer 1999a, 1999b, 1999c, 1999d). However, it should be noted, that while Gadamer shared a lot of thoughts with and was deeply influenced by Heidegger, he did not use the language of Heidegger, which made his hermeneutic phenomenology more understandable, but displayed a more implicit influence of Heidegger at the same time (Lammi 1991, Coltman 1998, Cesare 2007). This manner is also followed in my thesis. Consequently, even though I examine some of the concepts developed by Heidegger, my aim is to write about the issues in a way that is understandable to readers outside the Heideggerian sphere.

2.2.3 Phenomenology in the field of LIS

Phenomenology has been used in the field of LIS by some scholars both as a way to understand the premises of the discipline and as a way to introduce methods for examining phenomena related to information and knowledge (e.g. Cornelius 1996, Budd 1995, 2001b, 2005, Dalbello 2005a 2005b, Savolainen 2007, 2008, Budd et al. 2010, Hultgren 2013). The importance of interaction and communication in various information processes and practices has been acknowledged (Burns & Bossaller 2012, Robson & Robinson 2013, Huotari et al. 2016). In addition, there has been a growing interest on how to conceptualize and examine the experiences of information in the field of LIS (Latham 2013, 2014, 2015, Bruce et al. 2014, Gorichanaz 2015). Phenomenological philosophy has a place in this development, as it offers possibilities to understand human experience and the interactive nature of human beings in various ways.

Budd (1995: 295) has examined the research conducted in the field of LIS and suggested to replace its positivistic premises with hermeneutic phenomenology, to take into account “the intentional stances of the human actors within the realm of library and information science”. In the early 2000s, Wilson (2003) explicated some of the benefits offered by phenomenology to the field of LIS and stated that the phenomenological approach to the research has been implicitly present in the rise of qualitative research in LIS: “Implicit in the choice of qualitative methods is a relationship to a phenomenological perspective on the nature of reality, and our ability to understand it and gain knowledge of it.” (Wilson 2003: 447). In my thesis, this implicit nature is explicated and analyzed, and the connections between ontological and epistemological premises are examined, especially in the field of knowledge creation research. However, it should be underlined that the point is to
start by examining the nature of the object of research, which consequently determines which methods and approaches are most suitable.

As explicated in Subchapter 1.2, the development of the research in the field of LIS has brought the idea of the contextual and social aspects influencing human information behavior and related activities and processes to the center of attention. Studies emphasizing individuals’ interpretation during the process of seeking and using information can be seen to be related to the phenomenological approach as Budd (2005: 54) argues, referring to the works Dervin (1977, 1989) and Kuhlthau (1994). Also, Chatman (1992) examined the information search and use of elderly women in a phenomenological manner via the ethnographic approach. Huotari and Chatman (2001) applied Chatman’s small-world theory and the social network theory to understand organizational behavior. However, as Budd notes, many of such studies are only concentrated on the individuals and disregard the dialogical nature of human beings, emphasized in the phenomenological approach (Budd 2005: 55). Budd (2005) himself has emphasized the dialogical processes between the users and the providers of information, in a way resembling the processes of knowledge creation examined in this thesis. Moreover, Budd and his colleagues describe one essential feature of the phenomenological approach as a philosophical starting point of studying human beings in LIS: it 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 experience of people, examined as people experience and perceive, without a priori imposition or regulation.” (Budd et al. 2010: 273.) In this thesis, the notion of ideals and reality is essential in the examination of the concept of play in Studies I and II.

In the field of LIS, some scholars have presented their own views of phenomenology and found different approaches fruitful in their work. The social phenomenology of Alfred Schutz has been applied to examine information source horizons (Savolainen 2007) and information seeking practices from an outsider view (Hultgren 2013). In addition, Wilson (2002a) has formulated the methodology and methods for information behavior research based on Schutz’s phenomenology. Also, Chatman’s (1996) conception of life-world has been influenced by Schutz’s work. Budd and his colleagues (Budd et al. 2010) have also sought to combine phenomenology and the realist approach to emphasize the importance of the material world and human experience. In recent decades, there has been a growing interest in the empirical phenomenological research and librarians and libraries especially have been studied (Dalbello 2005a 2005b, Julien & Genuis 2009, Klentzin 2010, 44
Budd et al. 2010, Burns & Bossaller 2012, VanScoy & Evanstad 2015). This kind of research concentrates on the experiences and ways to conduct and analyze, for instance, interviews in a phenomenological manner. This is often based on Husserlian phenomenology, especially on the ideas of epoché and lifeworld. (VanScoy & Evenstad 2015, Budd et al. 2010.) Some profound work has also been conducted starting from the conceptualization of knowledge (e.g. McInerney 2002, Küpers 2005). In this thesis, I take a step back and consider how we understand the concept of a human being, and how our understanding affects the study of the phenomenon as a whole.

Some scholars in the field of LIS have introduced the phenomenological conceptions of very essential topics and examined their meaning in understanding phenomena related to knowledge and information. Templeton (2008) has examined the idea of the library as a place, whereas Gorichanaz (2016), in turn, has examined the nature of time in Heidegger’s phenomenology in relation to documents in a way that is compatible with the view of temporality in my thesis. Recently, the phenomenological approach has been used to examine organizational communication by Budd and Velasquez (2014), who suggest that the phenomenological attitude could be useful in the everyday life of organizations, as the managers and other employees communicate with each other. Budd and Velasquez describe a process of learning and developing to interact which emphasizes listening and speaking as the basis for common understanding and the meaning of the lifeworld: “The transition from the natural attitude to the phenomenological viewpoint is not a simple step. It requires what, in phenomenological terms, is a shift in one’s lifeworld.” (Budd & Velasquez 2014: 402.) Even though Budd and Velasquez (2014) base their ideas on the Husserlian phenomenology and especially the concept of lifeworld, which are not totally compatible with the scope of this thesis, the way in which they view the structure of ideals and lived reality is close to the approach promoted in this study (see also Budd 1995, 2001a, Budd et al. 2010).

Even though this thesis does not focus on the hermeneutic tradition as such, some profound studies concerning the use of hermeneutics in LIS should be mentioned. Benediktsson (1989) has distinguished the different ways to use hermeneutic tradition in the field of LIS. Budd (1995, 2001b), Hoel (1992), Capurro (2000), Cornelius (1996), Hansson (2005), and Suominen (2004, 2016) have investigated the nature of the core concepts and conceptions in LIS with hermeneutics. Also, Vamanu (2012) has investigated the possibilities of hermeneutics in the field of information sciences and emphasized the importance
of understanding the connections between ontological and epistemological conceptualization. These studies have illustrated the importance of examining and explicating the foundations of research in the field of LIS to understand the preconceptions and premises of the research.

### 2.2.4 Phenomenology in the field of Knowledge Management

In the field of Knowledge Management, the emphasis has been on the tacit or implicit and explicit knowledge in understanding knowledge processes in organizations (see Day 2005). This tendency, as well as the influence of the models of knowledge creation by Nonaka and his colleagues, has shaped the application of different theoretical approaches and metatheories, and phenomenology has not been much employed (Nonaka 1994, Nonaka & Takeuchi 1995). However, as the research has emphasized the value of context and experience in knowledge processes, some researchers have seen the potential of phenomenology in solving problems (Küpers 2005, 2015, Värlander 2008a, 2008b, see also White 2007, Larsen 2009). In addition, some of the most profound scholars in organization studies, such as Karl Weick and David Silverman, whose works have also influenced the development of KM in general, have based their theories on phenomenological grounds (see Tsoukas & Chia 2011: 230–233).

The use of phenomenology has however been scattered around different areas, and only sporadic studies have been conducted. Phenomenology has been used in developing ICT-solutions, as Butler and Murphy (2007) have questioned the ontologies and epistemologies behind knowledge management systems, which derive from the concepts and tools of information management (Butler & Murphy 2007). O’Farrill (2010) has examined the relations between the conceptions of information literacy and knowledge management, also referring to phenomenology, but conducted the actual research in a phenomenographical manner (see also Cibangu & Hepworth 2016).

One body of research has investigated knowledge processes in organizations from the point of view of the embodiment and found the phenomenologies of Merleau-Ponty and Husserl to be of interest. Küpers (2005, 2015) has performed some profound work in examining embodied implicit and narrative knowing in organizations. In his view, knowing is always “realized through embodied acting and experiential processes of enactment” (Küpers 2005: 115). To emphasize embodiment and the experiential nature of knowing, the phenomenology of Merleau-Ponty (2006) offers fruitful starting points. Also, Värlander (2008a, 2008b, 2009).
2008b) has emphasized the meaning of the body and situationality, stating: “The embodied approach to knowledge creation departs from the phenomenological assumption of being-in-the-world as constituting the basis for all our actions” (Värlander 2008a: 291). Even though I do not concentrate on the issues of embodiment in this thesis, these studies manage to explicate the importance of examining the premises of research in a way also valuable to my study.

Some researchers interested in the interactive processes in KM have used phenomenology as a starting point of their examination. Tsoukas (2009) has emphasized the importance of phenomenology in understanding the dialogical nature of knowledge creation in practice. In his profound examination of productive dialogues in organizations, Tsoukas (2009) suggests that the actual face-to-face conversations offer chances for new organizational knowledge to emerge. However, Tsoukas (2009: 942) does not elaborate the phenomenological aspect further, but uses other approaches, such as sociocultural psychology and creative cognition research, to examine the dialogical possibilities. Tsoukas (2011) has also further examined the nature of tacit and explicit knowledge from the phenomenological viewpoint and created a basis for understanding knowledge based on action and context. The notions of how to promote a knowledge-creating conversation, as well as his methodological interest in developing means to examine conversations (Tsoukas 2009, Yanow & Tsoukas 2009, Cooren et al. 2014, see also Crane 2016), have supported the shift from theoretical to empirical research in this thesis (see Subchapter 2.3.2). However, the concepts of tacit and explicit knowledge are not used here (see Subchapter 2.1.4).

2.3 Organizational knowledge creation and empirical research

In this chapter, I shortly describe the scientific philosophical background assumptions in knowledge creation research. After that, I outline the ways of studying knowledge-creating interaction and examine the use of phenomenology in empirical research.

2.3.1 Research paradigms and discourses in Knowledge Management

To understand the nature of the research, it is essential to investigate the premises of the investigation, which are often derived from the worldview of the researcher and the research community. As these premises form a basis for understanding a
specific field of research, they can be seen to develop research paradigms, coming from the philosophy of science (Kuhn 1962). Paradigms are formulated by the evaluations of the kind of knowledge that can be obtained by the research and how it is to be interpreted. However, the paradigms also determine what is considered to be a meaningful object of research as such. (Kuhn 1962, Morgan 2007, see also Burrell & Morgan 1979.) In LIS, the term of metatheories has also been used to describe the different underlying principles of the studies (Talja et al. 2005, Bates 2005, see also Hjørland 2000). These are discussed in Subchapter 1.2. Metatheories, meaning the philosophies behind the theory, are also essential in understanding the premises of the research (Bates 2005: 2). However, as Bates (2005: 2–3) suggests, paradigm as a term is broader, including metatheory, theory, methodology, and ethos. In the field of organization studies, similar issues are also discussed as research discourses (Deetz 1996).

In the field of social and organizational studies, Burrell and Morgan (1979) distinguish four paradigms, emphasizing the differences in the attitudes towards reality and change. The **Functionalist paradigm** is based on a positivistic and static worldview, whereas the **interpretive paradigm** is based on the notion that social situations are interpreted, and all knowledge is subjective. **Radical structuralism** promotes radical change from a positivistic standpoint, focusing on the structures of the society, whereas **radical humanism** shares the idea of change, but views knowledge as subjective and concentrates on human beings’ possibilities to promote social change (Burrell & Morgan 1979). Deetz (1996) suggests the typology of four discourses, which are based on language and are more flexible than the division to paradigms. **Normative discourse** is positivistic by nature and considers human beings as individuals owning the knowledge they have. **Interpretive discourse** emphasizes human beings who are actively constructing situated knowledge. **Critical discourse** is oriented towards the structures of power relations, whereas **dialogical discourse** emphasizes the constructed nature of reality, but considers power relations and domination to be situational (Deetz 1996: 201–203, see also Schultze & Leidner 2002).

In KM, there has not been a consensus of the basic assumptions of the research, which can be seen, for example, in the vast discussion of the concepts of information and knowledge related to KM, but discussed in the field of LIS (see Subchapter 2.1.4). Schultze and Stabell (2004) have examined the core assumptions of knowledge management concerning different understandings of the concept of knowledge, as well as its management, to highlight the different paradigms or discourses in the field of KM. They base their examination on Burrell
and Morgan’s (1979) paradigms and take into account Deetz’s critical correction (Schultze & Stabell 2004: 552–553), resulting in four discourses in knowledge management research. In neo-functionalist discourse, knowledge is seen as an asset, and tacit and explicit knowledge – as separable phenomena, and has a resource-based view of organizations. In constructivist discourse, tacit and explicit knowledge are seen as inseparable, and all phenomena – intertwined and mutually constituted. Thus, social practices constantly shape knowledge, which cannot be separated from action. Critical discourse sees knowledge as an object, which can be owned and sold. Dialogic discourse shares its interest in social conflicts and views knowledge as a means to exercise power. However, it lacks the political agenda and moral stance of critical discourse (Schultze & Stabell 2004: 552–561).

In my thesis, the approach is phenomenological. In Deetz’s (1996) categorization, most researchers representing interpretive discourse use phenomenology, ethnography, or hermeneutics in their studies. Thus, the approach and methodology I suggest in this thesis can be seen to be related to the interpretive discourse (Deetz 1996, Schultze & Stabell 2004), as the knowledge creation process is seen as situational and bound to the actions of human beings in many ways. However, it should be noted, that the phenomenological approach also emphasizes the world as a real, perceivable place (see Merleau-Ponty 2006, Küpers 2005, Värlander 2008a & 2008b, see also Budd, et al. 2010). In addition, the aspect of change can be seen to be present in this thesis in a way which is linked to more dialogic discourse, as the hermeneutic phenomenology I suggest also enables radical changes. Nevertheless, even if it is not always possible or meaningful to divide studies into certain discourses, the value of the above categorizations is that they make the “neutral tools” of the dominant forms of research in the field of KM visible and develop possibilities for alternative approaches (see Deetz 1996: 203–204).

2.3.2 Methods for studying knowledge-creating interaction

Organizational knowledge creation research can be seen to be based on the neo-functionalist and interpretive discourses, which is also seen in the methods used in empirical studies. Quantitative methods have been extensively applied to study the practices of using and creating knowledge in different kinds of organizations (Shih, Chang & Lin 2010, Mitchell et al. 2009, Li, Huang & Tsai 2009). Also, qualitative methods have been used in an interpretive manner, as knowledge processes and the phenomenon of knowing are often seen to be experiential phenomena (Cook &
Brown 1999). Thus, a typical means for studying knowledge creation has been interviewing members of a working community (e.g. Widén-Wulff & Davenport 2007, Travaille & Hendriks 2010). As knowledge creation has in some cases been seen as an interactive process in working communities, observational methods have also been applied to some extent (Schultze & Orlikowski 2004, Kosonen 2008).

Interaction in the knowledge creation processes can be studied in multiple ways, as the concept of interaction can be used to mean the flow of information in the organizations on a general level, as well as discussions in the concrete face-to-face situations (see Subchapters 2.1.2 and 4.1). Interactive aspects of knowledge creation have been studied using interview methods (e.g. Kraaijenbrink 2012), but little empirical work has been conducted to examine and explicate what really happens in the interactive events between human beings (Mengis & Eppler 2008, see also Cooren et al. 2014). For example, Tsoukas (2009) has theoretically explored the elements of creative interaction and empirically tested these ideas using short dialogues based on his earlier studies. Yanow and Tsoukas (2009) have examined the ways in which a human being reacts and improvises in a surprising situation (reflection-in-action), but their empirical exploration is limited to one discussion only. Thus, there is a need to examine the methods of studying this kind of phenomenon coherently. In this thesis, the theoretical examination of the phenomena is followed by the examination of appropriate methods (see Subchapter 4.4).

Interaction and communication on a micro level can be studied using several methods and means, each based on specific science philosophical premises. To gather information on the interaction, observational methods are usually used. To examine interaction in natural settings, the ethnographical approach can be applied (Smith 2001, Delamont 2004, Ybema et al. 2009, Armstrong 2009). The level of systematics and participation varies as well as the means to capture the events. Besides writing notes or field diaries, the interactive events can be recorded, even if it may be difficult in organizational settings. (Smith 2001, Derry et al. 2010, Chi 1997.) In particular, when studying knowledge-creating interaction, video data has not previously been used much (see Yanow & Tsoukas 2009). In this thesis, I gathered the data in an ethnographical manner, and one main set of data were video recordings of the interactive events in a working community (see Chapter 3).
2.3.3 Methods for analyzing interactive events

There are many ways to analyze video data from the interactive events. Analysis of video data requires multiple decisions concerning the focus of the analysis, as the data include a vast amount of different kinds of information (Derry et al. 2010: 8–9). Interactive events can be analyzed based on the amount and quality of interaction, the functions and contents of the communication, or relationships and networks in the community. Also, the multimodal elements, like gestures and actions, can be included in the research. (Derry et al. 2010, Bakeman & Quera 2011.) Quantitative methods have been popular in analyzing interaction. The analysis can be based on who is talking, how time is consumed, or what themes are discussed (Chi 1997).

However, qualitative means to analyze interaction have also been developed, in order to understand the meanings of the interactive events. These means have affected my choice of analyzing methods in this thesis. The discussions can be analyzed by using qualitative content analysis based on a specific theoretical background more or less tightly (e.g. Schreier 2012, see also Strauss & Corbin 1990). Also, different kinds of discursive approaches have been developed. These can be divided into two, based on the orientation to the language. Discourse analysis, mediated discourse analysis, and critical discourse analysis all are oriented towards detecting and examining how the interactive events are shaped by power and ideologies (Fairclough 1992, 1995, Wodak 2001, Budd 2006). Conversation analysis (e.g. Sacks, Jefferson & Schegloff 1974, Sacks 1992a, 1992b), in turn, concentrates only on the event of the interaction, without analyzing any hidden meanings. Conversation analysis focuses on the action and the structures of interaction, and by those means, examines how the participants achieve an intersubjective understanding (Peräkylä 2015).

In the research of language and conversation, organizational interaction has been widely studied via conversation analysis and interaction in meetings is a common topic (Asmuss 2012). Asmuss (2012: 1) notes this type of conversation analysis in the workplaces focuses on the "actions as collaborative achievements. For meetings this means that instead of being seen as events characterized by the fixed roles of the organizational participants, they are seen as the interactional accomplishments of all participants." Thus, a vast amount of research concerning human action and interaction related to knowledge creation has been conducted in the field of linguistics especially (e.g. Clifton 2009, Nielsen 2009, Asmuss 2012, Aggerholm & Asmuss 2016, Aggerholm & Thomsen 2015), and that research has
inspired my study. However, the concepts used in linguistics are different, and it is beyond the scope of this thesis to examine these relations. McKenzie (2009: 164–165) has already done some profound work investigating these connections in the field of LIS.

In the research of knowledge creation, the connection with those studies of conversation has not yet been acknowledged (McKenzie 2009, 2010, Talja & McKenzie 2007, Budd 2006, Mengis & Eppler 2008). Oddly enough, knowledge-creating interaction as “productive dialogue” has been defined by Hardimous Tsoukas (2009: 949) in detail: “Dialogue becomes productive when the modality of interaction is that of relational engagement, namely, when participants take active responsibility for both the joint tasks and the relationships in which they are involved. Participants in a productive dialogue make themselves open to influence and, thus, are led to selfdistanciation, that is, to taking a distance from their customary and unreflective ways of acting as practitioners.” Tsoukas (2009) also uses some transcripts of dialogues and analyzes them in light of conversation analysis to show how this kind of productive dialogue can manifest. This method has inspired the analysis of the knowledge-creating interaction in this thesis (see Subchapters 3.5 & 3.6). However, I do not use such a detailed manner of analyzing and transcribing the interaction as in the conversation analysis (Mondada 2012, Stivers & Sidnell 2012), as my scope is not on analyzing such micro level phenomena as in linguistics.

2.3.4 Phenomenology and empirical research

In Subchapter 2.2.1, the fundamentals of phenomenological philosophy were outlined. As such, phenomenology does not offer any simple, fixed method of research. On the contrary, for example, Gadamer (2004, 1999f) has criticized the idea of having simple methods, especially for humanities. Instead, the phenomenological method is a way of thinking and examining any context without binding oneself to any given preconception (Moran 2002: 1–2). Thus, the principles of empirical phenomenological research are found in Husserl’s ideas of rigorous research (see Subchapter 2.2.1). As phenomenology is describing and analyzing the ways in which the world presents itself to us as experiences, the experiences are always the objects of the phenomenological research, as we cannot reach any other kind of information about the world (Husserl 1981, Heinämaa 2000). These principles also guide my examination in this thesis.
Even though phenomenology offers first and foremost an overall orientation to the research and also avoids any presuppositions considering the methods of research, phenomenological philosophy has also provided good possibilities to develop empirical research methods. As Wilson (2003) stated, the qualitative approach as such can be seen to also reflect phenomenological ideas in the field of LIS (see Subchapter 2.2.3). Many methods used to study phenomena as it occurs in everyday life, such as ethnomethodology (e.g. Ten Have 2004) and ethnography (Maso 2001), relies more or less explicitly on phenomenology of some kind. Also, the study of interaction via methods such as conversation analysis is often related to phenomenology (see Subchapter 2.3.3) (Eberle 2014).

In addition, based on the different premises of key phenomenologists, orientations to study phenomena empirically (Moustakas 1994, Lopez & Willis 2004) have been developed. The empirical, descriptive phenomenology is based on the Husserlian notion of the lifeworld and experiences (Moustakas 1994, Lopez & Willis 2004). In that research, the emphasis is on getting as rich descriptions of experiences as possible from the people interviewed, as well as on getting closer to the true nature of the world by analyzing the data with the help of Husserlian conceptions of, for example, epoché and reduction (see Giorgi 1979, Moustakas 1994, see also Budd 2005).

Interpretive, empirical phenomenology follows the ideas of hermeneutic phenomenologists, such as Heidegger and Gadamer, who did not consider that a total reduction was possible. Instead, interpretive empirical phenomenology emphasizes the interactive element of the experiences. According to Lopez and Willis (2004: 729): “Hermeneutic phenomenologist (...) will focus on describing the meanings of individuals’ being-in-the-world and how these meanings influence the choices they make”. Another important feature in this kind of approach is the acknowledgement of the impact of the researcher in data gathering, as well as in the interpretation of the data. In addition, the role of the theoretical background guiding the research is recognized and even promoted: “(...) philosophical assumption underlying the interpretive phenomenological approach is that presuppositions or expert knowledge on the part of the researcher are valuable guides to inquiry” (Lopez & Willis 2004: 729). However, it is important to make the preconceptions explicit and explain how they are used (Lopez & Willis 2004: 730). In addition, the interpretive approach acknowledges that the researcher and the participants create meanings together, and they are blended in the process (Laverty 2003, Lopez & Willis 2004: 730).
In this thesis, I aim at deriving the methods suitable for studying knowledge-creating interaction from the phenomenological concepts introduced in Studies I and II. Thus, I do not use the approaches introduced above as such. However, by following the theoretical orientations, as well as the premises of phenomenological research as a rigorous science outlined in the beginning of this Subchapter and in Subchapter 2.2.1, the empirical studies in my thesis have features from the interpretive approach. Also, the means for in-depth interviews explicated in the empirical, descriptive phenomenology of Moustakas (1994) have been valuable in practice. The methodological choices in this thesis are outlined in detail in Chapter 3.
3 Research methodology

In this chapter, I first present the formation of the methodology of this thesis as a whole. After that, I describe the empirical research environment of The Joy of Reading Program. This is followed by an outline of the methodological choices conducted in Studies I to V, including the methods for data collection and analysis. Finally, I discuss the main ethical issues concerning the thesis.

3.1 Forming the methodology of this thesis as a whole

The research methodology was developed as a process from theoretical examination to empirical testing of the proposed framework. The ontology and epistemology together with compatible methods suggested in Studies I to III were applied to examine playful interaction in the empirical setting of a multi-professional and multi-organizational community. At first, I explicated how organizational knowledge creation as a phenomenon can be understood as the object of examination on the ontological level with the help of hermeneutic phenomenology. This was done by examining the key conceptions and preconceptions of organizational knowledge creation research in a systematic manner in Studies I and II. After this, in Study III, the examination proceeded to the epistemological level, as I considered how we can gain information on the abovementioned phenomenon. Finally, in Studies IV and V, the framework was tested empirically (see Figure 2).

![Fig. 2. The research process and the structure of the study.](image)

The methodology is qualitative, as the aim is to understand the actions of human beings in their natural working settings (Patton 2002, see also Schultze & Stabell 2004). Even though the phenomenological approach I suggest in this thesis can be
seen to avoid any strict categorization, my study is related to the interpretive discourse and the division to metatheories in the field of LIS (Talja et al. 2005, Bates 2005, Värlander 2008a, 2008b, see Subchapter 2.3.1). My starting point was to examine how the changes of the research paradigms in knowledge creation research have affected the nature of the research and created some contradictions in understanding the object of the research.

The research methodology of this thesis includes the theoretical examination in Studies I to III as well as the empirical examination in Studies IV and V. The methodology has been developed by following the phenomenological method presented in Subchapter 2.3.4, which emphasizes the idea of questioning the pre-understanding of the researched phenomenon (Moran 2002). The starting point of this thesis was the unquestioned nature of the human being in knowledge creation research. Consequently, to examine the pre-conceptions, I conducted systematically oriented literature reviews in Studies I and II (see Subchapter 3.4.1). However, as the questioning of the pre-understanding should be directed to my pre-conceptions as a researcher as well, in these theoretical studies (see Subchapter 3.4), I applied the method of theoretical analysis, which includes the critical testing of the suggested solutions (Niiniluoto 1984).

As the aim of the thesis has been to create a coherent path from the theoretical examination of the phenomenon to the selection of the appropriate methods with which to examine it, the hermeneutic phenomenology of Gadamer and Heidegger has affected the development of the empirical study (see Hansson 2005). Based on the notions concerning the nature of the phenomenon of knowledge creation, the empirical study was concentrated on examining the interactive events in a working community by studying both the participants’ experiences of the interaction as well as the events of interaction as they happened. In addition, the phenomenological understanding of human beings affected the nature of the study, which was designed so that the broader background of the participants was acknowledged. The understanding of the phenomenon of knowledge-creating interaction in the phenomenological context also shaped my approach to the events of interaction. The conceptualization of play in Studies I and II set limits on the examination, as it was suggested that actually being together during interaction is not the moment of objective development – in fact, it is impossible to contain (see Subchapters 4.2 and 4.3). However, the experiences of the encounter and absorption are open for discussion afterwards. Based on the aspects outlined above, I conducted the empirical study in an ethnographic manner (see Smith 2001, Maso 2001).
This process and the reasons for choosing certain empirical methods are described in Chapter 4, as the results of Studies I and II were applied to form the basis of the empirical methodology in Study III. A detailed description of the formation of this methodology is outlined in Subchapter 4.4.

3.2 The Joy of Reading Program as an empirical research environment

I conducted the empirical study in a community of librarians and teachers participating in The Joy of Reading Program in Finland (see Subchapter 1.2). The Program was launched by Finland’s Ministry of Education and Culture as a developmental program for the years 2012–2015. Its aim was to encourage schools and libraries to collaboratively develop the means and methods for increasing the reading motivation and joy of reading for the children. It also aimed at strengthening the awareness and skills of the teachers, educators, and librarians to support the children in those tasks. One goal was to also promote collaboration between the different actors, including schools, libraries, other municipalities and organizations of the community, parents, and children. The Faculties of Humanities and Education in the University of Oulu were chosen to implement the Program. (Huotari et al. 2013, Ikonen et al. 2015.)

Thirty-two (32) school and public library pairs were chosen to pilot their ideas for improving literacies within their communities. Finally, 30 pairs participated in the program. Half of the communities worked during spring and fall 2013, and the other half – during fall 2013 and spring 2014. The pilot communities were supported during their operational period by providing training days, information dissemination via the program’s website, and personal guidance by the Joy of Reading team. The pilot communities were also required to report their work in the middle of the period and at the end. I conducted my empirical study in one of the pilot communities, which worked together as a team from August 2013 to May 2014.

The pilot community participating in this study was located in a medium-sized city in Finland. This community consisted of seven schools and the city library and involved 25–30 participants. The vast majority of the members were teachers (over 20). The amount of the participants was not exact, as the participation varied due to organizational changes during the study period in many organizations. Also, the borders of the community were open in the sense that the sub-communities could send people to participate in the meetings whenever they wanted.
All the community members participated in the project as part of their regular work. Thus, the work conducted in this community was only a part of their everyday life in their organizations. The main aim of the community was to develop a library path to the schools of the city. In addition, the individual schools aimed at implementing several projects during the school year. In this study, the content of the projects is not concentrated on; instead, the interest was on the process of knowledge creation needed to achieve the goals of the community. The work in the community was self-organizing, as the community had to develop the means to work and collaborate by themselves, and the members mostly did not have any joint history in working in the same group.

The schools of the community were located around a vast area of the city, which consisted of both central areas of the city with big schools as well as more rural areas with quite small schools. The librarians participating in the community were from the main library, which was located in the center of the city. However, as the aim was to develop a library path to be applied in all the libraries of the city, the team of the community were tightly connected with the regional libraries. Thus, the community faced some challenges when organizing the collaboration. Consequently, it ended up arranging several common meetings with the whole community, whereas most of the practical developmental work happened in the sub-communities. These features of the community and the circumstances influenced the methods I used in this thesis, as outlined in the following Subchapters.

3.3 Research questions of this study

The research questions of this thesis are:

1. In which ways are the preconceptions of a human being and interaction present in the research of knowledge creation?
   1.1. How is the idea of a human being present in the conceptualizations of knowledge creation (Study I)?
   1.2. How is the concept of interaction defined in the research of knowledge creation (Study I)?
   1.3. In which ways is the research on knowledge creation based on the idea of experience and certain modes of being in the interaction between human beings (Study II)?
2. How can the hermeneutic phenomenology be used to conceptualize and examine the premises of knowledge creation?
   2.1. How can the phenomenological idea of a human being be used as a premise of studying knowledge creation (Studies I and II)?
   2.2. How can hermeneutic phenomenology be applied to specify the nature of interaction in events of knowledge creation (Studies I and II)?
   2.3. How can the concept of play be used to define the starting points of a successful, knowledge-creating interaction (Study II)?
   2.4. What kind of a framework can be developed based on hermeneutic phenomenology to examine knowledge-creating interaction in organizational settings (Studies I and II)?

3. What kind of a methodology can be developed based on hermeneutic phenomenology, to examine knowledge creating interaction in organizational settings empirically (Study III)?

4. How does the framework and methodology based on hermeneutic phenomenology function in the empirical examination of knowledge creating interaction in the studied multi-professional and multi-organizational community?
   4.1. What kinds of macro-level dimensions are identified in relation to interaction in the events of knowledge creation in the studied multi-professional and multi-organizational community (Study IV)?
   4.2. What kinds of micro-level dimensions are identified in relation to interaction in the events of knowledge creation by using the phenomenological idea of the human being and play in the studied multi-professional and multi-organizational community (Studies IV and V)?

5. Based on the empirical study, how should the suggested approach be modified to increase the understanding of the phenomenon of knowledge-creating interaction and its empirical examination (Studies I–V)?

Research questions 1–4 are answered in Chapter 4 and research question 5 in Chapter 5.

### 3.4 Theoretical methods and data in Studies I, II and III

In Studies I to III, the framework for examining knowledge creation using hermeneutic phenomenology was formed based on the research on knowledge creation and core literature on hermeneutic phenomenology.
3.4.1 Methods in Studies I – III

To enhance the argumentation of this thesis and to keep the examination of the theoretical premises of the research of knowledge creation consistent, the research method applied in Studies I and II was theoretical analysis, introduced and commonly used in the field of practical philosophy (e.g. Niiniluoto 1984). It consists of three phases. In Problematisation, a key problem is presented and its backgrounds explicated. In Explication, implicitly present views and presuppositions of the identified key problem are made explicit and an optional solution is explicated. In Argumentation, the reliability of the explications and solutions are critically reviewed. (Niiniluoto 1984.)

In my thesis, the problematisation started from the implicit and unquestioned ideas of the subject of knowledge creation as a cognitive being (see Day 2005, 2011, Koskinen 2010) in Study I and the unexplicated ideas of different modes of being present in the research of knowledge creation in Study II. In Explication, the concepts of knowledge and interaction used in recent research on knowledge creation were examined in more detail, and the presuppositions behind these concepts were revealed. Moreover, the definitions of a phenomenological human being and the hermeneutical conversation (Study I) and modes of being and play (Study II) were proposed as an optional, more profound basis for understanding knowledge creation in interaction. In Argumentation, the proposed hermeneutical view was explored in relation to the conceptualizations used in research on KC. The use of hermeneutics to understand phenomena in an organizational environment was also critically examined.

The argumentation and proposition of the phenomenological approach in Studies I and II were based on systematically oriented literature reviews and conceptual analysis of the basic concepts of the thesis. Study III was based on the results gained from Studies I and II and was not based on the same type of theoretical analysis as those of Studies I and II.

3.4.2 Literature reviews in Studies I and II

Study I aimed at indicating how the phenomenon of knowledge creation is understood in recent research. It was based on a literature review (see Petticrew and Roberts 2006). I collected a sample of scientific articles published in years 2005–2012 from the following databases: Library and Information Science Abstracts (LISA) (ProQuest), Information and Science & Technology Abstracts (LISTA) (EBSCO), Emerald Journals
(Emerald), and ABI/INFORM Complete (ProQuest). The search terms were “knowledge” and “creation” in the article title and “knowledge creation” or “creation of knowledge” in the subject, keywords, or abstract. A sample of 39 articles from the disciplines of LIS, economics, and organizational studies was selected for further analysis. The exploration was then further focused on the phenomenon of knowledge creation in organizational communities and on the knowledge processes between people. For the analysis of the concept of interaction, three studies of knowledge creation by Cook and Brown (1999), Morner and von Krogh (2009), and Tsoukas (2009) were selected due to their detailed theoretical approach to the concept of interaction.

In Study II, I strived to analyze the conceptualizations of play on two levels: as related in content to the descriptions of knowledge-creating interaction in KM research and semantically related with the uses of the concept of play in the field of LIS. It was based on two literature reviews. Data collection was organized systematically, in order to coherently establish the place of the concept of play in the field of LIS and knowledge creation research.

The first review in Study II analyzed how the aspects of being and experiencing interaction are defined in knowledge creation research in order to locate Gadamerian play as a conception. I collected the first sample, which examined the human relationships and experiences in the event of KC, from the databases selected in a multidisciplinary manner to include a broad body of research on KC. The databases included 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 the 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: a) did not concentrate on the human side of knowledge creation in organizations, b) did not explicitly explore the bases for human interaction in knowledge creation, or c) based their exploration mainly on the SECI model.

In the second review included in Study II, the different ways in which play is used in the field of LIS were identified in order to clarify the similarities and differences of the concept of play introduced in my thesis. I collected the sample 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 the analysis. Articles were excluded, if they did not explicate the conception of play or games to some extent.

In all the Studies of my thesis, I examined hermeneutic phenomenology by using foundational texts on the topic of hermeneutic interaction by Hans-Georg Gadamer (1999a, 1999b, 1999c, 1999d) and the early work of Martin Heidegger (1985a). This is relevant because the philosophy of being that was presented by Heidegger (1985a) substantially influenced Gadamer’s view of interaction (see e.g. Weinsheimer 1985, 1991, Lammi 1991, Tietz 2000, Sallis 2007), and Heidegger developed his thoughts and concepts in somewhat different directions in his later works after “the turn” (Die Kehre) in his philosophy (Pattison 2000, see also Olafson 1993). The background for these choices is presented in Subchapter 2.2.2.

3.4.3 Analysis of the articles in the literature reviews in Studies I and II

In Study I, the 39 selected articles were categorized according to major themes through content analysis (see Schreier 2012). My focus was on the argumentation of theoretical and epistemological backgrounds and objectives (see Table 5 in Subchapter 4.1.1).

In Study II, two separate reviews were conducted and the selected articles of both reviews were analyzed using content analysis. In the first review, my focus of the analysis of the 14 selected articles was on the elements specific to the interaction in knowledge creation and the attributes given to effective interaction (see Table 6 in Subchapter 4.1.4). In the second review of the 18 selected articles, my focus was on identifying research areas where the concept of play was used and in what ways (see Table 7 in the Subchapter 4.2.6).

3.5 Empirical methods and data in Studies IV and V

The examination in Studies I to III guided the formation of the empirical methodology in Studies IV and V.
3.5.1 Research process in Studies IV and V

As my conceptual examination in Studies I to III led to understanding the phenomenon of knowledge creation in terms of interaction as an event and an experience, I concentrated on the interactive events between human beings in the empirical Studies IV and V. I followed the work of the Joy of Reading community during its operational period, observing and video recording the community gatherings, following the interaction both in the meetings and training days provided by the Joy of Reading program, and via a community e-mail list. Additionally, I conducted informal discussions with the participants outside the meetings to gain an understanding of the development of the community. This was reported in the field diary. Additionally, after the operational period was over, I interviewed all willing participants of the community. As the studied community was separated into eight organizations, the everyday life in the organizations was not possible to observe. However, the theme of everyday life was vastly discussed in the interviews.

Consequently, I gathered data on the interactive events as such, on the experiences of interaction, and on the circumstances as well. Thus, there are data from three different stages: 1) from the events of interaction as they happened and were interpreted by me as the researcher (video materials, observations, field diary), 2) from the experiences of events of interaction and circumstances interpreted by the participants (interviews, information environment maps), and 3) data produced in the community (documents). Triangulation of the methods and data was used to gain a deeper understanding of the phenomenon and to examine the phenomenon from different angles (Gorman & Clayton 1997: 32). This is outlined in Figure 3.
The research process as a whole was based on the notion of being open for the course of events, even though there was a theoretical background affecting the process (see Subchapter 3.1). This was essential, as due to the organic nature of the community, I developed appropriate methods for gathering data, as the community itself developed its ways of working (see Subchapter 3.2). In order to keep the process open, I gathered the observational data both with help of the thematic scheme based on the theory and by keeping track of the meaningful events with open coding. In addition, the video recordings from the events gave me the possibility to analyze the events afterwards again to test my pre-understandings (Moran 2002). My understanding developed gradually, as I observed the work of the community during the whole period. This shaped the formulation of the themes.
of the interviews, which shed a new light on the observational data and video materials.

The aim of the interviews was to gain rich descriptions of the meaningful moments of interaction experienced by the community members. Thus, the interviews were conducted in a phenomenological context, while keeping the discussion open, as I avoided assuming anything beforehand and asked only open questions (Moustakas 1994: 105, see also Lopez & Willis 2004). However, I was aware of the hermeneutic nature of the research process, where the experiences of the researcher and the theoretical investigation of the phenomenon of knowledge creation affected the nature of the interviews. In the interviews, it was also essential to allow the co-creation of the meanings to happen, as the interviewees were engaged in dialogue to produce a joint understanding of the issues discussed with me. (See Laverty 2003.) However, due to the limited time of the participants of this study, the data were not jointly analyzed afterwards (see Moustakas 1994, Laverty 2003). This process is described in Figure 4.

![Diagram](image)

**Fig. 4. The process of data gathering and analyzing, related to the development of researcher’s understanding.**
The empirical study has some similarities to the empirical, interpretive phenomenology presented in Subchapter 2.3.4, as the experiences of the participants were viewed as part of their everyday life and the impact of the researcher in the data gathering and analyzing was acknowledged (Lopez & Willis 2004: 729). I was not actively participating in the interaction in the meetings. Nevertheless, it is important to recognize that my presence may have affected the nature of interaction in the events. However, I did not otherwise aim to distance myself to the participants of the community. On the contrary, I conducted informal discussions with the participants outside the meetings to gain an understanding of what was happening in the community, and how they were organizing their work (see Subchapter 3.2). Even though I did not represent the staff of The Joy of Reading Program, I was working in the same department as them. Thus, in some occasions at the beginning of the research period, the participants of my study confused me with the Joy of Reading team members. However, as I become more acquainted with the participants, this confusion disappeared.

Even if this thesis is affected by the interpretive phenomenology, some methods of empirical descriptive phenomenology inspired the empirical research, even though the Husserlian premises are not in line with the thinking of Gadamer and Heidegger (see Subchapters 2.2.1 and 2.2.2). Empirical descriptive phenomenology offered some good guidelines to phenomenological inquiry in a general sense. The practical approach to conducting research by Moustakas (1994) in particular provided means to question the presuppositions of the research. In addition, Moustakas (1994) has highlighted the openness in data gathering and analyzing, which are also essential in the more interpretive study (see Subchapter 3.5).

3.5.2 Observational data, field diary, and video materials in Studies IV and V

I gathered one set of data by using semi-structural observation and video recordings of the gatherings of the community. I gave information of the research to the members of the community beforehand, and they agreed to participate in the study (see Subchapter 3.7). The community was only formed at the beginning of the period. In addition, in sub-communities, the ways to work were not planned at the beginning, so one of my tasks was to find possible places the community and its sub-communities were interacting. In informal discussions with the participants, it was clear that most sub-communities did not have a separate Joy of Reading project.
team, which would have had formal meetings to be observed and recorded. Thus, the structure of the work in the pilot community shaped data collection. I collected data on three levels: 1) The Joy of Reading program as a whole, referring to information and training provided for all pilot communities participating in the program in Finland, 2) the pilot community as a whole, referring to seven schools and the regional library, and 3) Joy of Reading group in the largest school in this community. These data are outlined in detail in Table 1.

Table 1. Observational data and the related codes used in this study.

<table>
<thead>
<tr>
<th>MATERIALS</th>
<th>AMOUNT</th>
<th>CODES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observations in the meetings of the pilot community</td>
<td>3 meetings, 17 pages</td>
<td>O5, O10, O14, O20, O21</td>
</tr>
<tr>
<td>Observations in the meetings of the Joy of Reading group in the largest school of the community</td>
<td>2 meetings, 10 pages</td>
<td>O9, O11</td>
</tr>
<tr>
<td>Observations in the national Joy of Reading training sessions</td>
<td>6 training days, 14 sessions, 30 pages</td>
<td>O1, O2, O3, O4, O6, O7, O8, O12, O13, O15, O16, O17, O18, O19</td>
</tr>
<tr>
<td>Field diary</td>
<td>10 pages</td>
<td>OD</td>
</tr>
<tr>
<td>Video materials from the meetings of the pilot community</td>
<td>5 meetings, total duration 7h 12min</td>
<td>V1, V3, V5, V6, V7</td>
</tr>
<tr>
<td>Video materials from the meetings of the Joy of Reading group in the largest school in the community</td>
<td>2 meetings, total duration 1h 36min</td>
<td>V2, V4</td>
</tr>
</tbody>
</table>

I videotaped the meetings of the pilot community and the largest school. The videotapes are referred to as V1–V7. I gathered observational data by being present in all meetings as a non-participant observer (see Gorman and Clayton 1997: 106–107). Furthermore, I was present as a non-participant observer in all the training sessions of the national Joy of Reading Program during the period. The observations are referred to as O1–O21. I followed the work of the members of the community studied in my thesis to get an understanding of the meaning of the training sessions in the process of knowledge creation. However, these events were not recorded due to ethical reasons, as these events were open to everybody and other people were present (see Subchapter 3.7). I conducted structured observations of all the events by using a thematic scheme based on the theoretical framework (see Appendix 1). Furthermore, I took notes using time-coding, concentrating on
what happened, and what was said in the events. After each event, I wrote a field
diary about the nature of the events and the informal discussions conducted with
the participants. It was used as background material and referred to as OD.

I tested this scheme beforehand in an earlier Joy of Reading training session in
spring 2013 and developed the scheme, so that it was possible to divide the content
of speech and acts and gestures. In addition, I added a column for general features,
as it turned out that there were also examinable issues concerning the overall
situation and the nature of the event.

3.5.3 Interviews and information maps in Study V

I gathered one set of data by semi-structured interviews of 13 out of about 25 active
members of the Joy of Reading community; said data were used in Study V. Four
of the interviewees were librarians, and nine were teachers (see Table 2). An e-mail
was sent to all members of the Joy of Reading community three times during spring
and autumn 2014 by e-mail, but in spite of these efforts, it was not possible to get
interviewees from some of the organizations. Thus, about half of the whole
community was interviewed, though the exact amount of the participants of the
community was impossible to calculate, as the group was open and the
responsibility to participate varied in different organizations. The interviewees
represented five out of eight organizations. Two of the organizations whose
members did not participate in the interviews were small schools, where only one
teacher was responsible for the project. One school was larger and had some
organizational changes during the year, and the people responsible for the Joy of
Reading project varied. This can be seen to have an effect on the results of my study,
as the experiences of the participants could be related to the willingness to talk
about them.

Table 2. Interviews, interviewees and related codes used in this study.

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>DATE</th>
<th>DURATION</th>
<th>ORGANIZATION</th>
<th>CODES</th>
</tr>
</thead>
<tbody>
<tr>
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<td>19.8.2014</td>
<td>01:17:41</td>
<td>Library</td>
<td>Lib1</td>
</tr>
<tr>
<td>Librarian</td>
<td>19.8.2014</td>
<td>01:19:47</td>
<td>Library</td>
<td>Lib2</td>
</tr>
<tr>
<td>Library Director</td>
<td>19.8.2014</td>
<td>01:30:22</td>
<td>Library</td>
<td>Lib3</td>
</tr>
<tr>
<td>Librarian</td>
<td>9.6.2014</td>
<td>01:24:23</td>
<td>Library</td>
<td>Lib4</td>
</tr>
<tr>
<td>Teacher</td>
<td>21.5.2014</td>
<td>01:06:54</td>
<td>School no. 1</td>
<td>Tea1</td>
</tr>
<tr>
<td>Teacher (Leader of the project)</td>
<td>21.5.2014</td>
<td>01:18:56</td>
<td>School no. 1</td>
<td>Tea2</td>
</tr>
</tbody>
</table>
Altogether, I conducted 13 interviews after the last gathering of the Joy of Reading community, between May 2014 and August 2014. The interviews were recorded and transcribed, except one, which was conducted via e-mail in September 2014. The length of the interviews varied from 26 minutes and 53 seconds to one hour 30 minutes and 22 seconds. The average time of the interviews was 61 minutes 20 seconds. The interviewees were given the opportunity to choose the time and place of the interview. However, all interviews were conducted at the interviewee’s workplace during the working day. In some cases, the time set aside for the discussion was somewhat limited because of a strict timetable of the interviewee.

In the interviews, all the participants were also asked to draw or write their own understanding of the information environment developed during the project. This resulted in 12 pages of documents, which were used to support the analysis of the interviews, as they provided the names of their colleagues, databases they used, and other exact information related to their work in the Joy of Reading community. They were used as background information.

The theoretical framework and my experiences as an observer were in the background of the interviews. Also, the documents created by the community gave me a pre-understanding of their aims and achievements. The principles of this framework were stated in Studies I to III (see Subchapters 4.3 and 4.4). The interviews were structured around eleven overlapping themes, which were partly drawn from the theoretical framework, and partly to gain understanding of the work conducted in the community during the operational period. The themes were: 1) Background and previous experiences, 2) Goals and expectations concerning Joy of Reading, 3) Development of the community, 4) Role of the community, 5) Working in the community during the year, 6) Experiences in the interactive events, 7) Atmosphere for interaction in the community, 8) Relevance of the
interaction, 9) Circumstances for interaction in the community and in everyday life, 10) Collaboration and interaction in the organization in general, and 11) Development during the year (see Appendix 2). Though the emphasis was on the experiences of work related to the Joy of Reading program, it was relevant to gain information on the place of creativity and interaction in the work life of the participants in general, in order to better understand the changes and developments conducted during the pilot year.

The spirit of the phenomenological approach guided the interviews (see Subchapter 3.5.1). The aim was to openly discuss the experiences of the participants. Thus, I did not give the interview guide to the interviewees beforehand, and it was not strictly followed. However, I made sure that all the planned issues were discussed with all participants. The phenomenological approach in this process meant, for example, that I did not use professional vocabulary and did not express the premises of knowledge-creating interaction to the interviewees, but let them describe the processes and experiences in their own words. I informed the participants of the interests of my research beforehand in a letter, including some themes that would be discussed and explanations of the meaning of the research. In the letter and before the interview, I emphasized that I was interested in all the experiences and stories of the participants about work in the project during the year. (See Appendix 3.) The interviewees had a shared history with me, as I had followed the work of the community during the past year as an observer, being in all the meetings and training days provided to the community. Thus, the discussions could be conducted on the basis of this previous and partly shared knowledge, which in part helped open up the dialogue and create a joint understanding of the issues focused on (see Laverty 2003). The interviews are referred to by codes Tea1–Tea9, and Lib1–Lib4.

3.5.4 Documents in Studies IV and V

One set of data in Studies IV and V consisted of documents collected during the pilot year. These documents were created by the Joy of Reading community. The data consisted of four areas: 1) documents of the meetings of the community, 2) slide presentations shared in the community, 3) e-mails of the community, and 4) official documents, such as applications and plans, written by the community (see Table 3). They are referred to by codes D1–D38.
Table 3. Document materials used in this study.

<table>
<thead>
<tr>
<th>AREAS</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documents of the meetings</td>
<td>10 (14 pages)</td>
</tr>
<tr>
<td>Slide presentations</td>
<td>6 (121 pages)</td>
</tr>
<tr>
<td>E-mails</td>
<td>18 (22 pages)</td>
</tr>
<tr>
<td>Official documents</td>
<td>4 (70 pages)</td>
</tr>
<tr>
<td></td>
<td><strong>In Total 38 (227 pages)</strong></td>
</tr>
</tbody>
</table>

These documents provided information on the development of the work and provided an understanding of the goals and achievements of the community from the point of view of knowledge creation. They were used as background information.

3.5.5 Scopes in Studies IV and V

The empirical data were gathered using Framework III as a whole (see Subchapter 4.3.3). However, the scopes of the sub-studies were focused, so that the most essential features of the phenomenological approach were examined.

Scope in Study IV

Study IV was conducted as a pilot study in spring 2014, while data gathering was still going on. Thus, the data of Study IV consisted of observational data, video materials, and documents, which were available at the time of reporting the findings of the pilot study (Table 4).

Table 4. Data used in Study IV.

<table>
<thead>
<tr>
<th>MATERIALS</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observations in the meetings of the pilot community</td>
<td>3 meetings, 17 pages</td>
</tr>
<tr>
<td>Observations in the meetings of the Joy of Reading group in the largest school of the community</td>
<td>2 meetings, 10 pages</td>
</tr>
<tr>
<td>Observations in the national Joy of Reading training sessions</td>
<td>6 training days, 14 sessions, 30 pages</td>
</tr>
<tr>
<td>Observational diary from the events</td>
<td>10 pages</td>
</tr>
<tr>
<td>Video materials from the meetings of the pilot community</td>
<td>3 meetings, total duration 4h 56min</td>
</tr>
<tr>
<td>Video materials from the meetings of the Joy of Reading group in the largest school in the community</td>
<td>2 meetings, total duration 1h 36min</td>
</tr>
</tbody>
</table>
In Framework III, the aspects of the macro level of knowledge-creating interaction, as well as aspects of the micro level of interaction, were outlined (see Subchapter 4.3.3). However, Study IV focused on knowledge-creating interaction as an event which can be observed. Hence, the focus was on the explicit elements of interaction in creating knowledge both on the macro level, meaning the circumstances in the organization, and on the micro level, meaning relationships between people. (See Appendix 4 for the framework and the categories focused on in Study IV.)

**Scope in Study V**

Study V was conducted on the basis of the whole empirical data, gathered with the help of Framework III (see Subchapter 4.3.3). My scope in Study V was the core features of the phenomenological idea of a human being and playful interaction suggested in Studies I, II, and III. Therefore, the focus was on the micro level of the interaction and was concerned with both the participants’ experiences of the knowledge-creating interaction and the events of the interaction as such. (See Appendix 5 for the framework and categories focused on in Study V).

### 3.6 Methods for data analyses in Studies IV and V

#### 3.6.1 Triangulation in the data analyses in Studies IV and V

I gathered the data from Studies IV and V on the basis of Framework III, suggested in Studies I, II, and III. Thus, the data from all the elements present in the framework were gathered as a result of a process (see Subchapter 3.3). However, in this thesis, I concentrated on the key aspects of these data in Studies IV and V. The research questions outlined in Studies IV and V guided the analysis of the data. The data analyses in Study IV were conducted first, and its results affected the analysis of the data in Study V. The data analysis of each set of data is described separately in the following Subchapters, but the triangulation of the data analysis is outlined next (See Bergman 2009).

The analysis of the empirical data had different temporal phases, as the process was intertwined with data gathering in the sense that the observational data were

<table>
<thead>
<tr>
<th>MATERIALS</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documents of the pilot community and national Joy of Reading program as a whole</td>
<td>26 documents, 73 pages</td>
</tr>
</tbody>
</table>
collected and analyzed first, and the results affected the gathering of the interview data. Moreover, I conducted the first round of analysis of the video data before the interviews were held to gain an understanding of the themes to discuss in the interviews. Some of the results of this phase were reported in Study IV, which was concentrated on the observable elements of the knowledge creation process as well as on the circumstances of creating knowledge in the Joy of Reading community. As I analyzed the interview data in Study V, the video materials were also re-visited to confirm some interpretations. In the end, I analyzed the video data from the meaningful moments of interaction as well as the sequences of the interviews, where the participants talk about those moments. (See Gorman & Clayton 1997, Bergman 2009.)

The aim of this thesis was to examine how the phenomenon of knowledge creation can be studied from the phenomenological perspective via the concepts suggested in Studies I and II (see Subchapters 4.2 and 4.3). Thus, it was also necessary to examine if there were relevant phenomena which were not taken into account in the suggested framework. Therefore, the process of analysis had different levels of the role of the theory. On the first level, I identified the circumstances of interaction and play by analyzing the observational data, video data, field diaries, and documents to gain understanding of the nature of the community and to get a confirmation that examining interaction with the phenomenological concepts is possible. This was conducted using a theory-guided approach, and the results were reported as a pilot study (Study IV). On the second level, I carefully examined all the material to gain an understanding of the role of interaction in the community and to identify the events of playful interaction from the data. I conducted this analysis by using both the theoretical framework and the principles of inductive content analysis. On the third level, when conducting Study V, I analyzed the interviews and video data on the basis of a theory-guided approach, concentrating on the elements of the temporality of human beings and play. In this way, it was possible to assess the relevance of using the phenomenological framework of play in this case as well as to identify the phenomena related to the knowledge-creating interaction in this context. In addition, it was possible to be aware of the important themes which emerged from the data, but were not included in the suggested framework as such.
3.6.2 Analysis of the observational data in Studies IV and V

I analyzed the observational data in Studies IV and V on the basis of a theory-guided approach, concentrating on the observations which occurred frequently in the meetings observed. In relation to this, the field diary also provided a general understanding of the nature of the events, the development of the community, and the role of interaction in knowledge creation. The analysis of the data was focused both on the content of the speech and multimodal interaction during the events. The categories focused on in Study IV were diversity, flexibility, familiarity, equality, forms and rules, being present and seriousness, and shared goals, and in Study V: temporality of human being, goals, rules, everydayness, encounter, absorption, seriousness, being present, openness, and criticality.

3.6.3 Analysis of the video data in Studies IV and V

In the analysis of the video data, I took both the content of the conversations and the multimodal interaction into account. In Studies IV and V, the discussions were analyzed by using qualitative content analysis (e.g. Strauss & Corbin 1990, Schreier 2012), and the analysis of the selected sequences, which also had features from conversation analysis (e.g. Sacks 1992a, 1992b, see also McKenzie 2009, 2010). At first, a rough transcription of the videotapes was done to allow for the separation of the interactive events. The selected parts of the discussions were transcribed in detail to enable the multimodal analysis of the interaction. (Mondada 2012: 41.) Square brackets were used to denote overlapping talk and longer pauses were marked with numbers in brackets. However, a detailed analysis of the conversations is beyond the scope of this study. Therefore, the selected extracts of the discussions presented in reporting the results in Chapter 4 are modified closer to clean verbatim to provide readability (cf. Stivers & Sidnell 2012).

The first phase of the analysis was to find the moments of interaction, because most meetings had a chairperson, and the structure was based on presentations, which were occasionally broken by dialogical sequences. Two of the videotaped meetings consisted only of dialogues with changing topics. Based on the analysis of the sequences, I identified several forms of interaction. The presentations were interrupted by the chairperson or some other member of the community who wanted to comment or ask something. Also, the presenters could take turns and ask for comments or help, either at the end of their presentations or in-between. Further, a long silence could precede the interactive sequence (see Figure 5). In addition, in some cases,
dialogue was not created at all. Figure 5 illustrates the structure of interaction as a temporal sequence detected from the video data, with several different possibilities for the dialogue to develop.

Thus, it was possible to count a total of 54 interactive sequences. These included short dialogues, like comments, questions, and answers, and longer sequences. In longer sequences, which were 26 in total, the participants shared their knowledge and created new knowledge by finding a new solution, creating new ways to work, or finding a common understanding of the topic in question. However, the borders between these different types of sequences were ambiguous.

In the second phase, I analyzed the video data inductively first. In this, the units of analysis were sentences, actions, and multimodal interaction in the events, and categories were formed from the topics discussed as well as from the forms and functions of interaction. After this, the video data were analyzed theory-driven,
based on the categories from the theoretical framework. The categories focused on in Study IV were diversity, flexibility, familiarity, equality, forms and rules, being present and seriousness, and shared goals, and in Study V: temporality of human being, goals, rules, everydayness, encounter, absorption, seriousness, being present, openness, and criticality. (See Appendix 6 for a description of the analysis process.)

3.6.4 Analysis of the interview data in Study V

I conducted the analysis of the interviews in Study V by applying qualitative content analysis, where the units of analysis were clauses, sentences, and parts of the sentences. First, open coding was used to categorize the data according to the interactive and experiential descriptions. The subcategories were formed by identifying similar expressions and utterances, which were then grouped into main categories with axial coding. (Strauss & Corbin 1990, see also Schreier 2012.) In this way, it was possible to find out about issues experienced by the participants to be meaningful as related to interaction. These issues were focused on excitement, effectivity, trust, leadership, and everyday life in the organization (see Appendix 7).

Secondly, I analyzed the data with a theory-driven approach, based on the categories from the theoretical framework (see Subchapters 4.2 and 4.3). The categories focused on were: temporality of human being, goals, rules, everydayness, encounter, absorption, seriousness, being present, openness, and criticality. Thirdly, the results of these two analyses were brought together and reflected to the video analyses, to form an understanding of the relevance of the conceptions suggested in my study.

3.6.5 Analysis of the documents in Studies IV and V

I used the documents as background information in Studies IV and V and analyzed them using content analysis. The documents were categorized according to their function into main categories and subcategories. The content was analyzed to gain an understanding of the goals and practices of the community. (See Appendix 8.)

3.7 Ethical considerations

As I conducted the empirical part of this thesis in a working community, ethical considerations were important to acknowledge and follow carefully. The empirical part consisted of observational data from the meetings of the Joy of Reading
community as well as documents produced by the community members and interviews, which were recorded. Thus, to provide the participants a safe environment to discuss and work, it was essential to confirm that my thesis was conducted according to the ethical guidelines of research, outlined by the National Advisory Board on Research Ethics (2009) in Finland. Ethical considerations handled data gathering, analyzing, reporting of the results, and data storage (Hirvonen 2006, Derry et al. 2010).

When gathering video material, it was especially important to acknowledge the discreet nature of the data. Thus, I asked the participants beforehand if attending and recording in their meetings was allowed. I also gave a leaflet explaining my interests in common language as well as the research plan of my thesis. I also asked all the participants to sign an agreement to participate and be recorded. In this agreement, I promised to use the material only for research purposes, not to show it in public, and to report the findings in a way that the participants could not be identified (See Appendix 9). Also, during the interviews, these premises were outlined, and the participants signed an agreement to be recorded. (Fischer & Anushko 2009, Derry et al. 2010.)

I also received documents produced by the community that were not public, like e-mails, agendas, and memos, from the meetings. Those were also handled with the ethical premises in mind. While saving and storing the data, as well as conducting the research and reporting the results, I followed these ethical considerations (See Derry et al. 2010).
4 Results

In this chapter, I present the main results of the Sub-Studies I–V as a response to the research questions 1–4 in the same sequence (see Subchapter 3.3).

4.1 The preconceptions in the research of knowledge creation (Studies I and II)

The implicit preconceptions concerning the understanding of a human being were examined from literature reviews using theoretical analysis. The results of these analyses concerned: 1) the state of recent knowledge creation research and its premises (in Study I), 2) the main problems of the conception of knowledge (Study I), 3) the conceptualizations of interaction and premises of the conception of a human being underlying them (Study I), and 4) the preconceptions of different modes of being behind the ideas of knowledge-creating interaction (Study II).

4.1.1 The state of the recent knowledge creation research (Study I)

The analysis of the state of knowledge creation research was based on the studies on knowledge creation conducted in 2005–2012 (see Subchapter 3.4.1). It was possible to separate quite pragmatic knowledge creation research from research which questions the basis of previous studies and deconstructs known models of knowledge creation. Eight themes were distinguished and their focuses and objectives analyzed (see Table 5).

<table>
<thead>
<tr>
<th>THEME</th>
<th>FOCUS</th>
<th>OBJECTIVE</th>
<th>STUDIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEME</td>
<td>FOCUS</td>
<td>OBJECTIVE</td>
<td>STUDIES</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>TECHNOLOGY</td>
<td>What is the role of technology in the processes of knowledge creation, and how does it function in interaction with the working community?</td>
<td>To examine the opportunities and difficulties technology brings to the working practice, often combined with testing an instrument or software.</td>
<td>Salazar 2010, Lopez-Nicolas &amp; Soto-Acosta 2010.</td>
</tr>
<tr>
<td>VALUE CREATION</td>
<td>What is the relationship between economical productivity and processes of KC?</td>
<td>To develop often quite concrete indicators and measures.</td>
<td>Li, Huang, &amp; Tsai 2009, Shih, Chang, &amp; Lin 2010, Mitchell &amp; Boyle 2010, Song, Seung, &amp; Yoon 2011.</td>
</tr>
<tr>
<td>ORGANIZATION AS A CONTEXT</td>
<td>What is the role of the organizational environment and culture in the process of knowledge creation and what is the relationship between KM and organizational research?</td>
<td>To define knowledge creation in a broader perspective and in relation to the structures of the organization.</td>
<td>Lloria 2007, Chen 2008, Jiang &amp; Li 2009, Kao, Wu, &amp; Su 2011, Wang, Su, &amp; Yang 2011.</td>
</tr>
<tr>
<td>WORK PRACTICES AND NETWORKS</td>
<td>How knowledge is created in relation to working practices and social relationships?</td>
<td>To conceptualize and develop interpersonal processes as part of the organization’s activities.</td>
<td>Alberts 2007, Balestrin, Vargas, &amp; Fayard 2008, Olsen 2009, Farshchi &amp; Brown 2011, Iacono, Martinez, Mangia, &amp; Galdiero 2012.</td>
</tr>
</tbody>
</table>
The themes were: process, technology, value creation, management, organization as a context, work practices and networks, innovation, and interaction. The result was that a vast amount of research is still conducted to explore the knowledge processes in working communities in order to understand how the experiences and information of an individual are shared with the whole organization (e.g. Alberts 2007, Eliufoo 2008, Martin-de-Castro et al. 2008, Anand et al. 2010, Olsen 2009, van Helden et al. 2010). These processes are still often conceptualized by using Nonaka’s models (Nonaka, 1994, Nonaka & Takeuchi 1995). This area of research is thus concentrated on identifying the types of knowledge and its flows in different contexts and communities (e.g. Eliufoo 2008, Martin-de-Castro et al. 2008, Anand et al. 2010, van Helden et al. 2010, Ramírez et al. 2012). It was also found that as research moves towards more abstract phenomena of knowledge creation in intra- and interpersonal relationships, the questions of epistemological coherence become even more crucial (see Venzin et al. 1998). Some researchers explore the concepts of knowledge, interaction, and experience more thoroughly (Kodama 2005, 2007, Jakubik 2008, 2011, Tsoukas 2009, Morner & von Krogh, 2009, see also Cook & Brown 1999, Gourlay 2006, Akehurst et al. 2011). However, these kinds of studies were still usually linked with the idea of different types of knowledge.

In summary, it was concluded that despite the fact that knowledge creation research is conducted from various starting points, they share a similar trait: they usually start with the definition of knowledge, and though they concentrate on human activity and interaction, they do not explicate or question their dependency on the conception of the human being. Furthermore, the concept of interaction and the presuppositions behind it are still rarely explicated, both in the studies using Nonaka’s (1994) conceptions and in those criticizing it.

4.1.2 The concept of knowledge in the research of knowledge creation (Study I)

The use of the concept of knowledge in knowledge creation research was examined in relation to the presuppositions of a human being behind it. The main outcome was that in recent research on knowledge creation, the emphasis is not on an explicitly cognitive approach; on the contrary, the studies often stress the act of communal knowing (cf. Cook & Brown 1999). However, it was argued that even in the often applied conceptualization by Cook and Brown (1999), which challenges Nonaka’s perceptions, knowledge is still divided into tacit and explicit knowledge. With the division between tacit and explicit knowledge, Cook and
Brown (1999) emphasize the notion of knowledge as an element inside the human mind. In addition to this, Cook and Brown stress the division of knowing and knowledge as different elements in the process of KC, where knowing is a process which occurs in a certain context and situation, while knowledge is a separate object inside the human being.

Cook and Brown (1999: 384–386) examine this division through the concepts of epistemology of possession and epistemology of practice, where the epistemology of possession speaks of knowledge as somebody’s own, inner, and static phenomenon, and the epistemology of practice concentrates on “epistemic work”, which is a part of every human action in different contexts. With this distinction, Cook and Brown intend to draw attention to the interactive practice of knowing in connection with objective knowledge as a basis for all action. But at the same time, it was argued, the exploration is attached to the question of consciousness, body, and mind as separable units. Hence, it was suggested that although knowledge creation is currently clearly connected to this Cartesian conception of the self, this has not usually been specified or critically reviewed (see, e.g. Tsoukas & Vladimirou 2001, Koskinen 2010, Day 2011).

4.1.3 The concept of interaction in the research of knowledge creation (Study I)

To explicate the ways in which interaction is defined or left undefined in the research of KC, three alternative views of understanding interaction in the research of knowledge creation were identified. First of all, interaction could be defined as a movement, like Cook and Brown (1999) in their widely used study, which illustrates how epistemological separation of the forms of knowledge allows us to define knowledge processes as the movement between different types of knowledge and between knowledge and knowing. This movement creates new knowledge, which manifests itself in human action. In this view, interactive movement happens between knowledge and action, the individual and his or her world, and also between two individuals in a conversation, as their previous experiences formulate the interpretations made (Cook & Brown 1999: 393). Therefore, it was argued that the concept of interaction appears to describe movement in general, which makes it hard to get a hold of.

Another way to use interaction was to describe it on a very common level as a basis for communities, like Morner and von Krogh (2009). In their view, interaction is described as constant acts of communication, which function as a basic
construction for the whole activity in a certain community or organization. The basis for all knowledge creation is tradition, meaning the entity of everything already known in the community. This approach emphasizes the importance of interaction both in understanding the single process of knowledge creation and as a function of an organization in general. The importance of language and meaning creation is also underlined. However, it was concluded that Morner and von Krogh’s description places little emphasis on the perceived reality in communication (see Talja et al. 2005).

The third analyzed approach was that of Tsoukas (2009), which considers interaction as a dialog between people. Dialog in this context means actions between at least two persons. It is a highly linguistic event and includes exchanging messages. The dialogical approach concentrates on the concrete skills and means one needs when searching for completely new ideas and points of view (Tsoukas 2009: 943). Tsoukas underlines the importance of critical self-reflection in events of knowledge creation in order to reveal the underlying premises and presuppositions (Tsoukas 2009: 943). Dialog is defined as a goal-oriented activity which aims to achieve a common goal. This goal creates a framework for the whole dialog, especially in an organizational environment (Tsoukas 2009: 943). As Tsoukas bases his ideas partly on phenomenological philosophy, his approach was used as an inspiration in the later phases of my thesis (see Subchapter 2.3.3).

The conclusion of this analysis was that the analyzed descriptions of interaction provide valuable information about the importance of communality and human relationships in an organizational context. The main problem with these descriptions was that they do not eventually define the concept of interaction itself. Moreover, the descriptions do not explicate what kinds of assumptions and traditions views such as historically constructed knowledge and critical communication are based on.

4.1.4 The implicit idea of different modes of being in enhancing knowledge creation (Study II)

In Study II, the analysis was focused on the notion that in the research of knowledge creation, the interaction between human beings and the experiences of the participants are in a pivotal position and there is a constant strive towards defining the “creative” state of being or atmosphere where knowledge is created in organizations (Orzano et al. 2008). The conducted analysis implied that the suggested elements that enhance knowledge creation concentrate on three
dimensions: human relationships, the subject’s behavior and actions, and the organizational context (Table 6).

The studies analyzed implied that the subject’s own behavior, acts, and attitudes can vary in the event of knowledge creation. An open (von Krogh 1998), critical (Mitchell & Nicholas 2006, Mitchell et al. 2009, Tsoukas 2009), reflective (Topp 2000, Tsoukas 2009), and risk-taking (Cross et al. 2001, Tse & Mitchell 2010) way of being was implied to enhance interaction and further knowledge creation within a community. At the interpersonal level, the nature of the relationships between people within the community was emphasized. Trust (Cross et al. 2001, Bligh et al. 2006, Huotari and livonen 2005), openness (Mitchell et al. 2009), commitment (Bligh et al. 2006, Lubatkin et al. 2001), familiarity (Adenfelt & Lagerström 2006, Chua 2002), and equality (Tse & Mitchell 2010, von Krogh 1998) were seen to establish a relationship for interacting. At the organizational level, various contextual features were seen to affect interaction: mutual trust within the organization is essential to encourage risk-taking, sharing knowledge and even revealing a lack of knowledge if needed (Kelly 2007, Sankowska 2013). The flexibility of the context is crucial, referring to time, personnel, financial resources, and managerial control (Richtner & Åhlström 2010). Diversity is important, in creating new ideas and approaches to the old questions, referring to people’s different cultural and ethnic backgrounds, among other things (Tsoukas 2009, Mitchell et al. 2009).

Table 6. Elements describing the dimensions of human factors of KC (Study II: 509–510, Table II).

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>FUNCTION IN THE PROCESS OF KC</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELATIONSHIPS BETWEEN PEOPLE</td>
<td></td>
</tr>
<tr>
<td>TRUST</td>
<td>One has to trust colleagues and managers in order to reveal a lack of knowledge (Cross et al. 2001: 116).</td>
</tr>
<tr>
<td></td>
<td>One has to trust that colleagues are honest and able to uphold commitments in knowledge creating teamwork (Bligh et al. 2006).</td>
</tr>
<tr>
<td></td>
<td>Trustful relationships between people are needed, so that knowledge is shared, and thus, also created (Merx-Chermin &amp; Nijhof 2005: 146).</td>
</tr>
<tr>
<td>OPENNESS</td>
<td>KC needs debates and open communication, so it is important that group members value each other’s different ideas (Mitchell et al. 2009).</td>
</tr>
<tr>
<td>COMMITMENT</td>
<td>KC requires certain commitment between colleagues – meaning, being a part of the team with same values and goals (Bligh et al. 2006).</td>
</tr>
<tr>
<td>ELEMENTS</td>
<td>FUNCTION IN THE PROCESS OF KC</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>FAMILIARITY</td>
<td>Opportunism and self-seeking behavior can erect barriers to knowledge creation (Lubatkin et al. 2001). Knowing how the colleagues communicate and act enhances knowledge creation (Adenfelt and Lagerström 2006: 196). The history of interactions in personal relationships affects knowledge creation (Chua 2002: 376). Promotion of “a culture of respect, friendship and bonding among organization members” enhances knowledge creation (Chua 2002: 386).</td>
</tr>
<tr>
<td>EQUALITY</td>
<td>Social categorization in the workplace reduces the will to share and thus create knowledge, because it is associated with distrust, conflict and information-withholding (Tse and Mitchell 2010: 86). Highly individualistic incentive systems increase competition and reduce care (von Krogh 1998: 142).</td>
</tr>
<tr>
<td>ORGANIZATIONAL</td>
<td>Trust when creating organizations in which authority is exercised in a transparent and legitimate manner enhances knowledge creation (Kelly 2007: 131). Trust at an organizational level leads people to take risks, which means for example sharing knowledge and delegating (Sankowska 2013).</td>
</tr>
<tr>
<td>CONTEXT TRUST</td>
<td>Flexibility in time, personnel, top management control and financial resources has a positive impact on knowledge creation (Richtnér &amp; Åhlström 2010: 428–429). There should be room for critical consideration of different perspectives (Mitchell et al. 2009).</td>
</tr>
<tr>
<td>FLEXIBILITY</td>
<td>People from different knowledge domains create differences, which creates restlessness, which may be removed by creating new knowledge (Tsoukas 2009: 951–952). Diversity in personnel, meaning people from e.g. different backgrounds, cultures and organizations, often increases KC. Different views and opinions foster knowledge creation (Mitchell et al. 2009).</td>
</tr>
<tr>
<td>DIVERSITY</td>
<td>As knowledge creation requires acknowledging that one does not know something and need help, there is a need for safety in the environment. (Cross et al. 2001: 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. The behaviors increase the courage needed to experiment and voice out opinions. (von Krogh 1998: 137–138.)</td>
</tr>
</tbody>
</table>
ELEMENTS | FUNCTION IN THE PROCESS OF KC
---|---

**SUBJECT’S BEHAVIOR AND ACTS**

**OPEN**

KC means always challenging old knowledge, thus there is a need to be open to new knowledge – old habits and formal procedures can be barriers to it (von Krogh 1998: 135–136).

**CRITICAL**

Questioning old habits and overcoming subconscious pressures of doing something which is accepted leads to knowledge creation (Mitchell and Nicholas 2006: 311).

One has to be critical towards one’s own actions and ideas (Tsoukas 2009), but also in communication in general (Mitchell et al. 2009: 539).

Self-distanciation gives critical insight into one’s actions and thoughts (Tsoukas 2009: 943).

**REFLECTIVE**

Acknowledging one’s “customary and unreflective ways of understanding and acting” creates new paths and thus new knowledge in dialogue (Tsoukas 2009: 953).

Reflective ways create new thoughts in conversations via language games and combinations creating new knowledge (Topp 2000: 338).

**RISK-TAKING**

Safe relationships increase the ability to take risks, which often results in more creative solutions (Cross et al. 2001: 116).

The KC process includes failures – thus it is important to increase employees’ self-esteem and self-worth (Tse & Mitchell 2010: 86).

It was concluded that there were some implicitly present presuppositions in the examined research of knowledge creation: 1) The human factors effecting knowledge creation were connected with the experiences and modes of being in interaction in various ways, however, this fact remained mostly unexplicated, 2) The event of interaction played a crucial role, however, the structure of this process remained usually unexplicated, 3) Being in interaction was described as an individual accomplishment, and little emphasis was placed on the fact that in the event of this kind of interaction, there is always the other party, and 4) A successful interaction seemed to require being open and trusting and, at the same time, being capable of managing the event. Finally, it was suggested that this kind of phenomenon could be conceptualized more coherently with hermeneutic phenomenology.

### 4.2 The suggested phenomenological concepts (Studies I and II)

In Studies I and II, it was explicated how the phenomenon of knowledge creation can be understood from the phenomenological ideas of a human being and
interaction. It was suggested that hermeneutic phenomenology can offer a way to understand knowledge creation without the conceptions of knowledge inside the human mind and a human being as an individual.

4.2.1 Idea of a human being (Study I)

It was proposed that the human being can be defined quite accurately with the phenomenological approach. Heidegger’s concept of Dasein (‘there-being’) was examined, as it gives a phenomenological description of humans as particular ways of being within fundamental ontology. This being is characterized by that of being-in-the-world (in-der-Welt-Sein) (Heidegger 2006: 52–62). Dasein is unique among other beings in that, by its very mode of being, Dasein is able to think its own being, both in the sense that it can encounter its own being as Dasein, and in the sense that it can choose among its ontic or everyday modes of being (Heidegger 2006: 11–15). Based on these notions, it was also indicated that human beings always have certain opportunities for living in the world in certain ways, and they always either seize those opportunities or refuse them (Heidegger 2006: 12). Thus, the phenomenological idea of a human being is shaped by the idea of an open and questionable future, which is full of possibilities, in case the human being can seize the moment and understand the opportunities, which are shaped by past experiences.

Another crucial notion to understand the component of others in being was examined. Heidegger describes the basic structure of Dasein’s being in terms of “being-with”": “...because Dasein’s Being is Being-with, its understanding of Being already implies the understanding of Others” (Heidegger 1985a: 160–161, see also Dreyfus 1991: 149). This already given possibility to understand each other is essential when seeking to understand the nature of the Dasein and being in interaction. It was suggested that with this kind of phenomenological approach, the emphasis is shifted away from the human being as an individual, acting in mediated relationships with the world and other individuals, to the human existence and being, which is suitable for studying the collective nature of knowledge creation.

4.2.2 Modes of being (Study II)

The examination of the concept of the human being was continued in Study II. It was concluded that in knowledge creation research, the concepts of experience and being are in a pivotal position when trying to understand the process of interaction in KC. According to the literature review, the descriptions of the modes of being in
open, knowledge-creating interaction can be understood by examining the tension between everydayness and authenticity, as explicated by Heidegger (1985a, Dreyfus 1991). Everydayness is one of 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” (“they”). 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 1985a: 164).

The concept of everydayness was also suggested as being useful in understanding the ways of being in interaction in organizational settings. It takes away the responsibility of one’s action 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 1985a: 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 1985a: 167.) In other words, approaching the authentic mode of being is approaching the world, unveiling and eliminating obscurity. It was suggested that this is the nature of play, as well (Gadamer 1999d, 2004).

4.2.3 Experience and Erfahrung (Studies I and II)

In Gadamer’s thinking, authenticity also defines the concept of experience examined in Studies I and II. In the descriptions of hermeneutic circle and play, Gadamer’s conception of experience is divided into “lived experience” (Erlebnis) and “experience” (Erfahrung). However, the way of using these concepts differs from, for example, the use of the words by Dilthey (see Reid 2001). In Gadamer’s hermeneutics, experience (Erfahrung) is reserved to mean a deeply unified state of being, when understanding and openness to the world are possible — successful interaction creates this kind of a state. As a counterpoint to this, lived experience (Erlebnis) is a superficial way to encounter the world and other people in a state,
where a human is not totally present, but takes the position of an observer or user of the event for pure pleasure or curiosity (Gadamer 1999b: 72–73). Experience is thus comprehensive presence in the course of events and does not allow the human to stay in the background as a mere observer (Gadamer 1999b: 107–108). This kind of experience of interaction was suggested to be an eligible state, where profound learning and change can occur.

4.2.4 Hermeneutic circle (Study I)

The hermeneutic features found in previous knowledge-creating interaction research (Chapter 4.1.3) allowed suggesting in Study I that the main structure of knowledge-creating interaction could be understood based on the idea of a hermeneutic circle by Gadamer. The hermeneutic circle defines the interaction of understanding which happens between the past and the present (Tietz 2000: 47). In the act of understanding, a being acts supported by the horizon of expectation created by his or her prior experiences. This horizon is constantly changing as events progress. Thus, in principle, the hermeneutic circle is movement in time, and this movement involves anticipation, correction, and the reassessment of expectations, which in turn form a unified conception of the whole. One has certain prejudices and intentions, which guide the understanding (Gadamer 1999a: 57–58). The hermeneutic circle as a construction of interaction thus describes an interpersonal event of meaning creation and interpretation in a certain time and place, in order to create a new, better explicated, and understood position towards a certain thing, problem, or challenge encountered (Gadamer 1999a: 63).

It was stressed that in the hermeneutic circle, the aim is not to understand the other person, but to understand and explore the event of creating meaning in a shared situation of conversation (Gadamer 1999a, 1999b, 1999c, see also Gadamer 1999e). Thus, the Gadamerian view of being in interaction, together with the phenomenological idea of a human being, was seen as a fruitful starting point for examining knowledge creation. However, in the course of my thesis, I chose the concept of play for a closer examination in empirical settings as well (see Subchapter 4.3.3).

4.2.5 Hermeneutic play (Study II)

In Study II, the Gadamerian concept of play was presented as describing an ideal state of being together, which is also suitable for understanding knowledge-creating
interaction. An essential statement of Gadamer is that playing requires authenticity, as observing and creating distance from the action could thus be seen as an opposed mode of being in interaction (Gadamer 2004: 103). It was concluded that 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. 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: 105). This sort of play has certain rules, forms, and regulations, but they do not restrict the free element of play. On the contrary, they create the means for play to exist. (Gadamer 1999d.)

It was also emphasized that the Gadamerian concept of play offers possibilities to understand and examine the idea of reflectivity and openness needed in knowledge-creating interaction (Tsoukas 2009). Gadamer defines play as always intentional, in other words, the player has the desire to open up and act (Gadamer 2004: 107). 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. Csikszentmihályi 1991) and this could be seen as a mode of truly creating and learning together. “Play fulfils its purpose only if the player loses himself in play” (Gadamer 2004: 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 (Gadamer 2004: 103). However, it was noted that this does not mean that play would be a place of retreat from real life; on the contrary, Gadamer (2004: 102–103) describes play as a serious experience of being present in real life.

4.2.6 The concept of play in the field of LIS, in relation to Gadamerian play (Study II)

To understand the Gadamerian view of play, it was relevant to explicate what the relations between Gadamerian play and other uses of the conception of play are in the field of LIS, through a literature review in Study II. It showed that play is presently used in many areas in the field of LIS, and the conducted research is quite heterogeneous (see Table 7).
<table>
<thead>
<tr>
<th>AREAS</th>
<th>FOCUS OF RESEARCH</th>
<th>USE OF THE CONCEPT</th>
<th>ASPECTS OF PLAY RESEARCHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIBRARY STUDIES</td>
<td>Children and libraries: Plays and games as materials, playing in the space of libraries</td>
<td>Games as rule-based plays with goals and objectives</td>
<td>Free</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Voluntary</td>
<td>Rule based</td>
</tr>
<tr>
<td>INFORMATION BEHAVIOR</td>
<td>IB in play: Playing as action of children and adults, which includes information use</td>
<td>Game world as opposed to the real world</td>
<td>Harviainen 2007, Adams 2009</td>
</tr>
<tr>
<td>INFORMATION RETRIEVAL</td>
<td>Playing and games as tools to develop IR and new solutions</td>
<td>Playing as a mode of being, which can be used for useful purposes by technological solutions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Entertaining</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Engaging</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learning</td>
<td></td>
</tr>
<tr>
<td>EDUCATION &amp; LIS</td>
<td>Educating by using play and games as a way to enhance learning in the context of libraries, information organizations and phenomena connected to LIS (IL)</td>
<td>Playing as an action, which can enhance learning both as an experience and as a form of presenting information</td>
<td>Learning, Collaborating, Engaging</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Problem solving</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rewarding</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td>Safe environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>for exploring</td>
<td></td>
</tr>
<tr>
<td>KM &amp; ORGANIZATIONS</td>
<td>Play as a mode of being, which gives room for exploration and experimentation of new ideas in the organizational environment</td>
<td>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</td>
<td>Informal, as opposed to official social exchange, Flow-like state, Collaborating, Rule based</td>
</tr>
</tbody>
</table>
The analysis suggested that in the research of information behavior and information retrieval, playing and games have recently been seen as a field in which people act and interact more and more, and thus, studying how information is retrieved and used in these contexts is relevant (Harviainen 2007, Adams 2009). Games have also been seen as effective tools for developing new solutions for information retrieval, for example, for indexing and searching (Halttunen & Sormunen 2000, Bodoff 2009, Goh et al. 2011, Goh and Lee 2011). The goal of these studies is to explore how the entertaining feature of playing and games could be used to do something useful. Playing in this field of research is considered in terms of entertainment, collaborative work, or competition, but on the whole, playing can be considered an experience where pleasure and work may be combined.

Furthermore, the analysis indicated that playing and games are also being examined as means for educating and enhancing, for instance, Information Literacy (IL) skills (Halttunen & Sormunen 2000, Markey et al. 2011, Gumulak & Webber 2011). The basis for these studies is the notion of gaming and playing as an action, which enhances learning (Halttunen & 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 – as opposed to some more traditional ways of teaching or learning. Play is understood as an experience, which has quite powerful elements of change and development connected with the ideas of entertainment, engagement, and reward (Markey et al. 2011: 47–48).

Recently, the study of games has developed into a field of its own within LIS. In this area, the experiential nature of playing was seen to be highlighted, as the researchers have been interested in examining the motivations to play (Lee 2009, Sánchez et al. 2012). In addition, the phenomenon of flow has been studied as well as the imaginative sphere of playing (Stenros 2012). The analysis also showed that in research related to Knowledge Management, playing has been studied as
something which could be used to develop work through simulation, as well as by using play as a means to test unconventional ideas and practices (Desouza 2003, Chua 2005, Sukovic et al. 2011).

Moreover, the differences and similarities between the conceptions of play in LIS and by Gadamer, also in relation to the research on knowledge creation in KM, were outlined (see Table 8).

| TABLE 8. Results from the conceptual analysis of play (Study II: 517, Table IV). |
|---|---|---|
| PLAY AS A CONCEPT | PLAY IN GADAMER’S HERMENEUTICS | CONCEPT OF “PLAY” IN LIS – EXPLICIT |
| PLACES OF PLAY IN KNOWLEDGE CREATION – IMPLICIT | Describing being together | Experience or technology |
| In relationships: trust, openness, commitment, familiarity, equality | Describing change and learning | Learning or entertainment |
| In the creative subject: open, critical, reflective, risk-taking | Connected with the phenomenological idea of authenticity and everydayness | Absolute or instrumental value |
| In organizational context: trust, flexibility, diversity, safety | being in the “play world”, or rules, roles, and techniques |

4.3 The frameworks developed to understand knowledge creation with hermeneutic phenomenology (Studies I and II, also unpublished material)

The frameworks in Studies I and II were developed on the basis of notions related to the problems of the conceptualizations of recent knowledge creation research and the presented phenomenological concepts. These frameworks were developed in order to explicate the premises of studying knowledge creation. Additionally, they were integrated into Framework III, in order to create a basis for examining knowledge creation in empirical settings.

4.3.1 Formulation of Framework I (Study I)

It was suggested in Study I that the basic themes found in the studies of Cook and Brown (1999), Morner and von Krogh (2009), and Tsoukas (2009) from the field of KM were for the most part compatible with the phenomenological view of a
human being and hermeneutic conversation. With hermeneutic phenomenology, knowledge creation can be described in a way that is not primarily fixed with the concept of knowledge, but with the idea of a human being constantly creating and simultaneously being created when living in the world. Thus, a theoretical basis for knowledge creation based on the construction of the human experience in interaction, the structure of the interactive event, and modes of being in interaction was presented as Framework I (see Figure 6).

![Framework I](image)

**Fig. 6. Framework I summarizing the results of Study I (Study I: 1051, Figure 2).**

*Construction of the human experience in interaction* was based on the widely-accepted notion of knowledge creation as a historical, experience-based event, which includes an element of creative change. Hermeneutic phenomenology was seen to give a temporal construction to the experience by exploring the dimensions of past, present, and future in the human being. In the first place, phenomenology explains the historical structure of experience by attaching the human being and the whole event to an already lived tradition and experiences of the past. Secondly, the
phenomenological approach was seen to underline the future as always open and questionable: a human being always has the opportunity to choose and act differently, unconventionally. Thirdly, it was suggested that the most crucial aspect is the present, in which the past and future orientations encounter each other as a constant encounter between a human being and the world. The conclusion was that the fundamental advantage of Gadamer’s view is the explication of the communal and shared nature of experience, which is based on the phenomenological view of a human being.

Structure of the interactive event was based on the idea of a hermeneutic circle, which is useful in reviewing the event of knowledge creation in practice: new information offered by the other is viewed fundamentally positively, though critically asking for the grounds of information and its first interpretations. In this process, knowledge is created on top of what is already understood and known in a way which questions all previous knowledge (Gadamer 1999a, 1999c). Thus, this previous knowledge also becomes understood through questioning in new light and may thus be better, as the interpretation is made in a certain situation (Gadamer 1999a: 63). Hence, it was suggested that the process of knowledge creation through the hermeneutic circle can be understood as an event that changes and develops the basis of the human being in the experience. It was concluded that with hermeneutic approach, the phenomenon of reflective action (Cook & Brown 1999, Morner & von Krogh 2009, Tsoukas 2009) is related to the idea of being conscious of the situation, which means there cannot be certain models of thinking or acting independent from the environment and the other beings in that situation (Gadamer 1999c). Thus, the final conclusion was that the capacity to act in those situations comes from historical experience and lived situations, which provide skills for improvisation (see Yanow & Tsoukas 2009).

Modes of being in the interaction could also be explicated with the Gadamerian view. It was noted that the research on knowledge creation often emphasizes the importance of the mode of encountering when developing new ways of thinking. For example, Tsoukas (2009) has given the central position in his dialogical approach to the ideas of criticality, openness, and self-distanciation. It is highlighted that the idea of a conscious critical subject is present in hermeneutic thinking, which also emphasizes the openness of interaction and a critical approach to everything encountered. It was concluded that the strength of the Gadamerian approach is that it recognizes the meaning of tradition and the common ground of experiences in interaction (Gadamer 1999a, 1999c). Openness is explained through the conceptualization of a human being acting in his opportunities (Heidegger
2006), which is crucial to keep in mind when developing creative action in an interactive situation (see Yanow & Tsoukas 2009).

The main outcome was that the process of knowledge-creating interaction becomes possible in Gadamer’s hermeneutics, while understanding the nature of a human being as capable of understanding his own being: this explains the effectiveness of distanciation and self-consciousness in interaction (Gadamer 1999a: 61, Tietz 2000: 51). However, it was noted that hermeneutic interaction is not automatic, and understanding the way of being is just one possible mode of being. Thus, the interaction described by the hermeneutic circle needs cultivation and conscious action (cf. Budd et al. 2010).

On the whole, the idea of a common ground of understanding in Gadamer’s hermeneutics seemed to offer possibilities for research on knowledge creation in organizations, as the event of interaction at its best can be seen as a fundamentally shared state. This was seen to be related to the emergence of jointly shared knowledge in organizations. However, it was emphasized that it should be crucial to investigate how this kind of state can be reached in an organizational environment. The premises for empirical examination of the phenomenon were also outlined, as it was stated that the shared and open state of interaction should be seen more widely than the way previous research has defined context: according to a hermeneutic and phenomenological view, this ground consists of a unity, where human life and traditions are an inseparable basis for experiencing, understanding, and learning in interaction.

4.3.2 Formulation of Framework II (Study II)

Framework II was developed in Study II to further explicate the interactive event of knowledge creation, especially the modes of being in that event with the concept of play. It was suggested that using the Gadamerian concept of play was not in contradiction with the research of knowledge creation and LIS (see Subchapters 4.1.4 and 4.2.5). Moreover, it was proposed that the idea of Gadamerian play can expand our understanding of the phenomenon of knowledge creation and simultaneously form a coherent entity. Based on the conducted analysis, Framework II was formed to study being in knowledge-creating interaction, seen through the concept of play. It also integrated the research of play in LIS and the research of knowledge creation in KM, which was not in contradiction to the phenomenological orientation (see Figure 7).
Framework II consists of two levels: the micro level of the actual event of interaction and the macro level of the organizational circumstances of that event.

The Gadamerian conceptualization of play provides three dimensions with which to examine knowledge-creating interaction: the 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 was based on the notion of play being both an event and an experience.

The structural dimension of the event of play was formed by comparing the conceptions of play in LIS and in Gadamer’s thoughts, which share the idea of collaboration (Goh et al. 2011, Goh & Lee 2011). However, it was suggested that Gadamerian play can be seen as an event with forms, rules, a shared goal, and the element of collaboration. The temporal dimension of the experience play was formulated to describe how the experience of playful interaction can be understood.
with the notions of authentic being and everydayness. It was underlined that because of the nature of play, there is something special at the beginning, in the moments of deciding whether to participate or not. Thus, it was emphasized that this is the moment we should pay attention to. In addition, the actual being together in interaction was not the moment of objective development, as it is impossible to get hold of. However, it was suggested that the experiences of the encounter and absorption are open for discussion afterwards.

The *dimension of being in play* was formulated by combining Gadamerian ideas with the knowledge creation research analyzed in Subchapter 4.1.4. It was suggested that 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. Thus, the modes of being in play can be described as seriousness, being present, interpersonal trust, commitment, familiarity, equality, openness, criticality, reflectivity, and risk-taking. Additionally, it was argued that the circumstances of play are highlighted both in the knowledge creation research and in phenomenological philosophy, as the roots of the event of interaction lie in the past experiences in the context of work. Furthermore, it was suggested that the 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. The phenomenological approach, however, removes the borderlines between the context and individual human beings in the course of events.

### 4.3.3 Combined Framework III (unpublished material)

Frameworks I and II were developed based on separate literature reviews and analyses, each concentrating on the topics identified by the gaps in the research of knowledge creation in Studies I and II. The most essential features of Frameworks I and II were combined to form Framework III, which was used in the gathering of data. However, Framework III was not used as such in the published Studies IV and V.

In Framework I, the concept of the human being was in a pivotal position, and the premises of studying knowledge-creating interaction were defined as the hermeneutic circle, the construction of the human experience, and modes of being in interaction. The features of the organizational environment were identified on a very basic level, as they were not the focus of Study I. The purpose of Framework I was first and foremost to explicate the premises of understanding the interactive
event of knowledge creation and to establish the hermeneutic phenomenological basis for it. Thus, it was highlighted that the hermeneutic circle is suitable for understanding the process of knowledge creation as a whole. However, in Study II, the themes of being and knowledge-creating interaction were further studied. The modes of being in interaction were especially concentrated on with the help of the concept of play. Consequently, in Framework II, the concept of play was suggested to explicate the very event of knowledge-creating interaction in this thesis, and it thus replaced the more general idea of the hermeneutic circle presented in Framework I.

Thus, in Framework II, the special mode of being in playful interaction was at the center of attention and explicated in detail. Moreover, Framework II was also based on the phenomenological concept of a human being, as it was embedded in the conception of play as a whole. The analysis of the research on phenomenology, KM, and play had more elements concerning the circumstances and dimensions of play and highlighted the features needed for playful interaction, which formed Framework II.

Therefore, as a result of Studies I and II, an integrated Framework III was formed, concentrating on the concept of play (see Figure 8).
Framework III formed the basis for the empirical data collection of the knowledge-creating interaction in Studies IV and V. However, as it was impossible to report the results of the whole analysis of all the elements in Framework III, the empirical studies concentrated on the most essential features of Framework III (see Subchapter 3.5).

4.4 Suggested methodology for studying knowledge creation (Study III)

Studies I and II formed a background for my examination of the methodology of empirically studying knowledge-creating interaction in Study III. It was concluded that the experiences of human beings involved in the process of knowledge creation are in a pivotal position. However, as knowledge creation is an interactive process, it is also something which happens at a certain time and place. Moreover, interacting people have to encounter each other in order to create something
together. This encounter does not have to be physical, as it can happen with help of technological devices; nevertheless, it is always an event in itself. Furthermore, it was concluded that the phenomenon of knowledge creation is always contextual: it happens in a borderless relation to the world. This means that the circumstances of the event of knowledge creation also have to be considered.

The temporal nature of knowledge creation, outlined in Study I, gives a basic structure for the empirical inquiry: there is a need to examine the actual event of interaction, but also, the circumstances as the history of this event. The idea of macro and micro levels of interaction was introduced to help understand the entity of the event of knowledge-creating interaction, based on the notions in Study II (see Subchapter 4.3.2). In this division, the macro level refers to the circumstances and the history of interactions in the community, whereas the micro level refers to the actual event of interaction itself. Moreover, it was suggested that the phenomenon of knowledge creation is to be viewed as experiential, in the sense that the experiences of the human beings are where the actual knowledge creation happens. However, as a temporal phenomenon, it is also an event which can be observed.

Based on the notions of the nature of the phenomenon, it was concluded that the qualitative ethnographical methods would be the most appropriate for studying knowledge creation empirically. It was based on the notion that the process of knowledge creation is intertwined in the everyday life of the working community. Triangulation of qualitative methods was seen to be relevant to get a holistic grip on the phenomenon as possible. It was also noted that the empirical methods developed based on phenomenological thinking should be taken into account (see Giorgi 1979, Moustakas 1994). Thus, it was suggested that the event of interaction should be highlighted in the empirical research on knowledge creation (see Figure 9). Due to the limits of reporting the backgrounds of Studies I and II in the article form in Study III, the framework presented in Study III did not explicate all the dimensions and elements found in Frameworks I, II, and III. However, it is compatible with the more detailed frameworks in this thesis (see Subchapter 4.3.3).
Fig. 9. Structure of the event of interaction as a basis of studying knowledge creation empirically (Study III: 136, Figure 4).

Thus, it was suggested that knowledge creation should be studied on three levels, which all manifest in the event of interaction. The methods of studying these levels were also examined.
First of all, it was concluded that when knowledge creation is studied as an *experiential phenomenon*, multiple stories and interpretations need to be collected from the participants of the experiences. These data can be collected by using interviews, diaries, or surveys. The methods of empirically oriented phenomenology to enhance the openness in data gathering were also emphasized. It was suggested that we can get a deep insight on the experiences, if we take into account the phenomenological idea of a human being and the historical structure of interaction as a hermeneutic circle. This means emphasizing the historical nature of experiences by including the personal history of the participants and their everyday life as part of the interview, in order to understand the meaning of the interactive event in their everyday life. The evaluation of the methods to be used also took the results of Study II into account. In this study, it was suggested that the actual being together during the interaction is not the moment of objective development, but the experiences of the encounter and absorption can be discussed afterwards.

Secondly, it was suggested that *observation* of the actual events of interaction should be promoted in empirical research. Data from the interactive events can also be collected by using video recordings of the event. However, the importance of understanding what kinds of conclusions can be conducted through observation was also highlighted, as observation does not give any information about the experience of knowledge creation as such. However, the examination of the interactive events can make the possibilities of a successful interaction more explicit. The relevance of this kind of approach was highlighted, as in the studies of knowledge creation, the meaning of actual facial encounters has been emphasized, but the question of what actually happens in the discussions is seldom the focus of examination. It was also suggested that the multimodal conversation analysis would be a fruitful method for examining and increasing understanding of knowledge creation (see Subchapter 2.3.3). It should be noted, as Wilson (2002a) has suggested when referring to the phenomenological approach, both the interviews and observational methods can be seen to be based on observation, as interviewees also base their experiences on observing the world.

Thirdly, it was suggested that information on the *circumstances* of the actual event of interaction can be gained through interview methods, qualitative surveys, and observation. Also, organizational documentation provides data about the community and the context.

The results of Study III guided my empirical research process, reported in Studies IV and V. However, it should be noted that I conducted supplements and
correctives, as the research was developed further, and I developed the empirical research methodology in relation to the Joy of Reading community’s development (see Subchapter 3.2).

4.5 Circumstances of knowledge-creating interaction in the Joy of Reading community (Studies IV and V, also unpublished material)

In Study IV, the circumstances related to the nature of the community in particular, which affected the possibilities of interaction and knowledge creation in the Joy of Reading community, were examined. In Study IV, the more explicit features of play were also examined. In Study V, I concentrated on examining the micro level of knowledge creation and focused on testing the concepts of play and temporality of a human being in empirical settings. The studied aspects are outlined in detail in Appendices 4 and 5.

In the next Subchapters, I present the results of the empirical testing of the proposed framework. I also present results, which were not published in Studies IV and V. At first, I present the results of the knowledge creation process and the role of interaction in it and outline the features of the community affecting knowledge-creating interaction in JOR. After that, I proceed to present the results of the examination of the temporality of a human being and then the results, concerning the dimensions of play. I also describe the aspects which were found to be relevant in the knowledge-creating interaction in JOR, but were not included in the theoretical framework.

4.5.1 Developments in the Joy of Reading community during the pilot year (Studies IV and V, also unpublished material)

During the pilot year, several such developments could be identified, which can be seen as outcomes of the knowledge-creating interaction. The Joy of Reading community succeeded in creating new knowledge related to new ways to work, new ways to interact and collaborate. In addition, the community members developed several ideas into projects. This become evident on the basis of the examination of the goals of the community explicated in the documents, interviews, and interactive events in the meetings (see Subchapter 4.5.5), as well as the achievements of the community, which were discussed in the interviews (Lib2,
Tea4, Tea6, Tea2), and also partly outlined in the documents the community provided.

The community was able to achieve its main goal, which was to implement the plan written by librarians to establish a systematic collaboration between schools and libraries in the city (D38). This plan was discussed in the meetings of the community, and it was gradually implemented during the year in the schools of the community. Even if this plan was not jointly developed in the community, it was commented on and taken as a starting point of the collaboration in the community. (O5, O10, O14, OD.) The sub-communities developed their own projects in schools during the year such as joint reading sessions with different age groups, book fairs for the whole school, and reading circles with parents and pupils. Also, totally new ways of collaboration emerged, as some schools conducted book talks between each other by Skype, and joint book diplomas between the schools were planned. Finally, the community provided a required report on the developmental work and its outcomes for the Joy of Reading organization. In the interviews, it was confirmed that the developed ways of working were established in the sub-communities, and there were plans for further development (Tea8, Tea3).

Thus, it was concluded that it was relevant to examine what the role of knowledge-creating interaction in the developmental process was. In this process, information and knowledge gained during the period was used in various ways, also in the interactive events in the meetings of the community observed and videotaped in Studies IV and V. The results of the developmental projects of sub-communities, as well as plans and ideas, were presented in the joint meetings, which was one of the main purposes of the meetings. In Study IV, it was concluded that the process of knowledge creation was intertwined to the phenomena of information and knowledge sharing and use. This process is illustrated in Figure 10.
Even if the community reached its goals, during the period, there was slight change in personal relationships. In the interviews, no one said that they would have established deeper and more informal relationships within the whole community. However, professional relationships developed, as some of the teachers developed activities together, and there was a wish to collaborate in the future. Within the sub-communities, the collaboration was tightened, and the participants got to know each other better as collaborators, but the sub-communities did not see any need to continue the teamwork on this level in the future (Tea2, Tea8). However, there were several ideas and practical developments in progress, especially to enhance sharing information and knowledge within the sub-communities such as new technical solutions and folders with tips and advice to share the ideas with others (Tea7, Tea6, Tea1). In addition, the interviewees emphasized the meaning of the pilot year to their professional development, as new approaches were learned and developed in collaboration (Lib4, Tea4, Tea7, Tea9). As one of the participants described: “Even if I have always acknowledged the importance of reading, now I notice that I think about it even more than before and think about the ways to enhance the joy of reading in my work.” (Tea9.)
4.5.2 Features of the community affecting knowledge-creating interaction (Study IV, also unpublished material)

In Study IV, parts of Framework III that were used to study knowledge creation were used to examine the elements affecting interaction in the Joy of Reading community (see Appendix 4). In this Subchapter, I also provide additional results, based on the information gained in the interviews. The capacity to create new knowledge within the community was examined in terms of the contextual and interactional elements according to the theoretical framework (see Appendix 4). There were several elements which could be found to enhance knowledge creation in the Joy of Reading community. On the other hand, there were also elements which could be seen to create problems.

The diversity of the community members was found to be both supporting and limiting the interaction in the process of knowledge creation. Even though in the community, professional diversity was highlighted, as the members were from different organizations and represented different professions, the development of new ideas about the means to enhance the joy of reading in schools happened mainly without librarians, since they were not present in the discussions, where the means to enhance literacy in the schools were discussed (O9, O11, O14). However, the organizational diversity between the seven schools proved to have a positive impact on the work: the schools involved developed a new kind of community, and some future collaboration was established. Moreover, there was variation among the teachers, as there were principals, teachers of Finnish language and literature, and class teachers present in the meetings. Also, the director from the library was present in the meetings. Thus, the knowledge basis of the participants varied, and they could give new viewpoints to the discussions. In addition, even if the librarians were not included in the discussions in the sub-communities, they provided help and information to the schools, as they used the library’s services in their projects (Tea2, Tea1, Lib2, Lib4).

In Study IV, the element of familiarity within the community was also examined and was seen to vary a lot. The community as such was created at the beginning of the research period, and the members did not form any network or community beforehand. The library and the schools had sometimes interacted really intensively before, as well, but there were no shared guidelines before the project. The participants met in the first meeting, but being professionals in the same area, there were some relationships existing already. Most participants did not know each other professionally beforehand; only the members of individual
organizations had a shared working history. This affected the nature of interaction, as the participants had to familiarize with each other first as collaborators. Familiarity played a role in interactive events, especially within the Joy of Reading group of the individual school observed. Knowing the others’ way of working and interacting enabled discussion and decision-making, despite the limited time (O9, O11). In the meetings of the community as a whole, this kind of support gained through the mutual history of interacting was impossible.

The role of equality was seen to effect the interaction in the community, as some of the teachers were on a permanent contract and shared a working history together, whereas some were substituting teachers, and thus, did not have a similar position within the community (O9, O11). This was seen to have an effect on the nature of interaction in the community: on the one hand, the knowledge base of the community expanded; it got new members, who could give new insights to the discussions. However, on the other hand, as the community was continually changing, they had to spend time on getting acquainted and repeat issues to keep everyone on track. However, in the meetings, the changes in the personnel responsible for the pilot project was seen as a benefit, as it helped sharing information and knowledge with a wider network. In addition, the presence of the principals and the library director was seen to have an effect on the interaction in the meetings of the community, as they could share information on the issues concerning, e.g., the development of the curriculum planning in the city. In addition, they were also working directly with the issues of reading and its promotion, so they shared the same goals as the other community members. However, they were also aware of their role and wanted to give space to their subordinates in the interactive events of the community as well as in implementing the plans in the sub-communities (Tea3, Tea5).

In Study IV, it was suggested that the most important factor affecting the capacity to interact and create new knowledge within the community was flexibility, meaning the capability to use resources like time and money. In the interactions, time played a big role, as it limited the interaction both in the meetings and in the everyday life in the community. In the Joy of Reading community, especially in schools, there was very little time for informal communication, as teaching and independent work in the classrooms took most of the participants’ time. Also, in the meetings, the lack of time was continuously brought up, and interaction was sped up, as the time for the meetings was short (O5, O9, O10, O11, OD). Knowledge creation and the creation of new ideas to enhance literacy inevitably suffered from this limitation – there were few thorough and critical discussions before the
decisions. It was also highlighted that in the Joy of Reading group of the individual school observed, the other factors, such as sharing a work history together, supported keeping interactions and discussions short but effective because people understood what to do from even a small hint (V2, V4). This feature was further examined in Study V, in relation to the dimensions of play.

4.6 Previous experiences and future prospects as a basis for playful interaction (Studies IV and V)

In Study V, the temporality of a human being was examined by analyzing how the element of time was present in the interactive events, in the use of past experiences, but also in the understanding of the future as an open possibility. It was concluded that the community’s capabilities to create new knowledge were tightly connected to the previous experiences of the participants, which formed a basis for playful interaction. Also, the participants described the process of developing ideas in terms which come quite close to the hermeneutic understanding of knowledge creation in interaction, where previous knowledge forms a basis for finding a shared understanding. However, particularly the analysis of the conversations suggested that the participants were able to simultaneously see the future possibilities which shaped the creation of new ideas. Three tendencies of using knowledge were emphasized in the Joy of Reading community: 1) the importance of the Joy of Reading training days and ideas from other communities, 2) the acknowledgement that novelty comes from new combinations and contexts, rather than finding something totally new, and 3) the role of participants’ experiences as professionals and in their private life.

First of all, most of the participants traced the beginning of the creative process of developing ideas to the meetings or Joy of Reading training days, where others presented their ideas and projects. For example: "Actually, I got most ideas from training days, (...) but the meetings between our pilot schools were also rewarding, we have changed ideas, these practical things..." (Tea1) and: "it [the role of the pilot community] has been big (...), our meetings have been rewarding, I have always had good ideas from them, and then, they have helped me figure out what our aim is...” (Tea7) This principle was explicated by the Joy of Reading team in the training days (O1, O2, O4) as well as in the first meeting of the community by the chair of the meeting: “Everyone understands that we don’t have resources to begin creating something new. We have an idea that we put into practice this next presentation, which is the library’s project that they have done for us. But
additionally, we could think about something in these other Joy of Reading communities we could take and use in our schools.” (P1, V1).

In some cases, the participants developed the ideas further by themselves (e.g. Tea1, Tea8, Tea7), but in many occasions, the shared information formed the basis for conversation, either in the meetings or in other events, where the participants started to develop the ideas further together (Tea4, Tea1, Tea7, Tea2). The analysis of both the interviews and videos suggested that the importance of joint meetings and face-to-face encounters was highlighted, as those were the only times the participants had time to concentrate on this issue alone. Thus, even though, e.g., the presentations from the Joy of Reading training days were shared by e-mail to the members of the community, there was a practice to present the main content of the training days in the meetings as well, both in the meetings of the whole community (O5, O10) and in sub-communities (O9). The information gained from these presentations functioned as a basis for interaction, as new ideas were formulated in discussions during the presentations, as in Example 1.

Example 1:
TEA1: (Looks at the computer and the slides, gives a presentation) So, then there was (...) school and the seventh grade, (...) they had science books. The aim was to provide science cards, which were collected as books which were circulated at home, and they had also a competition of the cover [picture]
TEA10: (Has been nodding for a while, raises her hand and interrupts Tea1) [Yes,] this springs immediately to mind that it would be good to start at second grade and use the ICT classroom (...)  
TEA1: (Nodding) Hmm... (Points at the computer) Well, this was based on that they sought information from books
TEA10: Yeah, it could be [combined]
TEA2: [Yeah,] ICT strategy
TEA10: Yeah, so that it would be done in the class
TEA1: Yes, yes, right, so it would be done in [there]
TEA10: [Yes, done] with the computer.
TEA1: Yes. (1,0) So, it could have just a couple of points
TEA10: Yeah, just a couple of points
TEA1: [What animal and distinguishing marks]
TEA10: [Very short, just to become acquainted with the computer]
TEA1: Yeah, that could be it (0,5)
TEA2: Tea3 said just that in (...) there is a ICT plan which goes to the level of grades, (...) so, it would be good to start to think about what if we linked these two, as we are criticized that we don’t use these tablets. So, if we took it as a part of the curriculum plan, so that we think about Joy of Reading and how to implement our ICT strategy simultaneously, so
TEA1: Yes, yes, (starts to look at her computer), well, this was nothing special, but a nice idea... (Continues with the presentation)

In this sequence, one of the teachers is showing a presentation about the Joy of Reading training day she has participated in, as one of the listeners interrupts the presentation when she gets an idea. All the participants present join in the discussion, sharing their knowledge and experiences. One of the participants describes this further in the interview: “…our brainstorming started, so that every time someone was in the training (...), we brought ideas from other Joy of Reading cities. So, the suit cases of a Sipoo school were presented on Tampere training days, and from there came the bags, and they did books with Book creator, was it in Oulu, and we decided to take science books, and the table on the wall came from somewhere... (Tea2) In the interaction, the information was used to develop an idea, which would suit to the context – the experiences of the pupils and the methods used before shaping the idea: “So, we thought about what would be suitable, thinking about what our pupils can cope with, and what they wouldn’t have done earlier. So, it was also so, that many things had already been done, so we decided to do something different” (Tea2).

This kind of process is seen in the next example, where one sub-community is listening to a presentation and simultaneously developing ideas for their community.

Example 2:
TEA2: (Looking at the screen, where the slide is) Well, then there have been ideas about a joint moment for reading, reading godparents, reading grandmothers,
parents committee, reading circle, reading groups. There are some ideas which have already been [done]

TEA10: [Yes, it is so]

TEA2: (Looking at the slide) So, we already have functioning reading groups as we speak, the reading circle has not yet been founded, but there was a thought that now, as we have this “Schools on the move” project, and the breaks last for 30 minutes, (starts looking at Tea10), so could it be that someone would read a storybook, so it just occurred to me that (starts looking at Tea1) I could take some regular supervision of the breaks, and it would be always at half past, and I would read a book, and it would go on, of course, there has to be peace for [reading]

TEA1: [Yes]

TEA2: But what would it be [then]?

TEA10: [That] reading circle functions so that at least our colleague (name) has used it, in the last period (tells how it has been done...)

In this interaction, previous experiences both from the past and future projects played a big role. Also, experiences of colleagues were used, combined with the information shared using the slideshow. Nevertheless, the analysis showed that the possibilities seen were limited to the reality of the everyday life of the sub-communities.

One participant described how the development of one of the ideas was linked with various experiences like this: “Theatre Europa 4 visited our school, was it in April, and did Puss in Boots, and simultaneously, a shadow theatre was here (...), so I got the idea that we’ll start doing shadow theatre. And during those days, Tea4 was in that Joy of Reading training (...), and there was this communal writing, and then, as I enthused to Tea4 that I’m starting to do a new story based on Puss in Boots and kids can invent it, she said that she has this communal writing, so let’s do it together” (Tea7) In another case, the discussion was conducted in a meeting and dealt with participants’ previous experiences of writing a blog, resulting in delegation of work and a new way of collaboration:
Example 3:

TEA1: I have never written a blog, this is totally new, so I am interested if it would inspire me
TEA10: I have written one blog
TEA2: Yeah
TEA10: With our colleague (name) immediately, so one text onl-
TEA2: You see, our colleague (name) can, just to inform Anna
TEA10: [Help]
TEA2: Last year, [we] had (...) a project and there, we had to write a blog, and our colleague (name) started to do blogs, (...) so, writing that kind of free text distresses me
TEA10: [Me too] (laughs)
TEA2: So, I delegated it. Tea10 was my working partner last year, so Tea10 wrote the world’s loveliest [texts],
TEA10: [I wrote] only one (laughs)
TEA2: Well, it was lovely, and then, if I wrote one, it was so clumsy
TEA1: [Well, I]
TEA10: [There were a couple of pictures]
TEA1: (...) I would like to have a partner to do that with, so I can start writing that
TEA10: Hmm...
TEA1: Someone, so that there would be a point of view, so that I could discuss
TEA10: [Hmm...],
TEA2: [Yeah, yeah]
TEA1: Already, when doing it, you [know]
TEA2: [Yes],
TEA1: That what will we write and what is the point of view, like that
TEA10: So, yes, it is quite easy to do it together
TEA1: So, I could just-, well, in principle
TEA10: [Yes]
TEA1: [I can] be engaged in that, if I get a partner
TEA2: [Tea10], you get to be your partner.
TEA10: Yes, (laughs)
TEA1: Yeah, good
TEA2: And our colleague, (name), will teach us how to do it for sure

In this sequence, the participants’ previous experiences are shaping the process of knowledge creation, as they share their experiences of writing a blog in a previous project and develop a common understanding of how to write it in this project collaboratively. In addition, Tea2 shares knowledge about a colleague, who can help them further. This aspect of the experience of colleagues helping and offering additional information if needed was present in many interviews (Tea7, Tea2, Tea8). It was connected with the idea of the community being open and safe, aspects handled in the next sub-chapter.

However, even if there was a high motivation to participate in the Joy of Reading program, and the participants shared the worry of the reading skills of the youth, they did not have the need to create something totally new or special. Most of the participants underlined that while the issue of reading is important, this project was only one small part of their work, and thus, they could not do too much work in finding something totally new: “Besides this project, we had a couple of other projects, so Joy of Reading was not the only one. Almost every teacher thought that Joy of Reading shouldn’t cause any additional work. They were ready to hear ideas, and they participated in the theme days, but reading was equal to other things...” (Tea9) and: “…we did not set any high aims, as the everyday life in the school is what it is, and you know that if you plan something huge, it won’t happen, because this Joy of Reading is just one small part of the school, but we have so much other things.” (Tea1)

Remarkably, most participants emphasized that they did not need any additional information in the process, meaning that they did not seek out information on the Internet or libraries (Tea1, Tea8, Tea2, Tea6). They did not usually discuss the topic outside the workplace, even though there were some exceptions (Tea4, Tea7). Instead, the participants felt that the topic of reading was so close to their everyday life, that they did not have the need to seek extra information. Thus, one of the starting points of the process of creating new knowledge was the acknowledgement of previous knowledge and experiences of the participants, both as professionals and private persons. It was described by one of the participants: “I think this is so down to earth, this whole project, so concrete
and easy, that I didn’t have to struggle, just dig a bit, like what we have done, and what could be done differently. What would motivate a bit more.” (Tea1) In the meetings of the community especially, the tendency to draw conclusions based on the experiences of being a parent was obvious, as the participants mainly used their own children as a point of reference when discussing about the reading habits of children (see Example 4).

Also, the connection to the work done previously was important: “The school year started by planning and while doing it, we realized that we had been doing this Joy of Reading work for ages, we just didn’t have a package for it, no written idea file.” (Tea9). One of the participants described the process quite explicitly: “...when I went to the meeting in the first place, I thought that there would hardly be anything ground breaking, (...) like, there is not a single person who would be the one to do it, we have been doing these for ages, but now, we again (...) believe that this time, we “add our own flavor” a bit better, (...) and everyone can bring her own spices (...) from the systems we already have....” (Tea8). In this description, the experience of using previous knowledge is highlighted as well as the idea of uniqueness provided by the participants.

The analysis indicated that the conception of creating new knowledge was linked with the everyday life of the participants, and they based their collaboration on what was possible and what was new in those circumstances.

4.7 The dimensions of play and knowledge-creating interaction in the Joy of Reading community (Studies IV and V)

In Study V, the analysis of playful interaction from the whole data suggested that though it was difficult to arrange time for face-to-face meetings, they were the main form of interaction (Tea6, Tea8, Tea1, Tea7). Playful interaction can be seen to emerge in the pressures of the circumstances, like a lack of time and routines of everyday life in the organizations, and with the support of previous experiences both from the work life and private life of the participants. On the whole, the participants gave rich descriptions of the meaningful experiences of interaction and knowledge creation and were able to describe several cases, where they felt that they had created something new together with the Joy of Reading community. When analyzing the video materials, there were also several sequences identified, where the participants were involved in an enthusiastic discussion.

The analysis of the previous knowledge and future prospects in Study V allowed to suggest, that they, together with the features of the circumstances, form
a basis which inspires participants to discuss and create knowledge in the interactive events. Next, I present the results of the analysis of the elements of play found in the data, following the idea of play having structural, temporal, and experiential dimensions. However, it should be noted that while these dimensions reveal important issues concerning the possibilities to understand knowledge-creating interaction, play as a Gadamerian concept is not totally suited to that kind of structural analysis. Thus, the data were also examined more inductively. The segmented analysis shows that the dimensions form an entity and cannot be taken out of context. In addition, all the dimensions are intertwined, as can be seen in the next Subchapters.

4.7.1 Rules and goals of play (Studies IV and V)

The rules and goals of the Joy of Reading community were examined in Studies IV and V, related to the Gadamer’s concept of play. In Study IV, the goals and rules of the interaction were studied based on the observational and video data. In Study V, the results gained in Study IV, concerning the rules and goals of play, were supplemented by the interview data and a more detailed analysis of the interactive events. This analysis supported the results by emphasizing the meaning of goals and rules for the playful but effective interaction in the meetings of the community. In addition, it highlighted the process of forming a partly joint understanding of goals and rules and indicated that there were also moments of uncertainty and ambiguity in the process.

Goals

The goal-orientedness of all the interactions and actions in the community’s meetings was highlighted in the results. The goal of the community as a whole was formulated and written down in the application form, when the community wanted to join the Joy of Reading Program (D38). It dealt with developing collaboration between schools and public libraries as an official part of the city’s basic education’s curriculum. One purpose of the meetings was to share information on this collaboration, based on the planning conducted in the regional library (Lib3, Tea2, Tea5, Tea3). Thus, it was concluded that this information was disseminated, rather than mutually shared (O5). The other more formal goals, such as reporting the activities conducted within the pilot community, were not discussed in the meetings of the whole community. Towards the end of the period, the community
had a new, common and quite concrete goal, as it had to produce a joint presentation for the last meeting of the community, where people from the other schools of the city were invited (V6, V7). The goals and a joint understanding of the priorities shaped the topics of information and knowledge used, disseminated, and shared in the events.

The interaction of the community was focused on both long-term and short-term goals. The joint understanding of the goals of the community was seen to be important, and most of the interviewees thought that the goal of the community was to implement the library’s plan (D36). In addition, the participants had some personal goals, related to the projects in schools (Tea6), new teaching skills, or some changes to the routines (Tea1). An overall goal, which was also shared, was to enhance the reading skills of the youth. The starting point for collaboration in the Joy of Reading community was the worry about reading skills and motivation, especially for boys: “… the background information, the concern, the statistics, they only confirmed what we had been thinking [about the low reading skills of boys]” (Tea8) and “… I have already been worried for years and talked about boys not reading, and their writing is poor, so this matched this project, and I thought we have to start this, and I was really eager to do this myself” (Tea6) In addition, all the participants were personally excited about the topic, as they shared the joy of reading and would have wanted to teach it to the pupils.

In the descriptions, the joint understanding of the meaningfulness of the discussed topics was a major factor contributing to the emergence of playful interaction: “they [meetings of the sub-community] went really well, and everyone was, like, so good that you came up to that, and nobody put anyone down, so it just somehow went so that one says something, and the other something, and it went on all the time, one continued. And so, this is an inspiring topic, you know, reading, and you could see that we liked it a lot.” (Tea6). The ultimate goal of promoting reading for boys was also a common topic in the joint meetings, and it provoked enthusiastic discussions like in Example 4. In this meeting, the members of the organizing team were present, and their participation is marked with JOR1 and JOR2.

Example 4:
TEA8: Well, I have to say (...) that I was listening to the doctor, (...) and she asked the same essential question, which I tried to ask in our first meeting, that is: why don’t the children read? (...) So, does it help that we
only increase the input, or should we think really seriously about why 20% of boys are in danger of becoming marginalized in this society just because they are not at all interested in reading. (...) So, she thinks that there are some power relations related to this, and it can be that reading is not allowed to be enjoyed among boys (...). So, I was listening to her with my mouth open!

OTHERS: (Laugh)

TEA11: Yes, she talked about how there are peaceful boys and dynamic boys, and how they are related to reading. (The others start to raise their hands)

CHAIR: Let’s share the floor. Sorry, continue

TEA13: Oh, sorry, I was just thinking that it is perhaps so that a cool boy doesn’t read, it is a bit nerdy to read

TEA8: [Yes, partly it is not]

TEA13: [Yeah, partly]

TEA8: (...) So, as you know, it is important to have the opinion leader in the class, and you know that the teachers are really good at manipulating

CHAIR: Let’s go in order: Tea2 and Tea11

TEA9: So, I have to give a comment. I have three children: a boy and two girls, (...) and the girls read like maniacs and the boy doesn’t. Yesterday, I discussed with him about why he doesn’t read, and he told me that he has nothing to read, the library bus visits their school every week, and the boy does sports night and day, and the only thing he reads is ice hockey magazines, which he knows by heart

TEA14: Sounds familiar

LIB4: I would have [many suggestions for him]

TEA9: [Well, my daughter] said that the library is full of books, and the boy asks that where they are (...) JOR1: There you could use the information seeking of novels, if he would find that key

TEA9: Then, I took that boy with me to the library when there was this game day, and he was, like, in the library
there are other things also, not just books, and I was, like, OK, now, the library is at least a nice place, but I started to think that what if there was some kind of a boys’ library, or boys’ library day, because there are so much books for girls, like Konsta books, there is a boy as the main character, but girls read them
CHAIR: Then, Tea11
TEA11: I am a mother of an older boy, he is 25 now, and exactly the same things happened then when he was in primary school (…) (continues by listing important features related to boys and reading). So, here are some points, and then these electronic possibilities to read, would they be suitable for boys? I don’t know, but it is great that we have started to develop these together
CHAIR: So, Lib4
LIB4: Yeah, on behalf of the library, I can say that we have books for all these problems (…) (starts telling the options). I have to say that I had a book talk at the library, and there were a lot of boys (tells how one of the boys revealed that he had read a book twice). So, boys also get excited about books, if they are the right kind of books, and we talk about them a bit differently
TEA11: I have to say to this that Jaakko is 25 and reads Remes and all and reads to his own children and is excited about reading, so
LIB4: That’s it
TEA11: So, he has found his own world, but in school, he didn’t
CHAIR: Yeah, then
JOR2: Yes, this is true that the boys have their own worlds, like sports and gaming are that world, and what is linked with playing or being on the internet, it interests boys, as everyone, but we can say that boys especially, as we had this kind of an unofficial survey about this in Oulu, and (…) boys say that they would like someone to tell them what good books there are, and
now, this is what we have been using, Aleksi Delikouras and Neard [books]
LIB4: [Yes, those books] were popular this morning
JOR2: So, they are an example of how a Youtube figure becomes a book (…), so I can tell my own experience. I have a son, who is 17, and reads occasionally, and Neard is the one he reads spontaneously, if it is on the table. So, this is it, if the right worlds, which are the everyday life of the boys, are combined
CHAIR: TEA9 had something [to say]
TEA9: So, I am continuing Lib4’s comment. I can say personally that these book talks are marvelous, we had one in the autumn and (tells what happens and how often they have visited the library ever since). (…) So, boys also find reading [interesting]
JOR2: And also, science books
TEA9: Also, science books
CHAIR: So, we are on the way to what we have been doing, so let’s move to that topic. This question of “why” is constantly in our minds, and we debate about it on a daily basis

In this long sequence, there are many elements manifesting the goals of the community, as well as excitement providing a playful conversation. First of all, the starting point of this sequence is the experiences of the Joy of Reading training days, where Tea8 along with some of the participants have listened to an exciting presentation about boys and power relations. After the speech, the others start to discuss so eagerly, that the chair is needed to divide the turns. In the following turns, the concern of boys is shared, as some of the participants share their personal experiences of their own sons not reading. This is followed by a librarian, assuring that the library can help in these situations. In the following turns, the concern turns into a discussion about the means and possibilities seen by the participants. In the end, the chair tries to get the conversation back on track and reminds everyone about the next topic, suggesting that this discussion continues in the sub-communities.

Even though the community had a shared goal, which was also written down in the application of the community (D38) and presented in the first meeting of the
community, it was not clear to everybody on the practical level. Thus, one important function of the interaction in the joint meetings was to reassure and ease the anxiety experienced by the participants, especially in the early stages of the process, when there was a bit uncertainty concerning the ideas. One participant described the meetings as rewarding in the sense of peer support when the creative interaction was not functioning: “... so, that as the fall started slowly and soon it was Christmas, (...) so, now we shall really start doing something more concrete. So, at that moment, it was good to hear what the others had done, like, how you have started the project, and so...” (Tea1) and “I have liked this, of course, in the beginning, it was a bit gray, like, what is this, and how big the things are that we have to do, but then, one realized that we don’t have to do anything big, like, we don’t have to invent the wheel again, like, it is just new ideas and everyday life” (Tea7).

In addition to the shared overall goals, it was seen as important to understand the goals of each meeting as such: “we always knew what the aim of this day’s meeting was, so we were really effective, three effective women...” (Tea6). As one of the participants described how she prepared for the meetings: “well, of course, one is aware of the day’s topic, like, what we are supposed to do, and I have a memory stick with me, nothing else (...) Well, I look at what Tea2 has written in the invitation, like, what the theme is, and then, I am ready to go.” (Tea1) and “I think teachers are like that, I have a habit of- if I am going to some meeting, then I read things through beforehand, so I don’t go there just to sit empty.” (Tea2).

It could be concluded, that while the long-term goals helped the participants get excited and discuss the topics experienced as important, the understanding of the short-term goals, like the topics of a meeting, affected the discussions differently: they gave motivation to discuss, plan, and make decisions, as well as hurry, in order to get things done and discuss all the issues. The element of the lack of time, for example, was repeated constantly, and in the meetings, it was not criticized but taken as a goal which shaped the rules accordingly. However, this did not inhibit the playful interaction totally, but created quite quick and heated discussions, where the limited time was well-used. Still, it was concluded that it had an effect on the outcomes of the community – they knew what was possible in these limits and what was not beforehand. Consequently, the knowledge of the possibilities, analyzed in Subchapter 4.6, functioned as a basis for setting the goals on the practical level in the Joy of Reading community.
Rules

Understanding the goals can be seen to be related to the rules of interaction: shared goals set the possibilities for playful interaction to happen, and rules are needed for the interaction to be focused and based on joint understanding. When analyzing the experiences and events of meaningful discussions, two ways in which the interaction was supported by the rules of the community were found: there were rules shaping the interaction and the contents discussed in the meetings. In all the meetings of the community, there was an agenda shared in advance by e-mail (D2, D7, D21, D29, D31). In addition, there was a chairperson steering the meetings. Thus, there was a pre-understanding of the nature of the meetings, which did not totally support open discussions. However, the possibility of discussing, asking, and commenting was constantly reminded by the chairs (V1, V3), but often without leaving time to comment. The next example illustrates how the rules concerning time were formed in the interaction.

Example 5:

CHAIR: Thanks, well, so time flies, and I had the aim to be finished at three fifteen, so I hope it will last, and we still have two issues: the library’s news and Tea2 will show us the blog. (…) So, what would the library have at this point?

LIB4: Well, shortly, as time flies

OTHERS: (Laughing)

In this example, the role of the chair is highlighted, as she reminds the participants to keep talks short, as the goal of the meeting is to handle so many issues. Finally, this rule is repeated by the next presenter. However, the rules of the meetings were not stable, as the chairs changed, and in different meetings, the way of conducting the interaction varied (OD).

In principle, the participants had implicitly understood the nature of the events and the preferable way of interaction, as the dialogues were conducted efficiently, and the consumption of time was taken into account. However, in some occasions, there was a need to negotiate these implicit rules, as seen in Example 6, where a monologue of one teacher is interrupted by the chair of the meeting.
Example 6:

TEA8: (...) We have an impossible mission here, they have a bit more resources than we have here, but despite that [we would have lost the Winter war if we had been thinking about that]

CHAIR: [Despite that], which library do you [visit?]

TEA8: [Please, for a moment], let’s say that you are quiet (1.0), this is the starting point, by which I mean, do we stimulate the interest of the pupils? (Continues to explain the difficulties of the circumstances)

In this sequence, a teacher is giving a presentation of the Joy of Reading plans in their school, and unlike the other presenters, he is not talking about the plans and ideas as such, but has started by talking about the goals of the Joy of Reading program as a whole. Meanwhile, the chair of the meeting has been listening to the speech quietly for a while before unsuccessfully trying to ask about the more practical issues. After this, the teacher continues to talk about the principles of the project and finally says something about the plans of his school. Before the sequence, there have already been three really short presentations from other schools. Thus, it could be argued that they have established a right way to present and act in the limited time available for the meeting. This example, illustrating the negotiation of the rules, also reveals that in some cases, the understanding of the best ways to reach the goals varied (see Subchapter 4.7.2). However, the rules were mostly not discussed or debated in the meetings.

In addition to the rules for interaction, there were some implicitly shared rules which shaped the content of the interaction that are also illustrated in Example 6. This was related to the fact that the participants had formed a joint understanding of the level of collaboration from the beginning: they shared the idea of creating ideas in the sub-communities, not together as a whole community. In addition, there was no need to develop the library’s project further: “...everyone just tells about how their own project is going, everyone had some kind of development idea, and we did not talk much about the library’s project, so it was only updated in the meetings, and then, we have been on our own”. (Tea6) Thus, the goals of the sequences where the participants get carried away by the discussion in the joint meetings were not to develop their ideas of the projects, but solving some acute problems, developing new ways to work as a community, and sharing their opinions on literacy and joy of reading, as in Example 4. In addition, the cases where the
discussion was carried away to some extent dealt with topics related to the daily work of the participants, as they shared their experiences and gave tips to others (V5). However, there were practically no discussions concerning topics that would not deal with the issues relevant for JOR.

4.7.2 Modes of being in play (Study V)

The examined modes of being in play were seriousness and being present in the course of actions, openness, and criticality. All these features could be identified from the data sets. However, in many cases, I also identified a lack of these features.

Seriousness and being present

Seriousness in Gadamer’s terms meant taking the issue and the event of interaction seriously by being fully present in the event, concentrating on it completely (Gadamer 2004). Thus, it was related to the goal-centeredness of the interaction, which I have examined in Subchapter 4.7.1. The analysis of the observational and video data in Study V suggested that the overall mode of being in the joint meetings of the community was first and foremost shaped by being present and seriously engaged in the course of actions (O5, O10, O14, O20, O21, OD). The interactive events during the meetings were goal-centered and dealt only with the aims of the community. The participants concentrated on the face-to-face interaction and did not do anything else simultaneously. The intention to be fully present in the situation was emphasized, and no disruptions were observed (O5, O10, O14, O20, O21). This was regarded as self-evidence: “Teachers are like that in this community as well, they don’t visit Facebook, (...) teachers are so work-oriented that if the issue is to work, then we work and don’t go somewhere else.” (Tea2). This could be seen to be related to the fact that the time for shared meetings was rare and valuable, and the participants also acknowledged that these were the only moments for doing work related to JOR.

The participants used mobile phones and tablets during the meetings only for sharing information within the community or making notes (O11). In many cases, the use of a Tablet was initiating the interactive sequence, like in the Example 7:

Example 7:

TEA1: (Talking about a project presented in a training day she has attended, presents slides): ... so, they had
this kind of a library path (lifts her gaze from the screen), it was a nice idea, (...) this is worth looking into (looks at the slide on the screen)

TEA10: (Looks at Tea2’s tablet) mm, so they have all the materials on the net

TEA2: (Looking at her tablet, Tea10 looks also, sitting beside her) I just googled that here (reads aloud): a primary school’s library path [for]...

TEA1: [Isn’t that nice, isn’t that nice]

TEA2: This is really similar to ours, which support us with its content [entirely]

TEA1: [Yes, Yes,] yes, so nothing really new, but it is a very functional tool, this library path, to transplant directly to us (starts to look at the computer, and read the next slide).

In this example, the participant used a tablet to gain additional information about the topic, and this information stimulated the discussion. By using the device, limited time could be also used effectively. However, if the capacity of being present in the course of actions is examined in relation to the rules of the community reported above, the tendency of speeding up the conversation and emphasizing the limited time can be seen to restrict the total presence in the moment.

**Openness**

Openness was observed as the possibility to discuss in the meetings as well as openness of interaction in terms of no fixed goals (Mitchell et al. 2009, Gadamer 2004, von Krogh 1998). In this sense, the openness of the interaction was also restricted in the joint meetings, as the community had a fixed goal from the very beginning (O5), and also, the goals of the meetings were set by agendas. The time and resources limited the openness of discussions, because there were no possibilities to have deep discussions on the decisions (V1, V2, V3, V4, V5), which could be seen as a hindrance on the level of the whole community and the development of its goals. Despite these circumstances, in the joint meetings, there were several moments when the interaction was flourishing openly, as the participants could discuss the general goals of the community, like promoting reading, and also, the difficulties they had previously encountered in their working
life. Example 8 shows how the discussion is opened up by the comments of the participants, which create further discussions and some solutions in the end:

Example 8:
LIB3: *(Has been telling about the library’s plan for the schools with a slideshow)* So, the same content is for the fifths and sixths
TEA15: Do you have a learning plan for all of these?
LIB3: Almost, yeah
TEA11: May I say something to that? (...) So, you have written so nicely that “easy and nice reading” to the second-graders and learners, and lovely themes after that, and I hope that it is remembered that (...) for every grade, we also need to have presentations of the literature written in plain language
LIB3: Yes
TEA11: It is in many cases that when the reading skills are low, the dislike grows, as the texts that are provided are so far from my skills (...) 
LIB3: That is a good comment, and two things: you asked if we have plans for every class. So, the book talks are not planned, as they are so subjective (...), so the speaker creates a package of books after interviewing the teacher, so it is really important (...) to remind the speaker, as he does not necessarily remember this aspect (...). But that was a really good supplement
LIB4: Yes, I would add that it is really good to know about this issue. One does not always necessarily remember that there should be books with plain language also. And then, there is this issue that there are not necessarily those kinds of plain-language books which would interest, for example, teenagers.
TEA16: That is exactly our problem, they are not [available]
OTHERS: [Yes, hmm]
LIB4: [Yeah]
LIB3: The publishers should hear about this
TEA11: In particular, we ask that every age group should have some books with plain language (tells about different reading groups)

LIB3: As a librarian, it is so that as there comes a secondary school class... (shares her experience of a pupil who wanted an easy book for school work and her uncertainty if it is acceptable for the teacher) We don’t always know if they really need it or they are just lazy

TEA11: It is probably just that they need it

In this example, Tea11 comments on the plan of the library and shares her experiences of teaching pupils with learning difficulties. This comment is taken well by the librarians, but the second librarian continues by complaining that there are not enough good books. This promotes a discussion considering youth literature, a theme which is continued in the next meetings. In this case, the sequence is finished quite suddenly by the presenter, who goes back to her slides. This is a tendency which occurs frequently in the meetings where slideshows are used (V1, V2, V3, V4, V5, V7).

The question of how to use the limited time shaped the interactions of the community, and from this point of view, the capacity of being present and open in interaction comes into new light: practices were created which enabled the participants to be engaged, even though long discussions were not possible: “We are all the kind of persons who are just going through the agendas. I often say that we have to decide these three things now, and if we are on topic number two, we can jump into topic three and decide it. (...) So, we have not decided this kind of way to go beforehand, but it suits these persons” (Tea2). Thus, the topics of the discussions often changed in the course of actions, but the community was able to decide and handle several themes simultaneously (V2, V4).

However, there were also experiences of a lack of openness, in the sense that not all had the chance to take part in the discussion: “...occasionally, I did a lot of work of sharing knowledge with the other schools. But, when the moment of sharing was at hand, I didn’t get the opportunity to present our school’s work. At times, I felt that we small schools were overshadowed by the large school...” (Tea9) On the other hand, some experienced the openness and eager discussions as non-productive in some occasions: “when you have a lot of pressure, you get excited about something else, so that you don’t have to look at that bad thing.” (Tea8) and “sometimes I experienced that the meetings were a bit dispensable, (...) In some
meetings, we repeated ourselves.” (Tea4) However, the experience of non-productive discussions could also be seen productive in the long run, as one of the participants described: “It is the way women operate. (...) They go around the issue and make a fuss over it, and small things become hugely important, but in fact, (...) by doing so, they simultaneously contemplate in their minds what is essential.” (Tea8) These statements suggest that the idea of how to interact and why, and how to use the limited time productively, was reflected on and reasoned by the participants individually, and they could analyze it afterwards, as they had an understanding of the whole process and the goals achieved. However, these topics were not discussed in the meetings (O5, O10, O14, O20).

Criticality

Criticality could be seen as giving space to different opinions related to the openness examined above. In addition, it can be seen as explicitly critical commenting in the interactive events. (Gadamer 2004, Mitchell & Nicholas 2006, Mitchell et al. 2009, Tsoukas 2009.) In the interaction of the community, critical thoughts and different opinions were rarely expressed. However, there were cases, like in Examples 4 and 8, where a critical comment aroused vivid conversations. In Example 4, as well as in most of the others, however, the most usual way of being in the interaction was such that the comments echoed he other participants. The lack of open criticality towards the others’ comments was not related to the experiences of the atmosphere of the meetings, as the participants underlined that they felt the atmosphere was safe for them to open up and discuss freely (Tea1, Tea6). Thus, it was concluded that it was more related to the goals of the community and the lack of resources to really invent something totally new, which would have required questioning the state of affairs more (see Subchapter 4.7.1).

Nevertheless, in Gadamer’s (2004) conception, criticality first and foremost means questioning one’s own prejudices and actions. The participants could give analyses of their own habits and actions in the events, which reflect criticality in a hermeneutic manner: “I have been keen on saying things, and I tried not to offend (...). The teachers have to work with their personalities, so you have to be strong somehow, quietly or loudly strong.” (Tea8), and “Did I at all manage to take advantage of their ideas, or am I the kind of person who has his or her own ideas which I promote, and others’ ideas don’t fit at all?...” (Lib1) In all of these cases, the participants underlined personality and its meaning in the interaction and also described how they consciously tried to act differently in the discussions. In
addition, the descriptions of interaction in the community often included definitions of the professions of teachers and librarians having some characteristic features which affect the nature of interaction. This can be seen to be related to the idea of everydayness, which inhibits great changes from happening, but which is also useful to the participants, as they can find ways to cope with difficult situations.

All in all, there were also opportunities to enter into a playful interaction in the limited amount of time, as in Example 9:

**Example 9:**
TEA10: So how about the third- and sixth-graders?
TEA2: Third- and sixth-graders?
TEA10: They fall through the net
TEA2: It doesn’t matter, there is a number of ideas Let’s think, if we would link them, and the sixth-graders would read to the third-graders, and the third-graders would write stories to the sixth-graders, so only our imagination is the limit
TEA11: Are the sixth-graders really their peer buddies?
TEA2: Yes, they are peer buddies on top of everything else
TEA11: So, it is also [a peer buddy activity]
TEA1: [That’s really good]
TEA2: [So, write] that the third and sixth (says to Tea10 who is writing it down): peer buddy stories
TEA11: And what if it wouldn’t be just once, but every two weeks?
TEA2: Do you know what would really be nice? If we would do storybooks with Tablets or book creators.
TEA10: Or science books
TEA2: Or science books
TEA10: Science books, because this is an age where it would be good to start practicing how to search for information, and also the sixth-graders
TEA1: Yes, something, [an animal or a plant]
TEA10: [There would be repetition]
TEA1: Or a fairytale, I don’t know
TEA11: Do they have a space theme in third [grade]?
TEA2: No, it is in the second grade
TEA10: But, you know, [because]
TEA11: [Science book]
TEA2: Let’s give them a challenge that they have to do
a science book, a book on animals, a storybook, and we
give them a deadline
TEA10: And they can decide for themselves, if they want
to do four or eight
TEA2: Yes, exactly. And then, (...) we take the ICT class,
as we have not been there this semester
TEA11: Exactly
TEA2: So, we get that done [also]
TEA10: [Yes, it is just this], I think that we could
underline [the science book] (does her notes
simultaneously)
TEA11: It [science books] starts to interest kids at
that age
TEA10: So, they would learn something [the third-graders]
TEA1: [So, how about] the eighth and ninth grade? (the
discussion moves to that)

In this final example, the participants of one sub-community are planning the
projects, and even though they have a tight schedule, they manage to create an idea
based on their pedagogical knowledge and the possibilities created by the school’s
practices. They manage to combine the idea with the practices of the school, as
their idea supports the peer buddy activities and also their need to use the ICT-class.
Doing science books is emphasized by Tea10, and she constantly comes back to
the idea. She gets a lot of support for that idea, but simultaneously, the option of
doing storybooks is kept alive, and finally, the community is able to make a
decision, which is accepted by all, as Tea1 goes on and changes the topic. This
sequence is a good example of how many themes and orientations are present in
the course of a discussion, and how small openings, like Tea2’s first comment in
the beginning of the sequence, as she says that there are plenty of options, can give
inspiration to a playful interaction. In this case, Tea10’s opening words also gave
the chance for others to agree and move to another issue.

This example illustrates how all the phenomena studied in this research are
intertwined in the same discussion, as the participants use different kinds of
knowledge, have ideas for the future of a certain kind and shared goals, discuss with certain rules, are able to be seriously present in the discussion, and act openly, critically, and yet effectively in the discussion, which is also seen in other Examples.

4.7.3 The shared state of play (Study V)

In Study V, it was suggested that in the essence of Gadamerian play, there is the notion of stepping away from the everydayness to the authentic mode of being together. As the conception of authenticity does not fit the analytical examination as such, the temporal dimension of play was examined in terms of the experiences of meaningful encounters and shared understanding, which manifest themselves in the analysis of the structural and experiential dimensions in next sub-chapters. Even though there were several descriptions of meaningful encounters in the data sets, it should be noted that the descriptions of the everyday life of the community indicate that the daily routines and schedules gave little room for doing things differently, in relation to the working methods and collaboration in the communities. In that sense, there was a need to stay in the mode of everydayness, as the participants could not change the schedules or have long conversations whenever they wanted (Tea6, Lib4). Thus, the importance of face-to-face meetings was highlighted.

Additionally, there were some features of a shared state of knowledge creation (Tea1, Tea4). When describing the origins of their ideas, the participants in many cases could not trace back to who was responsible for the idea: "...it is really difficult to remember who said what and how it went, at least I [invented] the bag thing. (...) I thought it would be good, but I don’t know at all if it came from me or from somebody else" (Tea1) and: "well, it is hard to limit it, as it is kind of ‘headwork’, so the ideas come suddenly; they can come on my free-time, like, hey, that could be it. So, it [the meetings of the sub-community] is the place where we have written the ideas down and cultivated them together, and the ideas can come whenever, wherever. I cannot define it more precisely." (Tea4)

In addition, as the work of the community progressed, certain tendencies could be seen. In the first meeting, the emphasis was on sharing knowledge between schools and libraries, and the interaction was often opened with questions and comments (V1). In the following meetings, the emphasis was more on the ideas of the schools and overall worry about the reading skills of the pupils (V3, V5). As the period was ending and the community was about to have a joint presentation of the developed projects, the interaction was even more informal and at times a bit heated, as the community tried to negotiate the content and form of the presentation
In these discussions, it was obvious that the participants had a shared knowledge base about the ideas and projects developed in schools as well as the library’s plan in particular.

4.8 Aspects emerged in the inductive analysis of the data (Study V)

The conducted analysis of the data inductively brought up five main categories, which supplemented the analysis: excitement, effectivity, trust, leadership, and everyday life in the organization (see Appendix 7).

This analysis was seen to reflect the Gadamerian conceptualization in parts which handled the excitement, trust, and everyday life in the organization well. However, there were two themes which were seen to supplement the analysis. The modes of being in meaningful interactions were related to two major features: effectiveness and leadership. The experience of play was tightly connected with the effectivity and productivity of the community. One of the participants describes the community in her own words as follows: “So straightforward and open, active, productive” (Tea1), and when asked how these manifest in the community, she continued: “well, we got things that were on the agenda done (...), so we had 20 or 30 minutes, and we got things done in that time. We thoroughly discussed, and everyone in that group got to tell their opinions and thoughts, every member of the group was heard and it was kind of an effective group.” (Tea1)

The participants needed the feeling of things moving forward, as the process of creating new ideas and implementing them was in many cases a bit disorganized, and the concrete goals of the community were missing. “Well, in the beginning, we had trouble getting started. (...) It was a bit vague, like, what is this and what is presupposed from us? Like, help, do we have to invent the wheel again? But after the trip to Oulu [training day], it just dawned on me that I don’t have to be afraid of this or be nervous, this is just normal work.” (Tea7) Thus, the participants emphasized the effectiveness and productivity of the community: “Well, we have been really vigorous (...), seasonal, sometimes more quiet, sometimes we have been working hard, so we think we have accomplished things.” (Tea4)

Being effective in the work and achieving concrete goals was related to the experiences of being able to trust others: “... there is one nice thing, which I respect in my colleagues, if we agree on some role differentiation and who does what, it is nice that everyone has done their part, as sometimes there are people who promise much, but don’t do anything. But in this group, everyone has done what was agreed, so also, because of that, the collaboration was felt to be so easy and uncomplicated.”
(Tea1) Also, the previous experiences of working with the library were experienced to increase trust (Tea1, Tea3).

Having clear roles in the group was also related to the leading of the community and its interaction. “... *We have kind of done the work together, but Tea6 has been responsible for this in the end. So, I felt like I had an equal role in this. I have had my voice heard and so on.*” (Tea7), and “*Well, with Tea2’s leadership, it was easy. Tea2 drove this forward effectively, and it was easy to be there. We shared the jobs and clearly agreed on who does what....*” (Tea1), and: “*Well, Tea6 has been the boss from the beginning, (...) and Tea4 and me, we have been the second bosses, or ‘boss’ is a wrong word. But we have done the work together*” (Tea7), and “*The work in the community was quite disconnected and disorganized. Luckily, the teachers of (...) school kept the things together*” (Tea9). Thus, it can be concluded that there should be a balance between free and uncontrolled interaction and a more structured way of being together.
5 Discussion

The aim of my thesis has been twofold: a) to present a theoretically consistent conceptualization of knowledge creation as an interactive event by developing a framework for studying knowledge creation as an event and experience of interaction and b) to test this framework by examining the interactive events where knowledge is created in a multi-professional and multi-organizational community in a methodologically coherent manner. I have pursued to introduce the hermeneutic phenomenology of Hans-Georg Gadamer: his idea of a hermeneutic circle of communication and his conceptualization of play (Spiel) as a mode of being together in the event of shared experience. Moreover, I have aimed at combining the hermeneutic ideas of communication by Gadamer with the phenomenological conceptualization of a human being by Martin Heidegger.

In this chapter, I discuss how I have achieved this aim by discussing the main conclusions as a response to the research question 5: How should the suggested approach be modified, based on the empirical study, to increase the understanding of the phenomenon of knowledge-creating interaction and its empirical examination? I reflect the findings of the empirical testing in Studies IV and V to the theoretical framework suggested in Studies I, II, and III. Then, I describe the contributions of my thesis to practice, discuss the evaluation of the validity of my study, and outline the main limitations. Finally, I present ideas for future research.

5.1 Theoretical contribution

My thesis contributes to the research of knowledge creation by suggesting a framework for studying interaction for knowledge creation with phenomenological philosophy. In addition, my thesis increases the understanding of the possibilities of the phenomenological approach in the field of KM in general as well as the relations between knowledge creation and other knowledge processes such as knowledge use and sharing.

5.1.1 Understanding the premises of knowledge creation and Knowledge Management

My thesis has contributed to the understanding of the conceptions in Knowledge Management by suggesting how the phenomenon of knowledge creation could be approached without using the concepts of tacit and explicit knowledge (see Day
I have examined knowledge as a communal and shared phenomenon, and in its way, this thesis contributes to the discussion of the topic of understanding knowledge as a concept and knowledge processes in the field of LIS (e.g. Buckland 1991, Wilson 2002b, Hjørland 2004, Day 2005, Zins 2006). I have strived to examine how the presuppositions of the research on knowledge creation affect the nature of the research. My starting point was to examine how the definitions of the concept of knowledge are related to the presuppositions of the nature of the human being. The examination of the research of knowledge creation illustrated that the concept of the human being is usually left undefined, even if the use of the concept of knowledge would require that. Moreover, I concluded that the research of knowledge creation is still strongly attached to the idea of tacit and explicit knowledge, even if the emphasis has gradually shifted towards the conception of knowing. I have argued that by these conceptions, the cognitive approach is supported, even if the emphasis has shifted towards a more socio-cognitive understanding.

The basic assumption in knowledge creation research is focused on the idea that knowledge is created in the interaction, where previous experiences of the participants form the basis of joint understanding. This also reflects the presuppositions of the human being by describing the ideal modes of being and experiencing. My thesis has illustrated how these are connected to a quite hermeneutic world view without explicating it and without analyzing the connections of that kind of assumption with the concept of knowledge, which emphasizes the individual as a separate object. Furthermore, in knowledge creation research, experiences are handled as rather private and individual background elements, which are reformulated in the event of interaction (e.g. Cook & Brown 1999). After examining the definitions used to describe interaction, it was concluded that even if they are varied and move at different levels, they describe encounters between two elements that generate something new. The encounter can be inside a human being as a movement between forms of knowledge and knowing (Cook & Brown 1999) or between two people conducting a concrete conversation (Tsoukas 2009). Moreover, interaction can even be connected with the idea of communities developing as a past and present conception of the world encounter (Morner & von Krogh 2009). My analysis in this thesis has indicated that the elements of the hermeneutic ideal of interaction presented in Study I are implicitly present in all those conceptions.

Moreover, the examination in Study II shows how the different ways to describe a productive way of interaction in knowledge creation research are
connected with the idea of a human being and experience. I analyzed the
descriptions of the human factors enhancing knowledge creation in detail and
suggested that the descriptions cover elements describing the organizational
context (e.g. Kelly 2007, Sankowska 2013, Richtnér & Åhlström 2010, Mitchell et
al. 2009, von Krogh 1998), human relationships in the working community (e.g.
and the subject’s own behavior and actions (e.g. von Krogh 1998, Mitchell &
Nicholas 2006, Tsoukas 2009, Topp 2000). These elements come close to the
descriptions of hermeneutic communication and play, as they also deal with the
issues of how to be in an ideal relationship and how to create an atmosphere, where
open and trusting interaction is possible. However, in my thesis, I have suggested
that the hermeneutic phenomenological approach gives a more defined structure to
the event of interaction as such. Moreover, it gives explanations to the
presuppositions of the benefits of being, e.g., open and critical in the knowledge-
creating interaction.

5.1.2 Phenomenological framework for studying knowledge-creating
interaction

Theoretical framework

My thesis contributes to the knowledge creation research in the field of LIS by
proposing a framework for understanding and examining knowledge-creating
interaction with hermeneutic phenomenology. The framework developed in this
study gives the means to understand the basic concepts and their relations, but also
suggests how existing research on knowledge creation can be combined. In Study
I, a theoretical Framework I for exploring knowledge creation based on the
construction of the human experience in interaction, the structure of the interactive
event, and the modes of being in the interaction was suggested. This was enabled
by the notion of a human being as a point of departure of the exploration of
knowledge creation. In Study II, the modes of being in interaction were scrutinized
in detail, and play as a Gadamerian concept was proposed to deepen the
understanding of the ideal way to explicate the event of interaction. Framework II,
developed in Study II, differentiated 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. In Studies III, IV, and V, a combination of these
frameworks was used, and the core aspects of the integrated Framework III were examined.

My thesis has introduced the basic concepts to understand being and human beings in a phenomenological manner. These are the temporality of being, a shared nature of being, experience as Erfahrung, the capacity to understand one’s own being, the future as an open possibility, and the division of authenticity and everydayness. With these concepts, the mode of being in an interactive event of knowledge creation becomes more understandable. In addition, the conceptions offer a basic structure for developing knowledge-creating interaction in practice, as well as developing the means to examine it more thoroughly. The phenomenological conception of the human being differs considerably from the human being presumed in recent knowledge creation research, which reflects more socio-cognitive views of a human being, whose mind and body are separated (see also Värlander 2008a, 2008b). In the analyses conducted in this thesis, the phenomenological view provides a conceptualization of a human being and interaction which is not limited by the division of mind and body, the so-called Cartesian split. As this conceptualization of a human being does not collide with the conception of interaction and is not connected with the idea of knowledge as an asset inside the human mind, it gives a coherent basis for examining the phenomenon empirically with appropriate methods (see also Budd, 1995).

In Study I, it was proposed that the basic structure of knowledge-creating interaction could be understood in terms of a hermeneutic circle conceptualized by Gadamer. In Gadamer’s hermeneutic circle, the conscious and critical attitude towards the event of understanding and the constant examination of one’s own presuppositions and experiences are extraordinary (Gadamer 1999a: 59–60). With this notion, the hermeneutic nature of the knowledge-creating interaction can be acknowledged. In Study I, the key elements of hermeneutic circle, such as anticipation, correction, and the reassessment of expectations (Gadamer 1999a: 57–58) were also presented. Even though they were not examined deeper in this study, as I concentrated on the concept of play, they could also be used in future studies to explicate the process of forming joint understanding in the event of interaction.

In Study II, Gadamerian play was proposed to explain the modes of being in knowledge-creating interaction, describing how elements like openness and criticality, which are promoted in knowledge creation research as enhancing KC, can be understood with hermeneutic phenomenology. The concept of play provides the means to understand both the event and the experience of interaction. It provides elements concerning the structure of the event, such as rules and goals,
which support the interaction, if they are shared and understood by everyone (Gadamer 1999d). In addition, goals give play its orientation to the future. Play was also described in terms of its temporal nature, as it can be understood through the idea of everydayness and authenticity. For play to happen, there have to be encounters, where the move away from the everydayness is possible. This feature highlights the meaning of the circumstances, as well as the historical experiences shaping the possibilities. Most profoundly, Gadamerian play defines the modes of being in playful interaction. Gadamer describes play in terms of openness, seriousness, being present, and criticality, and these conceptions are justified by the hermeneutic phenomenology explicated in Studies I and II.

In this thesis, I have suggested, that with Gadamer’s conceptualization, the power of knowledge-creating interaction is emphasized, as play can lead to true change and learning if taken seriously. The conceptual analysis of the concept of play and its use in LIS suggests that Gadamerian play has similarities to the ways in which play has been used in the studies of learning and information literacy (Halttunen & Sormunen 2000, Markey et al. 2011, Gumulak & Webber 2011), where playing has been seen as a way of collaborative learning. The phenomenological conceptualization of being makes these claims more understandable and coherent, as it explicates the depth of the phenomenon of play and how it is related to the true change of human beings and their being. 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. In addition, Gadamerian play can be seen to be related to the studies of play in the field of game studies (Lee 2009, Sánchez et al. 2012, Stenros 2012), where the motivations to play are often studied, and the experiences of playing are especially under investigation. As opposed to that kind of playing, Gadamer’s play is not detached from real life, on the contrary.

The phenomenological explication suggests that both the human being and interaction obtain their structure from the three temporal dimensions – past, present, and future – which clarify the event of knowledge creation and provide possibilities to study this complex phenomenon in a detailed manner, as explicated in Study V. It should be noted, however, that the suggested approach, though based on the explication of a human being, does not pursue to emphasize the human subject as such, on the contrary, it provides the possibility to concentrate on the processes and events of knowledge creation as a whole (see Gadamer 1999e). This provides the possibility to focus on the issues which need to be developed in the organization or community (Gadamer 1999a, 1999b, 1999c).
Finally, as stated by Budd et al. (2010: 273), phenomenology provides possibilities to understand the ideals and lived experiences of human beings experiencing and perceiving their world. The acknowledgement of the ideals and realities concerning knowledge-creating interaction is one of the benefits of the suggested phenomenological concepts, which give possibilities to understand all kinds of interactions in the organizational contexts.

**Empirical testing of the framework in the Joy of Reading community**

The importance of the notion of ideals and reality (see Budd et al. 2010) has been highlighted in the empirical testing of the suggested theoretical framework in the Joy of Reading community. My detailed analysis in Study V was concentrated on successful knowledge-creating interaction, as I have strived to examine the conceptions of the temporal nature of being and play. However, one major part of the work has been to analyze the interactive events as a whole as well as the community members’ own descriptions of the events as one part of their everyday life. The Playful interaction could be seen to emerge under the pressures of circumstances, like the lack of time and routines of the everyday life in the organizations, and with the support of previous experiences and future prospects (see Figure 11).
The first step of my empirical testing was to examine the role of the circumstances in supporting knowledge-creating interaction in the Joy of Reading community. There were several elements which could be found to enhance knowledge creation in the Joy of Reading community. On the other hand, there were also elements which could be seen to create problems. Some of these elements were quite static, like the backgrounds of the participants, the location of the organizations, and the structure of everyday life in the organizations in general (such as schedules in schools, rotation of work in the library). The analysis in Study IV shows that the contextual and relational elements, such as the diversity of the participants, familiarity, equality, and flexibility of the circumstances affected both the amount of the interaction and the nature of it. Though the fact that the community consisted of members from several organizations was in principal a good thing, in practice, it caused challenges for interaction. If ideally there would have been more
interaction and knowledge-sharing between schools and the library, in practice, it was not possible due to pressures of everyday life in the organizations. The fragmented nature of the community affected the way interaction was formed right from the beginning. The empirical testing in the context of this study indicates that face-to-face interaction was preferred, and its meaning was highlighted in the circumstances, where interactive events as such are limited. Moreover, the study indicates that in the event of interaction, sharing information and knowledge had an essential role within the community, and it was related to creating new knowledge.

The most important feature affecting the interaction in the Joy of Reading community was a lack of flexibility of the circumstances. Knowledge creation needs time (cfp. Richtnér & Åhlström 2010, Mitchell et al. 2009). In particular, knowledge-creating interaction understood as Gadamerian play emphasizes that openness and criticality in interaction mean having time to thoroughly discuss, question, and seek optional alternatives (Gadamer 2004, 1999d, see also Tsoukas 2009). My analysis has shown that the potential to develop something new is related to the amount of interaction and discussion. However, limited time means that the interaction has to be focused, and it is achieved by implicit rules of what to emphasize and what to let go. Also, goal-centeredness can be seen as linked with time as a limited resource. This, in its part, shaped the interaction and the modes of being in the event: seriousness and the tendency to be present in the event was seen as a way to effectively use the time available. Thus, using information and knowledge in order to create new knowledge was related to the goals of the community.

The second step of the empirical testing was to examine the interactive events and the participants’ experiences of these events with the phenomenological concepts suggested in the framework. The results of the empirical Studies IV and V show how the phenomenon of knowledge creation is based on the temporal nature of a human being, understood via hermeneutic phenomenology. In the Joy of Reading community, the experiences from the Joy of Reading training sessions were in a central role, as the participants developed their ideas for the projects. However, they also used their own experiences of being a parent, as well as a professional, in the interactive events. They were also keen on using their knowledge about the future plans and expectations of their organizations. Conversely, they did not usually search for additional information, as they relied on the idea that the topic of reading was already familiar to them. This forms a contradictory basis for knowledge creation, as the community was not eager to
develop entirely new ideas. However, they could use both their past experiences and future prospects in their context very effectively, considering the circumstances. This was illustrated by the analysis of the conversations. The results confirmed the assumption that new knowledge is created in the interaction, as past experiences are reflected in the discussion with the others (Cook & Brown 1999, Tsoukas 2009, Morner & von Krogh 2009, see also Nonaka 1994). However, the importance of the future prospects is underlined in the phenomenological approach suggested in this study, and the analysis of the interactive events confirmed this notion. However, based on the analysis, it could be argued that the potential to see and grasp future possibilities are dependent on the flexibility of the circumstances. Thus, to support knowledge-creating interaction, the emphasis should be placed on future prospects, and the past experiences should be questioned more.

The elements of play (goals, rules, everydayness, encounter, absorption, seriousness, being present, openness, and criticality), as understood from the phenomenological perspective, gave the means to analyze both the content and the form of interaction. The events of interaction of the community were shaped by openness, seriousness, and being present, as the participants were able to concentrate on the essential issues, and discussions were to some extent open-ended. However, the limited time and other organizational features could be seen to hinder the playful interaction, as the community had very little time to discuss together (see Solomon 1997a). The analysis indicated that in those circumstances, the shared understanding of the rules and goals was really essential. However, due to the lack of time, the participants did not focus on negotiating or questioning them. The interactive events of the community were shaped by the tension between open and free discussions and the need to manage the interaction in order to get things done in the limited amount of time. This negotiation was implicit in the sense that it was not explicitly discussed, but it was identified by the analysis of the discussions.

Thus, the means provided by the concepts of openness and criticality were fruitful, as the places where the discussions were playful and the places where they could be detected and analyzed. Therefore, it was important to analyze the video data as a whole and also see it as an entity. Furthermore, the analysis of the modes of being in play in the Joy of Reading community suggests that the community was able to be absorbed into a playful interaction in the circumstances, and the limited time in some occasions also promoted playful interaction. In addition, the participants highlighted the importance of the effectiveness of interaction and emphasized the meaning of leadership. This can be seen to have an effect on the emergence of playful interaction, as the participants could not waste their time on
everydayness-like encounters. Getting things done gave motivation to the participants, as they were working in the middle of the open-ended process, which did not have any readymade guidelines.

5.1.3 Framework and the suggested approach re-evaluated

The theoretical framework proposed in this study was for the most part suitable for examining knowledge-creating interaction empirically. The different elements and conceptions of the framework gave multiple ways to approach the event and experience of interaction empirically. However, some of the features, such as the temporal dimension of being in play, described with the means of absorption and authenticity, are such that they are not as suitable for empirical examination. However, they can be examined in relation to the everydayness, which means that the emphasis of the examination should be on the everyday life and encounter possibilities in the organizations. On the other hand, the openness and criticality in interaction in particular are such phenomena, and they could be even more thoroughly examined and explicated in the conversations (see also Tsoukas 2009). Those phenomena, combined with the notion of the openness of the future, should be emphasized in knowledge-creating interaction.

The framework suggested in this thesis was tested in a multi-organizational and multi-professional community. The features of that community were unique, as the community has its own history, and the ways it organized its work were dependent on unique circumstances. In that community, a lack of time and a shared place for interaction in the everyday life of the participants were in a pivotal position and shaped the nature of the interaction. (See also Solomon 1997a.) As the time for interaction was limited, the role of an efficient leader was emphasized. In addition, the goals of the community were set so that there was no need for longer, developmental discussions in the joint meetings of the community. Thus, the suggested framework was seen to give means to understand different aspects of knowledge-creating interaction, but not all dimensions were as visible in the empirical data such as criticality or openness of interaction. Instead, effectivity and productivity of the interaction were highlighted.

Thus, the elements of leadership and effectivity should not be added to the framework as they are, because they are so closely attached to the limited time available for interaction in the community. However, their meaning should be further studied by testing the framework in other contexts and by examining their relations to the nature of hermeneutics. The results imply that the participants act
and interact in possibilities visible to them and develop means to cope with the circumstances in cases when really open and authentic being is not possible. Thus, it is important to understand the phenomenological idea of a human being proposed in my thesis, to get a grip of all the different possibilities of the modes of being in interaction. As such, however, the importance of leadership and productivity can also be seen as reasonable from the point of view of the phenomenological approach, as they also emphasize the role of a shared goal and rules of play. When striving to understand the nature of a knowledge-creating interaction, an important question is then the balance between freedom and limits, an issue noticed widely in the field of knowledge creation research (Richtnér & Åhlström 2010, Richtnér et al. 2014). In the Joy of Reading community studied in my thesis, this balance was continuously negotiated in the interactive events, as the participants strived to create a joint understanding of what issues to concentrate on and what to let go.

As such, the methodology I used in this thesis, proceeding from the conceptual analysis of the phenomenon of knowledge creation to finding the appropriate methods for the empirical study, has provided a good basis for the study of knowledge-creating interaction. In previous studies, the importance of examining interactive events which promote knowledge creation has been emphasized (e.g. Tsoukas 2009, Yanow & Tsoukas 2009). However, examples of how to conduct such research have been few. The framework developed in this study gave a good basis for comprehensively understanding the process of knowledge creation in interaction as well as the guidelines for data collection and analysis. The empirical study was conducted by gathering and analyzing multiple sets of data, which gave a detailed understanding of the interactive events in the studied community. After the empirical testing, a modified Framework IV could be formed (see Figure 12).
In Framework IV, all the elements included in Framework III are present (see Subchapter 4.3.3). However, based on the testing of the framework, the elements are divided differently, to emphasize the elements of play and to enhance the empirical examination of interaction with the proposed methods. Thus, the elements concerning the relationships between human beings are combined with the elements concerning the circumstances in the organization, to allow the examination of the different features affecting the emergence of the playful interaction. Also, the elements of organizational and interpersonal trust, safety, commitment, and risk-taking, which were not included in the empirical testing, are present in the framework (marked with a dash line), to allow further research to elaborate these features. In the future, the relations of this framework to the existing body of research, especially concerning organizational and interpersonal trust, (Cross et al. 2001, Bligh et al. 2006, Huotari and Iivonen 2005) should be explicated.

In addition, the phenomenological approach highlighting the temporality of the participants’ being and the interactive events as part of the whole everyday life of the participants could shed light on the knowledge-creating process. From the
methods used in this study, the focus is shifted away from the individuals, as the interaction is viewed as a joint accomplishment (see McKenzie 2009, 2010, Day 2011). However, this aspect should be studied more in the future to avoid highlighting the individuals in the empirical study of the phenomenon (see Subchapter 5.2).

Finally, based on the empirical testing, as well as the phenomenological approach examined in this thesis, I suggest that when studying knowledge-creating interaction with the proposed framework, the examination should be kept open to the uniqueness of the research object and to the world affecting the whole entity. This would be in line with the whole idea of Gadamer’s hermeneutics. This could be achieved by using research methods which support the openness of the research process, such as ethnography or action research. With these means, the phenomenon can be understood in its wider context in relation to the possibilities and limitations also created by the society (see e.g. Allen et al. 2013). The overall significance of the framework developed in this thesis is in the way it describes the basis of knowledge-creating interaction with the phenomenological approach and gives means to understand the nature of the phenomenon.

**5.1.4 Connections between knowledge creation and information behavior**

This thesis has also explicated the relationships between knowledge creation and other knowledge processes in organizations such as knowledge and information sharing and use. My study contributes to the understanding of the connectedness of these phenomena and also provides the possibility to acknowledge the uniqueness of knowledge creation among other phenomena. The event of interaction has been illustrated in relation to knowledge or information use and sharing in Studies IV and V, where the members of the studied community used different kinds of knowledge and information in the process of creating new solutions to achieve their goals. My thesis has illustrated how the discussions in the meetings of the studied community can be used to analyze the process of knowledge creation connected with other activities and processes of information behavior. Consequently, this thesis contributes to the research of information behavior as the phenomenon of knowledge creation is illustrated to be connected with the phenomena of knowledge and information sharing and use.

In my analysis, previous knowledge about the others’ way of working and interacting played a major role in interaction in the Joy of Reading community.
Additionally, information about what the others know shaped the content of information and knowledge shared and used in the interactive events. Thus, competent interaction is contextual and depends on the previous experiences of the participants, including their organizational background. The notion of the personal value of information by Taylor (1986) is highlighted in the studied context and is related to the goals of the community. The analysis suggested that the values and goals of the community have to be shared in order to succeed in the limited time for interaction. To understand this phenomenon, the Gadamerian idea of hermeneutic interaction and play as a shared event has proven valuable. My analysis has illustrated how important it is to investigate organizational information behavior, practices, and interaction in the natural context to understand the limits and possibilities of creating new knowledge. In this, the understanding of the dynamics of interaction within the community is emphasized (see Tsoukas 2009).

From the viewpoint of creating new knowledge, my thesis has illustrated how information and knowledge are used as the community proceeds from preliminary plans to concrete actions. Thus, I have suggested that knowledge and information use and knowledge creation cannot be separated but are intertwined as a phenomenon. In Study III, I discussed the different ways to define the conceptions of knowledge and information use and sharing (Savolainen 2009) and asked if the phenomena are in fact just sharing and using knowledge or information. Furthermore, I asked if in communication acts, we can observe and analyze only information, be it speech or action, and referred to the differences of understanding the concepts of information and knowledge, as well as the concept of a human being behind these concepts. I have suggested in Study III that through longer periods of gathering research material and following the knowledge processes in the communities further, developments and changes in the community and its members’ experiences can be detected. Thus, knowledge creation can be viewed as a phenomenon of its own. However, knowledge creation as an experience and especially as an event is tightly connected with other information and knowledge processes and should be studied jointly with these processes, in order to gain a more thorough understanding of how new knowledge is created. These notions can then be taken into account by combining both the experiential and the observable aspects in empirical research. I have also suggested that knowledge creation should be studied in the field of human information behavior, along with organizational information behavior, not solely in the field of knowledge management. The research conducted in KM could offer the means to understand human beings in
information processes more profoundly, especially when understood phenomenologically, as in this thesis.

5.2 Methodology and methods for studying knowledge-creating interaction

The phenomenological methodology I proposed in this thesis is related to the studies of organizational knowledge creation, as it acknowledges that many of the suggested features to enhance knowledge-creating interaction can also be found from the hermeneutic descriptions of authentic being together in conversation and play. However, the view suggested in this thesis offers a consistent explication starting from the concept of a human being, followed by the explication of how the concept of interaction is to be understood. The framework developed in Studies I and II provides a starting point for an empirical exploration of the process of KC. First of all, it was suggested that knowledge creation should be explored on two levels: on the macro level, meaning the circumstances which enable knowledge-creating 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 thesis has indicated, knowledge creation 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 thesis is that this view explicates knowledge creation in detail as an event of play. It also provides the means to examine the events of interaction using observational methods.

The framework is based on the notion of the temporality of being and human beings. This notion deepens the understanding of the phenomenon of knowledge creation as well as shapes the ways knowledge creation is examined empirically. It is important to understand that the event of interaction when knowledge is shared, used, and created in a working community is not isolated and should not be studied as such. By acknowledging the historical experiences of the participants, as well as the situation in a wider context of the everyday life of the participants, the purpose and meaning of the interactive events can be examined in its fullest sense. In addition, the notion of the unity of the context and the human being has an effect on studying knowledge creation, as it underlines the importance of studying the phenomenon in its context. It should be noted that the features affecting the interaction vary in each community, and thus, it is important for the researcher to
get to know the community he or she is studying. The phenomenological research orientation emphasizes this, as it acknowledges the unique nature of being, shaped by the past experiences and future prospects as well as the present moment where the past and the future are also present.

The phenomenological approach I proposed in this thesis pays attention to the actual events of interaction and shows how information and knowledge are used, shared, and created in these events. It is important to understand the possibilities and limits of studying knowledge creation in general. The approach suggested in this thesis emphasizes the fact that interaction is an experience which is personal in the sense that every human being has her own history of experiences, but as being as such cannot be understood individually, the experiences are also shared and open. In addition, the shared nature of being together in a knowledge-creating interaction has effects on its conceptualization theoretically and its examination empirically. Studying the interactive events illustrates how knowledge creation and other knowledge processes can be understood as shared events, where all the participants accomplish their goals together by discussing and developing new ideas.

In my thesis, the events of interaction were examined with the help of observations and video recordings. These methods still offer rich possibilities to deepen the examination, the ethnographical approach in particular could be used to study the everyday life in the organizational communities deeper. The use of video recordings gives us the possibilities to examine and understand the knowledge and information processes in the events of interaction. The empirical study of the Joy of Reading community gave an example of the way of working in a community, where most of the actual development and knowledge creation happened in the actual events observed and recorded. The methods of analyzing video materials especially could be further developed to increase understanding of the conditions which support knowledge-creating interaction in working communities. In particular, conversation analysis and discourse analysis could be used to study the discussions further. Examples of this can be found in some studies in the field of LIS (McKenzie 2009, 2010, see also Solomon 1997b).

Studying interaction in the Joy of Reading community gave an example of some possible elements affecting the knowledge-creating interaction in the community. Different elements, also acknowledged in the field of the research of KC, could be identified to have an effect on the capacities to interact in the community. The study of these elements could be useful and could give us a basic understanding of the possibilities of the communities in general. However, it should be noted, that it is also important to keep other options open to see, what is relevant
in the researched community. As in the case of my thesis, the elements of time and locations shaped the nature of the interaction in the community as well as the nature of the everyday life in the schools. With the methodology proposed in this thesis, this element of uniqueness is emphasized. Having video recordings enables the researcher to develop his or her understanding of the case carefully and gives the means to concentrate on different elements, compared with data gathered only by being an observer. However, when developing a general understanding of the working conditions and ways of interacting in a community, observation as a method is important.

Finally, this thesis as a whole has strived to contribute to the development of the theoretical methods in the field of LIS by making the theoretical analysis and the ways in which the theoretical argumentation has been developed with help of theoretical analysis explicit (Niiniluoto 1984). Even though this kind of an approach is commonly used as an implicit structure of many theoretical studies, I have strived to make it explicit. Even if the use of that method has resulted in quite strict a structure of Studies I and II, it has been suitable, as it has highlighted the systematic nature of the theoretical work conducted in this thesis.

### 5.3 Implications to practice

The phenomenological conceptualization of hermeneutic communication and play as an ideal mode of being together gives us the possibility to understand what the vast amount of knowledge creation research has stated about the circumstances of successful interaction. Also, with this conceptualization, the possibilities of development on a large scale become visible: every action also changes the everydayness accordingly, and thus, every conscious act to reach authenticity, for example, the encounters of the community members shape the nature of the community. Thus, the emphasis is on constantly developing good conditions for the long run, as every encounter matters. In this respect, my thesis gives the possibility to understand and address the ethical concerns in relation to the development of knowledge work (see Wilson 2002b). The results of this thesis could thus be used to develop an organizations’ human resources and strategies.

The framework gives the possibility to understand how working life should be developed in order to foster knowledge creation. In general, the empirical examination in Studies IV and V illustrates the difficulties of allocating time for interaction and simultaneously showed the meaningfulness of face-to-face meetings. In addition, being trusting and open is only possible if the employees
have historical experiences which support this kind of being in organizational environments. Thus, the environment for knowledge creation is developed in the everyday life of the organization, but also, by the means of successful management and organizational policies. Thus, my thesis could help plan and develop organizational culture and practices. However, the idea of a human being capable of choosing and understanding his or her possibilities for change in the future also gives responsibilities to the human beings themselves. Though it should be noted that human beings are not separable from their past and the circumstances they are in, and thus, the possibilities they can see always rise from those.

In addition, my thesis contributes to the understanding of how to develop interaction in organizational communities. The examination of recent knowledge creation research and the concept of play in Study I suggested that there is tension between claims of being authentically present in the event of interaction and, at the same time, capable of using techniques of managing conversations (Topp 2000, Tsoukas 2009). I proposed that the Gadamerian idea of play can clarify this contradiction, as the actual being in the interaction is not controllable as such, thus, the place of conscious action is at the beginning and in-between the events. Thus, I have suggested that the ability to act in those interactive events comes from past experiences and lived situations, which provide skills to improvise (see Yanow and Tsoukas 2009). Understanding this temporal structure could be helpful when developing the skills and processes of knowledge creation in organizations. As suggested above, the phenomena of being open and critical in interactive events can be further elaborated so that good practices for developing knowledge-creating interaction could be suggested.

The results of this study also increase the understanding of the meaning of interaction in the context of libraries and schools collaborating. The results imply that the differences in conduct of everyday life in different organizations is a challenge for collaboration. However, the collaboration as such was seen as natural and essential to both organizations, especially in the context of enhancing children’s joy of reading. In this study, the collaboration and interaction between the teachers was emphasized, and the results of this study suggest that the issues of Knowledge Management could also be valuable in developing circumstances in schools to promote collaboration and interaction.
5.4 Evaluating the quality of this study

In the quantitative research tradition, the quality of research has been measured by evaluating the validity and reliability of the research. The validity of research in that context means how well the chosen measurement or method actually measures the issues which are stated to be under investigation. Reliability refers to how reliable the used measurement is, and how repeatable the study is as a whole. (Hammersley 2009.) However, in qualitative studies, the terms are not used as such. The use of the terms is debated, as many scholars argue that they are not appropriate to evaluate the quality of qualitative research (Guba & Lincoln 1989, see Maxwell 1992).

Many scholars have strived to formulate conceptions and guidelines to assessing qualitative research by its own means (Miles & Huberman 1994, Guest & MacQueen 2008, Yin 2009). Many of the criteria described above can be related to the idea of phenomenology as a rigorous science outlined by Husserl (see Subchapters 2.2.1 and 2.3.4). Thus, I have already examined these issues in the course of my thesis. However, it is appropriate to discuss these concerns in detail by using Miles and Huberman’s (1994: 278–280) widely used list of quality criteria for qualitative research. Similar criteria for qualitative research have been outlined by, for example, Lincoln and Cuba (1985) and Bradley (1993).

Miles and Huberman (1994: 278–280) give the means to evaluate qualitative research in terms of confirmability, dependability, credibility, transferability, and application. Confirmability handles the issues related to repeatability of the research, and even if the nature of most qualitative studies is such that they are highly contextual, confirmability can be reached by making the research process transparent and acknowledge the role of the researcher. Dependability describes the research process and its consistency; it can be guaranteed by explicating the process and the premises guiding it. The credibility of the studies is linked with the questions of validity and can be reached by assuring that the most appropriate methods are chosen. Transferability means the generalization of the research. The results of the qualitative inquiry are such that they are case-specific and increase our understanding of the studied phenomena only in relation to the specific context. However, the term is suitable for evaluating the use of the study in a specific field, if it is understood to evaluate how the study is related to theory and how the results contribute to that. Application refers to the value of the study in practice, both to the participants of the study and in general. (See also Käänsäkoski 2014.)
I have strived to enhance the confirmability in my study by using the premises of phenomenological approach carefully (Subchapters 2.2.1 and 2.3.4). This approach acknowledges the fact that the researcher’s own interpretations affect the nature of the study. However, the features of self-reflection and awareness of one’s own prejudices are embedded in the research methodology. In the process of conducting this study, I strived to understand and explicate the premises of my view and sought to find theoretical evidence to support my suggestions. In the interviews, I attempted not to express my own prejudices, but asked open questions from the interviewees (see Moustakas 1994). In addition, I have taken into account the fact that my role as a researcher in the process of data gathering may have affected the nature of the data. My aim in gathering the observational and video data was not to be actively participating in the events in the Joy of Reading community. Instead, I wanted the events to be as natural as possible. Thus, I used only one small video camera to record the meetings and took notes by hand. However, in the interviews, I did not conceal the shared history with the participants, who I had met several times before the interviews in the meetings of the community. This joint history gave me the possibility to better understand the participants and ask relevant questions. Furthermore, I analyzed the data both inductively and theory-driven, to ensure that my own pre-understanding, which was influenced by the phenomenological conceptions, would be questioned. However, it should be noted that the purpose of this thesis has been to examine the potentials of the phenomenological approach. Thus, that approach has guided my decisions.

The dependability of my study has been confirmed by explicating the whole research process. I have made the whole process explicit, from the definition of the concepts and developing theoretical frameworks to forming the consistent methodology, gathering and analyzing the data, and reporting the results. This is also in line with the phenomenological approach. I have documented all the phases of the research carefully, to assure that the research could be possible to be repeated in other circumstances. However, I have also acknowledged that the special context of my study has determined the formation of the research methodology and the selected methods. In addition, I have strived to explicate the grounds of the results by using multiple citations from the data, both from the interviews and interactive events.

The credibility of the research has been one of the motives of my study, included in the research questions as well, as I have strived to examine how the used concepts and premises of the research affected the choice of the appropriate methods when researching knowledge-creating interaction. This has been outlined
in Subchapter 4.4. The acknowledgement that the phenomenon of knowledge creation is both experiential and observable guided the process of searching for valid research methods. Observation and video recordings of the events were chosen as the methods for gathering data from the meetings of the Joy of Reading community, as they gave the opportunity to examine the interaction as it happens. Even if the meetings of the community were recorded, I also observed the events, as it has been acknowledged that video recordings do not reveal everything from the atmosphere of the events. In addition, as I analyzed the video materials, I could test my notions in a way which revealed and questioned my pre-understanding. Interviews were chosen as the method to gather material from the experiences of the participants. This method was suitable for getting in-depth descriptions of the experiences of the participants, and it was also supported by the phenomenological guidelines outlined by Moustakas (1994). However, it should be acknowledged that other ways to gather descriptions of meaningful interactive experiences could also have been used, such as diaries or other writing assignments, but they were not possible in this context (see Subchapter 5.5). Group interviews could have given an alternative viewpoint to the study, but I preferred to give each participant the possibility to reflect his or her thoughts privately. This was justified, as I aimed at examining all kinds of experiences of the interactive events and wanted to give them the option to express critical thoughts concerning the collaboration. The interviews were conducted in the workplaces of the participants at times most suitable for them. Thus, most of them had enough time to concentrate on the interview. However, in one case, the interview was conducted during a class, while the pupils were doing an assignment. In addition, one of the interviews was conducted via e-mail.

Transferability is a complicated concept in qualitative research, as each study is so dependent on the context, and no generalizations can be conducted. However, even if anything universal cannot be concluded, based on the empirical testing in my thesis, it can be viewed as a contribution to the existing theory. In this thesis, I have based my examination on the existing theories in the field of KM to make the contribution of my study possible. In addition, I have tested the suggested approach empirically and also reflected on critical notions of the test. The Joy of Reading community studied in this thesis was relatively small, but I used multiple methods to gather information on its work to gain as rich and wide understanding as possible. I attended all the joint meeting of the participants and all the training sessions organized by the Joy of Reading Program. In addition, as it turned out that the sub-communities also developed the projects in the schools independently, I attended
the meetings of the largest sub-community, whenever it was possible. I strived to get all possible participants to interview, but did not get participants from all of the sub-communities. However, the use of triangulation of the data compensated for this problem. Even if the results of this study cannot be generalized to describe knowledge-creating interaction in organizational settings, they can increase the understanding of collaboration and interaction in the contexts of schools and libraries, as the topic has not been vastly studied. In addition, issues like multi-professionalism, multi-organizationality, and time as a limited resource are relevant in many other organizational settings.

I have strived to enhance the application of my thesis by explicating the conceptions of hermeneutic phenomenology in a language, which is understandable in the field of LIS as well (see Subchapter 2.2.2). In that sense, I have strived to open up the philosophical conversation on the interaction as a phenomenon within the field. Even if I did not do action research and did not strive to change the Joy of Reading community with my study, my attendance in the events of the community, as well as the fact that I brought up the questions of developing and collaborating in the interviews, may have affected the way the participants view their work in the future.

5.5 Limitations of this study

My thesis has some limitations. The examination of the premises of the research of knowledge creation is limited to the very basic elements of being and interaction. Also, the conceptualization with hermeneutic phenomenology has concentrated only on the concepts of being, the hermeneutic circle, and play, and these concepts have been understood with the help of very certain texts by Heidegger and Gadamer. However, it should be noted that these conceptions cover only a small part of the work conducted by those philosophers. The use of the phenomenological conceptions in my study was aimed at being careful and coherent. One has to keep in mind that the emphasis of both Gadamer and Heidegger is not on the subjectivity or even inter-subjectivity, but on being together as a fundamental characteristic of human beings.

I tested the developed framework in one multi-professional and multi-organizational community, consisting of teachers and librarians. Thus, the results cannot be generalized, as they are dependent of the very unique context of my study. Furthermore, the knowledge-creating interaction in the chosen community turned out to be somewhat limited, as the community was dispersed and the everyday life
of the community was so hectic, that they had only little time for collaboration. However, in this study, my aim was to investigate a natural and organic process of knowledge-creating interaction, and as such, this study reflected the organizational circumstances with its limitations well. In addition, the aim of my thesis was to test the developed framework empirically. Consequently, the theoretical examination was highlighted in my thesis, and the empirical part was experimental by nature.

Additionally, the empirical testing of the framework concentrated on the elements of the playful interaction and its circumstances (see Subchapter 4.3.3). Thus, some elements, like organizational and interpersonal trust, safety, and commitment, were not examined as such, but were partially covered by the examination of the elements of familiarity, equality, and being present in the course of actions.

One limitation of my thesis is that the amount of the participants of my study was limited, as the Joy of Reading community had 25 to 30 members, and 13 of them were interviewed, even though I asked them several times to participate in the interviews. In some sub-communities, I was able to interview all the members of the sub-community, as I got a contact to one of them. Still, I could not reach anyone from three sub-communities for an interview. Two of them were relatively small, but one of them was quite large. If only the most active members of the community were interviewed, it could have had an effect on the nature of the results.

The empirical methods used in this study had some limitations due to the nature of the Joy of Reading community. The ideal way to conduct the research would have included a shared event of analyzing the interactive events with the participants (see Moustakas 1994). However, in this study, this kind of setting was not possible due to the limited time of the participants. In addition, the nature of the community was such that observing the everyday life of the sub-communities was not possible. The analysis of the conversations was inspired by the conversation analysis, but it was not conducted in this thesis, as it proved to be too detailed by nature. In addition, due to the nature of the research environment, the methods for collecting data from the experiences of the participants were restricted to the use of the interview method.

5.6 Future studies

The phenomenon of play as an open and shared state of being together is intertwined with the organizational environment. I tested the developed framework in one multi-professional and multi-organizational community, consisting of
teachers and librarians. Thus, it would be important to test the framework in other working communities in different kinds of organizations, also in the private sector. The effects of the limited resources, especially time, were highlighted in the community studies in this thesis. In the future, it would be important to test the framework in circumstances which would support knowledge-creating interaction more by emphasizing the flexibility and the importance of reflectivity. Additionally, some elements of the framework, such as trust and commitment, were not examined in this thesis, and the relations of these elements to the aspects examined in this thesis could be elaborated in the future.

The studied working community was created during the research period. It would be useful to also study communities with a long-shared history of collaboration to examine the effects of long-term relationships in the knowledge creation process. Moreover, in the Joy of Reading community, the importance of face-to-face interaction was highlighted, as the community did not use any virtual environments to interact. In the future, computer-supported interaction should also be studied as one of the ways to communicate in the knowledge creation process (Wagner et al. 2014, Backer 2015, Baralou & Tsoukas 2015).

In the future, I will continue to develop the framework. I will use theoretical sampling to further test the framework to investigate knowledge-creating interaction in the research and development project Cloud Computing as an Enabler of Large Scale Variable Distributed Energy Solutions (BCDC Energy), which aims at introducing a new type of a digital marketplace for clean energy trading in Finland (see www.bcdcenergy.engl). The project is funded by the Strategic Research Council of Finland, and its aim is also to provide new knowledge to the decision-makers in collaboration with the public sector. Thus, interaction has a central role in this project. BCDC Energy consists of five research groups from the fields of Energy Economics, Computer Science and Engineering, Information Systems Sciences, Meteorology, and Information Studies. In addition, the project has strategic partners and an Advisory Board, consisting of private firms. All these actors form a multi-disciplinary, multi-professional, and multi-organizational community, which should work together and interact to form a common understanding and to achieve the goals set in the project. (See Huotari et al. 2016.)

In the context of BCDC Energy, it is possible to use theoretical sampling, as there are many similar features between the Joy of Reading community and the BCDC Energy community. They are multi-organizational and multi-professional by nature. In addition, they are of the same size and both located to multiple
locations. Furthermore, both of the communities have their origins in the developmental funding of the Finnish state. However, there are also substantial differences, namely, the goals and the aims of the communities. Joy of Reading was a developmental project aiming at developing new means for the local communities to enhance reading in children (see Subchapter 3.2). Thus, the community did not aim at developing something totally new. In addition, the work in the community was only part of the everyday life of the participants. By contrast, BDCD Energy is a research community, aiming at finding totally new solutions to the energy markets through research. Thus, its goals are distinct from the goals in JOR, as the understanding of what new knowledge is differs substantially. Therefore, the role of the interaction is highlighted and also acknowledged by the members of the community in a different way.

The methodology I used in this thesis should be tested in different organizational settings to develop it further and gain a deeper understanding of the best methods for empirical study. The communal and shared nature of knowledge creation as a phenomenon should especially be acknowledged and the methods for studying it also deserve further examination. In particular, the analysis of the interaction of the video materials should be further developed, e.g., with multimodal conversation analysis or discourse analysis, in order to grasp the openness and reflectivity of interaction in a more detailed manner. In this thesis, I was not actively involved in the interaction of the Joy of Reading community, but aimed at observing the interactive events in a non-participant manner. However, enhancing knowledge-creating interaction in organizations in practice would benefit from developing the methodology used in this thesis in the direction of an action research (Ladkin 2004, Allen et al. 2011). Therefore, in my future research of BCDC Energy, I will be involved in the work of the community; the aim also being to develop good circumstances for knowledge-creating interaction in the community.

Phenomenology still has more to offer to the research of knowledge creation and other phenomena in the field of LIS. The concepts of play and being could be further examined in relation to the themes of working and organizations, which are often places of different types of hierarchies and limitations (Wilson 2002b, Cyr & Choo 2010). Furthermore, the framework could be further developed to include the wider context of the society with its goals and limitations – this aspect could also be further elaborated by examining the relations between my approach and traditions, which have emphasized these aspects, such as the Cultural Historical Activity Theory (e.g. Wilson 2008, Allen et al. 2013, Wang 2013). The hermeneutic
phenomenology of Heidegger and Gadamer also gives the means to further examine the ethics of work life, if the meaningfulness of being together is taken seriously as suggested in this thesis. These aspects could be further elaborated in relation to the philosophers who have examined the questions of authenticity, otherness and ethics (Lévinas 1985, Taylor 1991, Ricoeur 1992, see also Ricoeur 1986). Furthermore, as Gadamer’s conception of hermeneutic conversation is interconnected with the idea of authority being a positive force in the goal of getting closer to truth (Gadamer 2004), this aspect could be further examined to understand the dynamics of knowledge creation within an organizational community, also in relation to the concept of cognitive authority (Wilson 1983). Moreover, the ideas of intersubjectivity, as well as the embodiment of being, are areas which should be examined and explicated more thoroughly. In these areas, the phenomenology of Merleau-Ponty (2006) should be applied, and his relations to hermeneutic phenomenology explicated. In addition, the examination of the experiences could be further explicated to increase the understanding of the relations between experiences and observations in the empirical study of knowledge creation (see Wilson 2002a, Husserl 1972).

Innovativeness has been studied to increase the understanding of the dynamics between productivity and free creativity (Merx-Chermin & Nijhof 2005, Popadiuk & Choo 2006, Verdonschot 2006, Schulze & Hoegl 2008). This theme could be further explored in combination with the view introduced in this thesis. The results provided by the empirical studies give good means to further examine this feature as well, as the empirical results showed how important the goal-centeredness and productivity in interaction can be in circumstances, where time is really limited. The division of authenticity and everydayness provided in this thesis could provide the means to understand this tension between productivity and free movement of play more deeply. It should be noted that authenticity should not automatically be viewed as an optimal mode, and everydayness as a negative feature. On the contrary, it would be important to understand the meaningfulness of both options in the everyday life of human beings trying to cope in the given circumstances. These dialectics offer many possibilities for further examination. Similarly, further research is needed to understand the phenomena of openness and creativity in interactive knowledge creation situations under the economic pressures of organizational environments more fully.

In this thesis, I have concentrated on the phenomenon of knowledge creation and used phenomenological texts to explicate the premises of studying it in detail. However, my thesis relates to the studies in the field of LIS, which have examined
interactive information and knowledge processes (see Subchapter 5.1.4). The relations between these could be studied further, to increase the understanding of the interrelationships between the phenomena in the field of LIS. Recent research on collaborative information behavior could offer the technological tools and methods necessary to examine the actual event of knowledge creation from the point of view of problem understanding and solving. To examine these issues, the question of an organizational culture (e.g. Alvesson 2002, Schein 2010) and its effects on the capacity of creating new knowledge becomes significant (Tsoukas 2009, Wang et al. 2011). The interactive nature of the phenomena, like information and knowledge use, should be more highlighted in the field of LIS in general, and my thesis offers good premises for that as well.
6 Conclusions

My thesis was aimed at providing a theoretically and methodologically coherent basis for understanding and further examining the phenomenon of interaction in knowledge creation with hermeneutic phenomenology. The aim has been to increase the awareness of the importance of explicating the concept of the human being behind the conceptualizations. Critics of KM often claim that KM concerns the same issues as information management (IM) (see e.g. Streatfield & Wilson 1999, Wilson 2002b, Shashi 2007, Ibrahim & Reid 2010) – in this thesis I have given the means to understand the debate on the concept of KM by showing the epistemological and ontological contradictions in the conceptualizations used in the research on KC. I have demonstrated that the suggested conceptualization allows distinguishing between these two fields by emphasizing the experiential nature of the concept of knowledge. Moreover, I have illustrated how knowledge creation is connected to the question of human existence. This opens up new possibilities to consider the ethical and practical questions of KM about how and whether or not knowledge can and should be managed (see Wilson 2002b).

Furthermore, the phenomenological grounds examined here offer several possibilities to empirically examine being in the event of knowledge creation. Altogether, this study has indicated that a phenomenological approach can be especially suitable for understanding and exploring the phenomena connected with experiential knowledge and interaction. The hermeneutic tradition deals with the ideal of encounters between free and independent elements, whereas an organization is a place of dependencies and hierarchies (see Wilson 2002b, Budd et al. 2010). The phenomenological approach combines the possibility of a critical and open attitude toward context, which raises the question of how this attitude can be obtained under the pressures of an organizational environment (see Wilson 2002b, Cyr & Choo 2010). With the phenomenological approach, this tension may open up and allow an analysis of the places of openness and criticality in an organizational environment by recognizing human willingness to understand and question when encountering challenges.

Finally, the use of hermeneutic phenomenology has set guidelines for this study. Hermeneutic phenomenology does not offer permanent means and instruments for behaving or operating in knowledge creation situations in general. Furthermore, it does not offer any fixed rules to follow in interactive events. Similarly, the hermeneutic viewpoint does not offer simple models for knowledge creation; instead, it emphasizes the deep and complex nature of the phenomenon. However,
I have suggested that acting in a flexible manner in an everyday life situation requires capabilities to listen and interpret the environment and other human beings with an open attitude (see Yanow & Tsoukas 2009). This is the basis of hermeneutic phenomenology promoted in this thesis and is worthy of further research.
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APPENDIX 1. The thematic scheme for observation.

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>GENERAL FEATURE</th>
<th>GESTURE OR ACT</th>
<th>SPEECH ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORMS: What are they playing? (Gadamer)</td>
<td>Is the event formal or informal?</td>
<td>Are there acts related to a formal meeting behavior and what are they?</td>
<td>What kind of speech related to a formal / informal meeting behavior etc. is there?</td>
</tr>
<tr>
<td></td>
<td>What is the genre of the event?</td>
<td>Are there acts emphasizing informality / formality and what are they?</td>
<td>Are there speech acts considering the form of the event?</td>
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<tr>
<td></td>
<td>Do all agree on the form of the event?</td>
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</tr>
<tr>
<td>RULES: How are they playing? (Gadamer)</td>
<td>How is the event structured: as formal or informal?</td>
<td>Are the rules present in the gestures and how are they present?</td>
<td>Are the rules present in the speech and if so, how?</td>
</tr>
<tr>
<td></td>
<td>Are all familiar with the rules?</td>
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<tr>
<td>BEING PRESENT: Are all present in play? (Gadamer)</td>
<td>Is there any use of phones or other devices?</td>
<td>Are the participants talking while someone is trying to express herself?</td>
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<tr>
<td></td>
<td>Are there other acts of not being concentrated (should be confirmed in interview) and what?</td>
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</tr>
<tr>
<td>SERIOUSNESS: Is the event of play taken seriously? (Gadamer)</td>
<td>Can seriousness be observed and if so, how?</td>
<td>Can seriousness be observed in gestures and if so, how?</td>
<td>Can seriousness be observed in speech and how?</td>
</tr>
<tr>
<td>SHARED GOAL: Are all aware of the meaning of the play? (Gadamer)</td>
<td>Is there a whole a shared goal of the project and the event?</td>
<td>How is the goal centeredness is present in gestures and acts?</td>
<td>How is the goal centeredness present in the discussion?</td>
</tr>
<tr>
<td>INTERPERSONAL TRUST (Cross et al. 2001, Merx-Chermin &amp; Nijhof 2005, Bligh, Pearce, &amp; Kohles 2006)</td>
<td>Is knowledge shared in gestures or acts and if so, how?</td>
<td>Is the lack of knowledge revealed in the speech acts and if so, how?</td>
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</tr>
<tr>
<td>COMMITMENT (Lubatkin, Florin, &amp; Lane 2001, Bligh et al. 2006)</td>
<td>Is care as active empathy, access to help, lenience in judgment, and courage present in the gestures and if so, how?</td>
<td>Is knowledge / information shared in speech acts and if so, how?</td>
<td></td>
</tr>
<tr>
<td>ELEMENT</td>
<td>GENERAL FEATURE</td>
<td>GESTURE OR ACT</td>
<td>SPEECH ACT</td>
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<tr>
<td>FAMILIARITY</td>
<td>Are the participants familiar with each other?</td>
<td>How does the knowledge of each other’s backgrounds manifest in speech?</td>
<td>Is the knowledge of each other’s way of communication present in speech acts?</td>
</tr>
<tr>
<td></td>
<td>Are there personal relationships?</td>
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</tr>
<tr>
<td>EQUALITY</td>
<td>What is the status of the participants?</td>
<td>Is the status present in the event (as formality / informality of the behavior)?</td>
<td>Are the statuses present in the speech acts explicitly or implicitly in the formality / informality of the speech acts?</td>
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<tr>
<td>OPENNESS</td>
<td>Does the structure of the event allow openness (time, not fixed goals)?</td>
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<tr>
<td>CRITICALITY</td>
<td>Does the structure of the event allow critical dialogue?</td>
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<tr>
<td>REFLECTIVITY</td>
<td>Does the structure of the event allow reflectivity (forms, rules)?</td>
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<tr>
<td>RISK-TAKING</td>
<td>Does the structure of the event allow risk-taking?</td>
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<tr>
<td>ORGANIZATIONAL</td>
<td>Is the management present?</td>
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<tr>
<td>TRUST</td>
<td>Are there guidelines from above?</td>
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<tr>
<td>FLEXIBILITY</td>
<td>Is there enough time to discuss?</td>
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<tr>
<td></td>
<td>Is the lack of resources visible in the event somehow?</td>
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</tbody>
</table>

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<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>GENERAL FEATURE</th>
<th>GESTURE OR ACT</th>
<th>SPEECH ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIVERSITY (Tsoukas 2009, Mitchell, Nicolas, &amp; Boyle 2009)</td>
<td>Who are present – what are their backgrounds considering culture, education, profession, and organization?</td>
<td>Do the different backgrounds manifest in speech acts explicitly?</td>
<td></td>
</tr>
<tr>
<td>ORGANIZATIONAL SAFETY (von Krogh 1998, Cross et al. 2001)</td>
<td></td>
<td>Is organizational safety present in the speech acts (e.g. mentions of consequences)?</td>
<td></td>
</tr>
<tr>
<td>PAST OF THE BEING (Heidegger)</td>
<td>How are the past experiences present in the gestures and acts?</td>
<td>How are the past experiences present in the speech acts?</td>
<td></td>
</tr>
<tr>
<td>PRESENT OF THE BEING (Heidegger)</td>
<td>Presence and being in the situation: comes out in other elements</td>
<td>How is the horizon of expectations present in the speech acts?</td>
<td></td>
</tr>
<tr>
<td>FUTURE OF THE BEING (Heidegger)</td>
<td>Openness and questionability: comes out in other elements</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 2. The interview guide for the interviews of the teachers and librarians.

The questions and topics of the interviews vary according to the interviewees and the organizations they represented.

1) **Background and previous experiences**
   a. Origins
   b. Education
   c. Previous working experiences
   d. Current position

2) **Goals and expectations concerning Joy of Reading**
   a. Ending up in the community
   b. Personal interests
   c. Motivations
   d. Understanding of the goals, shared and personal

3) **Development of the community**
   a. Structure of the community
   b. Relationships with the others
   c. Use of information in developing the ideas
      i. Other people
      ii. Information sources
   d. The role of interaction developing the community

4) **Role of the community**
   a. The community as a whole
   b. The Joy of Reading trainings and the National Program Organization
   c. The sub-communities
   d. Working in the community as a whole and in the sub-community
   e. Own role in the community

5) **Working in the community during the year**
   a. What was done, how and why?
   b. The role of interaction
   c. Evaluation: what worked and what did not?

6) **Experiences in the interactive events**
   a. Descriptions of meaningful moments of interaction
   b. The choices of the channels for interaction
c. Descriptions of how the process of creating the ideas have developed
   i. Interaction in the process
   ii. Own role in the process
   iii. Working as a team
   iv. Used infromation sources

7) Atmosphere for interaction in the community
   a. In the joint meetings
   b. In the meetings and gatherings of the sub-communities

8) Relevance of the interaction
   a. In the Joy of Reading community as a whole
   b. In the sub-community
   c. On a personal level
   d. In the everyday life of your organization in general

9) Circumstances for interaction in the community and in everyday life
   a. Everyday life of the organization
   b. Collaboration with other organizations
   c. Preassures and possibilities
   d. Resources

10) Collaboration and interaction in the organization in general
    a. Doing team-based work
    b. Developing new ideas in work
    c. Roles in collaborative situations

11) Change during the year
    a. Effects on the work in general
    b. Learning
    c. Concentration – what has been left out
    d. New relationships
    e. Future plans
APPENDIX 3. Letter to the participants about the interviews.

Hello,

The Joy of Reading project is ending, and I would like to interview you about your experiences with Joy of Reading during the year. I am interested in the ways in which new ideas are created and developed in your work on a more general level as well. I have followed your work as a doctoral student this period, and it is important to hear about your actions and experiences in detail. The themes of development, interaction, and networking in a working community have been studied very little in the context of schools and libraries. Thus, it would be important to get information on these topics and also to show these aspects of the work.

The interview themes are:

- Developing and implementing the Joy of Reading ideas
- Activities in the Joy of Reading community
- JOR community’s affects on your other work
- Importance of developing and creating new ideas in your work in general
- Importance of collaboration and networking in your work

My interest is in your experiences, the facts about the projects can also be obtained in other ways. In addition, it is also irrelevant if you have worked with Joy of Reading a lot or for only a little while. I am interested in all experiences. The interview data will be handled in confidence, and the results will be reported in a way that the interviewees are anonymous.

I would like to interview you during May or June, at a time which suits you. I can come to your workplace to discuss with you, or we can meet somewhere else, as you like. It is also possible to interview on the phone, if it is difficult to arrange a time. The interview will last about an hour.

Would you please contact me, so that we can arrange the appointment? You can, for example, send me an e-mail of the times which suit you, so I can plan for the schedule for the interviews. Please contact me, if you have any questions.

In the file, there is more information about my research.

Best regards,
APPENDIX 4. The framework and the elements examined in Study IV.

In Study IV: Figure 2.
APPENDIX 5. The framework and the elements examined in Study V.

In Study V: Figure 1.
APPENDIX 6. The data analysis of the video materials in Studies IV and V.

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>EXAMPLE OF AN ACTION IN THIS CATEGORY</th>
<th>EXAMPLE OF AN UTTERANCE/DIALOGUE IN THIS CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>RULES (Gadamer)</td>
<td>In the beginning of the meeting, the chairperson takes the lead.</td>
<td>CHAIR: So, item number two is short presentations of Joy of Reading schools, and I hope they are kept short, as we still have that blog issue…</td>
</tr>
<tr>
<td>BEING PRESENT &amp; SERIOUSNESS (Gadamer)</td>
<td>Teacher answers her phone in the middle of the meeting – explains: it’s my daughter.</td>
<td>TEA1: (Hmm) so, they have all the materials on the net (looks at Tea2’s Tablet)</td>
</tr>
<tr>
<td>SHARED GOAL (Gadamer)</td>
<td>Everyone shares the idea of hurrying up to get the decisions made in time. They talk fast and keep the turns short.</td>
<td>CHAIR: Everyone understands that we don’t have the resources to begin creating something new. We have an idea that we put into practice in this next presentation, which is the library’s project which they have done for us. But additionally, we could think about something in these other Joy of Reading communities we could take and use in our schools.</td>
</tr>
<tr>
<td>OPENNESS (Gadamer)</td>
<td>The participants are able to change their opinion and plans based on the conversation.</td>
<td>TEA10: So, how about the third- and sixth-graders? TEA2: Third- and sixth-graders? TEA10: They fall through the net. TEA2: It doesn’t matter, there is a number of ideas.</td>
</tr>
<tr>
<td>CRITICALITY (Gadamer)</td>
<td>The participants don’t openly disagree about anything in the meeting.</td>
<td>TEA8: So, does it help that we only increase the input, or should we think about it really seriously. Why are 20 % of boys in danger of becoming marginalized because they are not interested in reading?</td>
</tr>
<tr>
<td>TEMPORALITY: PAST (Heidegger)</td>
<td>The meeting starts with a presentation by one of the teachers, who has attended the Joy of Reading training days.</td>
<td>TEA1: (talking about a project presented in a training day she has attended, presents slides): … so, they had this kind of a library path (lifts her gaze from the screen), it was a nice idea, (…) this is worth looking into (looks at the slide on the screen)</td>
</tr>
<tr>
<td>ELEMENT</td>
<td>EXAMPLE OF AN ACTION IN THIS CATEGORY</td>
<td>EXAMPLE OF AN UTTERANCE/DIALOGUE IN THIS CATEGORY</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>TEMPORALITY: FUTURE (Heidegger)</td>
<td>The participants see the possibilities offered by the strategy of the school, which emphasizes the use of ICT in teaching.</td>
<td>TEA1: [I can be engaged in that, if I get a partner. TEA2: [Tea10] will be your partner. TEA10: [Y.. laughs] TEA1: Yeah, good. TEA2: And our colleague, (name), will teach us how to do it for sure.</td>
</tr>
<tr>
<td>FAMILIARITY (Chua 2002, Adenfelt &amp; Lagerström 2006)</td>
<td>The participants gather for the first meeting, someone is discussing eagerly together.</td>
<td>CHAIR: We are all unfamiliar with each other, and in case we are, we don’t remember the names, so maybe we should, at first, say who we are.</td>
</tr>
<tr>
<td>EQUALITY (von Krogh 1998, Tse &amp; Mitchell 2010)</td>
<td>Only two of the participants are male.</td>
<td>LIB4: so, yeah, well, is your aim to (2,0), so, now in that (talks really slowly) presentation (1,0) We are now talking about (that) TEA1: [yes] (nodding) LIB4: presentation which we are going to present to all [teachers] TEA1: [yes] (nodding) LIB4: is the intention to do this kind of slide of every pilot school TEA1: well, that is now our conversation LIB4: [yeah]</td>
</tr>
<tr>
<td>FLEXIBILITY (Richtnér &amp; Åhlström 2010, Mitchell, Nicolas, &amp; Boyle 2009)</td>
<td>The participants look at the clock on the wall and start to hurry for the next meeting.</td>
<td>CHAIR: Thanks, well, so, time flies. and I had the aim to be finished at three fifteen, so I hope it will last, and we still have two issues: library’s news and Tea2 will show us the blog. (…) so, what would the library have at this point? LIB4: Well, shortly, as time flies</td>
</tr>
<tr>
<td>DIVERSITY (Tsoukas 2009, Mitchell, Nicolas, &amp; Boyle 2009)</td>
<td>In the meeting, there are both librarians and teachers present. Also, several principles are present.</td>
<td>-</td>
</tr>
</tbody>
</table>
APPENDIX 7. An example of forming the categories from interview data in Study V.

<table>
<thead>
<tr>
<th>MAIN CATEGORY</th>
<th>SUBCATEGORY</th>
<th>EXAMPLE OF THE ORIGINAL UTTERANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXCITEMENT</td>
<td>PERSONAL INTEREST IN THE TOPIC</td>
<td>“In the meetings, people really burned with zeal to do this project.” (Tea3)</td>
</tr>
<tr>
<td></td>
<td>JOY OF DOING THINGS TOGETHER</td>
<td>“They (meetings of the sub-community) went really well and everyone was, like, yeah, good that you invented that, nobody dissed.” (Tea6)</td>
</tr>
<tr>
<td>EFFECTIVITY</td>
<td>GOAL-CENTEREDNESS</td>
<td>“We all like to go forward with the agenda” (Tea2)</td>
</tr>
<tr>
<td></td>
<td>PRODUCTIVITY</td>
<td>“Well, we have been really vigorous (…), seasonal, sometimes more quiet, sometimes we have been working hard, so we think we have accomplished things.” (Tea4)</td>
</tr>
<tr>
<td></td>
<td>USING TIME</td>
<td>“We were all like that in that we didn’t suffer if we had a fast pace and did things in a hurry” (Tea2)</td>
</tr>
<tr>
<td>TRUST</td>
<td>KEEPING PROMISES</td>
<td>“There is one nice thing, which I respect in the colleagues, that if we agree on some role differentiation and who does what, it is nice that everyone does their part.” (Tea1)</td>
</tr>
<tr>
<td></td>
<td>KNOWING EACH OTHER</td>
<td>“The library has always done a good work with schools. Mutual listening and sharing ideas has been a good thing”. (Tea9)</td>
</tr>
<tr>
<td>LEADERSHIP</td>
<td>LEADERSHIP</td>
<td>“Well, with Tea2’s leadership, it was easy. Tea2 drove this forward effectively, and it was easy to be there. We shared the jobs and clearly agreed on who does what…..” (Tea1)</td>
</tr>
<tr>
<td>EVERYDAY LIFE IN THE ORGANIZATION</td>
<td>RESOURCES</td>
<td>“The organization should have had more money, (...) it was a big issue to get go to the Joy of Reading training to the far away destination” (Tea6)</td>
</tr>
<tr>
<td>HELPING COLLEAGUES</td>
<td></td>
<td>“You don’t have to worry about your issues alone, you can always ask for help.” (Tea9)</td>
</tr>
<tr>
<td>COLLABORATION</td>
<td></td>
<td>“Our team has been a functional team, for example they have shared the responsibility of going to the Joy of Reading trainings, so the knowledge base is wider now.” (Tea3)</td>
</tr>
</tbody>
</table>
APPENDIX 8. The content analysis of the documents in Studies IV and V.

<table>
<thead>
<tr>
<th>MAIN CATEGORY</th>
<th>SUBCATEGORY</th>
<th>THEMES</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOCUMENTS OF THE MEETINGS</td>
<td>AGENDAS &amp; NOTICES OF THE MEETINGS</td>
<td>Goals of the meetings</td>
<td>8 (9 pages)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rules for the meetings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MEMOS</td>
<td>Achievements</td>
<td>2 (5 pages)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Goals of the community</td>
<td></td>
</tr>
<tr>
<td>SLIDE PRESENTATIONS</td>
<td>CONCERNING Joy of Reading TRAININGS</td>
<td>Ideas for the community</td>
<td>2 (19 pages)</td>
</tr>
<tr>
<td></td>
<td>CONCERNING</td>
<td>Goals of the sub-communities</td>
<td>4 (102 pages)</td>
</tr>
<tr>
<td></td>
<td>COMMUNITY’S OWN PLANS &amp; PROGRESS</td>
<td>Achievements</td>
<td></td>
</tr>
<tr>
<td>E-MAILS</td>
<td>NOTICES</td>
<td>Organization of the work in the community</td>
<td>6 (7 pages)</td>
</tr>
<tr>
<td>OFFICIAL DOCUMENTS</td>
<td>PRACTICAL ISSUES</td>
<td>Achievements</td>
<td>12 (15 pages)</td>
</tr>
<tr>
<td></td>
<td>REPORTS</td>
<td>Goals of the community</td>
<td>3 (66 pages)</td>
</tr>
<tr>
<td></td>
<td>APPLICATIONS</td>
<td>Goals of the community</td>
<td>1 (4 pages)</td>
</tr>
</tbody>
</table>

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Permission to the video recording

I am doing my doctoral thesis at the University of Oulu, in the department of Information Studies. I am examining creating new knowledge in organizations. I ask for your permission to videotape your meetings in the Joy of Reading community. My purpose is not to examine individual people, but the entity of the community, experiences, and first and foremost, the circumstances which make the development of new procedures and knowledge possible.

The data is used solely for research purposes, and the videotapes will not be used in teaching or shown outside my research group. The data will be handled in confidence and the results will be reported in a way that the interviewees are anonymous.

I give my permission to be videotaped:

________________________________  ____________
Signature                                            Date


139. Siitonen, Paulina (2016) Ehdotukseen vastaaminen perheen vuorovaikutustestissä: keskustelumanalyytyttöinen näkökulma vuorovaikutukseen ja sen arviointiin

140. Mustamo, Aila (2016) " Yö, metsä, aika ennen kristinuskoa": kotimaan ja kansakunnan representaatiot black metalissä ja folk metalissä Suomessa ja Norjassa

141. Kanto, Laura (2016) Two languages, two modalities: a special type of early bilingual language acquisition in hearing children of Deaf parents


143. Lindh, Johanna (2016) Poikkipäivystölinen identifioituminen vapauden ja yhteiskunnan vuorovaikutuksesta

144. Zachau, Swantje (2016) Signs in the brain: Hearing signers’ cross-linguistic semantic integration strategies


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Interaction for Knowledge Creation
A Phenomenological Study in Knowledge Management