Nina Bozic Yams is a researcher exploring how knowledge and methods from contemporary dance and choreography can be applied in organizations to enable innovation and innovative competence development among employees. She is in general interested in facilitating organizational transformation with an emergent, bottom-up, and purpose-driven approach that places people and their needs in the center. She seeks to connect different fields and perspectives, such as arts and business, to enable radical innovation. Nina works as a researcher and project leader at the research institute RISE SICS Västerås.
CHOEOGRAPHING INNOVATIVE PRACTICE IN EVERYDAY WORK

Nina Bozic Yams

2018

School of Innovation, Design and Engineering
ABSTRACT

The thesis argues for a humanistic and democratic approach to innovation management that puts employees and their engagement in the center of organizational efforts for innovation. It proposes that a culture for innovation can be built by enabling all employees to develop their innovative practice as part of their everyday work and not as an extra activity on top of their existing responsibilities. The aim of this approach to innovation is to build more human-centered organizations that help employees improve their own motivation, creativity, well-being, and self-fulfillment at work. This presupposes that they need to be able to connect with their body, feelings, fantasy, intuition, and will, and to be able to innovate more from within, balancing external expectations from management and users with their own personal needs. Since there is a lack of discussing embodied aspects of knowledge and learning in connection to innovative competence in the current innovation management literature, knowledge and methods from contemporary dance and choreography are explored to support a more holistic approach to innovative competence development. Based on integrating research from both innovation management and contemporary dance fields, a model of innovative practice in everyday work is developed. The model suggests what kind of skills and activities can enable employees develop their personal innovative practice that is adjusted to their work context and their specific needs. It is proposed that as employees practice innovating in everyday work, they will slowly move from innovating incrementally towards developing the competence for more radical innovation. Different practical tools and exercises for enabling innovative competence development that were inspired by choreographic practices, and adjusted and tested in organizational context are described. Ideas around how contemporary dance and choreography can be used to design and implement long-term art-based interventions in organizations that can create value on strategic level are proposed. The research approach used in the thesis is participatory action research done by several iterative cycles between practice and theory. Two empirical and two theoretical studies that were part of the research process are presented. The empirical studies were implemented in the Eskilstuna municipality and at the Art of Management and Organization conference. The theoretical studies were performed in the fields of innovative competence and contemporary dance and choreography.
ACKNOWLEDGEMENTS

Writing a PhD is a long process. There are ups and down, moments when you feel tired and stuck, and moments when you feel you got wings to fly. If I didn’t have the right people around me, who supported and encouraged me, engaged with me in lengthy discussions about my research, or simply gave me love and made me laugh when I needed it, I could not have gone through it.

This is why I would like to thank…

My free spirited parents, Silva and Jure, who inspired me to always follow my dreams, and made me feel that everything is possible in life.

Alma, who is the light of my life, and who with her curious and creative mind reminds me every day that questions and learning never end. “Mami, how do you make an airplane?” she asks me. And I have to make another thorough research of the day.

Adam, who meets me in our playground every day, and makes me feel that love is endless, and life so rich and beautiful. No matter how long and tough work day is behind me, he will always find a way to make me laugh and make me feel happy and loved.

My supervisors Tomas Bäckström and Bengt Köping Olsson, who have supported me on my research path, giving me a lot of freedom and space to explore questions I’m passionate about, engaging with me in inspiring conversations, providing useful feedback and guidelines, but also just listening, supporting, and encouraging me when I needed it.

My friend and co-creator Dejan Sroj, who has been the co-conspirator of all my research studies. He makes me look forward to every new project, because I know we will learn, create, have fun, and develop meaningful things together. I hope we have many shared adventures yet to come.

Other artists, who have collaborated with me in different studies. They have made it possible for me to test new ideas and methods, and travel between worlds. Thank you for sharing your valuable knowledge and perspectives with me: Mala Kline, Jennie Andersson Schaeffer, Erik Berg, Alexander Hall, Gustaf Iziamo, Sara Slivnik, Åsa Johannisson, and Johanna Byström Sims.

My brother Teo, who has always been there for me, and has helped give form to some of my ideas. Among other things, I would like to thank him for designing this PhD thesis.

Eskilstuna municipality, my colleagues at MDH and RISE SICS Västerås, Mälardalen University, Vinnova, and Rekarne Sparbank, who all provided different types of necessary ingredients and resources that enabled me to do my research projects, developing and testing new methods for enabling innovation, and bringing the two worlds that seem so far away: contemporary dance and innovation management, dancing together.
PUBLICATIONS

Appended articles


Earlier versions of appended articles were first presented as papers at international academic conferences.

Book chapters


Publications included in Licentiate thesis


# TABLE OF CONTENTS

1. **INTRODUCTION**  
   1.1 Background and problem statement  
      1.1.1 Challenges within innovation management theory  
      1.1.2 Challenges within innovation management practice  
      1.1.3 Challenges within the field of artistic interventions and the use of dance in organizations  
   1.2 Defining the research field and basic terms  
      1.2.1 Specific understanding of innovation  
      1.2.2 Defining contemporary dance  
   1.3 Research motivation and approach  
      1.3.1 My background as practitioner and my connection to dance  
      1.3.2 Academic context and experiences  
      1.3.3 Research approach  
   1.4 Research purpose and questions  
   1.5 Contribution  
   1.6 Delimitations  

2. **THEORY**  
   2.1 Innovation management and innovative competence  
      2.1.1 Developments within the innovation management field  
      2.1.2 Positioning within the innovation management field  
      2.1.3 Innovative competence  
   2.2 Body as enabler of innovation  
      2.2.1 Historical perspective: alienated body as an object of manipulation  
      2.2.2 Phenomenological perspective: body as the medium whereby our world comes into being, yet remains absent  
      2.2.3 Neuroscientific perspective: the embodied nature of mind, learning, and new meaning creation  
      2.2.4 Holistic Body: different dimensions of body  
   2.3 If creating new meanings is an embodied process, why is art so important in this process?  
      2.3.1 The role of dance as an enabler of innovation  
   2.4 Current status of use of dance in organizations  
   2.5 Contemporary dance and choreography  
      2.5.1 Historical background of contemporary dance  
      2.5.2 Characteristics of contemporary dance and choreography  
   2.6 Bridging theory with research problems and questions  

3. **RESEARCH METHODOLOGY**  
   3.1 Research process: connecting challenges, research questions, studies and articles  
   3.2 Research approach and the position of the researcher  
      3.2.1 Abductive approach to research  
      3.2.2 Paradigmatic positioning within action research  
      3.2.3 Combining critical and pragmatic traditions in action research  
      3.2.4 Position of the researcher  
      3.2.5 Democratic dialogue with participants  
      3.2.6 Ethical principles in participatory research  

   2  
   6  
   10  
   13  
   15  
   16  
   18  
   23  
   28  
   33  
   36  
   43  
   51  
   53  
   55  
   56  
   59  
   62  
   65  
   68  
   71  
   72  
   74  
   76  
   79  
   80
3.2.7 Embodied research practice
3.2.8 Summarizing key principles on the strategic, tactical, and operational levels of research

3.3 Research studies
3.3.1 Empirical study in Eskilstuna municipality
3.3.2 Systematic literature review on innovative competence
3.3.3 Literature review in choreography
3.3.4 Intervention at the Art of Organization and Management 2016 conference

3.4 Quality of research

4. RESULTS
4.1 Integrated Model of Innovative Competence
4.2 Concepts from Contemporary Choreographic Practice Relevant to Innovative Competence
  4.2.1 Body and materiality
  4.2.2 Practice
  4.2.3 Undoing everydayness
4.3 Choreographic toolbox
  4.3.1 Tuning-in
  4.3.2 Exploring body, movement, time and space in the work context
4.4 The impact of contemporary dance-based methods on innovative competence development
4.5 Using choreographic principles in the design of artistic interventions
4.6 Revised model of innovative competence

5. DISCUSSION
5.1 Conceptualizing innovative competence
5.2 Concepts from contemporary dance and choreography
5.3 Contemporary dance and choreography as enablers of innovative competence development
5.4 The potentiality of contemporary dance and choreography use in designing long-term artistic interventions in organizations
5.5 Revised conceptualization of innovative competence incorporating ideas from contemporary dance
5.6 Embodied approach to action research
5.7 The tensions between business and artistic paradigms and a proposal for a more critical and humanistic approach to innovation

6. CONCLUSIONS

7. REFERENCES

8. APPENDIXES
Appendix 1: Articles
  Appendixed Article 1
  Appendixed Article 2
  Appendixed Article 3

Appendix 2: List of literature - Study on Contemporary Choreography
1

INTRODUCTION

1.1 BACKGROUND AND PROBLEM STATEMENT

1.1.1 Challenges within Innovation management theory

Since innovation plays a central role in organizational competitiveness (Reuvers et al, 2008; Shalley et al, 2009), high innovation performance by an organization can no longer rely on a few select people working in R&D, but rather depends on the engagement of everyone in an organization across disciplines, functions, and levels (Trokhman, 2007; Abstein and Spieth, 2014). This means that innovative competence has become a core competence that is generic by nature and shall be integrated into the everyday practice of employees.

The centrality of innovation as a core competence has been suggested in different studies by various international and national institutions: the OECD (2005), the EU (2006), the Danish Ministry of Education (2005), the UKCES employability skills (2009), 21st Century Skills (Binkley et al, 2010), and Transferable 21st Century Skills (Pellegrino and Hilton, 2012). As such, innovative competence shall be part of the curricula in higher education (Vila et al, 2012; Borras and Edquist, 2015) as well as practiced in all types of business and other kinds of organizations (Räsänen et al., 2015). Although concepts, such as employee-driven innovation (Hoyrup, 2010) and practice-based innovation (Ellström and Nilsen, 2014), have developed in line with this trend of distributed innovation, the challenge within the current theory is that there seem to be no clear agreement on the definition of innovative competence (Zhang et al, 2013). Different researchers focus on highlighting only specific aspects of the phenomena. This is not surprising, as competence is in itself a complex concept lacking a common definition agreed upon by researchers in the field (Illeris, 2013). Innovation is an interdisciplinary field of study where many different perspectives meet, located at the crossroads between psychology, sociology, economics, engineering, to organizational theory (Ford, 1996). The innovation management field has developed over time, and changed from focusing on the individual psychological traits and attitudes of innovators (Amabile, 1983; Cerinsek and Dolinsek, 2009; Nanda and Singh, 2009), to more focus on the functional skills for innovation (McGourty et al, 1996; du Chatenier et al, 2010; Dyer et al, 2011). Recently, more attention has been paid to the interactive skills needed to practice innovation in
teams and in more complex collaborative networks (Hargadon and Bechky, 2006; Darso, 2012; Bissola et al, 2014).

The first challenge within the innovation management theory that this thesis addresses is to explore what different elements that influence innovative competence are and how innovative competence could be conceptualized to give a more holistic perspective about the phenomena, integrating different bits and pieces of research proposed by various researchers.

The second challenge within the theory of innovation management dealt with by the thesis, is how embodied ways of learning could contribute to understanding innovative competence development among employees. Current research on innovative competence focuses mainly on cognitive skills that influence innovative competence development. As Western societies have since renaissance placed cognitive skills and rational thinking on the pedestal, this is not surprising (Kunst, 1999). As a consequence, the awareness of body has disappeared from the predominantly immaterial work of knowledge workers in the digital age (ibid.), where the worker is engaged in the virtual world of signs, is overloaded with information, is subject to constant stimulation, and is frequently disconnected from the body and the material world of emotion and affection (Berardi, 2013). In industrial age, workers’ bodies were used in factories through physical work while their souls remained outside of workplaces (ibid.). In current society, it is the opposite, knowledge workers are expected to actively engage their intelligence and creativity at work, but their bodies are completely inactive and disconnected (ibid.). Theory from contemporary dance will be thus researched in this thesis to see whether it discusses concepts that could contribute to understanding of how different dimensions of learning and engagement through the body, aiming at a return to emotion, affection, and purpose, could help employees develop their innovative competence in a more holistic way in order to build more human-centered approach to innovation within organizations.

1.1.2 Challenges within innovation management practice

Looking at the developments in both theory and practice within the field of innovation management, it can be observed that innovation has expanded from traditional product innovation towards an inclusion of service innovation or the so called “servitization” (Miles, 2004; Nijssen et al., 2006), and business model innovation (Osterwalder and Pigneur, 2009). More inclusive and participatory models of innovating have been developed, spreading innovation activities from being closed in the R&D departments, towards involving all kinds of stakeholders in innovation: employees (employee-driven innovation) (Hoyrup, 2010), users (participatory innovation) (Buur and Matthews (2008), user-centered innovation (von Hippel, 2005)), interpreters (design-driven innovation) (Verganti, 2009), and a wider group of nearly anyone with the interest in contributing to innovative efforts, from students, suppliers, research institutions, and even the general public (open innovation) (Chesbrough, 2003).
The challenge which emerges though, is that most organizations are still based on traditional, functional models of organizing work processes top-down, rather than democratic models of innovating through participation, with emergence and self-organization as core organizing principles. The latter demands a high level of trust in employees and is dependent on the ability of management to let go of control, along with a higher degree of responsibility and proactivity from employees. Ideas around new organizational models, such as re-inventing organizations through self-organization, wholeness, evolutionary purpose (Laloux, 2014), holacracy (Robertson, 2015), and changing from within through U-processes (Scharmer, 2009), have lately become popular among managers as the speed of change forces them to explore alternative forms of organizing. They are realizing that long-term strategies are still needed as a sort of direction and have to be co-developed with employees, but detailed planning and control of how to implement them by top management is often counterproductive, and is better entrusted to those who are actually making the changes happening in everyday work. The problem is that managers often struggle to implement these new models of organizing within the old structures and rules which still exist in many organizations. According to these new principles of organizing, innovation management practices also need to be adjusted. But the predominant structure for organizing innovation in organizations remains a top-down driven, stage-gate innovation process (Cooper, 1990; 2008). Although more and more companies are trying to involve employees from across their organizations in innovation initiatives, (e.g. organizing innovation competitions and implementing some type of idea management systems), many still struggle to build a true culture for bottom-up, employee-driven innovation. One of the key challenges in innovation management practice that this thesis addresses is what kind of practical methods can enable employees from across an organization to develop their innovative competence in everyday work and increase their engagement in and ownership of innovation. As opposed to viewing innovation as an extra activity added to an existing job role, it is seen as a way of being and acting in everyday work that can help them develop and improve their own motivation, creativity and well-being at work as well as increase the innovative output of organization and thus, the satisfaction of other important stakeholders. In this way, being innovative at work can become a generic competence for all employees and a key element of organizational DNA and culture.

Most of the established and widely spread management systems that have been practiced globally across sectors, and work on bottom-up inclusion of employees in continuous innovation, such as continuous improvement and lean thinking, are focused predominantly on engaging analytical and other cognitive skills that can help employees reflect on how they could improve organizational processes and increase value for the customer by minimizing waste. This thesis thus addresses the challenge of how different embodied ways of learning can enable employees to step out of existing ways of thinking and acting to not get stuck only in improving what they already do, but to expand their innovative competence towards radical innovation.
1.1.3 Challenges within the field of artistic interventions and the use of dance in organizations

With increased focus on the human as the main holder of knowledge and the creator of ideas in post-industrial societies, artistic knowledge and methods have gained interest among managers. But many artistic interventions in organizations are still one-off events or short-term breaks from usual corporate operations, providing an entertaining alternative and inspiration within team-building or leadership skills development. Darso (2004) talks about different ways of engaging arts in business, from using it as an artefact or status symbol, as entertainment, as a way for developing various skills, or as a medium for long-term strategic transformation. The last is unfortunately still rare (Darso, 2016), while the use of arts in leadership development within business schools and among different consultants is in expansion. One of the challenges that this thesis seeks to address within the practice of art-based interventions in organizations is: **how can long-term art-based initiatives in organizations be designed and implemented to create value on a strategic level.** Choreographic concepts and methods are used to explore how they could support this endeavour.

The application of dance in organizational development and organizational studies is a relatively new field of study, but with a growing community of researchers, especially in Europe (Biehl-Missal and Springborg, 2016). There is a growing practical interest in dance as a means of arts-based intervention in organisations (Johansson Sköldberg et al., 2016), and notably, the use of dance-based methods for leadership development is becoming more popular in practice (Ladkin and Taylor, 2010; Zeitner, 2016; Hujala et al., 2016; Ludevig, 2016; Matzdorf et al., 2016). Practitioners are increasingly using dance and movement exercises for leadership development, addressing tacit and embodied forms of knowing through different forms of body work in order to gain new insights and understanding of different leadership aspects (Biehl-Missal and Springborg, 2016). The gap that this thesis addresses within the field of using dance in organizations is **how could dance-based methods be expanded from supporting leadership development towards other managerial areas, such as innovation management, and specifically innovative competence development.**

In order to do that, a specific form of dance, namely contemporary dance and choreography, are more closely researched. With this, another gap is attempted to be bridged, as the field of contemporary dance and choreography (as understood in this thesis) hasn’t been extensively explored within the research on dance and organization. Contemporary dance is different from classical ballet, ballroom dancing, modern jazz, tango, salsa or other popular forms of dance that many people practice today and even use in management training. Contemporary choreographic practices explored in this thesis have strong experimental and critical dimensions, and question the basic assumptions about the dance. They are consequently of special interest for the area of innovation, as critically questioning existing norms and experimenting with new ways of being and doing things are crucial aspects of innovating, especially when it comes to radical innovation.
1.2. DEFINING THE RESEARCH FIELD AND BASIC TERMS

The research presented in this thesis attempts to respond to the challenges both within the field of innovation management and the field of artistic interventions in organizations. Within the field of innovation management, it aims to contribute to understanding of the concept of innovative competence and its development in practice. In the field of artistic interventions in organizations the emphasis is on contributing to knowledge on dance-based interventions in organizations. The third field researched in this thesis, representing a source of inspiration and learning, necessary in order to contribute to the two previously named fields, is the field of contemporary dance and choreography. More specifically, the central question is how can knowledge and methods from contemporary dance and choreography be used in organizations to enable individual development of innovative competence. The research field in focus is visually depicted in Figure 1.

![Figure 1: Defining the research field](image)

The core concepts, such as innovative competence, dance-based interventions in organizations and contemporary dance and choreography are discussed in more depth in subsequent chapters. Here, two basic terms, innovation and contemporary dance, which frequently reappear in the text are explained, as they are understood differently among practitioners and researchers in their respective fields, and it is thus important to clarify what is meant by them in the context of this thesis to avoid misunderstandings.

1.2.1 Specific understanding of innovation

In their systematic literature review, Crossan and Apaydin (2010) propose a definition of innovation that synthesizes most of the key elements that are repeated in various definitions of innovation. Their work suggests that *innovation is a novelty that creates value in economic or social spheres, and can relate to improving existing or creating new products,*
services or processes. This simple way of defining innovation will serve a starting point to understand the meaning of innovation also in this thesis.

It should be emphasized that the focus in this thesis is specifically on the bottom-up approach to innovation close to the concept of practice-based innovation, defined by Ellström and Nilsen (2014) as professionals developing and implementing new working methods, routines, products and services for incremental or radical innovation of their daily work operations.

The following distinctions will make clearer the specific approach to innovation as discussed here.

First, as is evident in the text, the term “innovative competence”, “innovating”, and “to innovate” are used rather than “innovation competence” and “innovation”. This is an important distinction, emphasizing that the present focus is on the active aspect of innovation. It is the process and practice of innovating in everyday work that is central, and positions the current research close to the concept of practice-based innovation. The expression, “creative practice”, is only used when referred to the artistic practice of contemporary dancers. This is a different perspective on innovation than the traditional one, which is often focused on the outcome of innovating in the form of new products, services or processes. In this thesis it is suggested that if innovative competence is developed and practiced by employees across an organization, in everyday work, this will increase the overall organizational innovation capability. Further, the likelihood of sustaining innovative output over time is higher than if innovative competence is limited to employees in specific functions, or departments in an organization where innovation initiatives are driven top-down and focused on producing a specific outcome (e.g., products, services or processes).

Second, learning is crucial for innovation to occur. Ellström and Nilsen (2014) propose that innovating in the workplace is a balancing act between formal and informal learning. Employees need to combine adaptive and creative learning, in order to create both stability and efficiency, gradually improving existing operations, creativity and radical innovation, in order to explore new possibilities in the workplace (ibid.). Practice-based innovations often arise from the interplay between production focus and the objective of mastering explicit work processes that are formally codified, prescribed and organized, and on the other hand, constant development and renewal through implicit work processes as they are perceived, performed and improvised in practice by employees in their specific work context (Ellström, 2010).

The third innovation aspect stressed in this thesis is that people are at the centre of innovating. This is why it is suggested that when people innovate, there needs to be some sort of value or meaning created for them in the process of innovating, which will create conditions for their engagement and ownership of the innovation process. Innovating,
as studied in this thesis, starts from within, and is aligned with values, needs and drives of innovators. It is not solely based on external factors, such as market trends and user needs. Value needs to be created for both those innovating, and those who will be impacted by innovation (users and other stakeholders, or society at large). The research presented here promotes a rather humanistic and democratic approach to innovation, suggesting that all employees in an organization should be provided the conditions and support needed to learn and develop their innovative competence at work. The aim is not just improvement of organizational structures, customer satisfaction and shareholder value, but employee well-being, motivation, fun, creativity, development, and a sense of meaning and purpose at work. Employees should be engaged more holistically in the practice of innovating, taking into consideration their feelings, thoughts, and will. The ethical dilemma associated with this participative and human-centred approach to innovation is how to make sure that people are not exploited in innovation processes where they are expected to contribute not only with their ideas, but to openly share their personal feelings, needs, and other creative resources while innovating.

The last important aspect of understanding innovation in this thesis is that it is context specific and is thus influenced by various contextual and individual factors. What is perceived as innovative depends on what those who innovate in their specific organizational context and job role perceive as such. There are different contextual and individual factors that affect innovation, such as organizational climate, structure and leadership on one hand, and individual background, values, personality, knowledge, skills and work attitudes on the other (Ellström, 2010). Since innovative competence is a combination of individual knowledge, skills, personal characteristics and attitudes, developing innovative competence among employees at work is one of the key factors contributing to innovation in organizations.

1.2.2 Defining contemporary dance

Although the terms “contemporary dance” and “choreography” are often used in the dance field, they mean different things to different people, even among dance professionals. In this thesis, the terms “contemporary dance”, and “choreography” do not refer to popular forms of dance practiced across global cities in contemporary societies (e.g., street dance, salsa, tango, show dance, or ballroom dancing). Instead, “contemporary dance”, and “choreography”, refer to the practice and theory of a group of contemporary dancers and choreographers predominantly active in Europe, who, during the last two decades, have made an important shift in dance. This movement seeks a new poetics, one which would upset the knowledge about dance, and past prevalent notions about dance (Cvejic, 2015b, pp. 11-13). These dance practices question the centrality of self-expression from modern dance, the formalist-abstract paradigm of dance with mystical undertones and its phenomenological heritage, and the later poststructuralist readings of dance (ibid). They relate to a specific approach to choreography that has
been developing since the mid 1990s, and questions the basic assumptions of dance, including questions such as, “what dance or performance is, how choreography could be expanded beyond the movement of the body and how the way dance is made necessarily determines performance” (ibid., pp. 12-13). Some practitioners and theoreticians within the dance field started to even discuss the idea that we are in a “post-dance” period (Andersson, Edvardsen and Spångberg, 2017).

The experimental choreographic practices that are explored in this thesis question established ideas and norms of what a dance performance should be, proposing that creative process or or the way in which artistic work is conducted is central, and that it is the artistic practice that actually frames or defines a performance. A final tenet is that choreography, as a way of thinking and working can be used in other fields of practice, or as an extended practice (Hewitt, 2005; Spångberg, 2013). These contemporary choreographers mark the “beginnings of a ‘dance-philosophy’ as a kind of thought which arises within the material practice of dancing” (Čvejic, 2015b, p. 18). Compared to more traditional and established forms of dance, European contemporary dance of the last two decades is characterized both by its critical attitude, and experimental approach, two aspects that are also crucial for innovating in an organizational context. As dancer and choreographer Gregor Kamnikar (2012) proposes, contemporary dance is the art of exploring and creating movement with a critical attitude of questioning our understanding and experience of the world.

Choreographers within the field of contemporary dance are researching concepts and topics, such as “the method of practice,” “potentiality of doing less,” “undoing everydayness,” “body and materiality,” and possible new relations between body, movement, time and space. These terms will be explained in more detail, later in the thesis. Contemporary choreographers and dance theorists define choreography in many different ways, as the study done by the internet magazine for contemporary dance, choreography and performance, Corpus revealed (2013). But although the various definitions represent a colourful pallet of different proposals on the meaning of choreography, the definition provided by Tim Etchells suggests a common point of departure into further exploration of the term:

“Choreography is organization of movement in time and space.
( Corpus, 2013)

The elements of organizing movement, time, and physical space in new ways are the usual elements that choreographers explore in their artistic practices, and have also been researched in this thesis. Since choreography here has been used as extended practice for innovating in organizational context, the definition proposed by Simone Aughteronly is also relevant, as she sees choreography as a platform for learning and rehearsing future possibilities (Corpus, 2013).

“The trick is in being open to and recognizing the movements of this world and all entities
which have affect and are affected by it. Assimilating and synthesizing all the knowledge that is produced by our movements, thereby producing a kind of graphing, not for a plain statistical output but for a learning and rehearsing of future possibilities.” (Corpus, 2013).

Choreographic knowledge and methods here are seen as a platform for exploring how innovative competence among employees can be developed, enabling employees to learn and rehearse new ways of being at work, innovating their own daily work routines and exploring future possibilities in order to create more meaning at work. The ethical challenge when using dance-based knowledge and methods in organizations is to make sure that artistic knowledge is not abused for the purposes that art would never stand for. Care is necessary to avoid appropriation of artistic methods and their transfer to organizations in order to simply maximize shareholder value.

In the following section, previous experiences of the researcher, her motivation and research approach are presented.

1.3 RESEARCH MOTIVATION AND APPROACH

In order to understand the drives behind the research presented in this thesis, it is important to shed some light on my past experiences, the academic context within which I have been doing research, my personal motivation for the research, and the research approach that is the result of all these factors.

1.3.1 My background as practitioner and my connection to dance

Before I began my PhD studies, I had worked for seven years in practice, mainly as a management and entrepreneurship consultant and trainer, within both large and small companies, involved in improving their organizational processes and systems. As I noted in my Licentiate thesis (Bozic Yams, 2014) this “experience made me realize that the real change and innovation in organizations can only happen from within, if employees are motivated and engaged in driving the change process together with the management, feeling the ownership in the process.” (p. 3). Having a rather negative experience with the traditional top-down consulting approaches, I became interested in alternative ways of organizing that would be more organic, bottom-up, based on self-organization and employee-involvement.

Fortunately, early on in my career, I had the opportunity to participate in the workshops of different international artists from various artistic fields who were involved in interventions in organizations, inspiring me to pursue research in this field for two reasons. First, because I have always been interested in art. Dance, especially, has always been an important part of my life; I started to go to dance classes when I was four years old,
and in some form or another, continued to be actively engaged with dance all my life. Second, when I started to participate in workshops where artists shared their knowledge with managers, I really felt that they had the capacity to engage business people on another level, activating their deeper personal drives and establishing another level of connection among them. This form of engagement felt more meaningful when compared to my previous experiences with more classical training and consulting approaches. I saw this as an opportunity to connect two passions in my life: dance and management, exploring how they could learn from and benefit one another.

1.3.2 Academic context and experiences

What has importantly shaped the research presented in this thesis is also the academic context in which I have been working. My PhD studies have taken place at the School of Innovation, Design, and Engineering at Mälardalen University, which has an interdisciplinary approach to innovation management and a strong focus on co-production with regional companies and public institutions, which very much suited my interdisciplinary approach to researching innovation and my focus on practice.

The research presented in this thesis is largely based on my previous work published in the Licentiate thesis titled “Dancing Innovation” (Bozic Yams, 2014). In the Licentiate thesis I first performed a study interviewing 20 contemporary dance choreographers from various European countries in order to understand the key principles of work behind their creative processes. I also implemented two participatory action research studies where I began to experiment with contemporary dance-based methods in organizational context. The main study was a half-year process where 27 participants from different companies, public and research institutions participated in a specially designed university course called “Culture and space for innovation” that was at the same time organized as an action research study. Based on results of this study, I realized that in order to be able to more clearly see the potential impact of dance-based methods on enabling innovation in organizations, it would make sense to do an even longer-term study for my PhD thesis. Instead of involving participants from different organizations, the focus would be on one organization, in order to reach out to more people within the organization. On the other hand, it made me think also that I needed to focus more clearly on one concept within innovation management, as I was shifting between ideas about innovative mindset, innovative culture, innovation process and innovation enablers, while my empirical studies actually showed that what I was affecting most with my practice-based research was the innovative competence of people participating in the studies. This was the design basis for my studies on the PhD level.
1.3.3 Research approach

Based on my previous work experiences and the research done within the scope of my Licentiate thesis, I learned that as people are the most important drivers of change and innovation, what motivates me most, is to find ways to empower people to innovate, so that they may improve both their work and their lives. At the same time, I realized that for many of the practitioners I met in my projects, innovation was a very abstract word. Although everyone spoke about innovation with near-religious reverence, as something important that their organization should focus on, it seemed that the word was a buzz word, often devoid of any real meaning or substance. This made me realize that to make people passionate about innovation, they must first understand what they will personally gain from becoming more innovative, and how innovating can affect their lives in positive ways. They need to find some meaning in innovation that goes beyond the goal of launching a new product or reaching higher profits for the owners. This made me question the purpose of innovating and of innovation management. I felt that this was also the locus of the power and potential of artistic methods. My trajectory towards a more critical and humanistic perspective on innovation, allowed me to re-frame the purpose of innovation that I believe in, and seek to enable. Innovation that enables people to improve their own well-being, and society at large.

As a practitioner, I have always been motivated by seeing the results of my work affecting people in real life, and this influenced the type of research I chose for my PhD studies. My purpose has been to create new knowledge though experimentation in practice, not by being an external and neutral observer, but rather an active participant in my studies, allowing myself and other participants to take a learning journey together, co-shaping the research process. This is why I chose action research as my main research method and why using both first, second, and more traditional third voices as a researcher has been important to me. The first person voice allows me to use the research process as a personal adventure into learning about myself as a person, researcher, and practitioner. It challenges me to try out new things in my own practice and develop my own innovative competence in the process. The second person voice enables the conditions for co-creation of new knowledge and meanings with participants in my studies, supporting them to develop practical knowledge that would be useful to improve their own work and life situations. The third person voice is conducive to taking a step back, looking at the empirical data. From this perspective, it is possible to see how knowledge created in practice could be used to improve existing concepts in theory, and subsequently develop more generalizable knowledge that might be of interest or use for others who have not participated in my studies.
1.4 RESEARCH PURPOSE AND QUESTIONS

The overall purpose of my research is to explore how knowledge and methods from contemporary dance and choreography can be used in organizations to enable individuals to develop their innovative competence.

In the introduction, results, and discussion chapters, the research questions will be presented, answered, and discussed in an order that enables the reader to follow the red thread of the thesis in the most logical way. In the methodology chapter presentation of how the research process actually unfolded, the order is slightly changed. The reason for these differences is that due to the iterative action research process performed in this thesis, new theoretical questions appeared while experimenting in practice, which made it impossible to plan the questions in advance in a more linear and logical manner.

The first research question explored in my PhD thesis is:

**RQ1:** How can innovative competence be conceptualized?

The results of empirical studies from both licentiate and doctoral theses showed that what my research was affecting most was the innovative competence of participants. Still, when looking at the existing theory on individual innovative competence, it appeared that ideas about innovative competence were quite fragmented, with a variety of researchers focusing on various aspects of the phenomena. This motivated the implementation of a systematic literature review about the concept. This review aimed to synthesize different bits of research, suggesting how innovative competence could be conceptualized in a more holistic way, and contribute to innovation management theory.

The second research question explored in my PhD thesis is:

**RQ2:** What are the key concepts and practices from contemporary dance and choreography that can contribute to understanding and developing innovative competence in organizations?

When comparing the results of the main empirical study done in this thesis and the model of innovative competence developed based on the existing literature in innovation management, it became clear that the current research does not take into consideration the more embodied aspects of learning and developing innovative competence, aspects perceived as important by participants in the empirical study. This is why it was decided to further explore the relevant literature within the theory of contemporary dance and choreography in order to determine if the concepts discussed by dance theoreticians and practitioners could further inform and enrich ideas about innovative competence, and add a more embodied dimension to its understanding. A contribution to the theory about innovative competence in the innovation management field would result, as well as a contribution to the field of dance-based interventions in organiza-
tions. The contribution would first, address the lack of exploration into contemporary dance and choreography in this context, and second, expand the use of dance in organization from a predominant focus on leadership development towards another aspect of management, namely innovation management.

The third research question explored in my PhD thesis is:

RQ3: How can knowledge and methods from contemporary dance and choreography be used in practice to enable innovative competence development among employees?

The purpose of this research question is to operationalize the knowledge and methods from contemporary dance and choreography in an organizational context in order to determine how they could be used in practice, and to better understand how they could contribute to the actual development of innovative competence among employees. In responding to this question, it was necessary to develop and test a choreographic toolbox for enabling innovative competence development in organizations. In this way, a contribution to the practice within the field of innovation management can be made.

The fourth research question explored in my PhD thesis is:

RQ4: How could knowledge and methods from contemporary dance and choreography be used to design long-term artistic interventions in organizations on a strategic level?

This research question intends to contribute to the understanding of how contemporary dance and choreography could be used for the design and structure of more long-term artistic interventions in organizations. The goal would be to increase understanding and support by top management, and generate strategic value connected to the achievement of overall organizational goals. The purpose here is to not to answer this question on a general level, but rather through provision of a specific example of how a long-term dance-based intervention is designed, using methods from contemporary dance and choreography, which could in turn provide inspiration for future similar studies. In this way a contribution to the field of artistic interventions in organizations can be made, as well as more specifically, to the field of dance-based initiatives in organizations.

The fifth research question explored in my PhD thesis is:

RQ5: How can innovative competence be conceptualized integrating embodied ways of learning that can enable more radical employee-driven innovation?

This research question explores how knowledge from both empirical and theoretical studies could be synthesized into a new model of innovative competence that integrates embodied aspects of learning, absent in the current innovation management literature. It also explores how embodied ways of learning could enable employees to move from
incrementally improving what they already do towards exploring new future possibilities, and thus developing competence for more radical innovation. In this way, a contribution to the theory of innovative competence within the field of innovation management can be made.

1.5 CONTRIBUTION

The research questions explored in this thesis are relevant for both researchers and practitioners within the field of innovation management. They are relevant for researchers as they aim to contribute to further understanding, development and conceptualization of innovative competence. The use of concepts and methods from contemporary dance highlights the lack of consideration of the embodied aspects of innovative competence.

For managers and practitioners within innovation management, an important contribution is the practical toolbox for helping employees develop their innovative competence that treats and engages people more holistically (with their heart, mind, and will), bringing innovation closer to everyday work and practice. In this way, innovation is made less abstract, and engagement and a sense of ownership of innovation are potentially increased. The thesis also discusses the importance of body and materiality at work, and highlights an element of work often absent in the predominantly digital world of knowledge workers, where most attention has been given to cognitive skills.

For both researchers and practitioners within the innovation management field, the contribution of using contemporary dance and choreography in innovation represents a new, more critical and humanistic perspective on innovation. It locates people, their self-fulfillment, and rehearsal of new ways of being at work, at the centre of innovating, all within the larger scope of creating a better society.

For researchers and practitioners within the field of artistic interventions in organizations, the research presented here provides some new ideas about how choreographic frame of thinking and methods can be used to design and facilitate long-term artistic interventions in organizations on strategic level that are still rare. It also highlights possibilities of using knowledge from a specific field of dance in organizations, namely contemporary dance and choreography, exploring some of the concepts that contemporary experimental choreographers work with in their artistic practice and have not been discussed in this field before.

Finally, for action researchers, it suggests how dance methods could contribute to further development of more embodied approaches to action research able to more holistically engage participants in the research studies, taking into account learning aspects in research that cannot be experienced or communicated only through language.
1.6 DELIMITATIONS

There are various limitations of the studies presented in this thesis. The empirical studies were performed in a municipality, and at an academic conference, implemented in specific contexts, and thus engaged only selected target groups, (i.e. public officials and academics). The study in the municipality was performed in Sweden, where there is a general openness for experimenting with new methods. It is not clear how the same approach would work in other cultures that might be more resistant to using dance-based methods in organizations. Although the study at the AoMO conference included participants from different countries, the fact that they either research or work in practice with artistic methods in organizations, makes them, by default, more receptive to choreographic methods. While the study in the municipality was relatively long in duration (two years), it directly included only a relatively small group of people (22 innovation leaders). A limitation of the study at the 2016 AoMO conference was that it was rather short in duration (only a few days), and although it involved more people, it did not provide conditions for a long-term behavioural change or competence development. Its purpose was to initiate a thought process, and to offer a new framework for thinking and experimenting with innovative competence development at work through the use of choreographic tools.

The systematic literature review study on innovative competence, which resulted in an integrated model of innovative competence, is also subject to several limitations. The model is relatively complex, which makes it difficult to test and measure its every aspect in practice. The model has been tested only to a limited extent, which means that it needs to be further operationalized in different contexts in order to further understand its relevance and applicability. A revised version that synthesizes both research from innovation management, and concepts and ideas from contemporary dance and choreography, has yet to be tested, and remains an interesting challenge for the future but, represents a limitation of the current research.

Since this thesis contributes to two different research fields (innovation management and artistic interventions in organizations), and uses a third field (contemporary dance and choreography), as an important input and inspiration, a further limitation is that different fields could not be researched and discussed in the same depth as would have been possible had only one research field been explored.
2 | THEORY

2.1 INNOVATION MANAGEMENT AND INNOVATIVE COMPETENCE

2.1.1 Developments within the innovation management field

Changes in who is innovating

One noticeable trend in the development of the innovation management field is that the traditional focus on maintaining innovation within a specific department has extended towards engagement with different stakeholder groups, and consequently, different concepts around innovation have evolved: open innovation (Chesbrough, 2003), participatory innovation (Buur and Matthews (2008), user-centred innovation (von Hippel, 2005), design-driven innovation (Verganti, 2009), and employee-driven innovation (Høyrup, 2010). All these concepts suggest that, at best, innovation will not occur when closed in a box within a separate department in an organization, but through collaborative efforts, tapping into the creative potential of many people from different departments and exceeding organizational borders.

The concept of employee-driven innovation proposes that management should provide enabling conditions for all employees to engage in innovation efforts, while employees from across an organization should take a proactive and highly engaged role in making innovation happen, participating in all phases of the innovation process (Høyrup, 2010). The concept of participatory innovation, in the same line as employee-driven innovation, is democratic in its nature, as the name suggests, but has a slightly different focus. Buur and Matthews (2008) define participatory innovation as innovation driven by people, not experts. It is based on a democratic idea that comes from Scandinavian tradition of a workplace where “ordinary” people can contribute to innovation based on their existing practices and needs. In this way, participatory innovation projects take people’s practices and needs as a starting point of the innovation process, in which company developers (employees), and users collaborate, and together develop new products and services (ibid.). In comparison with employee-driven innovation, there is more focus on user involvement, and often design related methods (e.g., design-thinking) are used in the process. According to Buur and Larsen (2010), innovation is the novelty that comes about through local interactions between people with different intentions, and creates
new meanings (Buur and Larsen, 2010). This meeting of crossing intentions and new
themes that emerge when different perspectives in the group collide is crucial for inno-
vation to occur in a group conversation (ibid).

Another concept that stresses the importance of democratizing innovation and en-
gaging users, is the concept of *user-centred innovation* (von Hippel, 2005). Instead of a
traditional manufacturer-centric model where the manufacturer develops products and
services in a closed way using patents and copyrights, the contribution of users to new
product development grows steadily due to continuing advances in computer and com-
munications capabilities (ibid.). For users, it has become easier to get precisely what
they want by designing it for themselves, and often also increasing social welfare when
innovating. Von Hippel (2005) stresses the importance of lead users as those who are
most likely to successfully innovate products. Because they are ahead of other users with
respect to market trends, located at the leading edge of the market, it is highly likely that
the novel products they will develop for their own use will appeal to other users (ibid.).

The next concept that speaks in favour of democratizing innovation is the concept of *open
innovation* (Chesbrough, 2003). This concept extends the network of innovators beyond
users, suggesting that anyone with valuable knowledge and ideas should be invited to par-
ticipate in the innovation efforts of an organization. Thus, open innovation often results in
companies openly publishing specific innovation challenges and then inviting a wide com-
munity of researchers, students, or even the general public to contribute ideas. Different
formats, such as innovation competitions, 24-hour innovation jams, 72-hour innovation
races and open online platforms have been developed by companies to facilitate open
innovation and engage different stakeholder groups. The frequent challenge with open
innovation initiatives is that many ideas are generated but there aren’t enough available
resources to thoroughly process them and create conditions for actual implementation.
Many times the value or quality of ideas could also be questionable. This is why Verganti
(2009) suggests that it makes more sense to identify and attract a more targeted group of
interpreters from a large variety of fields (such as design, art, science, technology, anthro-
pology and others). These interpreters can contribute expert knowledge across disciplines,
and redefine potential new meanings for products, enabling more radical innovation in or-
ganizations (Verganti, 2009). Verganti refers to this model as *design-driven innovation* (ibid.).
In general, it can be concluded that the scope of innovation has largely expanded beyond
isolation in R&D departments, moving towards building a culture of innovation where all
employees are encouraged to participate in innovation. This expansion also implies that
users, suppliers, distributors, external research institutes, universities, opinion makers from
a variety of fields and other stakeholders (sometimes even the general public), all become
important sources of innovation.

**Shift in what is being innovated**

Another trend has developed within the field of innovation management concerned
with expanding ideas not only around who shall innovate but also about what shall be innovated. Traditionally, innovation was very much focused on product innovation, and often new technology was central to innovation, which is why it was so dependent on the capabilities of experts, and was managed through top-down, strictly planned and controlled stage-gate innovation processes within the R&D function. In recent decades, as more attention has been given to user engagement in innovation processes, the focus has shifted towards service innovation (Miles, 2004; Nijsen et al., 2006), or so called “servitization” of companies, in order to increase the value for the user and create new sources of income for companies. This servitization logic compels companies to make the shift from selling products (and services as a product add-on) towards selling integrated solutions (products and services), providing higher value in use for the customers. This involves innovating the capabilities and processes of an organization, starting outside-in, from understanding the customer context in order to meet her needs, and increase value in use through co-production.

Another direction in which the shift has been made in terms of what is being innovated is the trend of business model innovation (Osterwalder & Pigneur, 2009). Many companies have realized that important sources of creating value are found in innovating internal processes, organizational and business models, thinking in innovative ways how the company can be re-organized to reach out to new target groups, using different sales channels, improving customer relationships, innovating the structure of costs and resources used, or the ways organization works with suppliers and distributors. To a certain extent, a more systemic approach to innovation (Midgely and Lindhult, 2017) has been developed. Organization is placed within a larger context and network of relationships, with different stakeholders, and an attempt is made to understand how value can be created in this network or business ecosystem through interaction between different stakeholders in a process of joint value discovery (Lindhult et al., 2015). This means that “value can only be derived when the innovation is synergistically integrated with other complementary innovations, going beyond the boundaries of a single organization. Therefore, the term ‘systemic’ refers to the existence of a co-ordinated innovation system” (Midgely and Lindhult, 2017). Since value has become what is being innovated, and different actors in a complex system network are sources of value, Lindhult et al. (2015) identify value-driven innovation as the innovation that arises through the co-productive relations in such a system (ibid.). This kind of innovation can be manifested in different forms, through product, service or business model innovations, but the focus lies in the amount of value realized through the common efforts of different actors in the network.

New ways of organizing for innovation

As the focus of innovation moves from R&D departments and product innovation towards more complex networks of innovators (both from within and outside innovation), it is increasingly difficult for organizations to be in control of the innovation process - always planning and following a certain process of pre-defined steps. Traditional ap-
approaches to innovation management, especially within product innovation, have widely applied the so called “stage-gate model” of innovation processes (Cooper, 1990; 2008). This model divides different steps that are planned and controlled by gate keepers, making sure that the planned goals are achieved before moving to the next stage of the process.

In the context of today’s complex global society, one which is interconnected and continuously changing, it is hard to manage innovation in terms of designing, implementing and controlling a predictable process from a top-down organizational perspective, following a set of clear rules and stages. Innovation management is rather understood as an emergent process of creating conditions for innovation to occur within a complex and continuously changing organizational environment (Tidd and Bessant, 2011). As some of the literature in innovation management suggests (Tidd, 2006), the newer models of innovation recognize that most innovation is messy and hard to control. The more traditional innovation models which are rather linear in their conceptualization, for example the wide-spread stage-gate model (Cooper, 1990), must be complemented with more iterative, circular and emergent models of innovation process, such as are suggested by Scharmer (2009) and Peschl and Fundneider (2012). The stage-gate model is still largely used in organizations, particularly for incremental innovation of existing products and services. However, it is of less value when it comes to discontinuous innovation (Utterback, 1994; Bessant et al., 2005), also known as disruptive (Christensen, 1997), radical (McLaughlin et al., 2008) or bold (Cooper, 2011) innovation. Radical innovation is based on a more fuzzy logic with dead ends, recycling between stages, and jumps out of the linear sequence (Tidd, 2006). For it, a different sorts of learning and transformation processes are needed, as described by terms, such as “generative learning” (Senge, 1990) and “presencing” (Scharmer, 2009). In this context, it also makes more sense to talk about “enabling” innovation (Peschl and Fundneider, 2012), rather than “managing” it.

Most organizations today strive to achieve a good balance between incremental and radical innovation in order to continuously improve. The aim is to maximize the benefits from existing strengths, while at the same time invest in new areas of activities that will enable survival and growth in the future. The means of organizing innovation efforts in order to achieve this ambidexterity between incremental and radical innovation, is currently a significant question for organizations (implying multiple approaches). In this thesis, it is suggested that incremental and radical innovation do not need to be separated from each other. According to Lavie et al. (2010) this approach is called contextual ambidexterity, and is one of the four modes of balancing exploration and exploitation. The other three approaches separate them either on organizational, temporal or domain basis and are thus referred to as organizational, temporal and domain separation (ibid.). If people across organization should develop the capacity for both incremental and radical innovation as part of their innovative competence, they need to develop the ability to move between different dualities, such as exploration - exploitation (March, 1991), action – reflection (Schön, 1983), divergence – convergence, and autonomy – integration (Backström, 2013).
Re-definition of the purpose of innovation

As the field of innovation management practice has spread from companies towards the public and NGO sectors, the purpose of innovation has extended from barely producing economic value, towards also creating social or environmental value. Redefining the purpose of innovating is also assuming greater importance for private companies as new generations of more purpose-driven employees come into labour market, seeking more than just the pure economic value they create at work. Employers must find ways to engage and motivate these new employees beyond just the idea of maximizing profits. Employees increasingly want the possibility of personal development and growth at work, but often also feel more motivated when they can see that their work is contributing to a better society. This is why a rise of new organizational models, such as the “teal model,” proposed by Laloux (2014) in his book “Re-inventing Organizations” is seen. These models are largely built on participatory and democratic management principles based in self-organization, holistic treatment of employees, and evolutionary purpose, co-created by everyone in an organization (ibid.). These models affect ways of organizing, and enable innovation.

When innovation processes begin to follow more participatory, bottom-up logic, the basic drivers for innovation often start to change. Employees, users, and other stakeholders organizations seek to engage in innovation processes, will want to know how they can benefit from them. Employees, for example, will want to know not only how to optimize the time and resources spent on a task when innovating their work processes, but also how the new work process will increase their well-being, creativity, or motivation at work, all of which are relevant factors that can contribute to productivity and economic value produced by innovation.

This shift towards purpose-driven innovation is not occurring just because of changed employee expectations, but also because of the changes in society at large which are transforming the needs of consumers. People in the past seemed to have clear formulas for the life choices they were expected to make, (e.g., finishing a university degree, finding a stable job and a life partner, creating a family and a home). Currently, people are awash in near-infinite choice in every aspect of their life. They can live wherever they want, work with what they like, change careers, experiment with gender orientation, and experience different forms of partnerships and even ways of conceiving a new life (Verganti, 2016). Excess choices are further available for fulfilling a problem, need, or desire when buying consumer products or services. The current challenge for organizations is not to produce even more new solutions and product functions for a plethora of already existing products and services, but rather to help users make choices that are right for them (ibid.). This means that organizations need to learn how to enable consumers to co-create meaningful products and services together with the companies. The new meanings created in this process need to be based on inner values, beliefs and drives of people engaged in them (ibid.). This implies a shift from innovation based on problem-solving,
towards innovation driven by creation of new meanings or meaning-driven innovation (Verganti 2016; Öberg 2015). When users are engaged in innovation processes, (e.g., patients in a hospital), they will not be so interested in the latest app with new functionalities for the nurse, but rather in the value of a genuine and caring conversation with her that will make them feel more dignified and human in the clinical hospital environment. The deeper values of users have to be thus explored in such innovation processes, in order to create new meanings and a feeling of purpose for the users.

2.1.2 Positioning within the innovation management field

People-centered innovation

In this thesis, the focus is specifically on people-centered innovation processes that engage employees from across an organization, despite their position in the organizational hierarchy or department. In this sense, the research presented here is in line with the concept of employee-driven innovation (Høyrup, 2010 & 20012; Kesting and Ulhøi, 2010; Kristiansen and Bloch-Poulsen, 2010) that has developed in connection to learning theories. The thought behind employee-driven innovation is that innovation should not be limited to special innovation, or R&D departments, but should become embedded in the daily work activities across organizations (ibid.). Employees are an important but often overlooked resource for innovation because they possess highly context-dependent operational knowledge, acquired over time, often have unused creative potential, and maintain relevant external network contacts who could help generate valuable ideas (Høyrup, 2010). But for employee-driven innovation to occur, the right organizational conditions need to be created. One of the conditions needed is to decentralize the responsibility for planning and execution of work into operative and cross-sectional ad hoc teams, that can form and dissolve in a flexible way according to the needs of organization (Høyrup, 2012). Employees must also have the possibility to engage external experts, institutions, and partners that can contribute the necessary knowledge and resources in innovation projects (ibid.). This means that employees need a high level of autonomy, and ownership of work activities. Employees from any organizational level, (shop floor included), can take initiatives to propose, develop and implement new ideas. Innovation is thus understood as a bottom-up process. This does not mean that employee-driven innovation excludes the role of management. Managers can help coordinate and systematize innovation processes initiated by employees or invite employees to participate in innovation processes. In this way, both bottom-up and top-down approaches are part of employee-driven innovation (ibid.)

Holistic meaning-driven approach to innovation that starts from within

In Western societies that, since renaissance, have elevated the cognitive skills of rational analytical thinking, and where body awareness has disappeared from predominantly
cognitive, immaterial work of knowledge workers in the digital age (Kunst, 1999), the consequences for the individual are concerning. Digitalisation of work has resulted in a worker sitting in front of a computer most hours of the day, cognitively engaged in the virtual world of signs, and overloaded with information and constant stimulation. This worker is frequently disconnected from the body and material world of emotion and affection (Berardi, 2013). The constant flow of online images and information, often manipulated to represent an unrealistic picture (e.g., perfect individuals with fit bodies, always having fun, experiencing new things, being happy parents and successful professionals), increases pressure on individuals to perform in all areas of life. Work is not just a means of gaining a monthly salary, as in the industrial age, but one of the main paths towards self-fulfilment, leading to higher individual expectation of achieving self-fulfilment at work. The result of these high performance expectations are often heightened levels of anxiety, panic attacks, burn-outs and depression (ibid.). In the industrial age, workers’ bodies were used in factories through physical work while their souls remained outside of workplaces (ibid.). Contrarily, in current society, knowledge workers are expected to actively use their intelligence and creativity at work, while their bodies are almost completely inactive and disconnected (ibid.). In this way, high performance expectations are fed by external images and pressure, and disconnected from the real needs, values, and drives of the individual. A more holistic and humanistic approach could serve as a driver of innovation to increase the well-being of both those innovating and those affected by innovation. This approach would contrast innovation that only stimulates more unhealthy work, unhealthy life-styles, and meaningless overconsumption of goods. As both Laloux (2014) and Schärmer (2009) suggest, a focus on wholeness is needed in the way companies are organized and in how they treat their people and other stakeholders, engaging people’s minds, hearts, and will. This demands a return to body, emotion, affection, and purpose in the immaterial digital world of instant consumption, often emptied of meaning. Engagement of all aspects of self (mind, heart, body, will), and release of old behaviour patterns allows for new patterns to be established, enabling employees to develop their personal practice of innovating. “Theory U” by Otto Schärmer (2009) explains how radical innovation and change can only occur if people are engaged in the process on different levels (mind, heart, will) and through “presenting,” a shift in the place from which they operate as individuals and as community.

The purpose of innovating thus becomes creation of new meanings that will result in better individual lives, not just increased production, consumption, or profit maximization. In an economy where creativity, imagination and dynamism are key tools for production of value and experimentation, with subjectivity at the center of production (Kunst, 2012), life can be easily appropriated or misused if these inner sources of creativity are used for economic value creation and not for other more humanistic or social purposes. This is why a more humanistic approach to innovation is suggested, where the innovation process is turned from outside-in logic, toward inside-out logic. Instead of beginning to innovate by looking at market trends and user needs, employees would start innovating by reflecting on, and questioning their own work. They can explore how they can innovate around
questions such as, “why they do what they do” and “how they could it differently,” to make their work more meaningful for themselves and others around them. In this reflection and exploration that starts inside-out, and is based on individual’s values, drives, and needs, employees also extend their practice of innovating towards discovering how these new, experimental ways of working can produce meanings for other stakeholders affected by their innovations. Colleagues, customers, suppliers, partners, local community, and society, are provided the opportunity to engage them in co-creation of new meanings.

Enabling process-centered emergent innovation

In addition to focusing on people-centered, inside-out innovation, which enables employees from across an organization to create new meanings along with different stakeholders, this thesis focuses on innovation as a process rather than as a product. Attention is shifted from the end result towards a process or practice of innovating where, rather than planning and managing, emergence and enabling are in central. Peschl and Fundneider (2008) developed the concept of emergent innovation, discussing five different levels and strategies in the innovation and knowledge creation processes. The complexity increases as one moves from level one to level five, and the type of innovation engaged in changes, moving from incremental towards radical, arriving at emergent innovation.

From Peschl and Fundneider’s (2012) perspective, to initiate any kind of profound, radical and emergent innovation, the notion of enabling is crucial. Enabling is put into opposition with managing innovation (ibid.). Since managing well is connected with keeping things under control, innovation that aims to destabilize and change established routines can be seen as an enemy within an organization. Managers are thus unlikely to be enthusiastic about integrating innovation processes into their daily routines, unless they can make them predictable, and fit them into their procedures and processes (ibid.). This attitude of controlling is connected with the assumption that innovation processes can be produced or controlled like any other organizational process. In reality, even less-complex organizational processes can only be controlled to a certain extent, while reality is quite complex and often surprises us with unpredictable events. Those who try to plan and manage innovation processes by using rules and formulas, counteract their attempts at innovation because it is not possible to produce profoundly new knowledge and innovation through application of existing rules and recipes (ibid.).

The concept of enabling in the context of innovation relates to “providing a set of constraints or a facilitating framework for supporting innovation” (Peschl and Fundneider, 2012, p. 45). The necessary supportive environment for innovation is called enabling space (ibid.), and is based on cultivation, facilitation, incubation and enabling rather than on a regime of control and forced change (ibid). Space, in this instance, is broadly defined as a “container providing a set of constraints that holds it together and gives it a minimal
structure and dynamics” (ibid, p. 49). Enabling space is multidimensional and integrates a variety of factors, such as architectural, social, cognitive, emotional, technological, and others with the aim of supporting innovation (ibid.).

Innovation as a core competence in everyday work

Since innovation plays a central role in organizational competitiveness (Reuvers et al, 2008; Shalley et al, 2009), high organizational innovation performance can no longer rely on a few select people working in R&D, but rather depends on the engagement of everyone in an organization across disciplines, functions, and levels (Trokan, 2007; Abstein and Spieth, 2014). In this thesis it is suggested that innovative competence has become a core competence, generic by nature, to be integrated into everyday practice of employees. Several studies by different institutions have included creativity and innovation on their lists of core skills and competences. For example: the OECD (2005), the EU (2006), the Danish Ministry of Education (2005), the UKCES employability skills (2009), 21st Century Skills (Binkley et al, 2010), and Transferable 21st Century Skills (Pellegrino and Hilton, 2012). As such, innovative competence is trending towards assimilation within higher education curricula (Vila et al, 2012; Borras and Edquist, 2015), and will be practiced in a variety of businesses and organizations (Räsänen et al., 2015). This thesis suggests, that employees from across an organization should be enabled to develop and use their innovative competence in everyday work.

Developing innovative competence through practice and learning at work

Innovation as a core competence in everyday work is close to the concepts of employee-driven innovation (presented above), and practice-based innovation (Ellström and Nilsen, 2014). The latter suggests that innovation often occurs through informal on the job learning, as employees seek solutions to emerging problems in their daily practice. This means that innovations are not only the result of technological progress and R&D investments, but also the result of experience-based know-how, or the tacit knowledge of employees from across an organization. If employees are enabled and encouraged to develop new knowledge and skills while learning at work, they will find more efficient or new ways of organizing work, innovating shared routines and transforming the workplace into a site of production as well as a place for learning and innovation (ibid.). Organizational practices that encourage learning at work, such as project teams, problem-solving groups, job and task rotation can positively contribute to innovative performance (ibid.). The innovations developed by employees through formal and informal learning in everyday work, are driven from the bottom-up, and can result both in process innovations, such as new methods of work, or in new products and services. These innovations can be either incremental or radical, breaking with established views, knowledge or technology (ibid.).

For innovation to happen through learning at work, employees need to engage in a special type of learning that Ellström and Nilsen (2014) call “creative (or development-

Peschl and Fundneider (2008) even go one step further, suggesting that “reframing” and “re-generating,” are the basis for any radical and emergent innovation, and demand the innovator to remove themselves from their deep-seated assumptions, reframing existing knowledge by changing mental models. In profound existential change connected to emergent innovation, this change is not only cognitive or intellectual, but touches more fundamental questions of finality, purpose, heart and will, and is thus existential. Emergent approach to innovation does not focus on learning from the past, but rather on being completely open and present in order to sense the potential and see what could be possible in the future (ibid, p. 105). In emergent innovation “the goal is to be very close to the innovation object and at the same time completely open to what wants to emerge out of the surrounding, out of the organization, its humans and its knowledge” (ibid, p. 105). The existential levels of the individual and the organization/society are brought into a status of inner unity_ALIGNMENT with themselves, and with their future potential and future requirements (ibid, p. 105).

The idea of regenerating is close to Scharmer’s (2009) concept of presencing, which suggests that in the phase of presencing phase, people engage their hearts, minds and will and let go of all the non-essential old aspects of self, surrendering to the unknown and opening to new aspects of their highest future potential. Once this threshold is crossed in the innovation process, people begin to operate with a heightened level of energy, and as a vehicle for the future they sense emerging (ibid.). The idea of presencing suggests that the process of creating new knowledge from the future rather than from the past enables individuals and groups to innovate more radically and engages them on all levels. However, it is not very clear how this occurs in terms of activating embodied ways of learning, linking mind-heart-will. Besides the more classical ideas about engaging tacit knowledge in innovation processes, developed through learning at work (Nonaka and Takeuchi, 1995; Høyrup, 2010; Ellström and Nilsen, 2014), there is a lack of discussion on embodied learning in innovation management theory. Further thoughts on the importance of body in learning and creating new meanings arrive later in this chapter where certain theories from dance, phenomenology, and cognitive science are presented.
2.1.3 Innovative competence

Competence model

This section deals with understanding of the competence concept as used in this thesis, and presents a basic model, with different elements influencing individual competence. An integrated model of innovative competence will be introduced in the results chapter.

The comprehensive study of current research in the field of competence by Illeris (2013), stresses that there is no common agreement about the definition of competence, but that elements which are most commonly repeated in various definitions refer to competence as knowledge, skills and personal traits and attitudes that enable an individual to perform a specific task or activity in practice.

The dominant rationalistic approach to competence suggests that the specific set of competences required to effectively perform a certain job is generic and context-independent (Sandberg, 2000). This approach is also seen in the established human resource management practice of developing generic competence models which prescribe a certain set of competences needed for certain types of job positions. The competence models are usually used to recruit suitable candidates, as well as to evaluate their performance and plan for further development. These formally prescribed competences are connected to formal learning, and often expect employees to possess a certain formal educational background in order to perform a specific job role. Often formal training programs are suggested for further development of competences, based on yearly performance evaluations.

Rationalistic tradition based on the objectivistic epistemology is problematic in that it doesn’t account for the fact that two employees who might possess identical knowledge, skills and traits, may accomplish work differently in practice, depending on which of these attributes they use at work and how they are used (Sandberg, 2000). An alternative way of understanding competence is through an interpretative approach, based on phenomenological epistemology, which proposes that attributes which people use to accomplish their work are context-dependent rather than context-free (ibid., p.12). Furthermore, the attributes that people use in actual work depend on how they experience their work. As Brown and Duguid (1991) suggest, the way people actually perform their work differs fundamentally from formal definitions of their job descriptions.

Central to a context-dependent competence is the tacit dimension of knowledge which enables workers to carry out tasks without being able to explicitly describe it (Giddens, 1984). Ellström (2010) suggests that informal learning at work is crucial for innovation, and occurs when employees encounter different challenges and find new ways to explore and resolve solutions through improvisation. Competence in use or competence that is actually shown by workers in their practice is dependent not just on their formal training but on their actual experience. In actual worker experience, informal learning and tacit
knowledge not necessarily included in worker job descriptions plays an important role. Furthermore, depending on the contextual enablers, such as organizational climate, structures, and leadership style, workers might apply the different skills, knowledge, traits and attitudes they possess, adjusting to the expectations of their work environment.

Understanding which individual attributes influence employee competence can help employees reflect upon their current work context and practice. Further, it can aid consideration of knowledge, skills and attitudes they think they need and want to improve in order to develop their competence. Illeris’s (2013) flower-shaped competence model offers a comprehensive overview of the individual factors influencing competence, as seen in Appendix A.1. Because of the complexity of Illeris’s model, the model used in this thesis was simplified. Many elements in his original “competence flower” (ibid.) were seen as key elements of innovative competence (e.g., creativity, flexibility, combination ability, critical perspective), and were included in the innovative competence model based on a systematic literature review of the concept. Still, according to Illeris (2013) these elements should be part of any competence, which supports the thesis argument that innovation has become a generic competence, needed to act competently in any field of practice.

The model of competence representing individual factors (besides the contextual ones) influencing individual competence in use can be seen in Figure 2. Within the corners of the triangle are different elements that an individual combines in order to be able to act competently in practice. The supporting factors are organized into three dimensions: the content, intrapersonal, and interpersonal dimensions.

![Competence framework](image)

Figure 2: Competence framework, developed based on Illeris’s competence flower (2013, p. 61).

The intrapersonal dimension of competence is represented by person’s attitudes, personal profile, holistic engagement of both intellectual and emotional aspects of self, and the abilities to act autonomously, make competent judgments and decisions in concrete situ-
ations. The second dimension is the content dimension of competence, which includes the specific knowledge, functional skills and structural understanding of the field in which the competence is practiced. Since a competence is often employed in practice through social interaction, the interpersonal skills of sociability and collaboration are also crucial dimensions of any competence, referred to as the interpersonal dimension. The ability of an individual to combine elements of these different competence dimensions results in competent behaviour, demonstrated through practice. Or as Hayton and Kelley (2006) suggest, an individual will act competently when able to combine “the knowledge required to achieve a given outcome, the skills to implement that knowledge, and the personality characteristics required to motivate the implementation of the knowledge and skills to achieving a desired outcome” (p. 410). The practice, or the ability to competently judge which capacities, dispositions and potentials are needed in specific situations, and using them when acting at work, are at the core of any competence (Illeris, 2013). This is why practice is located in the centre of the competence framework in Figure 2.

Innovator’s DNA model of innovative competence

Through an eight-year collaborative study to determine which cognitive and behavioral skills separate innovators from non-innovators, Dyer et al. (2011) developed a framework of functional skills connected to innovative competence. The study commenced with nearly one-hundred interviews with founders and executives of the most innovative global companies. Based on the surfacing patterns of action of these individuals, Dyer et al. developed an innovative skills survey. Over five hundred innovators and five thousand managers in more than seventy-five countries responded (Dyer et al., 2011). The scale and length of the study, and its global orientation and results publication in top journals (such as Strategic Entrepreneurship Journal and Harvard Business Review), motivated the choice of using their framework for analysis of how dance-based methods could influence the development of innovative competence in the empirical study in the municipality presented in the thesis.

The recurring skills separating innovators from non-innovators, (and thus influencing individual innovative competence), according to Dyer et al. (2011), include:

- questioning,
- observing,
- networking,
- experimenting and
- associational thinking

The skill of questioning implies that one frequently poses questions, especially questions that challenge the status quo and underlying assumptions about individual, team, organization and society (Dyer et al., 2011, pp. 65–89). The second behavior skill of innovators is observation, and implies active observation of surroundings: listening,
seeing, and noticing what is different and surprising. It could mean observing customers, market trends or society in general (Dyer et al., 2011, pp. 89–113). The third skill of experimenting includes both mental (processing information from different kinds of sources), and physical exploration (testing new things in practice). It is concerned with continuous experimentation, (such as building fast prototypes), and learning through trial and error (Dyer et al., 2011, pp. 133–157). The fourth behavioral skill of innovators is idea networking, which occurs through creation of networks with people possessing diverse perspectives, which one can tap into for new ideas and insights (Dyer et al., 2011, pp. 113–133). The last skill of innovators is the cognitive skill of associational thinking, strengthened through practice of the other four innovative behavioral skills. Associational thinking, or associating, is connected to the “ability to make surprising connections across areas of knowledge, industries, and even geographies” (Dyer et al., 2011, p. 41). Figure 3 (below) summarizes how innovators access their innovative competence by first having the courage to challenge the status quo and take risks to go into unknown.

![Figure 3: The innovator’s DNA model for generating innovative ideas. In Dyer, J., Gregersen, H. and Christensen, C. M. (2011, p. 27).](image)

As seen in the innovator’s DNA model, the focus is rather on cognitive functional skills of innovator, while other aspects of innovative competence, such as the intrapersonal attitudes, knowledge, and various interactive skills are missing. This is also the case with other models focused on specific aspects of innovative competence, which fail to encompass the wide complexity of factors influencing individual innovative competence.

**Challenges with the concept of innovative competence in existing literature**

Within existing research on innovative competence, a clear agreement on its definition seems to be absent (Zhang et al, 2013), as different researchers focus on highlighting
only specific aspects of the phenomena. This is not surprising because competence is itself a complex concept, lacking a common definition agreed upon by researchers in the field (Illeris, 2013). Second, innovation is an interdisciplinary field of study, located at the crossroads between psychology, sociology, economics, engineering, and organizational theory (Ford, 1996) where many different perspectives meet. The innovation management field has developed over time and similarly to studies of leadership, ideas centered on innovative competence have shifted from a focus on individual psychological traits and attitudes of innovators (Amabile, 1983; Cerinsek and Dolinsek, 2009; Nanda and Singh, 2009), to functional skills for innovation (McGourty et al, 1996; du Chatenier et al, 2010; Dyer et al, 2011). Recent attention has been paid to the interactive skills needed to practice innovation in teams and in more complex collaborative networks (Hargadon and Bechky, 2006; Darso, 2012; Bissola et al, 2014). A holistic perspective is needed to integrate these different aspects of innovative competence and to provide an overview of the fragmented existing research.

In existing literature it can be observed that the term innovative work behavior (Scott and Bruce, 1994; de Jong and den Hartog, 2010) is used more frequently than innovative competence. The term refers to behaviors at the core of practicing innovation, such as: identifying opportunities, generating ideas, finding support for ideas, and implementing ideas (Kanter, 1988; Janssen, 2001; Abbas and Raja, 2015). These specific innovative behaviors are crucial because they are observable and can indicate the level of innovative competence as performed by an individual, though the behaviours themselves are not competences (Hayton and Kelley, 2006). When attempting to understand what influences individual’s ability to perform a specific activity in a professional context, and how she can improve that ability, it might be more adequate to use the concept of competence. The term behavior is rather broad and relates generally to the actions of an individual. Competence, on the other hand, explains what knowledge, skills and personal characteristics enable an individual to perform a specific task or activity in practice. Although definitions of competence may vary, most definitions include the mentioned components (Illeris, 2013). If innovative competence is to be developed as a core competence among students and employees across sectors, a more holistic understanding of personal characteristics, knowledge and skills influencing innovative competence is needed as a basis for developing educational and professional training programs. A positive aspect of competence is that it can be changed and developed through training and practice. Still, it must be noted that simply training individuals to improve their innovative competence will not necessarily result in innovative performance if other external innovation enablers, such as leadership, culture, and organizational infrastructure for innovation are absent (Smith et al, 2008; Nanda and Sigh, 2009; Crossan and Apaydin, 2010; Brem et al, 2016).

An integrated model of innovative competence will be presented later on in the results chapter, while here another challenge regarding innovative competence, will be addressed. Existing literature lacks discussion about the importance of embodied knowl-
edge as an important part of innovative competence. Perhaps this is not unexpected, as discussion of competences in Western societies often centers on cognitive skills, such as the skills of divergent and associational thinking, in regards to innovative competence. In the knowledge era where physical workers have been replaced by knowledge workers, more attention is given to cognitive skills, while the body and embodied knowledge have relegated to the background. The coming section thus explains why people, (especially in the West), have historically developed an alienated relationship with the body. The mind has been divided from the body, though cognitive science demonstrates that everything human beings perceive, learn and know, including the most abstract of things, such as language, are essentially rooted in the bodily experience. The body plays a crucial role in any process of learning, creating new knowledge and meanings. The coming sections will explain why the body is an important enabler in the process of innovating. This is especially important when enabling radical innovation, where engaging only analytical skills of looking at what is already done and analysing how it could be improved and optimized, is not sufficient. For radical innovation, new ways of seeing the world and sensing future possibilities are important, which is why engaging other aspects of learning beyond cognitive skill engagement becomes more significant.

2.2 BODY AS ENABLER OF INNOVATION

2.2.1 Historical perspective: alienated body as an object of manipulation

In Western philosophy, the body has often been regarded as a force of negativity, an obstacle to the soul’s attempt to secure knowledge, virtue, or eternal life, and a certain neglect and depreciation of body has formed an ongoing theme in Western intellectual history (Leder, 1990, p.127). Bojana Kunst (1999) claims that alienation with the body started with the development of anatomy in 17th and 18th centuries. In her book the “Impossible body” she suggests that with the rise of anatomy and renaissance thought, the body became an object of scientific inquiry, an independent machine which can be observed externally. Anatomy became the main aesthetic and intellectual method, starting a trend of total transparency which could reveal and help us understand the structures behind our bodily operations, turning the body inside out (ibid., p. 26). Descartes, who equalized organic and mechanic, lifted the mechanic principle of the body as a machine in which each organ has its function and is in relation with other organs of the body as a whole, into a universal method. In his mechanistic scheme of the world, body and mind are separated, and the body is seen as part of nature and natural law (ibid., p.29). Descartes and other philosophers (Leibniz, Wolf, Diderot, Locke, Hobbes) used the clock mechanism as a metaphor or automat which mediates the rational and magical, the body and the soul. This hierarchical and strictly causal mechanism of operation, enables the measuring and deconstructing of something as immaterial as time. It shows how men can achieve magical effects by using reason and mechanistic thinking.
(ibid., pp.35-37). The mechanistic paradigm of the body, systematically introduced by Descartes, has had an important role and influence on the image of the body in the past centuries and still today. There is a certain paradox in the fact that even though machines would not exist or operate without humans, they have served throughout the history as a structure and pattern to explain how the human body works, while the functioning of the body has been rarely used to understand machine operations (ibid. 38-39).

According to Leder (1990), the mechanistic view contributed to the negative perception of the body because of its identification with disease and death. The body was seen as a threat to eternal life because of its susceptibility to sickness and death. Descartes viewed it as a mechanical or mathematical entity, free of all soul attributes, and in this way his thoughts laid the groundwork for modern scientific medicine, using the corpse as a methodological tool and a regulated ideal (Leder, 1990, p.140). Descartes sought to overcome the limits of the material body and its illness and aging, proposing the immaterial nature of the rational, immortal soul. His view was further coloured by his own personal situation - he died quite young from pneumonia. Descartes valorized reason in both scientific and technological forms, as well as in metaphysical-theological mode (ibid., p.141). Cartesian science demystified the dangerous body through the third-person corpse perspective. The body was transformed into something mechanical, yielding all its secrets to the scientist/physician, and thus making the corporeal threat of mortality not my death exactly but that of the Other (ibid., p. 148): “The true self cannot be threatened by the demise of that which from the start was mere mechanism” (ibid.).

The problem with the mechanistic view of the body and anatomy, besides contributing to the negative attitude towards the body, is its obsession with the perfect or ideal body, where all parts are in functional proportions and organized relations (Kunst, 1999). The body as a machine projects an impossible image of a body, composed of scientific, aesthetic and moral dimensions. It stresses the imbalance between what is and what seems to be, dictating that our body is not what it should be. This creates a feeling of alienation towards our own body, which is clearly distinct from the perfect body (ibid., pp. 49-50). It also led to development of physiognomy, introduced by Lavater in the 18th century, which intertwines science and aesthetics, and proposes that the physical appearance of a person reveals character, and that physical perfection is an expression of a beautiful soul and moral excellency (ibid., p. 60). Barbara Maria Stafford (in Kunst, 1999, pp. 62-63) suggests that the physiognomic view has not disappeared in modern science, and that Lavater’s simplistic judgements have with the help of modern scientific technology become more epistemologically complex and because of that even more dangerous. New techniques, such as roentgen, CT, MR, genetics, biogenetics, cloning, and plastic surgery, have radically altered the image of the body. These new techniques have created an artificial bodily image processed through a technological filter that represents the body as a matrix, a dematerialized graph, a hypertext or something that can be repaired and reconstructed into a perfect body, or a body with as few imperfections as possible (ibid., pp.64-65).
This idea of the perfect body as a controllable machine that can also be optimized at work strengthened in the 20th century when Frederick Winslow Taylor problematized the worker as the least efficient part of the factory (compared to machines). He developed Taylorism, pursuing an efficient strategy of working rhythms, gestures, movements, and balance (ibid., p. 196). He called his studies motion economy, with the goal of developing work cycles that would enable the worker to achieve maximum efficiency through a detailed system of movements and pauses. His scientific management methods aimed to increase the mechanic efficiency of the body in order to boost the success of the factory, seen as an organism including both machinery and the workers’ bodies (ibid.). This utopian vision of idealized psycho-physical human development focused on the perfection of form and functionality was reflected in several movements in Europe during this era. From the Laban kinetics, to Dalcroze’s eurhythmics, to the founders of modern dance who began to explore the body as an autonomous, expressive entity (ibid., p.204) (see more in the chapter on the history of contemporary dance).

There is a certain paradox in this organic-mechanic transformation of the body, as it centrally locates the body, yet the body simultaneously becomes more abstract and disembodied, a slippery entity in space and time (Kunst, 1999, p. 210). This controlled, perfect body is a creation representing technological progress, science, and the synthesis of human and machine (ibid., p.213). Cultivated through movement, gymnastics and eugenics, it has been also misused by certain racist and fascist politics, which have applied this transformed model of the body as a perfect body that can be easily manipulated, predicted and controlled (ibid.). The organic-mechanic body thus enables a political machinery of reshaping and modelling the impossible body as a living model for everyday bodies (ibid.).

This duality in our attitude towards the body has been retained. There has never been so much focus on the body, and obsession with its parts. At the same time, this ideal of the perfectly trained body and the “data-body” that is enabled by new technologies, is creating a tendency towards deconstruction, simulation, emptying and control of the body (Kunst, 1999, p. 214). It produces a fictional, electronic copy of our body, which constantly indicates its biological, health and emotional status, and gives our body a new identity. Instead of the wholeness of the body, it becomes a dispersed territory of distance, never seen as a whole, but rather through its deconstruction (ibid.,p.215). The body has become an epidermal form, a fragmented fluid, a structure that can be influenced, and whose spatial and temporal limits can be extended, manipulated, intervened in and transcended to form new models of virtual bodies (ibid.,p.218). This can cause an identity crisis, as in a way it has never been so difficult as today to define the body as a space of subjectivity, to define it as my body and space of my identity (ibid., p. 219). This is why we need to turn our critical attention to the body as a subject and not only as an object in the future (ibid.). Although new technologies and knowledge of the body enable us to manipulate and control it, the body still importantly influences our personal experience of life, pleasure, pain, illness and our personal destiny (ibid., p.220). According to Lyotard (1998), our phenomenological deadly and perceptive body is still the only
body that enables thinking about the complexity of thought. The freedom of dispersed presence creates an illusion of limitless reinventions, but is accompanied by a need for the body as a home of the self (Kunst, 1999). Parallel to bodily symbiosis with technologies, there is a need to maintain some basic tension between what is and what could be, a yearning that gives the body its basis for individuality and being (ibid.).

In the context of work, organization, and innovation, closer connection to the body can help people become kinder to themselves, and build more human-centered organizations. This connection can support people to innovate more inside-out, taking into consideration their individual sensations, feelings, needs, and will. It counters exclusion of the body from the radar of attention, or use of the body as a machine-like tool solely intended to optimize work processes and outputs. The dangers of such an attitude towards the body at work can be seen in increased levels of burn-outs and other related symptoms detrimental to people’s health and well-being. Ignoring the body and exposing it to high, long-term levels of stress can lead to a total collapse of the body that is very hard to recover from.

2.2.2 Phenomenological perspective: body as the medium whereby our world comes into being, yet remains absent

Another interesting perspective on the body that sheds light on the historical persistence of body-mind dualism was outlined by Drew Leder (1990) in his book, “The Absent Body”. Leder builds on the previous work of phenomenologists, such as Merleau-Ponty, Husserl, Sartre, Marcel, Straus, and Jonas, and their understanding of the body, attempting to explain why the dualism of Cartesian thought has maintained such a persuasive power until today. He suggests that instead of merely citing evidence counter to Descartes’ philosophical positions, it is important to recognize that the self is at times experienced as involving a mind-body opposition, and that the body is often absent from our awareness. Unveiling the mechanisms behind this experience helps us understand our often problematic relationship with the body and its absence in everyday life and also explains the focus on and glorification of the mind in the Western world (ibid., p.107).

According to Leder (1990), there are different forms of disappearance of the body from our direct perception that explain why the body is often something that we take for granted and neglect, unless it is in a state of dysfunction. The body, according to Leder (ibid.), is often absent from our conscious experience, although it plays a central role in our experience of the world. As Leder suggests, “I receive the surrounding world through my eyes, my ears, my hands...My legs carry me towards a desired goal seen across the distance. My hands reach out to take up tools...My actions are motivated by emotions, needs, desires, that well up from a corporeal self. Relations with others are based upon our mutuality of gaze and touch, our speech, our resonances of feeling and perspective. From the most visceral of cravings to the loftiest of artistic achievement, the body plays its formative role” (p.1).
Yet, the body is strangely characterized by absence. When reading a book or lost in thought, very little attention is given to posture or physical sensations. Even when engaging in sports, the focus is on the opponent rather than the flexing of the muscles. “A psychological experiment has shown that nine out of ten people are incapable of picking out a photograph of their own hands from a small series of such pictures. This strangeness is even more pronounced in the case of internal organs.” (Leder, 1990, p.1).

Although the centrality of body has been illuminated in the works of other phenomenologists such as Husserl, Merleau-Ponty, Sartre, and others, they have mostly focused on the importance of the body in perception and motility, while the theme of absence has not been comprehensively explored in the literature on embodiment (Leder, 1990, p. 2).

According to the Cartesian position, (which is still maintained in science), the body is often perceived as an object, essentially no different from other physical objects, as its properties and functions can be characterized according to the general scientific law (ibid., p. 5). Merleau-Ponty challenged this presumption and suggested that “the body is never just an object in the world but the very medium whereby our world comes into being” (in ibid., p. 5). It is through the body and its sensorimotor powers that one encounters the world charged with meaning, and the body can be one of the objects perceived among the other objects. This dual perspective has been often referred to as the “physical body” (Körper in German), or as the “lived body” (Leib in German). While Cartesianism tends to refer to the image of Körper (dividing it from the mind as an aspect of self-involving cognition and intentionality), the phenomenologists stress the importance of the lived body for revealing the deeper significance of corporeality, and the view of self as an integrated being (ibid., p.5). The physical and lived bodies are not two different bodies, because Körper (physical body with bones and nerves) is an aspect of Leib, one manner in which the lived body shows itself (ibid., p.6). “The notion of lived body refers to the embodied person witnessed from the third-person and first-person perspective alike, articulated by science as well as the life-world gaze, including intellectual cognition along with visceral and sensorimotor capacities” (ibid., p.7).

Ecstatic body and its focal and background disappearance

Ecstatic body is the sensorimotor surface of the body through which the self meets the external world (Leder, 1990, p.11). In this meeting of the other, the perceiving organs recede from the perceptual field. This is necessary in order for the individual to be able to focus on experiencing the outside world, and means that they will not hear their ear, taste their tastebuds or smell their nasal tissue, but will perceive with and though such organs (ibid.)

Polany proposes that there is a so called “from-to” structure or mechanism that characterizes general experience as we act from the body towards the world around us (in Leder, 1990, p.15). If I grab a can of soda in front of me, there will be tactile sensations and a stream of kinesthesias coursing through my fingers that I will not be aware of, but which
will enable me to feel the hardness, weight and temperature of the can. This absence of body awareness is necessary to experience the outer world, acting from the body towards it (ibid., p.15-16). The “from-to” structure is present both in perception (I’m not aware of sensations in my eyes while I observe a tree in front of me) and in action, where the goal of the action is in focus, not the bodily sensations of performing the action. As Ricoeur (in ibid., p.19) says: “I am concerned less with my body than with the product of the action: the hanged picture, the strike of the hammer on the head of the nail.” When hanging a painting I will thus look at the walls, the spaces in my house where I want to hang the painting to achieve the right effect, the proper striking of the nail, while my body will recede before this primacy of the ends (ibid.). Even the most simple movements, such as walking, are affected by this “from-to” structure. Though I might concentrate on the rhythm of my walking, most of the physiology of the act is hidden from my awareness (ibid.). The same structure also works in expressions and in communication of mood and emotion. In Ricoeur’s words (in Leder, 1990, p.21): “When I am moved by emotion, I do not think of my body at all … Being afraid does not mean feeling my body shake or my heart beat; it is to experience the world as something to shun, as an impalpable presence.”

In regards to the absence of the body, it is relevant to be aware of the etymology of the word absence, from the Latin word esse, or “being”, and ab, meaning “away” (Leder, 1990, p.22). “An absence is the being-away of something. The lived body, as ecstatic in nature, is that which is away from itself. Yet this absence is not equivalent to a simple void, a mere lack of being. The notion of being is after all present in the very word absence. The body could not be away, stand outside, unless it had a being and stance to begin with. It is thus never fully eradicated from the experiential world. Otherwise I would not even know I had a body.” (ibid., p.22).

Absence refers to the ways in which the body can be away from itself (Leder, 1990, p.26). Body, as Leder (1990) suggests, is a living process in constant transformation, as it constantly acquires novel skills and habits. A phenomenological anatomy is thus not static. When new skills are learned, swimming, for example, a great deal of attention is given to the body, and the way it is supposed to move in an activity unknown to the body. Watching others swim also helps in learning how to swim. In the initial stages of learning to swim, movements need conscious monitoring to ensure kicking and breathing correctly. Yet once one learns to swim, they do not think anymore about how to move hands and legs as this comes without conscious effort. This type of progressive disappearance also occurs in the acquisition of cognitive skills, (e.g., learning a new language). Leder calls this process incorporation, literally meaning “bringing within a body”. When a skill has been incorporated into a bodily “I can”, the experiential disappearance occurs (p.30-31). In the stage of learning I thus act to the skill as my goal, while in mastery I act from the skill which I operate upon the world (p.32.). Through incorporation, both new abilities are acquired, and with time, also sedimented into fixed habits.
The recessive body and its depth disappearance

Most phenomenologists, like Merleau-Ponty, the main writer on embodiment, have focused on perception and motility, and thus on the ecstatic bodily functions as they are most prominent in shaping the experiential field (Leder, 1990, pp.36-37). But there is also another side of our body hidden to the experiencer, the world of internal organs performing visceral functions in the depth of the body, the recessive body, according to Leder (1990, p.36). This includes the organs of the digestive system, respiratory, cardiovascular, urogenital, and endocrine systems, along with the spleen. These organs are crucial for sustaining our lives, but remain largely unavailable to our conscious awareness and command (ibid.).

Compared to the ecstatic body that exhibits an “I can” experience, being largely in our control, the visceral body is more connected to experiencing the “it can,” “I must,” and “I cannot”. Our internal organs (e.g., heart, kidney, or lungs) are autonomous, and can accomplish their vital tasks without our awareness or volition, causing the “it can” experience of the recessive body (Leder, 1990, p.46). As Ricoeur writes: “It is extraordinary that life functions in me without me…This is extraordinary because at a certain level of my experience I no longer appear to myself as a task, as a project. I am a problem resolved as though by a greater wisdom than myself. The wisdom is a nourishing one: when I have eaten, it is not up to me to make the food into myself and grow on it. It is a wisdom of movement: the circulation of my blood and the beating of my heart do not depend on me” (in ibid., p.46). Since one must eat, breathe, excrete, drink and sleep, the visceral body is also dumbed to experiencing the “I must” in order to survive. Even though one can choose what to eat, he does not assert a final autonomy upon the recessive body, because by choosing not to eat at all, his life is threatened (ibid., p.48). “I must” in a way refers to personal inability that Leder terms “I cannot”. One cannot act from his inner organs in the way one can from the surface body. Lifting an arm is under one’s control, but accelerating digestion or being in touch with his liver is not (ibid.).

As one does not, for the most part, control vital functions, yet relies on their automaticities, visceral processes disappear from the field of action. Leder calls this form of disappearance depth disappearance (Leder, 1990, p. 53). As the viscera is part of the body which we do not use to directly perceive or act upon the external world, it is not a function of ecstasy, but rather recedes (meaning going or falling back) into unexperienceable depths, which is why Leder calls it the recessive body (ibid.). There is a certain alienation or foreignness that is experienced towards the recessive body because of our reduced perception, awareness and command of it. We would not recognize our own organs if they were presented to our gaze, not to mention that we often feel repulsion at the sight of our own feces or vomit (ibid., p.54).

Body surface (ecstatic body) and depth (recessive body) are complemental (Leder, 1990, pp. 55-56). The viscera always participates in ecstasy, although we’re not aware of it. To a large extent, our vegetative needs, such as hunger, and hormonal moods, motivate our
actions and selectively channel our attention. In this sense, it could be said that we perceive and act as much from the visceral as from the sensorimotor body. The same goes in other direction – the surface body always participates in depth disappearance, because even the most transparent sense organs possess tissue layers and functions beyond the reach of our experience. This means we have one body, which is ecstatic-recessive, and that each organ both projects outward and recedes inward (ibid.).

The Dys-appearing Body

As Leder suggests, it is essential to the body’s functioning that the body is so often absent from our experience, even though human experience is rooted in the bodily. If we would have to think of every muscle we need to move in order to walk, we would not be able to walk (Leder, 1990, p.69). Our lived body or our ecstatic-recessive being-in-the-world is thus necessarily self-effacing. What is interesting, though, is that body disappearance particularly characterizes a normal and healthy functioning body (ibid).

On the other hand, when the body becomes dysfunctional, when we experience pain and illness, for example, the body becomes the focus of our attention, and we suddenly become aware of it as an alien presence that we want to repair (Leder, 1990, p.82). When we experience pain, the region of the body that previously produced very little sensory stimuli suddenly speaks up, because of the wide distribution of large number of pain receptors in the body. Pain is thus one of the most intense sensations we experience and seizes us more than any other experience (ibid., pp.71-73). If pleasures are usually secured through satisfying a need or desire through interaction with the world, connecting us with others, pain is experienced in the confines of the body, and induces self-reflection, isolating us from the world. We feast and drink, and enjoyment connects us with our friends, which is why pleasure and happiness are expansive, compelling us to reach out to others. In contrast, pain has a constricted aspect, and when we experience it, we are no longer dispersed out there in the world. We often withdraw our attention to a particular body part, being suddenly isolated in the here and now. Physical suffering thus constricts us both spatially and temporally, what Leder calls spatiotemporal constriction (ibid., p. 75).

We may try to escape pain by focusing on the outside world or by dwelling in the past or future, and the body becomes an alien-like presence which we try to separate from the I. “The painful body is often experienced as something foreign to the self” (Leder, 1990, p.76), merely an “it”. Similar things happen with disease, which is in excess of pain typified by dysfunction. When we are sick, our “I can” bodily ecstasis is disturbed, and we become disabled. The abilities of the habitual body are lost, which we experience as “I no longer can”, because we are no longer able to engage with the world as we once could. We shift our focus inward, becoming preoccupied with trying to repair our body (ibid., p.81).

According to Heidegger, we assume this mechanistic attitude towards the body as a
tool. The body withdraws insofar as it functions unproblematically, while when a dysfunctional break happens in its use occurs, and the tool becomes unusable or standing in the way, we must take explicit account of it (in Leder, 1990, p.83). In these moments of breakdown, we experience to our body not from it because it demands focal attention. Leder names this principle of dys-appearance. “The body appears as thematic focus, but precisely in a dys state – dys is from a Greek prefix signifying “bad”, “hard”, or “ill”, and is found in English words such as “dysfunctional” (ibid, p.84).

Dysfunction and body awareness thus engender each other. In dys-appearance, the body is in focus but experienced as dysfunctional, not operating well. So as long as the body presents no problems, it disappears, but when perception is blocked or dysfunctional, the body becomes the focus of not only our attention, but also our action (Leder, 1990, p.85). The fact that the body is especially remembered at times of error helps explain the Cartesian distrust of the body (ibid, p.86). But dys is also a variant spelling of the Latin root dis, which originally meant “away,” “apart,” or “asunder.” Leder employs both the Greek and the Latin significance because the body in dys-appearance is marked by being away, apart from the ordinary function and health. There is a sense of privation of desired state in pain and disease and the body when ill is experienced as an alien prison in which one is trapped (ibid., p.87).

Leder’s ideas about the absent body (1990) help us understand why we can feel such alienation towards our bodies, which we can link also to work and consequently, to innovation. When we work, our attention is often oriented towards the external world we interact with while working on the daily goals that we have set during our work time. Our personal feelings, body sensations and needs are often put aside as we strive to fulfill various external expectations, based on which we are evaluated and rewarded. As Leder suggests (1990), the only time the focus is shifted towards our body is when it becomes ill and dysfunctional, and thus disenables us from performing our work as expected, creating a “cost” in the normal operations of organization. Leder’s theory on the absent body explains why sometimes we need to “forget” about the body in order to achieve certain goals that are directed towards external world. Leder suggests that our perception is so rooted in the bodily that it is important to be more present in our bodies in order to be able to more fully take in the world around us, and act with another quality of aliveness. Absence from our body would result in not taking properly care of our body, leading to sickness and dysfunction, all of which could be avoided if more attention had been paid to the bodily aspects at work.

**Why do we perceive our mind as disembodied?**

Before introducing the neuroscientific perspective on the body, which has heavily focused on the study of the brain, phenomenological explanation for our disembodied perception of the mind and cognitive processes will be put forward.
As Leder explains, in accordance with Descartes, the mind is immaterial. It is a substance that has no extension or location in space, but is at the same time united to all portions of the body conjointly (ibid., pp.108-109). “The continued presence of soul ultimately depends not on any particular body part but on the preservation of the overall union of its assembled organs” (p.109). It is the brain that acts as a mediator between the body and mind, according to Descartes, and this idea of the brain as the seat of mentality and consciousness has been affirmed by the modern science (p.111).

But the brain is an organ that is very rarely encountered in everyday life, as it is not visible to the self or the Other, unless seen in an autopsy, through diagnostic imaging techniques or pictured in textbooks (Leder, 1990, p. 111). The brain is almost never present as an object of direct perception or control, but despite this absence, it is central to our lived experience. Leder suggests that this disappearance of the brain provides a first clue to the seeming disembodiment of the mind (ibid.).

In a sense, the brain is stigmatised by both focal and depth disappearance. Like internal organs, the brain is hidden in the depth of the body and as such, we cannot see it or touch it. We have no direct experience of our brain as an object, which is why the brain is marked by depth disappearance (Leder, 1990, p. 112). The brain lies at the seat of embodied consciousness, sensory experience, and voluntary movement, enabling perception of the external world through the from-to structure, and is thus also characterized by focal disappearance (ibid., p.113). Compared to other surface organs, which are only tacit when they play the focal role (even the eye can be touched), the brain constantly plays a tacit role (ibid.). The brain is also special because it is connected with all other organs, it is the node where sensory channels are blended, and is in a way a microcosm of the whole body, participating both in its surface and depth. As such, the brain is participating in all modes of bodily disappearance, and is thus perceived as immaterial. In reality, the nature of the mind is embodied and it is precisely the brain that weaves together the threads of a unified body (ibid., p. 114-115). What makes our experience of the mind further disembodied, is that we link our brain with thinking, which is in itself quite abstract, employing a combination of language and pictorial imagery (ibid., p.120). Even language acquisition is a profoundly embodied affair, as the spelling of words needs to be observed, their sounds heard, pronunciation practiced, and rules of grammar studied. Since we can think motionlessly, without awareness of any corporeal activity, it would seem that the thinker makes no use of the body, but in actuality, the body remains involved (ibid., p. 123). Jacobson showed that minute movements of the vocal apparatus accompany our thinking, but we are unaware of these subvocalizations. Also, as we think our brain is active, but this is not considered as activity, as thinking simply seems to happen (ibid., p. 124).
2.2.3 Neuroscientific perspective: the embodied nature of mind, learning, and new meaning creation

Enacted vs. representational theory of cognition

In neuroscience, “there is a growing commitment to the idea that the mind must be understood in the context of its relationship to a physical body that interacts with the world,” which is often referred to as the concept of embodied cognition (Wilson, 2002). Embodied cognition opposes some of the key misconceptions of classical cognitive science, such as the disembodied mind, that thinking transcends feeling, and that feelings are not part of meaning and knowledge (Johnson, 2007, p. xi). It further disagrees there is a “higher” self (the rational part) that should control the “lower” self (body, desire, emotion), and that thinking is a conceptual, body-transcending activity (ibid., p. 2). Within the field of neuroscience, there is increasing evidence that cognition is embodied, that “mind” and “body” are not separate, but rather part of one organic process, and that all meaning, thought, and language emerge through this embodied process of an organism’s interaction with its environment (ibid., p.1). The evidence from cognitive science shows that meaning is to a large extent “shaped by the nature of our bodies, especially our sensorimotor capacities and our ability to experience feelings and emotions. If we look at pre-linguistic infants and at children who are learning how their world works and what things mean to them, we will find vast stretches of embodied meaning that are not conceptual and propositional in character, even though they will later make propositional thinking possible” (ibid., p. 9).

Within the field of embodied cognition, there is a great deal of diversity in the claims involved and definitions of how embodied cognition is understood (Wilson, 2002). In this thesis we build on the ideas of enacted cognition and the seminal work “The Embodied Mind” by Varela, Thompson, and Rosch (1991). Phenomenologist Merleau-Ponty first presented the idea of double embodiment that Varela et al. (1991) build on (introduced in this thesis in the phenomenological perspective on the body section). “We see our bodies both as physical structures and as lived, or both as “outer” and “inner”, biological and phenomenological… These two sides of embodiment are obviously not opposed. Instead, we continuously circulate back and forth between them” (Varela et al., 1991, p.xv). Varela et al. (1991) further connect these ideas with Eastern Buddhist philosophy, building a bridge between mind in science and mind in experience, connecting the traditions of Western cognitive science and Buddhist meditative psychology (ibid.).

They question classical cognitive scientific belief, that cognition consists of the representation of a world that is independent of our perceptual and cognitive capacities. Instead, they propose a view of cognition as embodied action, suggesting that cognition has no ultimate foundation or ground beyond its history of embodiment (Varela et al., 1991, p. xx). “By using the term “embodied” they mean to highlight two points: first, that cognition depends upon the kinds of experience that come from having a body...
with various sensorimotor capacities, and second, that these individual sensorimotor capacities are themselves embedded in a more encompassing biological, psychological, and cultural context. By using the term “action” they mean to emphasize once again that sensory and motor processes, perception and action, are fundamentally inseparable in lived cognition. Indeed, the two are not merely contingently linked in individuals; they have also evolved together“ (ibid., p.173).

In the representational view, cognition and thought consist of symbolic representations within the mind, and refer to the outside world and percepts, concepts, propositions, and thoughts are quasi-objects or abstract structures helping an organism make contact with the outside world (Johnson, 2007, p.117). Embodiment theory, proposed by contemporary cognitive scientists (e.g., Francisco Varela, Humberto Maturana, Gerald Edelman, Edwin Hutchins, George Lakoff, Vittorio Galese, Rodney Brooks), in contrast, requires a radical re-evaluation of dualistic epistemology. It suggests that cognition, thought, and symbolic interaction arise from organic processes of organism-environment interaction, and consequently, treats percepts, concepts, propositions and thoughts as patterns of experiential interaction (ibid.).

If classical, first-generation cognitive science understands cognition as mathematical and logical computation, and as mental mirroring of external reality, the pragmatist interactionist (or transactional or enactionist) alternative sees cognition as action or as a “response strategy that involves both nonconscious processes and occasional conscious processes that apply some measure of forethought in order to solve some practical, real-world problem” (Johnson, 2007, p. 120). In this view, the problem of knowledge is not how internal ideas can represent external realities, because mind was never separated from environment in the first place (ibid.)

**Primacy of movement**

Sheets-Johnstone (1999) discusses the primacy of movement for learning and creating new meanings as it is through movement that we discover ourselves and inhabit a world that has meaning for us. It is in the movement that we discover our arms that extend, spines that bend, knees that flex, and in doing so, make sense of ourselves (ibid., p. 136). Merleau-Ponty, in “Phenomenology of perception” (1962), and Dewey, in “Experience and nature” (1958), both demonstrated that there is no movement without the space we move in, and the things we move, and that subjects and objects “are abstractions from the interactive process of experience out of which emerge what we call people and things. There is no split of self and other in the primacy of our experience, and so we are never utterly separated from things” (in Johnson, 2007, p. 21).

We are seldom consciously aware of the nature of our movement, but we always experience the qualities of things and spaces, and the effort required to move objects, which is why movement is one of the principal ways for us to learn the meaning of things,
and acquire a sense of what the world is like (Johnson, 2007, p.21.). Beginning in the womb, we learn about different types of experiences from moving in various environments (ibid.). Even prior to conscious experience we are interacting meaningfully with environment, which means that meaning reaches deep down to our corporeal encounter with environment early in life, before we acquire language (ibid., p. 25). Meanings thus do not arise from nowhere, but are grounded in our bodily connection with things, and are continuously “in the making” through sensorimotor engagements (ibid.). At some point meanings can be consciously appropriated and reflectively understood, becoming consciously meaningful to us through language (ibid.). Through movement of our body in space, and by experiencing movement of objects in relation to space, we establish our individual perception of time (ibid., p. 28-29).

How we learn and make meanings from an early age

Understanding how infants make meaning also aids understanding of the structures behind the meaning-making processes of adults (Johnson, 2007, p. 33). As infants are dependent on their caregivers from birth, they learn to establish communication with them through eye-contact and mirroring movements. Mutual gaze is a form of primitive I-Thou relations between humans, and helps us learn the intentions of others, share meaning, and express communicative intention (ibid., pp.37-38). Primary togetherness is further established through mimetic bodily relations between babies and their caregivers. There must be some sort of primitive body scheme allowing infants to unify the visual and motor/proproceptive information into one framework (Meltzoff and Moore in Johnson, 2007, p. 38.), which shows human ability to make cross-modal connections, and reproduce gestures that we see enacted by others. There is a growing evidence that infant imitation is based on the mirror-neuron system discovered by Rizzolatti, Genti- lucci, Gallese and other researchers (ibid., p. 39).

Infants learn what objects mean to them through bodily interaction with them, watching them, handling them, trying out how they can be used, learning about their properties and characteristics long before they acquire language (Johnson, 2007, p. 45). Different organisms might experience the meaning of the same object in various ways – a blade of grass might afford climb-up-ability for a small insect, but not for a human. The meaning of objects thus depends on the size, shape and functional makeup of an organism and the characteristics of its environment (ibid., p. 47). Infants are thus “not born with an objectivist metaphysics of mind-independent objects…They learn through their perceptions, actions, and bodily experiments to grasp the meaning of object identity” (ibid, pp. 48-49).

Interaction with other people is another important way we learn about the world and meaning as children. “We inhabit a shared world, and we share meaning from the start, even if we are completely unaware of this while we are infants. In other words, body-based intersubjectivity – our being with others via bodily expression, gesture, imitation,
and interaction - is constitutive of our very identity from our earliest days, and it is the birth-place of meaning.” (ibid., p. 51).

**Importance of emotions and qualities for experiencing meaning**

Emotions play a primary role in our ability to evaluate situations and meaning. They are important in both the short-term, and over the duration of our lives, helping us assess and adjust our internal body-states and processes, and our actions directed towards the external world (Johnson, 2007, p.54). Antonio Damasio and Joseph LeDoux are two researchers that significantly contributed to the research on emotions within the field of cognitive neuroscience, bringing attention to the role of emotions and feelings in consciousness, judgment, and reasoning (ibid., p.55). In addition to metabolism, basic reflexes, immune system, pain and pleasure behaviours, and basic drives and motivations, feelings and emotions are two of the seven interrelated bodily systems that help organisms survive, grow and flourish (ibid., pp. 55-56). Most of the time, the entire neural, chemical, and behavioural arc of emotional response runs automatically, which enables us to act quickly and even saves our lives. For example, when under attack, fear prepares us for flight, even before we become aware of it (ibid., p.59).

All of the seven interrelated bodily systems have been developed over our long evolutionary history, and help us survive and function more or less smoothly within the physical, social, moral and cultural environments we inhabit (Johnson, 2007, p.56). Although we are seldom conscious of these bodily processes, which are mostly automatic and unconscious, they are life-sustaining, and highly meaningful, further allowing for our more conscious acts of meaning-making, such as the use of language (ibid., pp.56-57). Emotions are the primary means of responding to internal and external changes, as they are the result of an organism’s constant monitoring of how things are going, and responding in a way that is beneficial for the organism (ibid., p.66). They are complex processes of bodily perception, assessment, internal monitoring, self-transformation, motivation, and action (ibid.).

According to Johnson (2007), meaning arises from our feeling of qualities, sensory patterns, movements, changes, and emotions, and is thus grounded in bodily experience. Although it is not limited exclusively to bodily engagements, meaning always originates and leads back to them, depending, to a large extent, on how we experience and assess the qualities of different situations (p. 70). Traditional logic treats qualities as abstract concepts, as fixed structures possessed by objects in logic. This is a problematic view, as qualities are dependent on a complexity of visual, social, tactile and cultural aspects of situation, and the specific elements of this unified whole we choose or experience as pervasive quality for us. Artworks are good examples of pervasive qualities, because an artist usually chooses a situation and then exposes a pervasive quality or feeling experienced in connection to the situation in the art work (ibid., pp. 72-73). “Redness”, for example, has no intrinsic meaning, whereas the redness of blood, the redness of a ripe
cherry, the redness of a lover’s lips, or the redness of sunset have plenty of meaning, each red a different one. Redness means different things in different situations that we experience in our lives (ibid., p.268). Meaning is thus relational and instrumental, as it connects to our actual or possible experience (ibid.).

Meaningful experiences are simultaneously emotional, practical and intellectual (Johnson, 2007, p.74). We call them emotional, practical or intellectual, when we want to stress a specific aspect of the experience that is the pervasive aspect for us. This tendency to separate experiences comes from Enlightenment views of mind and knowledge (ibid.). In reality, thought begins from experiencing a situation as a whole through its unifying quality, or overwhelming impression. Distinctions are subsequently introduced, focusing on specific aspects of experience, distinguishing objects, relations, and properties (ibid., p.75). How meaning is made depends on selective perception of things, which is why the same event can mean different things to different people (ibid., p.269).

**Percepts and concepts as two aspects of feeling-thinking flow and thinking as action**

“Mind is neither a willful creator of experience nor a mere window to an objective, mind-independent reality. Mind is a functional aspect of experience that emerges when it becomes possible for us to share meanings, to inquire into the meaning of a situation, and to initiate action that transforms, or remakes, that situation” (Johnson, 2007, pp.76-77). The formal-structural dimension of experience (language, thought) and the felt-qualitative dimension are not autonomous but interwoven (ibid., 82). Both are part of a single, ongoing meaning-making activity and are intrinsically related (ibid.). This is contrary to objectivist theory of cognition, which distinguishes between percepts (sensations, which are perceptual givens, arising when sensory receptors are affected by internal or external events) and concepts (forms by which we organize experience into qualities and objects, for example, and are supplied by the mind to recognize what is given in sensation). The objectivist view is based on body and mind dualism (ibid., p. 87).

William James (1911/1979) instead suggested that percepts and concepts are two aspects of a continuous flow of feeling-thinking, and the difference between them is that percepts are a continuous flux of feeling, while conceptualizing is an act that is part of the flux of feeling but discrete, as each concept has a single meaning (p. 32). Conceptualizing enables us to recognize distinctions within the flow of our experience and make sense of them. From the perceptual continuum, we select things that matter and have meaning for us (ibid.). At the heart of this pragmatist philosophy is an understanding of thinking as doing, and cognition as action (Johnson, 2007, p.92). Thinking can transform experiences precisely because thought is embodied and interfused with feeling. Conceptualizing enables us to respond to encountered problems, adapt to situations and change them when possible and desirable (ibid.). Even our most abstract concepts (such as cause, religion, freedom and necessity) lack meaning without some connection to felt experience (ibid., p.93).
Tucker thus proposes that “all of the networks that have been implicated in cognition are linked in one way or the other to sensory systems, to motor systems, or to motivational systems” (2007, p. 58). If we simplify, we can say that through evolution, the brain developed and added new structures over more primitive ones that we share with some animals. The result of this is a brain with core limbic structures (mostly responsible for monitoring, motivation, emotions, and feelings) that are connected to cortical structures (with functions such as perception, body movement, action planning, and reasoning) (ibid.). What is interesting about this limbic core-cortical shell organization of the brain is that core regions are extremely interconnected, while areas in the shell are sparsely interconnected, which is why there is more functional differentiation in the cortical shell. The limbic core, with its dense interconnections and emotional valences, presents us with a holistic and feeling-rich grasp of situations, while the cortical shell enables conceptualization. Cognitive processing does not just occur from core to shell structures in a linear manner. That which occurs at more differentiated levels can influence what happens in the limbic areas, which again affects the shell regions, in a never-ending process of changing experience (ibid.).

Image schemas, embodied concepts and the meaning of metaphors in enacted cognition

Image schemas

Image schemas are the patterns instantiated in neural maps shared with other animals (though humans have particular image schemas depending on types of inhabited bodies and environments) and are preverbal and mostly nonconscious (Johnson, 2007, p. 144). They play a key role in the syntax, semantics and pragmatics and thus underlie language, reasoning and all forms of symbolic interaction (ibid., 145). They are stable patterns of sensorimotor experience and are image-like in the sense that they preserve the topological structure of the perceptual whole. They are both corporeal and mental, and stem from interaction with a wider environment. They link sensorimotor experiences to conceptualization and language (ibid., p.144).

Gallagher distinguishes between “body image” and “body schema,” suggesting that the first is related to the appearance of our own body in perceptual field, while the second informs us about how the body shapes our perceptual field (2005, p. 18). Body image consists of a complex set of (periodically conscious) perceptions, attitudes, and beliefs pertaining to one’s own body, and thus involves a form of reflexive or self-referential intentionality (ibid., pp.24-25). A body schema, in contrast, is “a system of sensory-motor capacities that function without awareness or the necessity of perceptual monitoring” and is thus preconscious, operating below the level of self-referential intentionality (ibid., pp.24-26). Performances of body schema are close to automatic, and play a dynamic role in governing posture and movement (ibid., p.26). If body schema is related to the capacity to move, or an ability to do something, then body image is a perception
or belief about it. This means that the difference between body image and body schema is akin to the perception of movement and the actual accomplishment of movement. Although closely interrelated, not all movements require a percept of it (ibid., p.24).

*Embodied concepts*

Cognition is an embodied process of enaction, in which the organism is dynamically interacting with environment, and is thus in and of the world, rather than separated from it. Sensorimotor patterns, image schemas, conceptual metaphors, and other imaginative structures are the patterns of engagement with surroundings (Johnson, 2007, p. 145). Through cognition, we distinguish and make abstract patterns from experience into a continuous and qualitative whole (ibid.). Concepts are thus structures of experience rather than re-presentations of experience, and exterior reality is the world as experienced (ibid., p.146). It is important to recognize that cognition is partially constituted by social interactions, cultural practices and artifacts (ibid.). The mind emerges and is enacted through social cognition – we acquire it through sharing meaning, and our ability to engage in symbolic interaction (ibid., p.151). Meaning does not reside in the brain, but requires a functioning brain, and a living body, interacting with social and cultural environments (ibid., p. 152). Cultural practices and artifacts such as music, art, language, architecture, and others, enable us to preserve knowledge over time and to accumulate meaning (ibid.).

Different perceptual and motoric events in our bodies initiate neural activation patterns, which are patterns of organism-environment interaction. These are recurring structures of both actual and possible experiences. Pattern derived from this interaction that are important enough for an ongoing experience of a person to be selected from the flow of experience, because they have most important characteristics of our experience, are concepts. Thinking is thus not so different from perceiving and doing because even abstract concepts are connected to sensorimotor processes. This means that concepts activate some of the same sensorimotor functional clusters of neurons that are also used in perception and motion. The activated sensorimotor system of the brain is multimodal, meaning that seeing, touching, hearing, and motor actions are integrated through cross-modal neural links (Johnson, 2007, pp. 157-160). When we see an object that we could grasp and then actually grasp it, the same canonical neurons are fired. When we see a cup, for example, we don’t just see a visual object, but we additionally perceive the cup as something that can be lifted and drunk from in order to quench our thirst. Perception is thus multimodal and action and perception are integrated on the sensorimotor system level, not via higher association areas (ibid., pp.160-161).

*Conceptual metaphors*

Lakoff and Johnson (1980) in their seminal work “Metaphors We Live By” explained how metaphors are fundamental mechanisms of the mind, allowing us to use what
we know about our physical and social experience by structuring our most basic understandings of our experience. They used the expression “metaphors we live by” by which they mean that metaphors can shape our perceptions and actions without our ever noticing them.

Johnson (2007) further developed the idea of primary and conceptual metaphors. The term conceptual metaphors, explains how metaphors are crucial for understanding the way in which abstract concepts of nonphysical things, such as values, are embodied. “Each conceptual metaphor consists of a systematic mapping of entities and relations from a sensorimotor source domain to a target domain that is abstract” (ibid., p. 165). For example, in the conceptual metaphor, “understanding is seeing”, the elements of a source domain, which is visual (seeing), are mapped onto a target domain, which is intellectual understanding, in the following manner:

<table>
<thead>
<tr>
<th>Vision (source domain)</th>
<th>Understanding (target domain)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object seen</td>
<td>– idea/concept</td>
</tr>
<tr>
<td>Seeing and object clearly</td>
<td>– understanding an idea</td>
</tr>
<tr>
<td>Person who sees</td>
<td>– person who understands</td>
</tr>
<tr>
<td>Etc. (ibid., p. 65)</td>
<td></td>
</tr>
</tbody>
</table>

If there are conceptual metaphors, then neural connections between sensorimotor areas and other parts of the brain involved in thinking must also exist. The new evidence from cognitive neuroscience indicates that sensorimotor areas are activated through processing of abstract concepts (ibid., p. 167). Even mathematics, which is traditionally seen as the highest form of disembodied universal thinking, is grounded in sensorimotor schemas, for example, the schema of collecting objects, which includes adding and taking away objects, is the basis for addition, subtraction, multiplication and division (ibid., p. 181). Image schemas operate within conceptual metaphors and make it possible to employ the logic of our sensorimotor experience to perform higher-levels of cognitive operations in abstract thinking. Conceptual metaphors are our primary means of reasoning and abstract conceptualization (ibid., p.179).

**Primary metaphors**

Conceptual metaphors are usually complex combinations of more basic metaphors, known as primary metaphors. As we go about our daily affairs of life from infancy to adulthood, they arise naturally from our embodied experience (Grady, 1997). For example, since infancy, we learn that being emotionally intimate with a person is connected with physical proximity. Through this repeated experience we establish the primary metaphor that “psychological intimacy is physical closeness” (ibid.). These metaphors are
formed primarily because of the nature of our bodies and how we interact with environment. We possess thousands of these primary metaphors that we cannot avoid because the experiential correlations on which they are based constitute large parts of our everyday experience (ibid.). They are mostly unconsciously and automatically activated in order to structure our understanding of situations. Conceptual metaphors blend, extend, and build on primary metaphors, and enable us to understand more abstract concepts which distinguish us from animals (ibid.).

If source domains of conceptual metaphors arise from our bodily experience, and conceptual metaphor is a structure of human understanding, then truth is a matter of the degree to which body-based understanding of a sentence fits body-based understanding of situation (Johnson, 2007, p. 195). This theory opposes the analytic theory of language (by Searle, Davidson, Rorty and others), which suggests that metaphors are based on similarities, that meaning is conceptual, truth-conditional and that only literal concepts bear meaning (ibid., p. 197-198). Embodied theory of language and meaning instead proposes that metaphors are based on experiential correlations. For example, if we say “Sally is a block of ice,” this is based on our primary metaphor that “affection is warmth,” which is based on our experience from infancy (ibid.) What is important is that we can learn where our primary metaphors come from, and how they work and underlie different cultures and philosophical systems. And if we can become aware of them, we can also critically evaluate and creatively elaborate them to help us better cope with the problems in our daily lives (ibid., p.206).

The field of neuroscience and specifically enacted cognition suggests that all learning, knowledge, and meaning creation is deeply rooted in the bodily experience, and that cognition is an embodied process of enaction, in which an organism is dynamically interacting with environment, and enables us to distinguish and make abstract patterns from experience as continuous and qualitative whole (Johnson, 2007). This means that even though we’re not often consciously aware of the bodily aspects of our being in the world, they nonetheless influence our perception and experience of it. Since learning, knowledge and meaning creation are core aspects of innovating, these theories explain the relevance of the body in innovation processes. Furthermore, they shed light on the possibility of expanding learning in innovation processes if people would more fully and holistically engage their bodily capacities.

2.2.4 Holistic Body: different dimensions of body

As seen in embodied cognition theory, the body is not merely and object; it is a collection of skin, bones, blood, organs, and fluids, all interacting together, and its story cannot be told by the natural sciences alone. The body has different dimensions that we must understand in order to grasp the complexity of our being in the world (Johnson, 2007, pp. 278-275). As Merleau-Ponty (1962) suggested, our body is a lived body, the
situation from which our world and experience flow.

Paul Valéry (in Feher et al, 1989) talks about four different bodies. The first one, “My Body,” is the body of the presence without a past history. It is the most important object in the world for each of us, and we talk about it as if it belongs to us. The world is based on this body and it exists in reference to it, as “My Body” is wholly made up of events that we experience in the moment (pp.398-399). Our Second Body is the body that others see, and the one that confronts us in mirrors or in portraits. It is the body that has a form and is represented in art. We are not aware of how it functions or have an ability to control our organs. This body is oriented toward the outside world upon which we act, though we are not cognizant of the underlying mechanisms (ibid., pp.399-400). The Third Body is the body of science and observation, unified only in our thought, as we know it, by dissecting it and reducing it to parts and pieces (ibid., pp.400-401). Valéry calls the Fourth Body the Real or Imaginary Body and this is the body that is everything what the other three bodies are not, though it still appears together with them. Our thoughts and perceptions are based on the experiences of the first three bodies, and this fourth body is the one that helps us look into core existential and philosophical questions about life, death, and freedom (ibid. pp.401-402). This is the body that enables us to create new meanings and explore beyond what we currently know. It is the body of innovation.

Johnson (2007) distinguishes slightly different five dimensions of the body: body as biological mechanism, ecological body, phenomenological body, social body, and cultural body. Body as biological mechanism is the flesh-and-blood creature that I call “my body,” and is a functioning organism that can move, perceive, and respond to the environment, transforming it. This body makes it possible for us to experience qualities, feelings, emotions, and thinking (ibid., pp.275-276). The ecological body refers to the fact that there is no body without an environment and its interaction with it, which means that as with body and mind, the body and the environment are aspects of one continuous process (ibid.). The phenomenological body is our body as we live it and experience it: the living, pulsing, moving and feeling body of our being-in-the-world. The body we are aware of through different bodily-based systems, which constitutes our felt sense of ourselves (ibid.). The social body is composed of intersubjective relations of experience which make us who we are through others, and through our capacity to communicate with others (ibid.). The cultural body is influenced by cultural artifacts, practices, institutions, and rituals that form our culture and are different from culture to culture. The ways that people walk, talk, and even stand varies across cultures. Cultural dimensions of body include gender, race, class, aesthetic values, and others.

If we see our body only as a physical thing – as a biological body, then this quickly leads us to distinguish body and mind as two separate things. The body has different dimensions and cannot be simply reduced to one. If we understand thinking and feeling as two aspects of the same organic process based in body-based experiences, then we need to
take into account the complexity of different bodily dimensions that influence the way we experience the world around us, act in it, and create new meanings. Engaging the body in its complexity in processes and practices of innovating thus becomes crucial, and the basis for any real human behavioural change.

Although the role of the body is crucial in the way we experience and make sense of the world, it has only gained on limited interest from organizational studies in the last decades, being perceived as a medium through which social actors exchange information, and thus have relations with the world (Biehl, 2017). As the body is a primary means of connecting with the world and creating meanings, Biehl in her book “Dance and organization” suggests that in the contemporary world of organizations, more emphasis is needed on developing not just the muscles of the body, but its aesthetic capabilities. Kinaesthetic empathy, for example, fosters collaboration and the management of interactions between people. If all knowledge is grounded in sensory experience, then embodied knowing is a crucial part of creating new knowledge in organizations. The knowledge and methods from dance can play a useful role in helping people develop their ability to innovate.

2.3 IF CREATING NEW MEANINGS IS AN EMBODIED PROCESS, WHY IS ART SO IMPORTANT IN THIS PROCESS?

Dewey (1934/1987) suggested that art matters because it provides heightened, intensified, and highly integrated experiences of meaning, using all of our ordinary resources for meaning-making. This is why we should turn first to social interaction, gesture, ritual, and art to discover how meaning works, and only later, to language. If the arts, as Dewey suggests, are the primary means by which we grasp, criticize, and transform meanings, and innovating is about questioning existing norms and ways of doing things, and creating new meanings, then art, artistic knowledge and methods can become cornerstone facilitators of the practice to innovate. Most people turn to art because they are looking for meaning. Music, poetry, painting, sculpture, drama, dance, and architecture aid understanding of the human condition, because meaning exceeds the confines of words and sentences (Johnson, 2007, p.208).

As Johnson (2007) suggests “we need a philosophy that sees aesthetics as not just about art, and taste, but rather as about how human beings experience and make meaning. Aesthetic concerns all of the things that go into meaning – form, expression, communication, qualities, emotion, feeling, value, purpose, and more. Instead of isolating the “aesthetic” as merely one autonomous dimension of experience, or merely one form of judgment, we must realize that aesthetics is about the conditions of experience as such, and art is a culmination of the possibility of meaning in experience” (p.212). Langer
(1947, p.15) sees art as expressive of human feeling in its broadest sense, a definition which includes physical sensation, pain and comfort, the most complex emotions and intellectual tensions, and more. What is expressed in a work of art, cannot be grasped, apart from the sensuous or poetic form that expresses it, because feeling is presented directly and not through a sign that points to it (ibid., pp.133-134).

According to Damasio (1999), art enacts meaning through a series of interwoven images, patterns by which understanding takes shape, and undergoes transformation. These patterns of object and event experience include tokens of different sensory modalities: visual, auditory, olfactory, gustatory and somatosensory, and are often unconscious (ibid.).

Poetry and literature, for example, use images, metaphors, image schemas, felt qualities, rhythm, meter, pitch contours, and other tools to construct a very rich and moving experience for the reader (Johnson, 2007, p.221). The reader can be transported into a world of imagination where the described situations can be nearly sensed and experienced. They make the reader not only think but also feel and experience the qualitative whole that pervades the situations described, evoking powerful visual, tactile, olfactory, and kinesthetic images, which become alive for the reader, and are fused with meaning, import, and feeling (ibid., p.224).

Research shows that we experience and associate certain forms and patterns with specific feelings. Curved lines, for example, create more gentle, smooth and flowing feelings, while jagged lines lead to harsher, more agitated, and intense feelings in our bodies (Johnson, 2007, pp.225-226). Visual arts thus activate different experiences and meanings, using forms and patterns in various ways. Consider Picasso’s “Les demoiselles d’Avignon,” where the female nudes are depicted as aggressively angular and pointed; they confront or almost assault the viewer with their piercing gaze, while the nudes in Cézanne’s drawing “Small Bathers,” is composed with organic curves, balance and harmony: humans and nature harmoniously integrated (ibid.).

Music also has a great ability to move us, ordering experience through the use of tone quality, pitch, meter, rhythm, and other processes that we feel in our bodies (Johnson, 2007, p.236). Music appeals to the felt sense of life and presents the flow of human experience in concrete, embodied forms, moving us bodily, emotionally and qualitatively (ibid.).

Johnson succinctly captures the conception of art as a way of exploring meaning, finding new possibilities in meaning, and expanding meaning: “Art uses the same syntactic, semantic, and pragmatic resources that underlie all meaning, but in art those resources are exploited in remarkable ways that give us a sense of the meaning of things that is typically not available in our day-to-day affairs… In art we thus seek an intensification, harmonizing, and fulfillment of the possibilities for meaning and growth of meaning” (Johnson, 2007, p.261). Engaging with arts while in the process of innovating enables us
to discover, experience and create meanings in new ways that fully engages our capacities of perceiving, experiencing and creating that go beyond language. This engagement thus expands the creative process of new knowledge and meaning making. It is especially critical when we want to turn our gaze from incremental improvements towards developing competence for radical innovation, and exploring new ways of being in the world.

2.3.1 The role of dance as an enabler of innovation

Although dance is commonly a forgotten art in aesthetics and is treated less than other forms of arts in philosophy, “man has always danced”, and there are no human societies in which men don’t dance (Sheets-Johnstone, 2009, p. 306). “Dance stands at the source of all the arts that express themselves first in the human person” as the origin of dance precedes the man himself (Ellis in ibid., p.310). Among birds and insects, dancing is an essential part of courtship and love (ibid.). There must be something in human nature of man himself that makes him dance irrespective of any particular village or culture he comes from (ibid., p. 315). Bipedality seems to be at the foundation of dance, because play and rhythmic patterning are embedded within it as evolutionary-derived features (ibid., p. 319). As Sachs writes “rhythmic patterns of movement, the plastic sense of space, the vivid representation of a world seen and imagined – these things man creates in his own body in the dance before he uses substance and stone and word to give expression to his inner experiences” (1963, p. 3).

Similarly to rhythm, play is also an evolutionary dimension of animate life, typical of young mammals for example (Sheets-Johnstone, 2009, p.321). “Play is the discovery of one’s kinetic possibilities and mastery of the challenges they present in terms of both learning one’s body and learning to move oneself...Dance is a continuation of play precisely in the sense of learning one’s body and learning to move oneself” (ibid., p.323). Coming back to dance is thus coming back to our roots and ways of expression that precede language.

Dance being beyond language as means of expression is nicely described by Stern, who says that dance “reveals to the viewer-listener multiple vitality affects and their variations, without resorting to plot or categorical affect signals from which the vitality affects can be derived. The choreographer is most often trying to express a way of feeling, not a specific content of feeling” (1985, p.56). “We know the meanings of various bodily movements and gestures in dance precisely because we know the feeling and meaning of our own bodily gestures. We know how it feels when our bodies sway gracefully and rhythmically versus when we slip and fall, or jump back in fright. We know intuitively what it means to “be up” and happy, just as we know what it means to “feel low” when we are depressed. Our bodily posture and openness to the world is upright and expansive when we are joyful, and it is drooping and contracting when we are sad.” (Johnson, 2007, p. 45).
According to Husserl, the core self carries with it a sense of coherence, affectivity, and continuity, and is fundamentally animate and animated (in Sheets-Johnstone, 2009, p.47). Stern similarly expands further that this existential self is not only anchored in a dynamics of aliveness anticipating language, but in an aliveness that language often fails to capture, as what moves and changes is always in excess of the words that try to name it (ibid.). Thinking in movement is different from thinking in words, so when the latter starts to dominate the first, a rich and subtle mode of thinking is often displaced or even no longer recognized (ibid.). “Language is slow” and “breaks apart rich, complicated global experiences into relatively impoverished component parts,” often dividing thought from emotion, incapable of capturing experiences, such as looking into someone’s eyes (Stern in ibid, pp. 48-49). When we look at the infants and how they are caught up in thinking through movement and not in words, we realize that basic human concepts, such as “distance,” are fundamentally corporeal concepts, as our first experiences and thoughts about them were nonverbal (ibid., pp. 49-50). Going back to movement and exploring the world through movement and dance thus helps us get in touch with our existential self and enables us to explore the world beyond language. Other modes of thinking through movement can be discovered that can help us experience and create meanings in ways that we have often forgotten because they are so primary to all human beings that they even precede language. Dance can thus enable access to another form of presence, another medium for exploring the surrounding world, as well as a new way to create meanings and knowledge, and express them in a richer, multisensorial, and more multidimensional ways than possible through language. This can all add new aspects to the practice of innovating that wouldn’t be possible through the use of the usual innovation methods that are restricted to language.

Since this thesis is focused on the use of dance as an enabler of innovating in organizations, the following section will be devoted to explaining the current status of dance within an organizational context before more focus is given to the specific form of dance dealt with by the present research, namely contemporary dance, and its role as enabler of innovation.

2.4 CURRENT STATUS OF USE OF DANCE IN ORGANIZATIONS

The application of dance in organizational development and organizational studies is a relatively new field of study, but represents a growing community of researchers, especially in Europe (Biehl-Missal and Springborg, 2016). In 2014 and 2016, a special stream on “Dance, choreography and organisation” was hosted at the Art of Management and Organisation Conferences in Copenhagen and Bled. In between the two conferences, a special issue of Journal of Organization Aesthetics on “dance, choreography and organisational” was published in 2016. These events took place alongside the first publications
of other articles, several doctoral theses (Springborg, 2014; Mueller, 2015; Zeitner, 2016, Satama, 2017), and the first book titled Dance and Organization by Brigitte Biehl in 2017. A growing practical interest in dance as an arts-based intervention in organisations can be seen (Johansson Sköldberg et al., 2016). Especially the use of dance-based methods for leadership development are becoming increasingly popular in practice (Ladkin and Taylor, 2010; Zeitner, 2016; Hujala et al., 2016; Ludevig, 2016; Matzdorf et al., 2016).

Since aesthetics has gained importance in organizational studies and is concerned with the sensual perception of reality in which the body plays an important role, the practice and research from the field of dance have become a source of inspiration for management (Biehl, 2017). Dance studies can contribute with their study of movement as an embodied practice occurring in interaction between actors, as organizations today are in the world of continuous change (ibid.). Raising kinesthetic awareness can enable different kind or relationships between people in organizations, alternative forms of leadership based on kinesthetic empathy, and new choreographies of collaborating and organizing work processes that are in constant flux or motion (ibid.). Dance can help organizations better understand the performative side of organizational culture, not just as captured in artifacts and texts, but rather in embodied interaction, where non-verbal communication plays an important role (ibid.). The moving body as an agent of performative act thus gains a central role in producing the perception of reality, which is a construct of aesthetic experience and interpretation (ibid).

Biehl (2017) highlights different aspects of applying dance in an organizational context in her book “Dance and organization,” showing a wide spectra of issues that can link dance to organizations. She proposes using dance as a metaphor for organizing, as has been previously and popularly done by comparing the work of orchestras, jazz ensembles or theatre groups with organizations and teams (ibid.). Another topic she discusses is the kinesthetic politics, linking the research on body and gender, with management, and showing how personality, gender and social roles are related to movement and its perception (ibid.). Kinesthetic empathy is also a field where dance can play an important role to help leaders develop their ability to tune-in to movements and bodily expressions of others, through the use of the embodied dimension of leadership. Furthermore, Biehl (ibid.) proposes that choreography can be used as an analytical term to capture how people in organizations collaborate and compose different constellations in motion, creating dynamic social choreographies that are constantly negotiated (ibid.). She also discussed dance as a research method and as a base for kinesthetic training in art-based interventions in organizations (ibid.).

In this thesis, the focus is predominantly on using knowledge and methods from dance to develop another quality of being and acting at work by enabling employees to develop innovative competence in their everyday work routines and thus continuously transforming an organization and its capacity for constant renewal and innovation based on humanistic and participatory principles. In this model, everyone is engaged holistically
and special attention is given to caring for people’s feelings, needs, and creative capacities, all of which go beyond the use of language.

Through consideration of the existing practice and research in the field of dance and organization, it can be observed that the most common form of using dance in an organizational context is within the field of leadership development, and addresses tacit and embodied forms of knowing through different forms of body work (Biehl-Missal and Springborg, 2016). The exploration of the leader-follower relationship is often in focus (Hujala et al, 2016; Ludevig, 2016; Matzdorf, 2016), as in dance the agents constantly shift between leading and following, which is an important aspect of participatory forms of leadership that have been gaining importance in modern management.

The use of knowledge and methods from dance in organizational settings is motivated by different reasons. First, engaging in bodily work forces organizations to put the individual and her inside-out perspective at the center (Hujala et al, 2016). This is important because as Merleau-Ponty (2000/1962) suggests, the world starts from the body since the body is the starting point from which people observe and experience reality. This increased body awareness provides people with insights about themselves but also fosters a capacity to read, register and feel compassion for what is going on in others (Sinclair 2005, p. 403). Being in the body helps people to be more mindful, connecting to the present moment, rather than being driven by anxieties about the future or regret for the past (Sinclair 2005, p. 403). Giving attention to the body also leads people to consider emotion more closely (a central and emergent feature of embodied practices), and helps them become more aware of the physical and social spaces in which their bodies move (Chandler, 2012). Being in the body rather than the mind, and engaging in explorative movement brings about unconscious material and opens the world to fantasy and dreams (Kline, 2016). Dance-based methods can help people explore the sensuous, embodied, and aesthetic qualities of work (Hujala et al, 2016; Satama, 2016), and enables them to develop their embodied knowledge (Ludevig, 2016). There are multiple intelligences, including the linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, and intra- or interpersonal (Blom and Chaplin, 2000, p. 14) and by engaging in learning through dance and the moving body, we can access and experience this knowledge (Zeitner, 2016). But dance can also be used to help managers explore their passion and vulnerability at work (Satama, 2016), and to develop their aesthetic reflexivity and agency (Springborg et al, 2016).

The existing literature discusses different forms of dance in an organizational context, (from classical ballet, ballroom dancing, tango, clubbing, to modern dance), but there is a lack of attention given to the experimental choreographic practices from contemporary dance in Europe that have developed in the last two decades, and have started to bring practice and theory more closer together. This marks the beginning of a dance philosophy that arises from the practice of dancing (Cvejic, 2015b). This is also possible today due to the fact that more choreographers document and write about their work
and do artistic research in academic institutions. The next section further explains the historical background of contemporary dance, and the main characteristics relevant for the organizational context. It is important to make a clear distinction about what type of dance is explored in the research presented, and avoid the trap of generalizing “dance” as one and the same.

2.5 CONTEMPORARY DANCE AND CHOREOGRAPHY

2.5.1 Historical background of contemporary dance

The beginnings of contemporary dance reach back to the start of 20th century when modern dance started to form. In the first part of the 20th century, an educational movement influenced by French rhythmologist and spiritualist Francois Delsarte, spread around the US, which began to introduce the regular physical training into kindergartens, schools, universities and hospitals (Kunst, 1999, p.164). The founders of modern dance, such as Ted Shawn and Isadora Duncan were also influenced by his system that attempted to explain the relationship between gestures, emotions, and senses (ibid.). Movement, according to Delsarte, has a key role in achieving harmony between the inner and the outer world of the body, and the body thus needs to be trained and disciplined in order to be developed into a responsible and expressive instrument. In the beginning of the 20th century there is thus an explosion of attempts to return to the natural body. This marks an important cultural and social movement both in art and in everyday life (ibid.)

Isadora Duncan, viewed as one of the founders of contemporary dance, suggested that we need to return to nature in order to form our bodies as expression of our inner world (Kunst, 1999, p.165). The body which moves in alliance with the soul, is, according to her, an earthly body returning to its natural essence, movement. The new dancer needs to find the primary movement of the human body that fits her form (ibid.). A similar tendency towards return to the natural body can be seen among other founders of contemporary dance and popular bodily movements, such as Ruth St. Denis, Ted Shawn, Jaques-Dalcroze, Rudolf Laban, and Mary Wigman. They see the natural body as a key emancipatory method from traditional body discourses, especially from the figurative rhetoric of the classical ballet (ibid., p. 166). In classical dance, there is an established repertoire of movements, which need to be technically perfected and performed according to pre-set expectations (Martin, 1965/2001). The predominant characteristic of classical dance is that the movements are unnatural and highly abstract, as they do not account for the natural movements of the body and human experience in general (ibid.)

The return to the natural body was not a return to the neoromantic ideal of harmonic relationship between the inner and the outer world, but rather a way to bring forward an autonomous body, which becomes the exclusive bearer of values, signs, and aesthetic
strategies (Kunst, 1999, p.167). Modern dance in the early 20th century thus proposes a post-literate era, in which, as Isadora Duncan proposes, dance can enable a possibility of immediate expression without spoiling it with language (Hewitt, 2005, p.118). America finally found its adequate aesthetics expression in dance. As John Martin (the founder of American contemporary dance critique) suggests, in the society of that time, “nothing had meaning until it was translated into words” (ibid., p.119), which is why he develops kinesethesia, a notion of immediate bodily communication: bodies talking to bodies through movement (ibid.). According to him, “dance is the closest thing to a natural language of the body and it passes universally from body to body through association rather than translation” (ibid., p.127). With kinesethesia, the movement itself becomes the main substance of dance. In the movement of the dancing body, the physical and psychological are just two poles of the same reality – the body as aesthetic form. Movement is thus the exclusive aesthetic practice that gives the body autonomy and specific aesthetic power. Dance for the first time becomes an independent art form (Kunst, 1999., pp.167-168).

American modern dance proposes anti-authoritarianism and rejects any set formulations of movement codes. It instead suggests a more democratic and spontaneous approach to dance, urging everyone to practice it (Hewitt, 2005, p.128). This was the first period of American modern dance influence on European culture, started by a wave of female dance pioneers such as Isadora Duncan and Ruth St Denis, who rejected rigid balletic forms, and celebrated expressive freedom (ibid., p.177). This early period of modern dance was followed by a second period, inspired by Taylorism and the efficient body of the American production line, which found popular expression in the mechanized movements of dance troupes such as the Tiller Girls (ibid.). Rudolf Laban developed the school of Eukinetik, based on the analysis of body movement, as well as a system of dance notation called Labanotation (Kunst, 1999). His school became popular around Europe and focused on the idea of bodily education of the masses. Laban suggested that every man is a dancer and the goal of dance education, which is based in individual movement expression, is to awaken the environment and our life space (ibid.). Laban is the most notable example of linking aesthetic and social rationalization discourse based on Taylorism, and the efficiency of body and its movement of that time (Hewitt, 2005, p.47).

Modern dance, which was a response to the artificial and perfect body of classical ballet, (and developed between the 20s and 50s of the 20th century), was an important step towards developing new forms of dance which provide the current basis for contemporary dance. Its relevance in terms of the possible application of dance in organizations was that it freed dance from a very rigid and specific technique-based movement, mastered only by the “perfect body” of classical ballet, and created a space and importance for the “natural body.” This is still relevant today, in a world obsessed with the perfect mechanical body that can be controlled and manipulated, but is often disconnected at work. Modern dance stressed the importance of the knowledge that resides within the body. This knowledge exceeds language, and can find ways to express itself through the movement of the natural body. This can be an interesting aspect in organizations where
the predominant focus is on abstract knowledge expressed through language and the use of cognitive skills, while the more tacit and embodied knowledge, of which we are often not even aware of, is less valued.

Another crucial movement within dance that planted seeds for contemporary dance and is also relevant for dance in current organizational contexts was the New York avant garde connected to the Judson Dance Theatre in the 60s and 70s. This began as a critical response to the pathos, romanticism and technique of modern dance (Hrvatin, 2001) and brought important questions about new uses of body, space and time into dance (Banes, 1987/2012). Neo-avant-gardist performance practitioners of the 1960s claimed that any movement, body, or method could be dance (ibid). As a consequence of this process of democratization of dance, the performers´ bodies could be untrained everyday bodies and the theatre stage could become a street, a roller-skating rink or a farm (Banes, 1987/2012). These practices fused art and life, renouncing theatre and theatricality in the name of the everyday and art-into-life, seeking to produce the “real” in performance art (Cvejic, 2015, pp. 96-97). They actively invited the audience to reconsider their habitual perceptions of everyday movement (Rosenthal, 2011, p. 65). Works, such as “Man Walking Down The Side of A Building” (1970) and “Floor of the Forest” (1970) by Trisha Brown are examples of such performances which force the audience to reconsider such simple everyday acts as walking, dressing and undressing. The first performance featured a man placed in a harness, walking down a seven-story building in downtown New York. The second performance had two performers traverse a rope grid suspended from a frame in the air, with clothes hanging from it, undressing and dressing again as they climb through the rope grid (ibid.). Choreographers of early postmodern dance, such as Steve Paxton, Trisha Brown, Yvonne Rainer, Simone Forti, and others extended the notion of dance by presenting different games, sports, competitions, simple movements such as walking and running, as dance. These choreographers proposed that it is not the content but the context – presenting something as dance, that can make practically anything a dance (Banes, 1987/2001). This “everydayness” is an important topic of dance. Exploring everyday movements and venues as material for dance performances, and the democratization of dance, (in the sense of reaching out to amateurs or non-professional dancers), are both relevant for bringing dance into the context of organizations. Another important aspect that the choreographers of the avant-garde worked with, relevant in the context of organization, is improvisation as a method for creating new dance material. As Trisha Brown (1975) suggests, structural improvisation offers some basic frames or scores that dancers use as guidelines, but within those frames there is a lot of freedom and many possibilities for exploration. A structural limitation could be as simple as giving the instruction of making a 3-minute choreography, where the time limit sets the frame, but it could be also more specific, such as instructing dancers to move from one side of the room to the other, only moving forward, with a soft body, and remaining silent while moving (ibid.). Improvisation is also currently an important skill to master in organizations due to the high speed of change that shifted more top-down, plan-and-control models of management towards bottom-up self-organizational
principles based on high levels of improvisation and autonomy of individuals who need to improvise together through collaboration in teams.

The use of scores in the avant-garde dance and performance art in the 1960s and 1970s, is also interesting in the organizational context because it allows for the setting of some form of limitations within which people can practice improvisation. In dance scores, there are often short tasks that aim at creating dance material for a performance, or are used as a type of instructions for structuring performances. An example of such a score used during a dance performance, is Trisha Brown’s “Rulegame No 5,” from 1964, which included five dancers in seven rows. The score was that each dancer could only move between rows when everyone in front was lower than in the row behind. The mechanism was simple, but the patterns produced were quite complex.

In the 1960s, the Fluxus movement, which connected artists from across disciplines, suggested that art should be democratized, created not only by the artists and consumed by the elite, but brought closer to the people. Fluxus artists created score cards that could be performed by anyone, and had the aim of shifting a perception of something through a new experience. An example would be the score called “A Week” from 1966 by Milan Knizak (in Friedman et al., 2002), which says:

“A Week
1st day All your clothes should have same color. Also underwear.
2nd day Keep silence all day long.
3rd day Look at your naked body in a mirror for at least an hour. Do it carefully.
4th day
5th day Sing or whistle the same tune all day long without a pause.
6th day Make a trip by train. Buy no ticket.
7th day Walk all day long aimlessly through the city. The best is alone.”

This kind of scores are interesting also for organizations as they can stimulate people to experiment in new ways and explore their creativity at work, especially if they are adjusted to the organizational context and needs.

2.5.2 Characteristics of contemporary dance and choreography

Building further on the ideas from modern and postmodern dance, contemporary dance started to form in the 1990s, exploring movement in many different dimensions without the limitations of one specific form, style, or technique, but rather with the focus on the “natural” and “real” body (Hrvatin, 2001). This also makes the thinking and working methods behind contemporary dance more inclusive and accessible to people lacking previous training experience in a specific dance technique. The idea of expanding dance and
mixing it more with everyday movements from the sixties has been lately taken further as choreography is being more and more explored as a generic set of tools, a technology or a field of knowledge that can be used as expanded practice in other fields of life (Spängberg, 2013). Since choreography deals with design of procedures that regulate creative process and the organization of many heterogeneous elements in motion (Cvejic and Vujanovic, 2013), it has the potential of being transferred into organizational contexts. Especially if it is seen as “the creative act of setting humans, actions, ideas and thoughts in relation to one another, to create order, channel energies, explore dynamics and create the conditions for something to happen” (Gormly and Klien, 2005, p. 3).

Since the 1990s, the term “contemporary dance” has replaced “modern dance,” acting as a more neutral denominator than “modern” and “postmodern dance,” and represents an attempt to avoid disputes about modernism in Anglo-American dance criticism and history (Cvejic, 2015, p.5). It is marked by the pluralism in performing arts, where no specific movement or style is perceived of critical dominance (ibid.). The term synthesizes both the characteristics of the modern, or disruption, with the past and the avant-garde or a novelty ahead of its time (ibid.). New terms, such as “conceptual dance” and “post dance” were introduced in the 21st century, due to the new aesthetics and stage presence employed by contemporary choreographers, questioning the established norms about what a dance performance is. Often, there might be no “pure dance,” in the traditional sense of meaning. As Lepecki suggests, these performances often critique representation and dance techniques, and use still-acts rather than continuous movement, radically re-thinking the idea of mobility in dance (2009). The choreographers thus often rather refer to their works as “choreographies” or “choreographic performances” and not “dances” (Cvejic, 2015, p.7). The fact that the meaning of the word “choreography” is changing, is also seen in the inquiry of how choreography could be defined, conducted by the Austrian dance web journal Corpus Web. This journal invited 100 established artists, theoreticians, curators, and critics from the field of contemporary dance to define what choreography means today. The answers reveal a very colorful pallet of different proposals on the meaning of choreography, highlighting a variety of issues currently dealt with by choreography. One common denominator among the various proposed definitions is that choreography refers to the organization of movement in time and space (Etchells in Corpus, 2013). The elements of body and movement in relation to space and time are interesting parameters that can enable new perspectives on organizing and innovating within organizational contexts as well, and which managers are rarely aware of.

Another relevant core aspect of contemporary dance, according to dancer and choreographer Gregor Kaminikar (2012) is a critical attitude of questioning our understanding and experience of the world through the art of creating movement. Contemporary dance performances often set conditions that enable the audience to establish relation with potentiality of life, and numerous variations of possible materialized modes of being (Kline, 2016, p. 44). They apply specific forms of work as an individual and collective practice of “alternative life,” examining “not what we are but what we are not but could
be” (ibid, p. 175). These singular acts of resistance allow us to observe, contemplate, and reconsider how we form our perceptions, enabling other choices, sensibilities and knowing to take place (ibid.). These acts question performance art itself, and its proximity to everyday life. This importance of a critical, and questioning attitude is also a relevant skill in innovation processes. Unfortunately, it is often missing in the organizational context where the focus is on action, performance and end results, and rarely on standing still, reflecting, or exploring other alternatives.

Other important issues that the new approaches to choreography question and explore are: “what dance or performance is, how choreography could be expanded beyond the movement of the body and how the way dance is made necessarily determines performance” (Cvejic, 2015b, pp. 12-13). This means that contemporary choreographic practices question the established ideas and norms of what a dance performance should be, proposing that creative process, or how the artistic work is done, is at the center. This implies a shift in the focus from end product (performance) towards the creative process and individual artistic practice which really frames or defines a performance. Further, new choreographic approaches suggest that choreography as a way of thinking and working can be used in other fields of practice as an extended practice (Hewitt, 2005; Spångberg, 2013). These are all relevant issues for the practice of innovating in organizational context, as questioning established ideas and norms about what innovation is and how we should innovate, moving the focus from end result of innovation towards the process of innovating, being inspired by choreographic knowledge and methods, can provide new sources of ideas for innovation management.

Another interesting idea for organizations is the notion of social choreography, introduced by Hewitt (2005), suggesting that the body and aesthetic realm can act as sources of social model and order (p.2). Schiller saw dance as a model or prescription for social organization already in the 18th century (ibid.). The idea of social choreography is to look at choreographic configurations and apply them to broader social and political spheres, suggesting that dance is not only a figure for social order but also a medium for enactment of a social order (ibid., pp.2-3). Hewitt is less interested in the body that has reappeared as the grounding topos in the cultural studies in the recent years, but rather in the dynamic spaces that link and separate bodies, in the dialectical movement of bodies that can act as the model for material analysis (ibid., p.7). Hewitt doesn’t see choreography as a metaphor, but rather as a medium for rehearsing social order within the realm of aesthetics (ibid., p.11-12). Hewitt distinguishes between two aesthetic ideologies – mimetic and performative. In the mimetic ideology, “the artistic representation of a better life serves to blind the audience to the social realities in which they live,” and “distracts us from the political praxis necessary to bring that utopian condition about in reality” (ibid., p.21). Art in this ideology serves as a platform for unrealized political action and false consciousness (ibid.). On the other hand, in the performative or integrative aesthetic ideology art does not just misrepresent an existing social order, but rather becomes a “realm in which new social orders are produced…and in which the integration of all
social members is possible” (ibid.). Choreography can thus become a medium for rehearsing new ways and models of organizing and management that are more inclusive, participatory, and humanistic than the predominant top-down plan-and-control models.

Contemporary dance and choreography can introduce to the organizational setting a new approach to organizing that comes from inner awareness and understanding of the body, movement, and the embodied knowledge that resides in humans. It can enable exploration of the human and bodily potential in relation to time, space, and other people, based on the practice of combining playful exploration, which holistically engages people through their bodies, as well as stimulates an attitude of critical thinking and reflection. As Biehl (2017) suggests, dance can connect people and coordinate their actions without words, helping them to cooperate socially and empathically with each other, but also relates to spaces and contexts through a collaborative practice and embodied form of interaction. In this fast moving society, everything is constantly in movement and change, so what can better help us understand what and how moves us than dance? It is a logical response to societal conditions that different efforts to integrate studies of dance into organizational research are currently underway. These efforts aim to centrally locate the moving human body and its capacity to generate meaning (Biehl, 2017).

In the results section, some further concepts from contemporary dance and choreography that are specifically interesting for developing innovative competence in organizations will be presented.

2.6 BRIDGING THEORY WITH RESEARCH PROBLEMS AND QUESTIONS

The theoretical part of this thesis is seen as one of the important additions to what is already presented in appended articles and as necessary to provide a more profound understanding of some of the issues that the research in this thesis addresses. This section briefly explains how theory presented in the current research, links back to the research questions defined in the introduction.

The first part of the theoretical chapter introduces the developments within the innovation management field, the positioning within the field, and the basic ideas around understanding of innovation, competence, and innovative competence. It presents the background for further exploration of the first research question:

**RQ1: How can innovative competence be conceptualized?**

One of the key challenges addressed in this thesis in relation to the concept of inno-
vative competence is that existing innovation management theory does not pay enough attention to embodied aspects of learning and knowledge creation, especially when it comes to enabling competence development for employee-driven radical innovation. An important part of the theoretical chapter thus provides some background knowledge about the body and its importance, addressing the following issues:

- Why have we developed a rather mechanistic attitude towards the body, treating it as an object and separating it from the mind in the Western world? (historical perspective on the body)

- Why must the body be frequently absent for us to be able to function in the world? (phenomenological perspective)

- Why and how is the body crucial for learning and creating new knowledge and meanings /innovating? (neuroscientific perspective)

This provides necessary background, understanding, and argumentation for the current state of disconnection with body at work. Additionally, it emphasized the importance of embodied aspects of knowing and learning in using and developing innovative competence. These insights are necessary for further exploration of the fifth research question:

**RQ5:** How can innovative competence be conceptualized integrating embodied ways of learning that can enable more radical employee-driven innovation?

The remaining research questions explore the connection between contemporary dance, dance-based interventions, and innovative competence development in organizations. This is why the third part of the theoretical chapter explains how art, specifically dance, is relevant in the context of innovation. Second, since in this thesis a specific form of dance is explored, (contemporary dance), some background information on its historical development and characteristics are provided and linked to relevant issues for organizations. This is necessary in order to avoid generalizations about dance, a common practice when people from business with very limited knowledge about dance think and discuss the possible relevance of dance in an organizational context. The last part provides necessary background knowledge for further exploration of research questions 2, 3, and 4:

**RQ2:** What are the key concepts and practices from contemporary dance and choreography that can contribute to understanding and developing innovative competence in organizations?

**RQ3:** How can knowledge and methods from contemporary dance and choreography be used in practice to enable innovative competence development among employees?

**RQ4:** How could knowledge and methods from contemporary dance and choreography be used to design long-term artistic interventions in organizations on a strategic level?
3 RESEARCH METHODOLOGY

3.1 RESEARCH PROCESS: CONNECTING CHALLENGES, RESEARCH QUESTIONS, STUDIES AND ARTICLES

The research presented in this thesis builds on the previous research done in the licentiate thesis (Bozic Yams, 2014), which explored how to use knowledge and methods from contemporary dance to enable innovation in organizations. The first study in the licentiate thesis was a series of semi-structured interviews with 20 choreographers, through which the core principles of creative processes of contemporary dancers were identified and compared with the key factors that stimulate innovative culture development in organizations (Bozic and Köping Olsson, 2013). Two further empirical studies were performed where contemporary dance-based methods were used to enable innovation processes and development of innovative culture in organizations. The first was a pre-study performed at an international dance festival during a period of two weeks with a group of 20 individuals from different sectors, who went through an innovation process using dance-based methods, conducted by myself and choreographer Dejan Srhoj as co-facilitators. Based on the experiences from the pre-study, a larger participatory action research study was implemented at Mälardalen University, called “Culture and space for innovation”. Smaller teams from 7 different organizations (27 people in total) participated in this half-year study. The teams from each organization would participate in a series of workshops, and after each workshop, test the ideas and tools from the workshop in their teams to see how they could be used to create more innovative work environments in their organization (Bozic Yams, 2016).

As a result of the studies conducted as part of the licentiate thesis, some challenges were identified and used as relevant input for designing and implementing the research presented in the PhD thesis. One identified challenge was that it is difficult to create an impact on an organizational level if only a few people from each company participate in a study, and if the study is not a long-term study designed together with the top management of organization. The other challenge identified was that there is a general a lack of longer-term artistic interventions in organizations on the strategic level that would show how art can enable change. So in order to better see the potential effects of dance-based methods on enabling innovation in organizations, and how these methods could be used to design an artistic intervention on a strategic level, a longer 2-year study was designed within one organization. Eskilstuna municipality, which participated in the previous study (“Culture and space for innovation”) conducted as part of the licentiate thesis, intended
to implement such a study within their organization coinciding with the beginning of my
doctoral research. This is why the research process started with the implementation of a
participatory action research study in Eskilstuna municipality, with 22 innovation leaders
from across the municipality as core participants.

The study in Eskilstuna municipality, in addition to the previous studies in the licentiate
thesis raised another relevant question: what concept or aspect within innovation man-
agement does my research attempt to respond to? Even though different concepts, such
as innovation process, innovative mindset and culture had been previously explored, the
actual empirical studies, including the main study of this thesis performed in Eskilstuna
municipality, seemed to have the biggest effect on the innovative competence of partici-
pants. When empirical data from the municipality study was analysed, it became clear
it would be relevant to explore how contemporary-dance based methods influenced
participants’ development of innovative competence. Since choreographic frames of
thinking and methods were used for the study design, the study in Eskilstuna munici-
pality attempts to provide some answers to the research questions: How can knowledge and
methods from contemporary dance and choreography be used in practice to enable innovative
competence development among employees? and How could knowledge and methods from contem-
porary dance and choreography be used to design long-term artistic interventions in organizations
on a strategic level? The results of the empirical study in Eskilstuna municipality are
captured in Appended Article 1: “The impact of contemporary dance methods on innovative
competence development.”

Analysis of the empirical results and the existing literature on innovative competence in
the Eskilstuna municipality study highlighted shortcomings in the current theory about
innovative competence, leading to formulation of the research question: How can innova-
tive competence be conceptualized? The corresponding study was then designed as a system-
atic literature review on innovative competence. Appended Article 2: “Integrated model of
innovative competence” summarizes the results of this study and synthesizes a model of
current theories in innovation management.

Comparing empirical results of the study in Eskilstuna municipality and the model of
innovative competence developed based on existing theories in innovation management
showed a gap between the two. An evident lack of emotional capacities and embodied
aspects of knowledge and learning in the current literature on innovative competence
existed, while on the other hand, reflections of participants in the municipality study
showed that a holistic approach to using senses, emotions, fantasy and tacit knowledge
was crucial for their development of innovative skills. This is why the next study was
designed as a literature study about the concepts from choreographic practice in the
contemporary dance field to identify how knowledge and theory from contemporary
dance could contribute to further development of the innovative competence concept.
This study complemented the knowledge gathered through interviews with 20 choreog-
raphers, previously conducted as part of the licentiate thesis.
Dance concepts that were identified as relevant in this study of literature on contemporary choreography were materialized in a shorter participatory action research study, implemented in the form of choreographic intervention at an international academic conference, the Art of Management and Organization (AoMO). This conference allows academics, and practitioners in the field of connecting arts and business, to gather every second year. The literature study on choreography and the empirical study at the AoMO conference explore the research question: What are the key concepts and practices from contemporary dance and choreography that can contribute to understanding and developing innovative competence in organizations? Their results are summarized in the Appendix Article 3: “Is this Choreography? - Choreographing conditions for innovative practice in everyday work.” Based on experiences from the two empirical studies (one in Eskilstuna municipality and one at the AoMO conference), and two literature studies (one on innovative competence and the other one on contemporary choreography), a revised conceptualization of innovative competence integrating embodied aspects of knowing was developed, and is presented in the results chapter. It answers the research question: How can innovative competence be conceptualized integrating embodied ways of learning that can enable more radical employee-driven innovation?

The overview of research questions, studies performed, and articles published as part of the doctoral thesis can be seen in Figure 4.

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Studies</th>
<th>Articles/Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>How can knowledge and methods from contemporary dance and choreography be used in practice to enable innovative competence development among employees?</td>
<td>2-year participatory action research study with 22 leaders from Eskilstuna municipality, 6 process facilitators: the main researcher, project manager from municipality, 3 artists and a following researcher</td>
<td>Article titled: “The impact of contemporary dance methods on innovative competence development”, published in the Journal of Business Research</td>
</tr>
<tr>
<td>How could knowledge and methods from contemporary dance and choreography be used to design long-term artistic interventions in organizations on a strategic level?</td>
<td>Systematic literature review on innovative competence</td>
<td>Article titled: “Integrated model of innovative competence”, published in the Journal of Creativity and Business Innovation</td>
</tr>
<tr>
<td>How can innovative competence be conceptualized?</td>
<td>Literature review within the field of contemporary choreography</td>
<td>Article titled: “Is this Choreography? - Choreographing conditions for innovative practice in everyday work”, published in the Journal of Organizational Aesthetics</td>
</tr>
<tr>
<td>What are the key concepts and practices from contemporary dance and choreography that can contribute to understanding and development of innovative competence in organizations?</td>
<td>Participatory action research study with participants at the AoMO conference 2016</td>
<td>Revised conceptualization of innovative competence integrating embodied aspects of knowing</td>
</tr>
<tr>
<td>How can innovative competence be conceptualized integrating embodied ways of learning that can enable more radical employee-driven innovation?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4: Overview of research questions, studies, and articles/results
3.2 RESEARCH APPROACH AND THE POSITION OF THE RESEARCHER

3.2.1 Abductive approach to research

In this thesis, the abductive approach to research was used through iterative cycles between practice and theory, which have been informing one another, as can be seen in the previous description of the research process. American philosopher Charles Sanders Peirce (1839-1914), proposed that induction and deduction should be complemented by a third inference mode in science, which he called abduction, and claimed was qualitatively different from the two others. Abduction is inferring a case from a rule and a result and starts with consideration of facts, that is, particular observations (Peirce, 1955). By relating facts to a wider context - some other fact or rule which will account for them - a hypothesis is formed (ibid.). An example that Peirce gives of this process and the underlying practical reasoning is: “One observes a man with a special dress, expression of countenance, and bearing. One knows that such features are characteristic of Catholic priests. One infers that this man is a Catholic priest “ (Peirce 1955, p.151). Peirce relates abductive reasoning both to practical reasoning in life and to scientific inquiry, which he sees as a special case of human sense-making (ibid.)

Abduction can help clarify, integrate and broaden an uncertain, vague or narrow experience, contributing to a more reflective praxis (Lindhult, 2005). It is a creative but also controlled “process where experience, conceptualization and theorization interact in order to form new understanding or theory proposal” (ibid., p. 328). In this type of action research, knowledge is created through cycles of experiential learning through action, experience, reflection and conceptualization (Johansson and Lindhult, 2008). Since the focus is on action and learning by trying out new things in practice and observing the results, it is often the experimenting in practice that initiates reflection, and highlights gaps and needs for further development in theory. Schön (1983) calls this “reflection-in-action.”

This also happened in the research process presented in this thesis, which began with the study in Eskilstuna municipality. Specific observations of participants, such as their reflections on developing certain skills in the process that could be related to the concept of innovative competence in innovation management theory, made me hypothesize that using dance-based methods enabled them to develop innovative competence. This brought my attention to innovative competence as a concept for further inquiry, and stimulated implementation of a new study, reviewing existing research about innovative competence through a systematic literature review. When looking further into empirical data, participant observations about the importance of different embodied aspects of learning for the development of innovative skills was found, while on the other hand, there was a lack of discussion of these elements in innovation management theory. Hence another hypothesis could be formed that looking further into contemporary
dance theory and practice could inform and further contribute to the conceptualization of innovative competence. This is why another literature study was performed in the field of contemporary dance and choreography. In this study, specific participant observations from the Eskilstuna municipality study were again used to support hypothesizing which concepts from contemporary dance theory could be relevant for the concept of innovative competence. For example, the importance of practice, undoing everydayness, and body and materiality. From these concepts, a need for the second empirical study emerged to see how selected concepts from contemporary dance could be further materialized in an organizational context, to enable innovative competence development. This iterative process between practice and theory was necessary in order to develop an improved workability of praxis in time, and to enrich existing theory with new ideas (Johansson and Lindhult, 2008).

3.2.2 Paradigmatic positioning within action research

After describing how the research process evolved, it is relevant to position it within a specific paradigmatic approach, pinpointing the core principles on which the process was designed and implemented. Since the research presented here relates to different research fields that are based in different paradigms, these paradigms are briefly introduced to highlight the differences and similarities between them. The different paradigms each have their own core patterns of thinking, with specific central problems and a basic theoretical frame and structure (Holmstrand, 2006). Authors define the main paradigms differently, but the referenced paradigms are included in various categorizations, with an emphasis on the social sciences: positivism, hermeneutics, critical theory (Marxism, feminism), postmodernism, and praxis-research (action research, participatory research) (Johansson et al, 1972; Alvesson and Sköldberg, 1994; Holmstrand, 2006; Mattsson, 2012; Coghlan and Brannick, 2014).

Since this thesis presents research that is positioned between the fields of innovation management, and artistic interventions in organizations, and with the third field of contemporary dance as an important influence and inspiration, an interesting mix and tension between elements of various paradigms emerges. Management theory is largely based on the positivistic approach; aesthetic theories of organization that study the role of art in organization often have a base in hermeneutics and phenomenology, while contemporary dance theory frequently leans on references from critical theory and postmodernism. This is, of course, a simplification, because within each field, one can find researchers with different orientations. Nevertheless, a tension occurs when one tries to connect various fields of research, originating in different paradigms, which means they have different ontological views on the nature of the world, and epistemological understanding of how knowledge is created.

As a short overview of different paradigms (as seen in Figure 5), hermeneutics is based
on subjectivist ontology (Coghlan and Brannick, 2014), and on the insightful interpretation of the researcher who is immersed in her field and thus develops a unique understanding and knowledge of it (Mattsson, 2012). In positivism, which has an objectivist understanding of the world and knowledge, the researcher is an outside neutral observer, who with reliable research methods collects and analyses data and then tries to explain to the world, through cause and effect, links which produce general knowledge and can be repeatedly used in different contexts (ibid.). Praxis-research is a mix in the sense that it has an objectivist understanding of the nature of the world but a subjectivist perception of knowledge (Coghlan and Brannick, 2014). It aims to produce change in practice through actions that engage participants and create context specific knowledge (Mattsson, 2012). Postmodernism employs deconstruction and discourse analysis in order to create discourse-related knowledge where its communicative validity is most highly valued (ibid.).

<table>
<thead>
<tr>
<th>Hermeneutics</th>
<th>Positivism</th>
<th>Pragmatism</th>
<th>Postmodernism</th>
</tr>
</thead>
</table>

Figure 5: Different research theory models (Mattsson, 2012)

In this thesis, action or praxis-research is chosen as the main research method, and is the one applied in empirical studies, although the theories and references used in the thesis come from all three fields of study (innovation management, contemporary dance, and art in business), and thus represent different paradigmatic views. Action research suits the type of study conducted here because it combines some aspects of all other paradigms but expands them in its own ways (Holmstrand, 2006). As hermeneutics, it takes into consideration participants’ feelings, attitudes, experiences and specific context in which they produce knowledge. Similarly to critical theory, it challenges the wider social and power structures and established theories, inviting participants to re-evaluate
them. And as positivism, it has also an aspect of functionalism and pragmatism, trying to solve real problems and create knowledge that can be applied (ibid.). All of these elements were critical in the studies presented here, where the main source of empirical data taken into consideration is participant reflections on their experiences and feelings in connection to the research process. Yet, engaging artists and artistic methods invited participants to be critical and re-evaluate existing structures, values, and behavioural patterns in their respective work contexts. Finally, a pragmatic approach through focusing the research process on enabling participants to work with actual work challenges and finding new ways of developing solutions in their everyday work, was applied.

3.2.3 Combining critical and pragmatic traditions in action research

According to Johansson and Lindhult (2008), there are two main scientific orientations within the action research (AR) today: the critical and pragmatic. Critically oriented researchers within AR emphasize humanistic values and transformation, helping underprivileged groups to develop consciousness of their situation and emancipate themselves through reflection and critical thinking, finding ways to struggle against dominant ideologies and oppressive structures (Fals Borda, 1979; Löchen, 1972; Sandberg, 1976). They are often connected to liberation movements from Latin America, Africa, and Asia (Mattsson, 2012). Pragmatists focus on praxis and development of practical knowledge with an emphasis on cooperation between all concerned parties, and creating a common platform for action, where participants adapt to situations and incrementally implement change through a process of democratic dialogue and experiential learning (Johansson and Lindhult, 2008). The pragmatic approach is the dominant orientation in Scandinavian countries (ibid.).

These two AR traditions can be also referred to as the North and the South traditions (Brown and Tandon, 1983). The North tradition is associated with the classical Lewinian approach, working in hand with the dominant social structures, and building on consensus and conflict avoidance, while the South tradition is associated with Paulo Freire, has a stronger ideological base opposed to dominant power structures and focused on helping marginalized groups to emancipate themselves (Johansson and Lindhult, 2008). This is why in critical tradition the role of researcher is to pay more attention to dissen-sion rather than to consensus (ibid.).

The predominant approach used in the research presented in this thesis is closest to the pragmatic Scandinavian tradition in AR. The base proposition was to empower participants in the empirical studies to improve their working conditions and develop their innovative competence in everyday work through a process of experiential learning and in collaboration with the power structures (in the case of Eskilstuna municipality top management and politicians, and in the case of AoMO intervention conference organizers). But what distinguishes the research presented here from the barely pragmatic
approach, was that artists and the artistic methods they applied in the research process, utilized a more critical perspective. Participants were motivated to step outside of their comfort zone and question existing norms and behavior patterns in their respective systems. In the case of the municipality, participants began to question the predominant attitudes of top management and the core culture of law and rule-driven processes that were often contrary to the innovative thinking and behavior which they experienced in the learning process. Doubts, distrust, questions, and tensions appeared. Participants felt that the top management wanted to outsource the responsibility for innovation to innovation leaders (participants in the study), while top managers were not ready to go through any major change in behavior themselves. Artists invited participants to work in spaces that were very different from their normal office space (e.g., theater, art museum, church, makers space), but also engaged them in experiences that made them act and think in ways that were very different from typical everyday routines in the municipality. After being immersed in the artistic methods of work, they realized that part of becoming innovative is to push oneself outside of the comfort zone, daring to expose oneself and explore new ways of being and acting at work – none of which they believed top management was ready to do. This stimulated a dialogue that I, as the researcher, and the project manager from the municipality initiated with the top management. We openly discussed the challenges, and suggested top management to embark on an innovation journey themselves, working more closely with innovation leaders rather than outsourcing the responsibility for innovation to them. There was a feeling of resistance and the wish to maintain the status quo from the management side. After a few failed attempts, we accepted that a real transformation of top management was not possible, and went back to a more pragmatic approach. Artistic methods showed the potential for infusion of a more critical approach into the pragmatic one which dominates the Scandinavian management tradition. These artistic methods dare to face problems more openly, rather than seeking to avoid potential conflicts. Artists brought a certain distance with their own way of thinking and practice that was very different from organizational one. They created space for reflexivity and reflective knowledge to be developed by challenging the norms of the existing situation.

Artistic methods can thus help participants avoid the risk of being too easily co-opted by dominant interests or power structures and develop a more independent thinking. In the more democratic and pragmatic Scandinavian tradition based on consensus, the risk is that everyone prefers to feel and think the same to avoid conflict, potentially hindering real change and innovation. Combining artistic methods with more traditional methods of democratic dialogue from the Scandinavian pragmatic approach can thus enable research participants to move from developing their ability to incrementally improve current structures towards the ability to introduce more radical change and innovation, enabling long-term transformation. But for this to happen, the research process needs sufficient time and everyone involved must be ready for transformation, since change cannot be imposed on people. This includes top management. If research participants see that the top management only demagogically promotes change and innovation but
is not really ready for it, they might decide to step out of the system and go their own way. This happened to one participant in the study, who left her work at the municipality and took another job.

3.2.4 Position of the researcher

Action research does not believe that there is any value-free researcher who can examine reality, but that the data is embedded in the context and interpreted, and consequently the knowledge created in research is particular and situational (Coghlan and Brannick, 2014). The action researcher is immersed in the research context and the action research cycles that each follow the steps of planning, taking action, evaluating the action and conceptualizing further planning (ibid.). Action research works on the epistemological assumption that the purpose of academic research is not just to describe, understand and explain the world but also to change it (Reason and Torbert, 2001). Those who decide the agenda of research and benefit from it are much more important than the form of the knowledge produced and the methodology employed to gather data (Coghlan and Brannick, 2014).

In the pragmatic tradition of action research the researcher acts as a facilitator of democratic dialogue between different participants in the research process, being closely involved in the development of the research process and acting together with practitioners, but giving participants a primary role to decide upon the content that is being discussed and the practical knowledge and solutions that are being developed in the process (Johansson and Lindhult, 2008). The researcher is there to support the formation of practical knowledge, and create conditions for further interaction and collaboration that can help develop organization in a participatory way (ibid.). The researcher’s theoretical knowledge can be used to expand the learning process of participants. In the research process both the researcher and participants develop professional as well as personal knowledge of oneself and others (ibid.).

Coghlan and Brannick (2014) discuss the three voices of the researcher. The traditional voice is third person voice, where the researcher is doing research on third persons and subsequently writing a report for other third persons (p.5). In action research, the researcher integrates the first and the second person voices. Through the first person approach, the researcher inquires into her own research practice, becoming aware of her basic assumptions, intentions, actions, and philosophy of life, reflecting on them, and using those insights to act more purposefully (ibid.) The second person practice, on the other hand, is concerned with doing research together with others. Through dialogue and joint action, the research is challenged with questions of who to include, and how they should be involved in the research (ibid.) The dialogue is central in action research, which is based on the collaborative and democratic principles. In action research, the third voice is concerned with how the researcher can co-create communities of inquiry,
disseminating knowledge beyond the direct second person action, through publishing and other forms of sharing knowledge on a more general level (e.g., teaching, academic conferences, professional associations) (ibid.). For an action researcher, the challenge is how to integrate the three voices in her research, because as Reason and Marshall (1987) propose: “All good research is for me, for us, and for them...It is for them to the extent that it produces some kind of generalizable ideas and outcomes...It is for us to the extent that it responds to concerns for our praxis, is relevant and timely...It is for me to the extent that the process and outcomes respond directly to the individual researcher’s being-in-the-world” (pp. 112-113).

As a researcher, I have also tried to combine these three voices in my research process. The first person voice was present in different ways. On one hand, by not having the traditional role of an objective researcher that observes from the outside, but rather being immersed in the research process as one of the participants. I was continuously reflecting on my experiences as a researcher, sharing my feelings and thoughts openly with other participants, and talking about my own personal vulnerabilities as a researcher in the process. What helped me develop insights on my own basic assumptions and research practice was the dialogues with participants, artists who were co-facilitators of the process, and the following researcher, who all shared valuable feedback throughout the process.

In order to question and further explore my own research practice, using the knowledge we were creating in the research process, I also tested a variety of choreographic tools in my daily work routines. I was exploring how I could use physical space in new ways and tried to work in all kind of places besides my office, like museums, dance studios, gym, parks, playgrounds, cafés, to see how the physical space affects my feelings and work process. While working, I was experimenting also with how I could use body and movement in new ways in my work routines, not only working in different body positions (standing, lying, sitting on the floor etc.), but also integrating different bodily practices into my work process. For example: breathing and relaxation exercises to tune into a day or meeting, stretching and Tibetan ritual exercises to activate my body when needing a short break from my writing, taking walks to make detours in my thinking, short sessions of free dance, or listening to music to create energy and generate inspiration. I also conducted specific experiments during certain periods in my research process. For example, during half a year, I rented a dance studio every Friday morning. I agreed with Dejan Srhoj (the choreographer with whom I have collaborated most with in my research) to send me a score with movement tasks that I would perform on my own in the studio. The scores were adaptions of improvisational dance classes he was leading for a group of amateur dancers on a weekly basis. I explored how my body can move and how I can express myself through movement, sometimes just allowing myself to move and dance, and then sit for a few hours and write. Or I would even give myself tasks to explore concepts from my research through movement and then write about them. Once when I was writing a book chapter with another researcher (Bozic Yams and Helldorff,
2017) I proposed that we use the choreographic model of creative process and tools (Bozic Yams, 2016), which I developed and applied in designing my empirical studies, to see what impact the choreographic frame of thinking could have on the writing of an academic text. All these experiments enabled me to inquire into my own practice as a researcher and over time, to develop my personal innovative practice in everyday work. A positive aspect of taking the first person perspective is that it has enabled me to learn a lot about myself and to develop both personally and professionally during the research process.

The second person voice was used when co-producing research with other participants. In the main 2-year empirical study in Eskilstuna municipality, the research process was designed together with the participants, and choreographic tools were proposed based on continuous reflections shared among participants, when it became clear what were relevant issues for them in different moments of the process. The knowledge from innovation management theories and choreographic practices was used to help participants in the process reflect on their own innovative competence, and to decide what innovative skills were important in their specific work situations. They decided how they wanted to use the inputs from our workshops and reflection sessions to make different experiments in their own daily work routines in order to further develop their individual ability to innovate. The fact that dancers co-facilitated workshops or interventions with me, also allowed me to not only take the role of a facilitator but often to be one of the participants while doing the dance-based exercises, exposing myself not only through talking, but also in more personal ways through movement and dance. In this processes where both I as a researcher, and other participants moved together and touched each other without words, another level of connection was established. More on the embodied aspects of research can be found in the next section of the text, and details on how each study was performed in the continuation of the methodology chapter. In general, it can be said that the positive aspect of taking the second person voice and engaging participants in co-developing new knowledge has been that the research has meaningfully affected participants’ daily work, and helped them develop their innovative competence, at the same time as structures for improving innovative capability on organizational level were created.

The third person voice has been applied through publications of articles and book chapters that tried to generalize ideas from theoretical and empirical studies, sharing knowledge with a wider audience. The research was also presented in various academic conferences, and events for professionals. Reflecting back on the process, I think it would have been interesting to engage participants in the studies and write a common text together to make the group knowledge created in the process and expressed in our group reflections more explicit and to add another layer of learning in the process through co-writing. While one of the articles was co-written with choreographer Dejan Srhoj (Bozic Yams and Srhoj, 2018), who co-facilitated both empirical studies, and a book chapter with the following researcher (Bozic Yams and Helldorff, 2017), there is still potential to develop
new processes of co-writing texts with the whole group of participants in the future.

Reflecting on different aspects or voices used in my researcher role, I can say that it has sometimes been challenging to combine so many positions at once. I was responsible for co-designing and “selling in” the process to the top management, as well as co-facilitating it, being one of the participants (and undergoing my own change process), but also attempting to maintain a critical distance, observing what is happening in the process from the “outside”, collecting and analyzing data, and then trying to make sense out of my own and participants’ experiences to be able to generalize knowledge for others. Being so immersed in the process and the context, the most difficult thing has been to keep distance and a critical mindset as a researcher, which is reflected also in this thesis. Having various people actively involved in the process, however, contributed to balancing my own thoughts as a researcher with other voices (participants, artists, following researcher) through democratic dialogue.

3.2.5 Democratic dialogue with participants

One of the main characteristics of action research is that it strongly promotes an anti-elitist view of research, proposing that research is not exclusively the domain of researchers, but should actively include citizens (Holmstrand, 2006). It answers a core research question of “what is worth knowing” in a deeply humanistic way, proposing that anything which contributes to changing the world and making it more human is worth knowing (ibid.). In the words of Reason and Bradbury, “action research is a participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes, grounded in a participatory worldview” (2001, p.1). According to Shani and Pasmore “it is simultaneously concerned with bringing about change in organizations, in developing self-help competencies in organizational members and adding to scientific knowledge. Finally, it is an evolving process that is undertaken in a spirit of collaboration and co-inquiry” (1985, p. 439).

Gustavsen (1992) proposes different principles, important for conducting democratic dialogue in participatory action research, and here it is outlined how some of them were applied in empirical studies presented in this thesis. One of the important principles of democratic dialogue is that all participants in the process are equal (Gustavsen, 1992). In business, often small things like how we sit in a meeting or conference room establish and define power positions. This is why the circle form was always used in the studies presented in the thesis to outline the importance of equal participation of everyone, including the researcher and other facilitators of the process, who participated in different exercises and reflected on their personal experiences of the process as equal participants. Some other principles of democratic dialogue suggest that it is not sufficient that all concerned people have a possibility to participate but also that everybody should be active and should not only share their own ideas but also help others to contribute with
and further develop their ideas (ibid.). This is why all the activities in the studies were designed as interactive, presupposing everyone’s active participation. In all sessions, the classical lecturing was limited to a minimum (15-20 minutes), while the rest of the time was spent on interaction between participants. Many creative exercises also encouraged collaboration between participants, following the principles of “yes, and…” to encourage them to build on each other’s ideas, and work together in teams, supporting each other. For example, even if participants in the study with Eskilstuna municipality came from different departments, (which could potentially divide them), they were encouraged to find common challenges and form teams around them, supporting each other and working together on finding new solutions to shared challenges. This integrated another principle of democratic dialogue that work experience is the basis for participation and that at least some of the experience that each participant has is considered legitimate (ibid.). The research process in the case of empirical studies presented in this thesis was centered around work experience and how to use the research process to develop innovative competence at work. Work experiences were used as core input, along with reflecting and re-evaluating them to be able to provide a platform for further improvement of work conditions for enabling innovation. This relates to another principle of democratic dialogue, that it should provide a platform for practical action (ibid.). Different opinions were encouraged, and when it was felt that participants did not openly share some of their opinions to avoid conflict, an open dialogue was encouraged.

Following the principles of action research and democratic dialogue, the research was consequently done in action (and not about action), resolving important organizational issues together with those who experienced those issues directly (Coghlan and Brannick, 2014). In action research, members of organizations studied are thus treated as subjects and not objects of the study, as in more traditional research (ibid.). They actively participate and collaborate with action researcher(s) in iterative cycles of learning, co-designing and experiencing the whole process together. This is also how research was implemented in the empirical studies described in this thesis where participants were invited to take part in a process of experiential learning in which they were actively engaged. They had an impact on the process design, and instead of following a prescribed formula, decided for themselves what experiments they wanted to do in their own work practice to further develop their practical knowledge on innovation. Researchers’ and artists’ knowledge, methods, and thinking frames were shared as an input to inspire the learning process.

3.2.6 Ethical principles in participatory research

As Florin and Lindhult (2015) suggest, the principles of democratic dialogue are an important part of ethical principles in the context of co-production-oriented research where the main focus is not how researcher treats other affected parties, but rather how all participants (including researcher) collaborate and relate to one another. In the continuation it is discussed how other ethical principles were applied in empirical stud-
ies presented in this thesis. The first one suggests that all parties must participate in making decisions on research aims and how co-production of knowledge is organized (Florin and Lindhult, 2015). In the case of the study in Eskilstuna municipality, there was a relatively long preparation stage, and several kick-off workshops with participants where the aims, conditions, common principles and design of the process were discussed and agreed upon. Some of the participants decided to step out of the process after this phase when it became more clear what expectations were, and how much time everybody shall invest in the process. It was important that participation was voluntary and that all participants were personally motivated to be part of the process. Especially when working with artistic methods, the principle of voluntary participation throughout the process is crucial. Some people might want to be part of the process but then feel uncomfortable participating in specific activities facilitated by the artists. This also happened in the case of the study in Eskilstuna municipality, where a few participants felt uncomfortable with dance-based exercises but did not want to feel excluded from the process. Facilitators always encouraged participants to take responsibility for themselves and feel free to step out of the process if it felt uncomfortable, and to come back when desired. This led to discussions about how to find a good way to allow someone who decided not to participate in an exercise to still be included in the process. This is why it was suggested that those who decided not to participate in an activity would take the role of an active observer, and then contribute to the group by sharing their observations, feelings, and thoughts from the outside in the reflection part of the exercise.

Another important ethical principle that was considered in the research process was how to create value and benefits for different participating parties, despite of their different knowledge interests and needs (Florin and Lindhult, 2015). In the case of the study in Eskilstuna municipality, there were different types of people participating, employees from the municipality, an innovation strategist and project leader from the municipality, a researcher, artists, and the following researcher, each with different types of interests and needs. So it was important to always openly discuss these needs and how we could accommodate them. For example, data collection and analysis is what the researcher would normally do and what participants might consider a waste of time in their organizational context. So when participants were asked to write personal reflection stories, which would serve as empirical data, it was important for them also to discuss the benefits of writing these stories. They stimulated self-reflection, another important ethical principle in participatory research (Florin and Lindhult, 2015), which helped participants raise awareness of personal and structural norms in the municipality, and encouraged them to critically re-evaluate them. Over time, they also realized that reflection skills were an important aspect of innovative competence, and that practicing reflection on a regular basis helped them become more innovative at work. They also experienced the increased value of their personal written reflections when shared in group reflection sessions, which supported learning and knowledge sharing and creation at the group level. These sessions then inspired them with new ideas about how they could further improve their innovative practice in everyday work. In this way, something that was suggested to
the group from the need of the researcher became an important tool for learning and new knowledge creation for the whole group.

Another important ethical principle in the research process was to share responsibility for agreeing and implementing rules around confidentiality (Florin and Lindhult, 2015). Using artistic methods often makes the process very personal, so people might feel vulnerable and exposed, either because the methods push them out of their comfort zone, doing unusual things (like dancing with their colleagues) or they trigger different emotions, memories or other personal material that people don’t necessarily feel comfortable sharing in a work context. This is why it was even more important to spend time building trust among participants and agree from the start about confidentiality of information shared in the group. During the kick-off workshops, an informal agreement was thus made among participants that “what is said in the group, stays in the group” and that everyone is responsible to make sure this agreement is respected. A formal confidentiality agreement was also signed by all participants at the beginning of the process, where they agreed that all data collected during the research process will be used only for research purposes, and will stay anonymous.

3.2.7 Embodied research practice

Although the predominant research method in this thesis is action research, it is relevant to also discuss the embodied aspects of research that the use of dance methods brought into the process and are not traditionally used in action research. As Satama (2017) proposes, the sensual experiences of both the researcher and the subjects being researched are an important aspect of embodied research involving dance. Such qualitative research becomes multimodal as the research material is not only verbal but multi-sensory (Dicks et al., 2011). As can be observed from the article on the study in Eskilstuna municipality (Bozie Yams, 2018), one of the consequences of using dance-based methods in the research process was that participants were frequently reflecting on their feelings, the use of senses, and other bodily aspects of work that would not emerge in a traditional study. Although the primary source of data analyzed in the study were the personal reflection stories of participants, the embodied experiences that we shared while moving and dancing together, and the very personal conversations we engaged in afterwards, certainly influenced both my own reflections, and my practice as a researcher.

The challenge is how to best capture these multi-sensory, embodied participant experiences as they can add an important element to action research. Within ethnography, a new field called “sensory” or “multisensory” ethnography has developed (Pink, 2011; Dicks, 2014), emphasizing subjective and physical experiences of the researched subjects, and features sensory methodologies (Low, 2015; Sunderland et al., 2012).

Since sensory ethnography views human experience as fundamentally embodied (Sun-
derland et al. 2012), the researcher’s body is also crucial for capturing embodied ways of knowing (Low 2015). According to Küppers (2013) and Warren (2002) researcher’s sensory-based skills and creative forms of expression are part of the “embodied research practice”. Alvesson and Sköldberg (2009) thus argue that researchers need to do something with the sensory impressions gathered in the research process to make them comprehensible and meaningful.

In the studies presented in this thesis it became clear that there were layers of experiences that felt important for the process that were not expressed in words and for which I haven’t yet found the right research methods for capturing and analyzing in a structured way. As Warren (2008) argues, there is a lack of literature discussing appropriate methodology for doing “aesthetic research” using artistic knowledge in organizations, as aesthetic experience cannot be broken down into the basic syntactical units which language demands (Langer, 1957). Even though there is a growing interest in aesthetic studies of organizations, most of these studies still take the “commentator” approach, focusing on the aesthetic experiences of the researcher, rather than on those of organizational members (Warren, 2008). The ways in which embodied knowledge co-created by participants can be captured and made explicit and available for those who are not directly involved in the study, continues to be an important question for future studies in action research. This is a difficult task because often these embodied experiences are sudden, short, and transitory, rushing through our bodies, but fleeting and beyond our grasp, so it is difficult to pin them down for later evaluation (ibid.). The studies I have performed so far also show that since people feel exposed and vulnerable when they are asked to go out of their comfort zone and “dance” or explore different questions through movement, taking photos of them or even recording them on a camera, makes them feel even more uncomfortable, and resistance is felt. People open much more if the researcher in this kind of situation acts as one of the participants, exposing herself too, moving together with the others, instead of being an outside observer. Even though in Eskilstuna municipality there was a following researcher who could gather external observations, a wish was expressed that she also act as one of the participants when movement exercises with the whole group were performed. A possibility for the future could be to install a self-standing camera that captures the whole working space after the initial trust in the group is established and then devote a part of the group reflections to watching parts of the recordings together, and reflect on the more embodied experiences and knowledge created from them in the process.

3.2.8 Summarizing key principles on the strategic, tactical, and operational levels of research

In the first part of the methodology chapter, the general principles and approach to research were presented on strategic and partially on tactical levels, discussing the general logic of the research process based on abductive approach to research, in which different iterations between practice and theory were made. The pragmatic orientation
with a critical element through using artistic methods within action research that was applied in this thesis was presented. Participatory and democratic principles of co-producing knowledge with participants were introduced, and the active and interactive roles of researcher through first and second voices discussed. Ethical issues in participatory research were discussed and the embodied approach to research was presented as an important aspect that influenced the research process because of the application of knowledge and methods from dance.

In the following section, each research study will be presented separately to discuss its specific design in more detail, the choice of research methods, and the process behind data analysis, describing in more depth the tactical and operational levels of research.

3.3 RESEARCH STUDIES

3.3.1 Empirical study in Eskilstuna municipality

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Research approach</th>
<th>Study</th>
<th>Methods for data collection</th>
<th>Article / Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>How can knowledge and methods from contemporary dance and choreography be used in practice to enable innovative competence development among employees?</td>
<td>Pragmatic action research with elements of critical approach through arts</td>
<td>2-year participatory action research study with 22 leaders from Eskilstuna municipality and 6 process facilitators: the main researcher, the project manager from municipality, 3 artists and a following researcher</td>
<td>Full-day workshops, experiments in everyday work practice, individual reflection stories, group reflections, literature discussions, reflections between the main researcher and the following researcher, interviews with artists facilitating the process</td>
<td>Article titled: “The impact of contemporary dance methods on innovative competence development”, Published in the Journal of Business Research</td>
</tr>
<tr>
<td>How could knowledge and methods from contemporary dance and choreography be used to design long-term artistic interventions in organizations on a strategic level?</td>
<td></td>
<td>Main source of data for analysis: Personal reflection stories written by participants</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 6: Study in Eskilstuna municipality: Overview of research questions, study with methods for data collection, and article/results

In accordance with the principles of action research, where the goals are to generate new knowledge in order to achieve action-oriented results and to educate both the researcher and participants (Herr and Anderson, 2005, p. 54), it was agreed with the Eskilstuna municipality that the project would be implemented both as a research study
and as a practice-based training program for participants. The study was coordinated by two people, a project leader from the municipality and myself as a researcher and project facilitator from the university. The project leader from the municipality was the innovation strategist, who works full-time with innovation management, and reporting directly to the economic director of the municipality. Her role was to make sure that everything was aligned and adjusted to the municipality’s goals and context, to communicate the project internally, and to recruit and coach participants. The researcher’s role was to co-design the strategy and activities for the entire intervention with the project leader and participants from the municipality, co-facilitate different activities (such as workshops, literature discussions, and group reflection sessions), provide training material and tools needed in the process, and collect and analyze the data. There was also a following researcher, Elisabeth Helddorff, a PhD student in art and business from Germany, who was partially observing and partially participating in the workshops. She took photos and recorded videos and group reflections in the workshops. Drawing on her experiences in the workshops, and the material she collected, she had a reflection session with me as the main researcher after each workshop. There she also proposed topics that could be interesting to discuss in the group reflections between workshops.

The project lasted two years, from January 2014 to January 2016, and the primary participants in the study were 22 innovation leaders, representing different functions within internal administration (like HR, finance, quality, etc.) and key organizational units working with core areas, such as education, health, environment and construction, and culture. Innovation leaders voluntarily participated in the project. Most of them were women over the age of 40 that had been working in the municipality more than eight years. The way they were recruited was that the project leader from municipality presented the project to different management groups, who then passed along information to their colleagues and those who were interested. They took the role of an innovation leader, and participated in the project to build innovative competence across the organization. Once the group of participants was formed, some kick-off workshops were organized to discuss ideas about the project with participants and to get their feedback to be able to design the process according to their needs. In the beginning of the process, participants also identified certain innovation challenges they wished to work on during the process while developing their innovative competence. Based on shared interests, they formed different innovation project teams, each choosing one innovation challenge they wanted to work with.

After the initial discussions and kick-off workshops, the process continued with six experiential learning cycles. Each cycle started with the literature discussion related to the topic that was in focus. A full-day workshop followed, where participants explored the specific topic through practical work on different exercises that had been developed in accordance with the goals of each workshop by the researcher, and three contemporary performing artists who participated in the study: Dejan Srhoj, Gustaf Iziamo, and Alexander Hall. The purpose was to combine theory and tools from innovation management
with contemporary dance-based methods. The dance-based methods were always developed based on the previous reflections of participants in the process, and what was felt that the group needed at each point of the process. After each workshop, participants were invited to test what they had learned in the workshop in their innovation projects, adjusting the knowledge to their specific needs in order to further develop the innovation project. They were also asked to write a personal reflection story on an important experience or learning from each learning cycle. Afterwards there was a half-day group reflection session, where participants shared both personal reflections and experiences from the innovation project groups. The last step in each cycle was where participants were asked to test something that inspired them in the common reflection session in their everyday work routines to further develop their personal innovative competence at work. In this way they were encouraged to develop their innovative competence by applying innovative skills in a concrete innovation project they were part of, and experimenting with how they can use them in everyday work routines in the context of their specific job role.

In this way, knowledge from innovation management research and contemporary dance-based methods were used as inspiration in the experiential learning process. An important aspect of co-creating practical knowledge was that participants decided how they wanted to use and adjust it to their specific work situation. Instead of prescribing a set of tools, they were encouraged to develop their own, using their experiences from different activities that were part of the project. The idea was that as participants were engaging in several experiential learning cycles, their innovative competence would increase in time and in the end they would be ready to design and lead a training program for 700 managers and innovation ambassadors in the municipality, in order to support the development of innovative competence across organization.

My role as a researcher was to co-facilitate the learning process for participants and support them in co-creating practical knowledge they could use at work. The project leader from the municipality, and three artists actively co-facilitated different activities, which allowed us to complement each other with different skills and perspectives. Our roles always shifted between facilitator and participant, meaning we would lead some exercises and participate in others. We also always shared our personal reflections on what was happening to us during the learning process, and what our own challenges and learnings were.

The dance-based methods served to add a new layer of learning which would engage participants in a more holistic way, not only developing cognitive skills for innovation, but also embodied knowledge, use of their senses, feelings, intuition, imagination, and even unconscious material inscribed in their bodies but difficult to access through language. Dance-based methods also transferred participants in another world, where they had to leave their comfort zone and expose themselves in front of their colleagues, sharing their vulnerabilities in a way that is not usual at work, but comes out when moving
together and touching each other. Artists encouraged participants to express their ideas through different forms and also made participants reflect on and question their own work routines from another perspective.

**Data collection and analysis**

The main sources of data collection were the personal reflection stories written by participants after each of the six workshops. In total, sixty-seven reflection stories were collected during the process. The number of reflection stories per workshop dropped in time, and the total number of reflection stories per participant varied. Other sources of data influenced the research process, for example, all reflections shared among participants in workshops and group reflection sessions were a key input into the learning process. Feedback and material collected by the following researcher contributed to the process development as well. And in the end of the study, interviews were performed with the three choreographers who co-facilitated workshops in order to understand how they experienced and reflected about the process.

Data analysis was done according to the principles of qualitative data analysis (Merriam and Tisdell, 2015) by first reading all reflection stories and marking different terms or topics that were identified as relevant by participants. Similar terms were then grouped in categories, and text segments relating to each category were analyzed to understand why participants experienced them as relevant. Afterwards, the second round of reading reflection stories took place, focusing on whether and how participants related to different aspects of innovative competence as described in the Dyer et al (2011) model, introduced in the theoretical part of the thesis, and visualized in Figure 3. Special attention was thus given to understanding whether they had developed different innovative skills (questioning, observing, networking, experimenting and associational thinking) from the model. Another aspect that was analyzed in the data was whether dance-based methods were mentioned in correlation with developing different innovative skills, and if they added any special qualities to development of those skills. It was also considered whether dance-based methods affected other aspects that were not included in the model of innovative competence that was used as the basis for analysis. Finally, in order to check whether participants developed some general knowledge of the innovation management field, it was analyzed to determine if they had referred to different innovation management concepts presented in the literature that had been discussed in the workshops and literature discussion sessions.

During the process, the group reflections provided an important source of data or input that influenced how the whole process was designed and implemented. The group reflections took place as a component of each of the workshops, and special group reflection sessions were organized between the workshops for participants to share experiences and reflections on the learning process. Another important part of analyzing data was that the following researcher looked at the data she collected in each workshop
(video recordings, photographs, audio recordings of discussions in smaller groups) and based on this data, had a discussion with the main researcher, proposing potentially important topics to reflect upon in the next post-workshop group reflection session. In this way, the process was emergent and constantly adjusted according to what occurred at different moments and seemed relevant for participants, but also what researchers observed and could be important topics to bring up in group discussions.

More information about the study can be found in Appended Article 1.

### 3.3.2 Systematic literature review on innovative competence

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Research approach</th>
<th>Study</th>
<th>Methods for data collection</th>
<th>Article / Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>How can innovative competence be conceptualized?</td>
<td>Reviewing literature in innovation management field and through analysis, developing an integrated model of innovative competence</td>
<td>Systematic literature review on innovative competence</td>
<td>ISI Web of Knowledge database (Social Science domain), search words “individual” and “innovation” in combination with “competence”, “behavior”, “skill”, “attitude” and “trait”</td>
<td>Article titled: “Integrated model of innovative competence”, published in the Journal of Creativity and Business Innovation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5,279 titles/results found, 236 identified as potentially relevant, 94 articles analyzed, in-depth analysis performed for 71 articles</td>
<td></td>
</tr>
</tbody>
</table>

*Figure 7: Systematic literature review on innovative competence: Overview of research question, study with methods for data collection, and article/results*

Due to the fragmented research on innovative competence where different researchers focus on various aspects and use a variety of terms (innovative skills, innovative behavior, innovative competence, innovative attitudes), the second study was a systematic literature review on innovative competence. The study looked into different ideas about innovative competence, and integrated them into a model which proposes how innovative competence could potentially be conceptualized. Following a structured process of performing a systematic literature review (Webster and Watson, 2002), several stages were implemented. First, a few steps to collect and organize data, followed by further actions to perform data processing and analysis (Crossan and Apaydin, 2010). The ISI Web of Knowledge database for Social Science domain was chosen because in this way only peer-reviewed journals with validated knowledge would be considered (Podsakoff
et al., 2005). Since the term “competence” is not only used in relation to individual innovative competence in the current literature, different combinations with the words “individual,” and “innovation,” such as “competence,” “behaviour,” “skill,” “attitude,” and “trait,” were used as search words.

The search was performed for the period between 1980 to 2016 (4 February) and resulted in 5,279 hits. Out of the 5,279 titles read, 236 were identified as potentially relevant. Many titles discarded in the first step of selection were related to specific health-care issues, in which the term “individual behavior” of patients was often used. In the next phase, after reading all 236 abstracts, ninety-four articles were chosen for further analysis. Many articles excluded in this phase were somehow related to innovation, creativity or entrepreneurship but did not discuss relevant issues for individual innovative competence. Seventy out of the selected ninety-four articles were available in the online databases, downloaded and read in-depth. They were analyzed in two ways: by looking at the relevance of the content of each article for innovative competence field in general, and through the utilization of a general model of competence. In this model, content, intrapersonal and interpersonal dimensions (as presented in the theory chapter of the thesis - see Figure 2) provided the basis for analysis. A detailed database was built to systematically show which elements of innovative competence referring to which dimensions (content, intrapersonal and interpersonal), were discussed in each article: how many times each element was mentioned in total, what was the main focus of each article, the key terms used in relation to innovative competence, and finally, the year and journal in which each article was published.

After performing the analysis, the abstracts of those twenty-four articles out of ninety-four selected articles unavailable in the online databases were read again to determine if they could add something to the current analysis. Only one article seemed to be contributing something new, and was thus ordered separately and added to the analysis. Based on the in-depth analysis of the seventy-one selected articles and the competence framework presented in theoretical background, an integrated model of innovative competence was built. Other texts were used in the process to see if something was missing in the analysis and for developing argumentation and discussion of the article. The additional texts were either found as references in the articles gathered through the systematic literature review, recommended by other researchers or read by the author prior to doing the systematic literature review.

Further information about the study can be found in Appended Article 2.
3.3.3 Literature review in choreography

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Research approach</th>
<th>Study</th>
<th>Methods for data collection</th>
<th>Article /Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the key concepts and practices from contemporary dance and choreography that can contribute to understanding and development of innovative competence in organizations?</td>
<td>Literature review on contemporary choreography complementing practice based knowledge gathered in licentiate thesis. Experts from contemporary dance were consulted to find the relevant literature.</td>
<td>Literature review within the field of contemporary choreography.</td>
<td>Reading and analysis of literature (literature list can be found in Appendix 2)</td>
<td>Article titled: “Is this Choreography? Choreographing conditions for innovative practice in everyday work”, Published in the Journal of Organizational Aesthetics</td>
</tr>
</tbody>
</table>

Figure 8: Literature review in choreography: Overview of research question, study with methods for data collection, and article/ results

Comparing empirical results of the study in Eskilstuna municipality and the integrated model of innovative competence developed based on the systematic literature review revealed a gap between the two. An absence of emotional capacity and embodied aspects of knowledge in the current literature on innovative competence became evident, while reflections of participants in the municipality study showed that a holistic approach to using senses, emotions, fantasy, tacit and other forms of embodied knowledge was crucial for development of their innovative skills. This is why a literature review on contemporary choreography was performed, with the focus on finding concepts that could contribute to further development of the innovative competence concept. Since this demanded a very specific filter of looking through contemporary dance theory, a standard systematic literature review wouldn’t work. Choreography is a large field of study and not all the literature is relevant for the concept of innovative competence. On the other hand, there is no existing theory in dance that specifically researches the concept of innovative competence. The question was thus what would be the right databases to search for literature and what to search for. This is why different choreographers and dance theoreticians, (notably, Dejan Srhoj, Mala Kline, Bojana Kunst, Rok Vevar, Janez Jansa), were consulted instead to suggest sources relevant to this specific topic. The resulting list of literature can be found in Appendix 2. Further, Janez Jansa/ Emil Hrvatin, one of the most established artists, authors, and editors within contemporary performing arts in Slovenia, was asked to approve the literature list as relevant, and acted as my examiner on the field of contemporary choreography.

When analysing the literature, attention was given to the relevant topics that different choreographers and dance theoreticians highlighted in their texts. At the same time, it was necessary to keep in mind which of those could be related back to innovation management literature about innovative competence and the different aspects that were
identified as important for developing innovative competence by participants, who had worked with dance-based methods in the study in Eskilstuna municipality. In this way, some concepts of interest that could contribute to further development of ideas around innovative competence were identified.

The main underlying reason why the new contemporary choreographic practices are compelling in terms of connecting them to innovation, is that they question all established ideas and norms of what dance performance is: who should dance, where the dance should happen, and what the relationship with the audience could be. Contemporary choreographic practices propose that it is rather the creative process or how artistic work is done than the end product – the performance - that should be in the centre. Finally, they suggest that choreography, as a way of thinking and working can be used in other fields of practice, or as an extended practice (Hewitt, 2005; Spångberg, 2013).

The challenge within this experimental contemporary choreography is that many choreographers who do very interesting work do not document and write about their artistic practices, processes or methods. Recently, as more artistic research within contemporary dance has begun to be performed by dancers and choreographers themselves, not exclusively by dance theoreticians, a new dance-philosophy has started to develop, built on the practice of dancing, and rethinking of the relationship between the body, movement and time (Cvejic, 2015b, p. 17). This is in contrast with traditional dance theory, where theoreticians or dance critics view dance works and analyze them through philosophical lenses. Often these critics imparted a feeling that theoretical concepts are imposed onto artistic work post-festum, and do not emerge from the artistic practice or thoughts of the artists. Notably, many interesting contemporary authors in this field are women with origins in the Balkan region, most of them active and working in the West (such as Ana Vujanovic, Bojana Cvejic, Bojana Kunst, Mala Kline, Katja Legin etc.). The literature review in choreography performed in this thesis does not exclusively build on their work, but their ideas provided important inputs for thinking about contemporary choreographic practices and how they are relevant for the development of innovative competence in organizations.

More information can be found in Appended Article 3.
3.3.4 Intervention at the Art of Organization and Management 2016 conference

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Research approach</th>
<th>Study</th>
<th>Methods for data collection</th>
<th>Article / Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the key concepts and practices from contemporary dance and choreography that can contribute to understanding and development of innovative competence in organizations?</td>
<td>Pragmatic action research with elements of critical approach through arts.</td>
<td>Participatory action research study with participants at the AoMO conference 2016, testing in practice the concepts identified in literature study on choreography.</td>
<td>Movement workshops with participants, interactive installations where participants wrote their reflections on experimental tasks, group discussions. Main source of data for analysis: written reflections by participants</td>
<td>Article titled: “Is this Choreography? - Choreographing conditions for innovative practice in everyday work”, Published in the Journal of Organizational Aesthetics</td>
</tr>
</tbody>
</table>

Figure 9: Interventions at the AoMO conference: Overview of research question, study with methods for data collection, and article/ results

The final study performed in this thesis was a choreographic intervention at the AoMO conference 2016 in Bled. The idea behind this intervention was to utilize different choreographic concepts and practices identified in the literature study on choreography and materialize them in the typical daily work activity of researchers, which in this case meant participation in academic conferences. The goal was to establish whether choreographic concepts and tools could enable conference participants to innovate their usual practice of participating in academic conferences, and based on this experience reflect on potential meanings aimed at developing innovative practice in their everyday work.

The Art of Organization and Management conference is a biennial conference for the international community of both academics and practitioners in the field of artistic interventions in organizations. Participants were familiar with the idea of using artistic methods at work, and did not need much time to open up and experiment with proposed choreographic ideas. Yet, the limited time frame presented a challenge, as the conference only lasts three days, which means that the possibilities of creating practice-based knowledge together with participants had limitations. Nevertheless, choreographic intervention at the conference was designed as a participatory action research study as conference participants were actively engaged in critically questioning and innovating the established format of academic conferences, playing with the idea of un-doing their own habits, and experimenting with the possibilities for their own innovative practice. The intervention was designed by myself and choreographer Dejan Srhoj, who proposed different activities during the conference which operationalized, in practice, the concepts of using “body and materiality,” the “method of practice,” and “undoing everydayness,” as identified in the literature study on choreography. For example,
a morning tuning-in practice, daily experimentations through choreographic scores or tasks, performative ways of innovating paper presentation, and the co-writing of conference manifesto. Dejan and I engaged in proposed activities both as facilitators and active participants. Each activity combined experimentation through practice and reflection, in order to make sense out of experiences and create knowledge.

**Data collection and analysis**

The data was collected in different ways throughout the intervention. Participants in the morning tuning-in sessions were asked to write their reflections on their experiences. On the other hand, reflections on performing different scores were collected from the installations as participants were asked to write their reflections after performing a score on the other side of the score card, placing it back in the installation. After the “Art of Doing Nothing sessions” participants wrote their reflections, which were collected, and then discussed as a group. The group reflections were recorded. The Conference Manifesto, co-written by participants, was another source of data that showed how participants had engaged in innovating or re-thinking their practice of conference participation.

After the conference, all sources of data collected during the intervention were analyzed by reading through participant reflections, and listening to recordings of group conversations. Reflections of participants were then linked back to choreographic concepts identified in the literature study on contemporary choreography in order to see what effects these materializations have on participants, and whether they could be linked back to developing innovative competence in everyday work.

Further information about the study can be found in Appended Article 3.

**3.4 QUALITY OF RESEARCH**

Discussing quality in the context of action research implies a different set of criteria compared to traditional positivistic approach to science. Regarding value created in research, in participatory action research, the goal is to produce knowledge that is relevant in a specific context and can help people in that context change in a meaningful way (Mattsson, 2012). According to Peter Reason (2006) four key dimensions should be considered in action research: ”worthwhile practical purposes, democracy and participation, many ways of knowing, and emergent developmental forms” (p. 187). Due to the context specific knowledge creation, using the same research design and methods in different contexts cannot produce the same result in action research. This opposes the traditional focus in positivism which strives towards general knowledge that can be repeatedly used in any context. On the contrary, participatory action research has a pragmatic criteria of truth and applies the idea of “pragmatic validity,” meaning that the
new knowledge is valid if it produces real change in a specific context where research is
done (Kvale, 1997). If people can show they have an understanding of the new knowl-
edge through their actions, it is a sign that valuable knowledge was produced (Mattsson,
2012). In this way, research is meaningful when it helps people implement desirable
changes, and has an ethical, social and, political dimension (ibid.).

In action research, the goal is thus not only to produce scientific knowledge that con-
tributes something new to existing body of theory within a research field but to create
practical knowledge which is useful for different participants in the research process,
and to enable personal learning and development of all stakeholders involved in the re-
search, helping them towards emancipation through practicing democratic principles of
active participation (Lindhult, 2008). Trustworthiness, which usually refers to the validity
and reliability of research, is thus understood in a less absolutistic way than in traditional
research, and more as a pluralistic concept (ibid.). There are different ways of judging,
improving, questioning, and ensuring trustworthiness in action research, depending on
the context and different forms of knowledge and value being created in the research
process, all considered important in action research: scientific, practical, normative-po-
litical or personal (ibid.).

<table>
<thead>
<tr>
<th>Area of value created</th>
<th>Scientific</th>
<th>Practical</th>
<th>Normative-political</th>
<th>Personal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance</td>
<td>Contribution of scientific knowledge to a specific research field, knowledge dissemination</td>
<td>Product or process innovation, new understanding, organizational or structural development</td>
<td>Democratization, emancipation, welfare, supporting political process, contributing to fairness</td>
<td>Personal and professional development, creating value for participants</td>
</tr>
<tr>
<td>Validity</td>
<td>Valid theories, data and research methods</td>
<td>Functional and effective solutions and praxis</td>
<td>Moral or political improvement</td>
<td>Authenticity, improved life for those involved and influenced by research</td>
</tr>
<tr>
<td>Reliability</td>
<td>Reproducible and testable research process</td>
<td>Robust solutions and stable praxis</td>
<td>Sustainability of improvements</td>
<td>Safety, security, health, limited risks</td>
</tr>
</tbody>
</table>

*Figure 10: Overview of different aspects of quality in action research (adapted from Lindhult, 2008).*

To some extent, the research presented in this thesis strives to create value in all the four
areas presented in Figure 10 above. In terms of scientific value, in line with the action
research, data collected from practitioners in both empirical studies served as an input
to highlighting gaps in current theory, and helped to further develop and contribute
to understanding of innovative competence and innovative practice in everyday work.
Research methods were selected during the research process as new research questions
emerged, based on the empirical data collected. They were adjusted to the needs of specific contexts in which studies were performed. Proposed models of innovative competence and practice presented in this thesis are not intended as normative prescriptive models but as helpful tools to support practitioners reflect and increase understanding of innovative competence and practice in everyday work and to focus on developing those aspects that are relevant to their specific role and work situation. The models are thus not recipes that would prescribe one way of developing and assessing innovative competence, but rather conceptual frames that can help both researchers and practitioners further develop their understanding and practical knowledge in the field.

Besides scientific value, the research in this thesis has the aim of creating also practical value. Practical knowledge is usually created by practitioners participating in the research process in the form of new products, services, methods, practices, understanding (Lindhult, 2008). Validity, in this case, is connected to improved practice, functionality, and the effectiveness of new solutions. Reliability is related to the degree of stability and how robust the new solutions and practices are (ibid.). In the study in Eskilstuna municipality, practical knowledge was created through new methods for facilitating innovation processes and developing innovative competence that were co-developed and tested in the research process by different research participants. The goal to improve conditions and knowledge about innovation in the municipality, and to create innovative solutions to different challenges was met. Validity was achieved by improving internal processes for innovation and developing innovative practice, not only among direct participants in the project, but for many other employees that were trained by innovation leaders due to the project. This also ensured reliability by sustaining the results in time, and scaling them throughout the organization. In the choreographic intervention at the AoMO conference, practical knowledge and methods for stimulating development of innovative practice were created and tested. Validity and reliability were limited, due to the time limitation of the intervention. Participants were able to grasp some new ideas on possible innovative practices through conference participation, and experimented with some new methods for developing innovative practice in everyday work. Since the intervention was only three days long, it isn’t clear whether they were able to use and integrate the experience and knowledge from the conference afterwards in their daily work.

Validity when creating normative-political value in action research is often related to moral and political improvements, for example, contributing to fairness, freedom, and discrimination issues, while reliability is concerned with sustaining these improvements in time (Lindhult, 2008). Although the present research did not focus on creating normative or political improvements, the use of artistic methods, with their critical perspective and questioning of existing norms and behavioral patterns, did increase participant awareness of these issues. They were encouraged to feel more free in exploring how they wanted to change their own work practices and to refine them according to their own needs and desires, rather than following pre-defined norms and external expectations, (from top-management, for example). Artistic methods can be used to enable eman-
icipation of participants in the action research process, taking a critical stance towards the existing system and power structures. To a certain extent, this occurred also in the case of Eskilstuna municipality where participants started to question the behaviors of top management and the prevailing rule-driven mindset in the municipality, highlighting them as a hinderance for developing leadership and a culture that supports innovation.

If value is created through new knowledge in research, there needs to be someone who is learning something new, gathering new experiences, and reflecting upon them to create new knowledge in the research process (Lindult, 2008). This means that creating personal value is a pre-condition for creating other types of value in research (ibid.). In this case, validity is concerned with creating conditions and a learning context participants can identify with and feel at “home” (ibid.). They should be able to develop new personal and professional insights without being exposed to substantial risks, or feeling unsafe (ibid.). In the studies presented in this thesis, it could be observed that the dance-based methods created conditions for people to open up on a more personal level. They stimulated self-reflection and awareness by encouraging participants to be present in the body. They began feeling themselves and their personal needs and drives, and started to prioritize this more than what the usual practice in a corporate environment is. In corporations, attention is predominantly given to organizational goals, while the personal and professional goals of individuals are secondary. Although some participants experienced the artistic methods as risky and uncomfortable, as time passed, many of them also reflected that going out of their comfort zone and daring to take risks with unknown methods was crucial for starting to work in more innovative ways. Participants in the Eskilstuna municipality study were encouraged to use the knowledge created in the process to develop innovative solutions for their organizations, and to improve and innovate their personal daily work routines to better suit their own needs and desires. The process inspired personal reflection and development. As the results of the study showed, the dance-based methods also helped them develop different innovative skills and thus improve their innovative competence as professionals.

The challenge with the validity and reliability of the research presented in this thesis is that, like any action research, it is context-specific. Since the methods developed and tested here have been applied in a limited number of studies, predominantly in the context of Sweden, it is also questionable how they would work in other cultural contexts where practitioners are not so open to trying out new methods, engaging with artists, and following participatory and democratic principles of equal participation for all participants, despite their position in the organizational hierarchy.
4 RESULTS

4.1 INTEGRATED MODEL OF INNOVATIVE COMPETENCE

The main result and contribution of the systematic literature review on innovative competence is the integrated model of innovative competence described in Appendix Article 2 that can be seen in Figure 11 below.

Figure 11: Integrated model of innovative competence

The main contribution of this model is that it connects different pieces of research in the innovative competence field. It provides a better clarity and understanding of the complexity of elements that drive innovative behaviour, and helps individuals to innovate competently. At the core of the innovative competence is the ability to innovate in practice by combining two key aspects of innovation: the exploration of new oppor-
tunities and the generation of new ideas, and on the other hand the ability to promote, develop and implement ideas. This means that at the base of practicing innovation is the ability to be ambidextrous, which is the ability to move between dualities, such as generating, exploring and experimenting with new ideas on one hand, and promoting, implementing and exploiting them on the other, in order to make them useful and valuable.

Apart from the core practice of innovating that lies in the center of the model, there are different elements in the three corners of the triangle, including different kinds of knowledge, attitudes and skills which influence an individual’s ability to innovate. They are organized as three dimensions of the model: the intrapersonal, the content, and the interpersonal dimensions. The intrapersonal dimension covers different personal attitudes and characteristics supportive of innovative behaviour, such as, risk taking, curiosity, and flexibility. The content dimension includes more functional skills and knowledge about innovation, for example, the skills of divergent and associative thinking on one hand, and reflection and convergent thinking on the other. This dimension suggests that innovative individuals should combine both expert knowledge within their domain of practice and heterogeneous interests in other fields that can inspire deep knowledge in their core field of expertise and help them make new connections. The third dimension is the interpersonal one, covering various collaborative skills. As innovation occurs most often in interaction with others, skills like trust building, listening, and networking ideas with others significantly impact individual innovative competence.

When looking at different elements in the model it can be observed that some of them are more supportive of the explorative side of innovative competence, like risk taking, openness, heterogeneous knowledge, divergent thinking, experimenting, improvisation, and networking ideas. Others, such as persistence, the need for achievement, expert knowledge, convergent thinking, problem solving, giving feedback and negotiation, will more likely enable the exploitative aspect of innovative practice. It must be emphasized that it is not possible to clearly separate the elements into those supporting exploration and those supporting exploitation, because many can be used interchangeably. As the innovation process is often iterative and inherently non-linear, it would be also impossible to define clear stages of the process and then link specific skills or attitudes to each phase of the process as many skills will be used throughout the process. For example, reflection will be important both when exploring new possibilities in the process and when deciding what actions to prioritize when implementing ideas.

It is important to underline that this model is an overview of different elements that have been identified in the current literature and are relevant in terms of their influence on individual innovative competence. Nevertheless, the model does not suggest that every individual should be a high performer in all of the elements in the model, but rather that specific elements of the intrapersonal, content, and interpersonal dimen-
sions will be more important for each individual, depending on work context, position, situational needs, or career phase. This means that the model provides a useful structured overview of the research around innovative competence, but subsequent focus can be oriented towards specific elements in the model, depending on the needs of different individuals and situations.

4.2 CONCEPTS FROM CONTEMPORARY CHOREOGRAPHIC PRACTICE RELEVANT TO INNOVATIVE COMPETENCE

The second contribution of this thesis are the concepts from contemporary choreographic practices that are relevant for enabling innovative competence development in organizations. These concepts can help further develop the concept and model of innovative competence presented in the previous section of the text. Some key ideas from choreographic practice and theory, along with explanations about why they are relevant in relation to the concept of innovative competence will be briefly presented here, while more detailed information can be found in the Appended Article 3.

4.2.1 Body and materiality

Existing research on innovative competence predominantly focuses on the cognitive skills needed to practice innovation. In the current digital age, the body is often erased from our attention, which is why it is interesting to look at the practice of contemporary dancers who use body and materiality as an essential part of their work practice. Focusing on body and materiality in contemporary dance is a form of “resistance to the present processes of immateriality and abstraction that take place as a massive intellectualization and technical expropriation of the language that causes a separation, capture, and alienation of materialized and embodied processes of life” (Kline, 2016, p. 16). It is not that choreographers abandon language, but that they reinvent it, reclaiming matter, body, sensibility, affective power, emotion, experience, and connection with the world (ibid.). The performing arts are highly material in that performances are “the site not only of ‘heavy’ bodies but also of a real gathering, a place where unique intersection of aesthetically organized and everyday real life takes place. In contrast to other arts, which produce an object and/or are communicated through media, here the aesthetic act itself (performing) as well as the act of reception takes place as a real doing in the here and now” (Lehman, 2006, p. 17). As choreographer Katja Legin (2015) suggests, a good performer uses her presence and awareness of the body, and what’s happening internally while onstage as a resource during the performance. In this way her presence becomes more alive, and is a reflection of what is happening in the moment, in contact with the specific space and audience sitting there that night (ibid.).
Though the body and materiality are focused on by contemporary choreographers, it is important to note that these topics are explored in a specific way. They question whether authentic movement exists at all, and intentionally rupture and reinvent the relation between the body and movement with various procedures of conjunction (Cveje, 2015a). They also question the necessity of training for the dancer as a precondition to perform. Further questions are raised regarding where dance can happen, what conditions are necessary for a dance, and what needs the dance fulfills. Contemporary dancers thus begin their creations from a rather experimental and critical attitude towards the body and materiality, and in contemporary dance performances it is not uncommon that no “dancing bodies” are present on the stage, as seen in the traditional perception of a dance performance. Though many contemporary dance performances are conceptual, the body and materiality still represent their crucial element.

This experimental attitude towards the body and movement in contemporary dance can be relevant to innovation management practice. Bringing the body back to work and using it more consciously and holistically can shift the starting point from which innovating operates. It suggests that rather than initiating innovation processes outside-in, looking first at the market, trends, and consumer needs, and then innovating around these aspects, with the focus on problem-solving, innovating can start from within. Innovating can begin with the individual, connecting with her body, and through it to her inner drives, feelings, values, and needs. This can help direct the focus of innovating to questions that are meaningful for exploration. It does not mean that external perspectives are not be taken into consideration when innovating. On the contrary, contemporary dancers quite actively observe current social events and respond through their performances. They also involve various external collaborators in the process of making, from dramaturgs, light, set, music and costume designers, as well as the audiences that they engage on a different scale throughout the process (Bozic and Olsson, 2013). The starting point of innovation could come from this inside-out awareness of the body instead of an outside-in focus on the market and users, and can thus take the process of innovating in another direction.

Engaging the body in new ways will help individuals develop various types of knowledge. People have multiple intelligences, including linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, and intra- or interpersonal (Blom and Chaplin, 2000, p. 14), and by learning through dance and the moving body, they can access and experience these various types of knowledge (Zeitner, 2016). Contemporary dance can provide an interesting pool of knowledge and methods on how the body can be engaged more consciously in everyday work processes. With its experimental attitude towards seeking out new connections between the body, movement, time, and space, contemporary dance can support people in becoming not only more aware of the body and taking better care of their needs, but also becoming more experimental, and strengthening their ability to use different embodied ways of knowing to not only improve what they already do, but to develop their competence for radical innovation.
4.2.2 Practice

One of the main concepts that first attracted my attention while I was interviewing different choreographers (Bozic and Olsson, 2013), and again, while reading further literature on contemporary dance, was the concept of practice. The concept of practice challenges the traditional focus on performance and end product or result that is so predominant in business. Choreographers started to turn to the so called “method of practice” as a revolt against mainstream modes of production in dance. These often forced choreographers into shorter production cycles, limiting their time to produce a new performance to one to three months. Since for many dancers this way of working was not sustainable, they started to create new conditions for work that would enable more long-term exploration of relevant questions, shifting their focus from product rather to the process of making and developing their artistic practice over time. Performances thus started to be seen as moments in a longer temporal period of creation, in which artistic practice is shared with the audience.

The concept of practice reframes what is traditionally understood as performance. “Performing implies a competence related to the ability to achieve something or have an effect” (Cvejic, 2015a, p. 68). The concept of performance plays an important role in current wider society, where the focus is often on achieving set results, using competencies and resources in the most efficient and effective way. The idea of practice shifts the focus from the act with effect towards a temporal process, where “emphasis is on the duration of action rather than the effect” (ibid). “Performing” in this case “suggests a frequentative form of doing which provides or generates something in time rather than being reduced to felicitous or infelicitous act that achieves, fails to achieve, or transgresses a certain expected effect” (ibid). This does not mean that performing cannot have an effect, but it shifts the focus away from effect towards the process.

In the context of innovation management, the goal of developing and using innovative competence is often the production of innovations and the achievement of an expected result or effect. The idea of practice as used in contemporary dance, challenges the traditional idea behind competence development in management. The concept of practice suggests that if one wants to perform, one needs to spend a lot of time rehearsing. Rehearsing and trying out things is thus crucial to becoming good at something. But in business there is often no time to rehearse, as people are expected to perform on a daily basis. It is as if we would expect a football team to win a match without any prior training. In football, for example, the matches represent a rather small part of the total practice. Similarly, in dance and theatre, performances represent a small percentage of working time for dancers and actors.

In the following section, further characteristics of the method of practice are explained.

One important element of the method of practice that contemporary dancers often
explore in their work is the *dimension of time*, and extending an action in time through *repetition*, as well as *stopping time, and doing less, or slowing the action down*. Bojana Kunst suggests that the “ability to do less, to insist endlessly on this less and on that which could still be is what opens a human being to the dimension of time, it is what makes him historical and communal at once. This potentiality to do less gives human activity sustainability, and to art it gives durable and autonomous power to re-think the borders between diverse modes of human experience” (Kunst, 2012, p.153). When there is time for slowing down, silence and the creation of empty space, a space for new things begins to emerge. This rarely happens in business where people are under the constant pressure to perform and be productive and where there is no time to stop and reflect. Different studies that I have implemented over the years, in various organizations, have shown how difficult it is for practitioners to slow down and do less in order to discover the potentiality of something new - even more valuable and meaningful than existing modes of operation, if only given the chance to emerge. Many people in business are afraid to expose themselves by challenging existing norms, or it is simply more comfortable for them to continue working on autopilot.

Kline (2016) describes the work “Recollections” by choreographer Dalija Acin Thelander as an example of this practice of “doing less” in which a space is created for the audience where one does not need to perform, produce, or actualize anything. One can just be and attend to being in the here and now, and observing others in the shared space. The audience is invited into an almost empty studio with some objects, like headphones with recordings available on to listen to, but it is up to the audience to decide what to do with these objects, and whether to act upon them. “It is precisely the gesture of “doing less”, framed as the withdrawal and suspension of the demand to produce and perform in order to make a space for simply being there and attending to the common “being together” here and now, that makes a rift in the habitual modes of production of self and work. A space of “active undoing” opens in this rift in the habitual...Recollections take us to the space of possible, the possibilities of life not actualized and recalls in us that there is always more to life than what is actualized” (ibid., p. 146). This potentiality of undoing existing modes of being can only be accessed if we dare to take the risk to stop, reflect, and explore new modes of being.

*Improvisation* is another important element of the method of practice that choreographers often use as a tool for experimentation, creation of new material and as a performance method. According to the choreographer Burrows (2011), material is movements that arise through the process of improvisation and are later put into relation with each other to make choreography. Improvisation, for Burrows, is about the freedom to let yourself to the impulse of the moment and come to the right structures without limiting it with formality. In improvisation it is important to trust the material and accept what comes easily because material is to be discovered through this explorative process, not controlled (ibid.). An essential part of experimentation and improvisation is to have the courage to go into the unknown and fail because improvisation
by definition means you go into a new territory where you have to also fail. Although some researchers in management stress the importance of developing improvisation skills at work (Sawyer, 2000; Vera and Crossan, 2005; Lewis and Lovatt, 2013; Nisula, 2015), the idea of practicing innovation through improvisation is still quite challenging for many people in business. Improvisation presupposes a release of control and trusting the people and the process to create something valuable and meaningful without knowing in advance what that will be.

A significant aspect of the method of practice is that it is usually focused on a set of questions or problems that the artist is concerned with in her work and the conditions she wants to create in order to explore these questions in time (Cvejie, 2015b). The questions or themes that become the base for exploration and development of artistic practice are not based on solving the problems of users, as is often the case in innovation management. Instead, these questions are closely connected with the personal interest of the artist and are often problematized in a way that engages the audience in their own exploration of the questions, in order to create new meanings around them. American choreographer Deborah Hay describes her choreographic practice in her book My body, the Buddhist (2000), where she explains how her research is driven by certain questions or themes that become the base for bodily exploration and inquiry in the dance studio for several years. Instead of instructing dancers on a specific repertoire of movements or dance technique, the themes or images provide a focus and frame for developing her practice. Examples of such themes or questions could be “Every cell in my body perceives that alignment is everywhere,” or “What if where I am is what I need?” (Hay, 2000, pp. 103-104). The body in this setting must be awake and attentive as it becomes a site of exploration and infinite possibilities, rather than a tool for mastering specific skills (Foster in Hay, 2000, p. xiv-xv). This research through dialogue between the body and an image creates material, and over time, Hay makes decisions, choosing those impulses that most vividly reflect and amplify her experience of working with the image (Foster in Hay, p.xv). She distinguishes between everyday practice and choreography that slowly takes form through practice: “They are two different animals. The practice is like the conscious heartbeat of the dance. The choreography is simultaneously the conscious choices I am making within the form” (ibid., p. xv).

If these ideas were applied to the concept of innovative competence, or rather innovative practice, in organizations, employees would not be instructed to train and develop their innovative practice according to some predefined set of steps and tools to develop specific skills and perform an expected result. Employees would be enabled to identify questions or themes they find interesting and relevant at work. Through slowing down, reflecting, experimenting, and improvisation employees could try out different ways of working with their given questions. They would need to develop their own practice of innovating around each question and as a result of their practice, new skills, work processes or even products and services might develop, (though it is hard to predict exactly what they would be in advance).
4.2.3 Undoing everydayness

Another concept from contemporary choreographic practice relevant for the concept of innovative competence is “undoing everydayness.” Everydayness in contemporary dance relates to different things. On one hand, many choreographers explore topics and movements from everyday life in their dance works. On the other hand, the venues where they perform have moved from theaters to different sites of everyday life, like streets, squares, factories, cafés etc. In this way, performances have come closer to the venues of everyday life, and the audience is engaged in another way. Contemporary dance choreographers often invite the audience to actively engage or even become the performers of their performances.

Everydayness in contemporary dance has its origins in the Neo-Avantgarde in the 1960s-1970s, when the choreographers of Judson Dance Theater started to fuse art and life, and used new types of physical sites, like galleries, the street and other places from everyday life for their performances (Cvejic, 2015a, pp. 96-97). They sought to democratize art, removing it from a form of bourgeois entertainment and elitist venues, and instead tried to produce the “real” in performance art (ibid). They actively invited the audience to reconsider their habitual perceptions of movement (Rosenthal, 2011, p. 65). The works like “Man Walking Down The Side of A Building” (1970) and “Floor of the Forest” (1970) by Trisha Brown are examples of such performances that invite the audience to reconsider simple everyday acts and movements such as walking, dressing, and undressing. The first one by putting a man in a harness walking down a seven-story building in downtown New York, and the second one by making two performers traverse a rope grid suspended from a frame in the air with clothes hanging from it, undressing and dressing again as they climb through the rope grid (ibid.).

Even though current experimental choreographic practices build on and refer to some aspects of the tradition of avant-garde, they also reject its promise of the real and live presence produced by the theater, instead exploring, undoing and reinventing the given structures of theater (Cvejic, 2015a, p. 97). In this sense exploration of potentiality and undoing the everydayness becomes an important aspect of experimental choreographic practices of today.

An interesting example of undoing everydayness are some of the performances of choreographer Dragana Bulut. In her work E.I.O. she invites the audience to decide upon entering the theatre whether they want to be workers or viewers in the performance. If they decide to be workers, they are asked to go to the backstage. If they decide to be viewers, they are asked to pay with a financial contribution for which they receive a ticket on which the sum they paid is written. The viewers can then observe how the performers enter the stage where different objects and materials can be found. The performers are asked to perform during a set time. They know that those watching them will, in the end, be asked to reward their favorite performer whom they thought performed best with
the financial reward – their ticket money. As one sits and observes the “workers” on the stage, a lot of questions arise about what work and performance mean. E.I.O received The Prix Jardin d’Europe 2010, a European dance prize for young choreographers with the following explanation that “through this performance, with minimal resources and much imagination, the concept of work is deeply redefined, questioning the means of production both in art and real life, the creation, distribution and the value of art.”

A lot of the works of contemporary choreographers thus try to reclaim potentiality through strategies of “undoing” the common ways of working, creating possibilities to form alternative ways of being and doing that emerge from another relation to life (Kline, 2016, p. 17). This “undoing” gives freedom and power to the individual to find her own voice and explore new ways of seeing everyday life. Experiencing these performances thus challenges us to go through undoing the habits of being and perception, reconstructing a problem within a performative setting, in order to produce a new understanding of commons and to undergo a transformation (ibid., p. 183).

The ideas around “undoing everydayness” from contemporary dance can have some interesting implications for innovation management and the concept of innovative competence. They might suggest that the topic of innovation can move from the traditional association of innovation with new technologies, products and services towards innovating something as mundane as everyday work routines, but from a new position where the body, the senses, fantasy and emotions are actively engaged in exploration of alternative ways of being and working. It also means that innovation does not have to occur in a special space like an “innovation room” where there has to be table tennis, colorful beanbags, and a videogame console. It can happen in the everyday spaces where people work - a meeting room, corridor, or even elevator in the office building - if they find new ways of using these spaces, or seeing them with new eyes. It suggests that innovation does not have to be planned top-down and performed by a special team of genies in the R&D department but can be done by any employee. Any employee can become the innovator and develop her own innovative practice in her everyday work. But the conditions need to be set for her to be able to continuously undo her own everydayness, question existing norms and have the space and support to try out alternative ways of being and working, more aligned with her own needs and feelings.

Bringing everydayness into the practice of innovating can make innovation less abstract and nearer to everyday work problems. Often, employees see innovation as something distant from them, and as a burden, because it is another extra activity that management expects them to perform in addition to their existing work responsibilities. They often lack a sense of ownership because even though they might suggest ideas of how to change things in an organization, the ideas are usually lost somewhere in the idea management system, and no one really knows what happens to them. But with this shift of making the practice of innovating part of everyday work routines, each individual develops her own practice of innovating, and becomes responsible for innovation within
her own area of responsibility. Her innovative practice becomes her way of thinking, being, and acting at work that she owns, develops and embodies. This means that people do not have to follow a given formula of innovation process, which is proposed top-down, neatly packaged in as a set of steps and tools, but are rather encouraged to find their own way of innovating. Their singular innovative practice. And as the result of these singular innovative practices in interaction with each other, new ideas, problems, processes, ways of collaborating and even products will emerge. Innovation will occur, but in a less controlled and predictable fashion, giving space to more self-organized, emergent ways of working.

4.3 CHOREOGRAPHIC TOOLBOX

The third contribution of this thesis are the practical tools inspired by choreographic practice, developed as part of the empirical studies in collaboration with choreographers and can be used by professionals to support them in developing their innovative competence in everyday work. What is important to stress is that the idea is not to prescribe a set recipe of how one should develop her innovative competence. Tools and exercises described in the following section are just examples that have been useful for participants in empirical studies. Normally the specific exercises used would be adjusted in each process to the needs of participants. As one practices innovating over time, the idea is that one can start designing and using her own creative tools, adjusted to her singular needs in everyday work.

4.3.1 Tuning-in

Tuning-in can be useful as a way to start practicing innovating in everyday work through an awareness of the body, connecting to feelings and needs of the moment, allowing relevant questions to emerge from the wisdom of the body. Just as dancers start their day in a studio with a warm-up, employees at work can innovate their daily practice by becoming better at taking some time for themselves at the beginning of the day or a meeting to feel their body and be more present in the moment. Tuning-in can be done in many different ways, depending on the needs of the moment.

In every workshop in the empirical study in Eskilstuna municipality, and during the intervention at the AoMO 2016 conference, different tuning-in exercises were used. Tuning-in at the start of each workshop or conference day helped to create the possibility for participants to enter the process from within, focusing on their body, feelings, sensations, and what they needed or was most relevant for them in that specific moment. A space was created to enter into the physical space, the context, and group, before starting the work. It also enabled a more customized process, encouraging the individual to focus on her own needs, or be at least aware of them. The tuning-in exercises varied
in type, and could be anything from listening to music, relaxation, massaging exercises, walks in nature, dancing, breathing and meditating, or physical warm-up/training. Since in office work, the focus is predominantly on the use of cognitive skills, the tuning-in methods that engage bodily practices help people connect with their body and feelings, engaging them more holistically and providing another type of conditions to enter the work process.

*Photo 1 and 2: Morning tuning-in session with participants at the AoMO conference*

Here is an example of a tune-in exercise that we used in the beginning of a meeting in the empirical study with Eskilstuna municipality:

**Tune-in exercise (15 minutes)**

Participants in the meeting are invited to sit in a circle without any table in the middle, in order to encourage equal participation and position of everyone in the room.

Facilitator welcomes participants and summarizes where in the process they are.

Participants are then invited to close their eyes, if they feel comfortable, and focus on their natural breathing for a while. Attention is slowly moved to sensations in the body, starting from the feet, and ending at the top of the head, going through a short process of body scanning.

Next, a piece of calming classical music is played, while participants are instructed to just enjoy the music, following the images and feelings that might appear as they listen. Towards the end of the piece, they are asked to consider the strongest feeling, question, or topic for them at this moment in the process that they want to share or address in the meeting in order to progress in their projects.
Participants are then invited to design together the topics and structure of the meeting out of what feels most relevant for them and would help them move forward with the projects in the desired direction.

As mentioned in the theory chapter, the idea of scores from contemporary dance and the Fluxus movement was identified as relevant and was thus also applied in the empirical study of choreographic intervention at the AoMO conference where a special collection of score cards was created and placed in different installations around the conference venue to encourage participants to do small experiments and to innovate their practice of participating in an academic conference. Examples of the scores will follow in this section in relation to each concept or choreographic tool.

Photos 3, 4, and 5: Installations with scores at the AoMO conference

Here is an example of a score connected to the tune-in concept:

**Tune-in Score**

“Take a few minutes for yourself to just listen and observe your own breathing. You might want to sit down and close your eyes. After that, write on this card the first thing that comes to your mind, starting with WHAT I NEED TODAY IS…. Give yourself what you need during the day.”

4.3.2 Exploring body, movement, time and space in the work context

Some of the core elements that choreographers explore in their work and compose in different ways are body and movement, time, space, and relations between them, or the
so called composition of these elements. These elements were consciously used when designing the processes and activities in the two empirical studies presented in this thesis. Some examples follow.

Body

In general, one can say that all the workshops for Eskilstuna municipality were designed in a way that allowed the body and senses to be consciously activated during the process. Different bodily positions and practices would be used in various exercises to create a certain dynamic and stimulate creativity and flow in the process. During each workshop, we would usually switch between different modes, from sitting in a circle, moving, lying on the floor, working alone or in a group, choosing your own body position, going out, taking a walk, or dancing together.

Photos 6, 7 and 8: Different modes of working in workshops in the Eskilstuna municipality

Movement exercise

An example of an exercise where body and movement were explored and used more actively in the innovation process was when participants in the Eskilstuna municipality study were trained by a choreographer in different types of movement (spiral, straight, upwards, downwards, forward, backwards, diagonal, strong and sharp, soft and weak, etc.). They later played with these moves in their innovation project teams, with the task of embodying the core ideas of the project through a short choreography created by each team. After embodied visions of the project teams were presented, the rest of the participants gave each team feedback on what were the strongest feelings and associations they experienced or saw in their choreography. From this feedback, each team chose some core concepts that were important for their innovation challenge, and then used them as key input in order to generate new ideas around them and further develop their project.
The following is also an example of a score used in the intervention at the AoMO conference that encouraged participants to use body and movement in a new way in the conference setting, and to connect participants through a bodily activity.

**Body Score**

“Compose a sequence of four personal gestures and teach it to someone else at the conference. Ask the person to pass it to someone else who should pass it to the next person etc. At some point your little choreography may reach you again, but you might not recognize it anymore.”

**Space**

In general, physical space was very consciously used in both empirical studies. Before the project started in Eskilstuna municipality, both project managers went on a discovery journey, visiting interesting spaces in the city, many of which are owned by the municipality, but never used as spaces for management training, like the public library, sports hall, theater, art museum, craftsmen workshops, etc. Later on, a specific space was chosen for each workshop, depending on the topic in focus, in order to explore the potentiality of different spaces. For example, when we were working with reflection, we had a workshop in a church. When we were exploring innovation challenges and expanding our views, we had a workshop on a city bus that would take us to different places in the municipality where we would stop for various activities and new perspectives. When we were generating new ideas, we were in a makers space for local designers and creative professionals, and when we were exploring how innovative concepts could be communicated and shared with others, we worked in a theater studio where we had access to different props used when staging performances.

![Photos 9, 10, 11: Different spaces used in workshops in the Eskilstuna municipality study](image)

In general, it can be observed that participants in the Eskilstuna municipality study have
also started to explore using the physical space in new ways in their daily work, and have become much more aware of what kind of spaces they need for different innovation activities. The participants are more aware of how they could better use existing office spaces in new ways to support their needs, recognizing that physical spaces affect the way they feel, think, work and relate to other people. For example, a simple thing like sitting in a circle without a table in the middle instead of using the traditional setting in a conference room can affect the process, the power relations in the group and the atmosphere in a meeting.

In the case of the intervention at the AoMO conference, an example of exploring how space can be used in new ways was tested in a paper presentation setting. Instead of using the room in the conventional classroom set-up, with the speaker in front, the chairs were dispersed around the room, and often turned upside down to make an installation of chairs around the room, attaching pieces of text from the paper on the chair installations and other parts of furniture in the room. Participants were invited to walk around the room and read parts of the paper placed in the installation, writing their own pieces of text in response. A new version of the text was co-created and presented by participants in an improvised performance, where some people were dancing, others standing and reading the author’s or their own text, and with everyone using the physical space in different ways.

Photos 12, 13, 14: Paper installation and performance at the AoMO conference

**Space exercise**

One workshop in the study with Eskilstuna municipality took place in the museum of modern art. Participants were invited to take an inspirational walk around the museum, visiting its different spaces and observing the artworks. They had to find their favorite spot and work of art in the museum and spend some time there, reflecting on how the
work of art connects with the story of their innovation project. Then they had to create a pitch or tell the story around their innovation project, integrating it with the story of the artwork. Each group also had to consider how the space they were presenting their pitch in could be used in a new way to engage the audience while they were doing their presentation.

After time for preparation, participants moved together through museum, listening to different project stories and using space in new ways. In this way the physical place where the workshop was organized could be used as an inspiration in the process of innovating their everyday work routines, such as meeting each other and using the place to present their projects in a more interesting and engaging way.

The following is an example of a score related to the exploration of physical space, used in the study at the AoMO conference.

**Space Score**

“During the conference, as you move through the conference venue, try to notice the details you haven’t noticed before: undiscovered places, shapes, colors, smells, random objects, sounds, the touch of different materials in the space. Write them down on the other side of this card.”

**Time**

Time was also something that was experimented with in the process. Participants in the Eskilstuna municipality study were encouraged to think of their own use of time at work, and how they could spend it in different ways to improve their work processes in accordance with their needs. Time was also something we experimented with in the workshops. For example, participants were asked to slow down, sit, and observe people in the city, imagining and writing their life stories, stepping into the shoes of different citizens, their customers. On other occasions, they were given tasks with a very short time span, where they had to react instantly, like in dance or theater improvisation, so they didn’t have time to think, but had to react on an impulse, following their intuition and body, developing their associative thinking ability.

In the intervention at the AoMO conference, we experimented with the idea of stopping time in a context where people’s schedules are usually filled with constant 10-minute paper presentations, having no time to really process all the ideas and information consumed in a span of a few days. This is why we invited participants every afternoon during the conference to practice the “art of doing nothing,” sitting on the lawn in front of the conference venue, and just observing what was happening from a distance, as if they were observing a dance performance. Through this practice we wanted to create another time-space that could shift attention to new things. After taking the luxury of sitting, observing and reflecting for an hour, there was a group discussion where inter-
esting ideas came up, challenging existing conference formats and academic routines. Slowing down and doing less created space for new ideas to emerge.

\[\text{Photos 15, 16: “The Art of Doing Nothing” sessions at the AoM0 conference}\]

\textbf{Time exercise}

Reflect on how you spend your time during a normal week at work. How much time do you spend in meetings, answering emails, planning for work, or performing routine, creative, or strategic tasks? From your reflection, identify what you would like to change in terms of how you usually use time at work, in order to adjust it more according to your needs and wishes. If you spend too much time in meetings and lack time for more strategic and creative tasks, book a slot of time each week where you will work on things you’re interested in that will stimulate your creativity and strategic thinking. See what happens if you play with different timing for an activity you spend the most time on in your work. For example, if you are a manager and spend most of your time in meetings with other people, see what happens if you shorten meetings to 15 minutes, or extend them to several hours or even days.

Here an example of a score encouraging participants to experiment with the dimension of time through slowing down follows.

\textbf{Time score}

“After a session, go to the next session or to a coffee break in extreme slow motion. Take at least 10 or 15 minutes to get to your destination. Don’t talk to people while doing it. Just focus on experiencing the conference happening around you and the sensations in your body when being in slow motion. Afterwards, write about what you experienced on the other side of this card afterwards.”
4.4 THE IMPACT OF CONTEMPORARY DANCE-BASED METHODS ON INNOVATIVE COMPETENCE DEVELOPMENT

The choreographic tools applied in the study in Eskilstuna municipality resulted in demonstrating some positive impacts of dance-based methods on the development of innovative competence among participants. The Innovator’s DNA model by Dyer et al. (2011) presented in the theory chapter was used to test how contemporary dance-based methods could enable participants to develop different core skills of innovators, (such as questioning, observation, experimenting, idea networking and associational thinking), and thus strengthen their innovative competence.

The Innovator’s DNA model by Dyer et al. (2011) was used as a base for analysis because of the scale and length of the study, its global orientation and publication of results in top journals, and because the skills included in the model seemed to be close to those used by contemporary dancers in their creative processes. At the time of the study, the integrated model of innovative competence was not yet developed, so it could not be used in the study.

The analysis of reflection stories written by participants in the study shows that dance-based methods supported their development of all five skills described in the model. Some skills were mentioned more often in the reflections than others. A more in-depth analysis can be found in Appended Article 1. The following summary of participants’ reflections is shared to demonstrate the manner in which they reflected about their learning process, specifically, in connection to the five innovative skills from the Dyer et al. (2011) model.

Observation was one of the most mentioned innovative skills in the reflection stories. Participants wrote that being an observer was an important experience that they took from the process, as practicing it helped them see both their own reality, users’ problems, and society at large from another perspective. It forced them to open up their senses and use them in a freer way, strengthening their empathy for the people they were observing: colleagues, users, and strangers. Observation also stimulated fantasy, visualization of new ideas and possible scenarios for the future.

One participant summarized her observation learnings as:

“Observation gave me new insights and experiences. As a person it is easy for me to engage strongly in different questions. But engaging too much also blocks me from seeing new things. By taking a step backwards and observing something from outside created for me a space for totally new thoughts and inputs. To land in another mode was important for me to shift my perspective. When observing I tried to use my senses in a more dynamic and free way. I tried to listen, watch,
and even smell to see what impressions I would get. For me it was nice and relaxing to not have the pressure to perform. Being in harmony and not stressed allowed me to observe with an open mind. I really need to consciously take a distance sometimes, observe in an open way, and not get so engaged.”

Besides observation, the second innovative skill that was mentioned as important by participants in reflection stories, was experimenting. Many examples were shared in reflections, of how participants started to implement new things in their everyday routines, and how they tested different innovation tools, facilitating workshops both in their innovation project teams and for colleagues in their departments. Participants reflected that experimenting gave them a better understanding of the conditions they needed to become more innovative in their daily work - it was fun and energizing. They received a lot of positive feedback from their colleagues and users whom they engaged in different workshops, which in turn, increased their motivation to continue with the innovation work.

On one project team they gave each other the task to do five routine things in a new way, take a “selfie” while doing the experiment and then share the photo and how it felt doing it with the rest of the group. One of participants described her experiment this way:

“\"I decided to take a different entrance to our office. I always use the main entrance, so I chose to enter the building from the back street instead. I felt an enormous feeling of emptiness. The main entrance is usually full of people when I come to work. There are customers and my colleagues in the service centre, and the doorman who greets me good morning every day. I often look into café that is next to the entrance and there are always people in full preparations for the day. I meet colleagues from other departments and we say hello even if we don’t know each other. There is usually someone joining me in the elevator up to my office. But now it was only silent, lonely and empty. No one was at the entrance, no one was in the elevator and no one was there when I came up. I came to my office, robbed of my usual cozy start of the day! I actually had no idea what I had or what it meant to me! I felt sad and reflected what would happen if there was a rule that forced me to enter the office from the back door. Because often we impose rules on how other people should do things without thinking of what is important for them. And tragically enough, often we are not even aware of what is important for us.\"”

The third innovative skill that participants started to develop and use in their work during the process was questioning. Questioning was often related to the broader category of reflection, which was the second most mentioned category in all reflection stories. Participants wrote that reflection takes time and is rarely prioritized in work where the focus is more on performance and achieving set goals than stopping to think and question the rationale behind a choice. At the same time, they observed that reflection was a precondition for learning something new and to innovate. Participants started to critically question their work routines and how they hinder innovation. One of them wrote:
“I started to think and question why we do the work as we do it. The biggest part of our work consists of meetings in traditional format or sitting in front of computer. How are we supposed to find innovations if we continue to work like this? How can we transfer our new experiences from the training to daily operations and get support from other colleagues?”

Idea networking and associational thinking were also mentioned by participants as skills strengthened through the process.

In terms of idea networking, participants reflected that they learned about the importance of meeting new people with different backgrounds and competences in order to receive new inputs, thoughts, and to broaden their perspectives. Participants reflected on different roles or ways of thinking that need to be present in innovation teams, and how building on the ideas of others is more fun if different profiles and complimentary competences meet - but to work with people who think differently also demands an open mindset. They realized how narrow the thinking often is within the municipality, and that more cross-disciplinary meetings should be encouraged. Some even reflected how corporeal and nonverbal communication can be important when you share ideas with others who do not speak your language. In one workshop the choreographers took participants on a bus tour around the city and then stopped in a part of the city where many immigrants live. They asked them to get off the bus and discuss their innovation project ideas with random citizens they would meet in the neighborhood in order to get some feedback. One participant reflected on her experience:

"My first thought was how scary this task was. I met two 15-year olds, a boy and a girl. I soon realized that none of them could speak Swedish or English. I felt frustrated. I figured out I would not be able to use language to talk with them, so the first wish was to run away and give up. But then I breathed in deeply and said to myself: I can, I want and I dare! I took out a notebook, and started to draw and use body language. What I learned was that there are other ways to communicate with people than through language. I even learned how important it was to be able to put myself in the shoes of our users and experience how frustrated they must feel every day when they cannot communicate with most people living around them.”

Associational thinking was the innovative skill not explicitly mentioned in reflections, but participants were continuously encouraged to strengthen it as they were engaged in a new practice through dance-based methods and then asked to translate their experiences into everyday work, continuously using associating in the process. Sometimes they experienced this as easy and sometimes as hard, depending on the different exercises facilitated by choreographers. Based on reflection stories, participants also strengthened their associational thinking by starting to more actively connect ideas from other fields of practice to their own work. For example, one participant observed her daughter’s different horse riding trainers and then reflected upon the qualities of innovative leaders. Another participant went to a popular running race to observe how the organizers managed to create such high engagement and motivation among participants: as the
organizer of municipality events, this was the kind of user experience she wanted to generate also in her own work. One participant was inspired about the creation of fun and interactive user experiences by visiting the local zoo. Another participant observed youth, while on a trip abroad, and reflected on how different behavior patterns in the new generations will change the future of work and how she and her team will need to adopt new HRM policies accordingly.

Apart from demonstrating that dance-based methods supported participants in the development of their innovative skills, it is worth noting other contributions these methods made which would have been unlikely through the use of more traditional training methods. This could also further inform existing ideas around innovative competence in innovation management theory. Participant reflections show that contemporary dance-based methods allowed them to combine the traditional external focus on goals, customers, and performance with increased awareness of their own body, feelings, senses, needs and how they could use them as enablers in innovation processes. By also having an internal focus, they realized what kind of conditions they needed to create in order to innovate in everyday work. They found out that there is no standard recipe, and began to develop their own personal formula for innovating through experimenting. Choreographic tools supported them in this experimentation process as they started discovering how they can use body, space, and timing in new ways to enable innovation. Many realized that they generate better ideas when they integrate movement through different bodily practices in their work process, (e.g., taking a walk in the breaks, or having a talk-the-walk meeting, going jogging in the lunch time, doing some yoga in the beginning of the day, or starting meetings with a short meditation). At the same time, they also learned about the value of slowing down, doing less, and creating time for silence, reflection, and observation, engaging all the senses and not feeling the pressure to perform, instead taking time to re-think why and how things could be done better.

Dance-based methods engaged participants more holistically, using their body, mind, will, senses, and emotions in the innovation process. This encouraged them to not focus on developing more explicit knowledge solely through traditional training methods like lectures and group discussions about different innovation concepts. Instead of exercises that only stimulate the development of cognitive skills, participants were encouraged to also develop their intuition, senses, and other forms of more tacit, embodied knowledge, (e.g., the unconscious material that came out in the movement exercises and was used as input in the process, or by learning how they could express and use emotions in innovation processes to stay closer to their motivations and what is meaningful for them in work).

Another aspect of innovative competence that arose through the use of the choreographic approach, is the practice-based aspect of innovative competence. Rather than the usual focus on performance and end results, more attention was given to the process of experimenting, learning, and creating new knowledge, without knowing the end re-
sult. Although not knowing what will happen was at first frustrating for participants, they realized after a while that there were no fixed recipes for developing innovative competence, and that it took a lot of practice, experimentation, and persistence to change the work processes in a meaningful way. They realized that this persistence was important for changing the mindset and culture in their organization, and to see a lasting change in people’s behaviors. At first more focus was on the specific innovation projects where they sought to develop innovations around different innovation challenges. Towards the end of the process, it was seen that what was most meaningful to them was their own innovative practice which they developed at work, and would eventually result in new services for citizens – but only if they trusted the process. If innovation initiatives, such as the study in Eskilstuna municipality, focus too much on specific innovation projects and their end results – innovations, that often results in people going back to their old ways of working once the project is finished. But when participants realize innovation is more about continuous practice and work that needs to happen in everyday life of organization, the results become more long-lasting.

4.5 USING CHOREOGRAPHIC PRINCIPLES IN THE DESIGN OF ARTISTIC INTERVENTIONS

One of the challenges that the research presented in this thesis tries to address is how long-term artistic interventions in organizations can be designed to enable change on a strategic level and how choreographic knowledge and methods could support that. The idea in the study with Eskilstuna municipality was to apply the same principles and tools that choreographers use in their creative processes to provide some sort of frame that participants in the intervention could rely on and use as support. At the same time, an aim was to allow a substantial amount of openness for new, unplanned things to emerge. As part of the research started in the Licenciate thesis (Bozic Yams, 2014) and later on developed and published in a book chapter (Bozic Yams, 2016) a choreographic model of creative process and tools (see Figure 12) was created and used as a basic framework to design the empirical study in Eskilstuna municipality.
Different process activities (tuning-in, exploration, reflection and sharing) and tools (body, space, time, and composition) were applied throughout the intervention as base principles of work in all activities, as well as for the design of the process as a whole. For example, each workshop would start with some tuning-in, and include some sort of exploration of a topic, individual reflection, and the sharing of what was learned in the whole group. The way each workshop was designed also consciously played with the idea of how body and movement, physical space, time, and composition of these elements could be used in new ways to create the right conditions for an emergent innovation process to occur.

The entire process was structured into six iterative cycles of learning, where participants were constantly shifting between tuning-in, exploration, reflection, and sharing in different activities (in the process depicted in Figure 13). Each cycle began with tune-in through a literature discussion connected to the topic of the upcoming workshop. A workshop followed where participants were invited to visit inspiring spaces outside of their office, and immerse in the exploration of a new topic. In this way, conditions were created for daring to go into new territories in collaboration with choreographers that they would probably find difficult to do in their office environment. After each workshop, participants were encouraged to reflect on how the knowledge and experience
from the workshop could be used in their innovation projects, and then experiment with these ideas in practice. Based on what they learned from it, they had to write a personal reflection story and then share their reflections in a group session where different teams received inspiration from each other. This inspired new ideas they were motivated to implement in their individual innovative practices at work.

![Diagram](image)

**Figure 13: Key implementation activities representing the logic of each learning cycle in the process**

A big, colorful 3-D model of choreographic model of process and tools was produced and used in all the workshops. This model reminded participants about the design framework we were applying, and encouraged them to also make use of it in their work.

Based on the reflections of participants in the process, this method of designing the intervention enabled them to transfer the ideas and tools used in workshops into their everyday practice. They were always encouraged to experiment with them in the work place, reflect on what happened, then share and discuss it with other participants. The choreographic frame of thinking (depicted in Figure 12) also gave them a useful tool for thinking and designing their own work processes in an innovative way. At the same time, it was enough open to allow a high degree of freedom for experimentation, encouraging each individual to find her own way of innovating in everyday work.
The challenge remains, for many artistic interventions in organizations, of how to go from one-time events or short-term interventions that can be highly engaging and energizing for participants, but cannot create long-term change, towards more long-term strategic processes of transformation. Finding tools that can help design such interventions can support practitioners in the field. The study in Eskilstuna municipality was one such attempt, and can be seen as an example to inspire future studies if considered useful, but cannot serve as a general recipe. The researcher who followed the study, and has seen and studied other artistic interventions in organizations, reflected that she found this balance provided a good base for designing long-term artistic interventions in organizations. She cited the basic frame that allowed participants to trust in the process, and imparted some stability and continuity, but at the same time openness to what was happening, and adjusting the process to what was relevant in the moment. It allowed change to happen progressively as participants were ready to encounter new knowledge and slowly embody it in everyday work. As time passed, it could be observed that participants eventually developed their abilities to design their own tools for innovating at work, moving from simply copying the workshop exercises towards designing and trying out their own. To truly embody new knowledge, it takes time and a lot of practice. This is why it is important to create the conditions for more long-term artistic interventions that can enable a true process of learning and change, not only on the level of new skill development, but new attitudes that drive behavior. This was also observed among participants, who came into the process expecting to get a ready-made recipe for the innovation process and tools they could just copy-paste into their work. They struggled somewhat, as this was not the case, and then slowly started to enjoy having the freedom, knowledge, and support to develop their own individual and team formulas for practicing innovation in everyday work, adjusted to their needs and work context.

### 4.6 Revised Model of Innovative Competence

The results chapter began with a proposition of an integrated model of innovative competence. It attempts to answer the question of how innovative competence can be conceptualized by synthesizing different ideas about the phenomena in the current innovation management literature. The systematic literature review revealed that there is not much discussion about embodied aspects of innovative competence in existing research, while participants in the study in Eskilstuna municipality stressed the importance of different embodied aspects of learning for developing innovative competence, such as using the senses, body awareness, bodily movement, imagination, feelings, and will. This is why it is interesting to explore how the proposed model of innovative competence could be revised, taking into consideration the concepts and practices from contemporary dance and choreography presented earlier in the results chapter. Both the choreographic model, which was applied to design the empirical studies (see Figure 12), and the ideas around “practice,” “body and materiality,” and “undoing everydayness,” that were discussed in previous sections of the thesis.
In Figure 14 a revised model of innovative practice that integrates ideas from innovation management research and contemporary dance and choreography is proposed.

The first important point of emphasis is that, based on ideas from contemporary dance and experiences gathered in empirical studies, the revised model focuses on discussing the innovative practice rather than competence, (although practice was in the center of the initial model as well). The purpose of this change it to make it clear that competence in this thesis is not understood in a more traditional and formal way but is rather connected to the competence in use, or what is practiced in reality. Another purpose of discussing practice rather than the term competence, is to emphasize the focus on the active aspect of innovating. What is important is to keep practicing innovating in everyday work routines, “rehearsing” the ability to innovate. In this way, innovative practice becomes a way of thinking, being and acting in the everyday work routines of all employees, rather than a specific set of skills that are trained for, with the goal of producing a set effect - developing a specific new product, service or process, but only applied in innovation projects and limited to the innovation experts in an organization. If innovation is practiced across an organization on a daily basis, the chances of the innovative output of an organization increases. Without being limited to specific top-down innovation initiatives, innovation is rather viewed as an integral part of organizational culture.
The core enabling activities that form a component of innovative practice in the revised model are different from the ones in the initial model. They are inspired by the practice of contemporary dancers and the choreographic model presented in the results chapter (see Figure 12), which was developed on the basis of interviewing different choreographers and understanding their creative practice and process (Bozie Yams, 2016). Innovative behaviors frequently proposed in the innovation management literature (and included in the initial model of innovative competence presented in this thesis): exploring, generating, championing and implementing ideas (Kanter, 1988; Scott and Bruce, 1994; Janssen, 2001; de Jong and den Hartog, 2010; Abbas and Raja, 2015), are different activities or stages in the innovation process that traditionally follow each other in a rather linear manner and have a specific outcome in each phase of the process. In comparison, the enabling activities of tuning-in, exploring, reflecting, and composing, as proposed in the revised model, are practiced continuously and iteratively when innovating. These activities can be used to both explore and generate ideas, but also to develop further ideas towards their conceptualization and implementation. They suggest that innovative practice needs to include all of these activities on a continuous basis, as staying both explorative and exploitative is important throughout the innovation process. Still, there might be more emphasis on some aspects (like tuning-in and exploring) in the earlier phases of the process and on others later on (reflecting and composing).

Each of the four activities of innovative practice can be enabled by practicing certain skills. Although the revised model of innovative practice does not aim at providing a final list of skills to be developed for one to excel in her innovative practice, it suggests that there are certain skills that both the theoretical and empirical results in this thesis show as enabling people to innovate. These enabling skills can support different activities that form innovative practice (tuning-in, exploring, reflecting, and composing). However, certain skills are more crucial in supporting one of the core activities, which is why four selected enabling skills are depicted in the model in connection to each of the four enabling activities of innovative practice.

*Enabling skills presented in connection with tuning-in are: slowing down, connecting within, opening up, and building confidence and trust. Slowing down is closely connected to the idea of “doing less,” an important part of the “method of practice,” presented as one of the concepts from contemporary dance and choreography earlier in the thesis. As the empirical studies showed, slowing down and doing less is an important aspect of being able to shift into a more innovative mode of thinking and acting. It is necessary to stop time, which moves fast, and is measured in hours and hourly deliveries, as this momentary halt creates an experience of endless time without the pressure of expectations. Stopping time is about switching off the predominant performance-oriented mode that drives most behavior at work, and forgetting about other thoughts, worries, and the constant obsession with delivering short-term results. By slowing down and doing less, one can be more present in the moment and can create an empty space of “not knowing”, where something new might emerge. The experience from empirical
studies is that many people are so stressed at work, that they have difficulty entering this mode of being. They need to practice this mode, and with practice, develop the ability to slow down and just be, without worrying and thinking too much about their “to-do” lists or results that need to be delivered by the end of the day or week. The next closely related skill is connecting within, which means entering into one’s body, sensations, and feelings, and sensing what is important and necessary for the person right now in that specific moment. It is finding the right focus, the right question, or problem relevant for that person to explore in her innovative practice. Here it is important to not identify the relevant questions based only on external expectations from top management, market trends, user needs, and alike, but to start the process of innovating inside-out, connecting to questions that are meaningful to explore for each person in their work. People are often disconnected with their bodies at work. Connecting with the body, feelings, inner wisdom, and will demands “rehearsal” of the skill of acting from a more holistic body awareness and presence. Once this inner connection with self and will is established, the skill of opening up towards other people and the world is important, too, developing an attitude of openness for new inputs and ideas without judging. To feel comfortable enough to open up to others and to share personal vulnerabilities, feelings, needs, and ideas demands the ability of building confidence and trust. It is necessary to possess both confidence in oneself and in the process, and to be able to trust colleagues and other people who might take part in one’s innovative journey. Especially in the early stages when emergent needs and ideas are not yet clear or well developed, one feels more vulnerable. The building of self-confidence, and an environment of trust and support with other colleagues, thus is very important.

Once this environment is established, it is easier to immerse in the exploration of relevant questions, problems, needs, and ideas. The enabling skills presented in connection with tuning-in remain relevant, but other enabling skills such as diverging, associating, combining, and improvising arise. Diverging can be connected to trying out and experiencing new things, being inspired from a variety of sources, activities, spaces, and people that do not necessarily connect directly or obviously to the question or problem in focus, but could give new, potentially relevant insights. Diverging also relates to the ability to see something from different perspectives, for example, finding many different ways of solving the same problem or exploring a need or question in focus. Associating, on the other hand helps one make new connections between seemingly unrelated ideas or fields of practice. In this way, ideas gathered while diverging can be bridged back to the driving question or problem, showing that they could potentially contribute to the issues at hand. The skill of combining is also important, as when new ideas are explored and developed, constructing, deconstructing and re-constructing different bits and pieces in various ways will help with the generation of innovative concepts and solutions. Improvisation, on the other hand, can help individuals and groups move between diverging, associating, and combining ideas in new ways, with a spontaneous attitude of acting in the moment, saying “yes, and...” to all ideas proposed, and building further on them, no matter how far fetched they initially sound. The skill of improvising enables one to
take the risk of going into the unknown and to let go control. The end result of the improvisation may be unknown, but the skill is about allowing the moment to bring up something new and unexpected, maintaining a very open, non-judgmental attitude, saying yes to everything that comes, and even celebrating failures as an important part of learning and exploration. In improvisation, it is important to be fully present, with the entire body and all of the senses in order to be able to respond quickly and without much thinking, relying on the intuition, imagination, and wisdom of the body.

But the act of exploration needs to be balanced with reflection when innovating, in order to take a step back and look critically at the ideas with some distance, question, and develop them further. This is why the skills of observing with all senses, questioning, receiving and giving feedback, and sensing potentiality can be helpful. Participants in the empirical studies noted that traditionally observation is connected with focusing on the sight, but that when other senses are given more attention (like touching, smelling, tasting and listening), new valuable things are noticed. Even closing one’s eyes and just feeling from within the body can lead to important insights, or help making decisions on how to proceed with ideas. After being immersed in the exploration, generating, and experimenting with new ideas, it is thus helpful to slow down and just observe what has been created, employing the resources of the whole body. When taking time to stop and observe, usually questions will appear as one creates some space for distance between herself and ideas. This skill of questioning with a curious and critical attitude, trying to understand why something has been created and is important for solving the question in focus, is crucial to advancement in the innovation process. Listening to others and sharing feedback can also contribute to the gaining of new perspectives and insights, widening the understanding of a problem, and helping make decisions about what to do next. This is why the skills of giving and receiving feedback are valuable when innovating, but as the studies show need to be practiced. People often avoid giving genuine feedback to avoid potential conflicts or uncomfortable discussions. Once the ideas and creative material have been observed, questioned and feedback shared, it is important to make decisions on what inputs will be taken further in the process of innovating and which ideas or material discarded. Here it can be of help to balance more traditional evaluation approaches that select ideas based on scoring them against the amount of financial resources and time needed for development, with sensing their potentiality. This relates to an ability to sense closely from within, using different resources of the body, combining intuition based on knowledge and experiences one has accumulated through innovating in the past, but also a feeling that one usually has. Intuition can indicate the most meaningful ideas which need to be taken forward, though it is often difficult to justify these ideas through numerical calculations - specially early in the process. Sensing the potentiality of an idea also demands the ability to use one’s imagination to see what could be possible to do with the idea in the future. When innovative practice in everyday work is discussed, relating to individuals innovating their own work practice where both their expertise and engagement are crucial, this is an important inner resource to use in the innovation process.
The last aspect of innovative practice, namely *composing*, relates to the importance of making ideas happen by involving different people in the process of innovating. This means going beyond one’s team of closest colleagues, in order to gain access to valuable knowledge and resources necessary to further develop ideas and move them forward towards implementation. Engaging important internal and external decision makers in the process that might be needed to provide knowledge, financial resources or other types of support to make ideas happen is crucial here. The skill that can be supportive in this type of activity is the ability to *mobilize crucial others*, those who can contribute in different ways to the innovation process, making them interested in the questions in focus and ready to take part in the process. The skill of *listening* with full attention, suspending judgement, and opening to those that one seeks to engage in innovating can help establish a more fruitful base for collaboration and provide conditions for a *generative dialogue*. Generative dialogue is an experience of free flow of meaning between people without a predefined expectation or a specific result that needs to be produced (Bohm, 2004). It focuses instead on exploring and learning together, creating free space for something new to emerge, building on each other’s ideas (Bohm, 2004). Through engaging and sharing with other people in the practice of innovating in everyday work, the ideas will expand, gain new perspectives and the necessary support for implementation. For this final aspect of innovating to occur, the skill of *co-producing* will be helpful. This means contributing to the act of sharing and engaging with others as an element of follow-up, to make sure things are being done and composed in a way that will facilitate actual innovation. This demands the ability to synthesize different ideas and contributions into a coherent whole, making sense out of things and presenting them in an interesting way to users and other relevant stakeholders. Here the choreographic tools of use of space, body, time, and the way the audience is engaged in new ways can help reach stakeholders on emotional and more embodied levels than by using the traditional ways of conversing.

As can be seen in the visualization of the revised model in Figure 14, surrounding the core four activities of innovative practice and their enabling skills, are the enabling tools of body, physical space, time, and other people. Individuals can play with and use these tools in new ways in their process of developing their innovative practice in everyday work. As the empirical studies show, these tools can provide a useful frame for innovative thinking and practical experimentation in how to organize work processes differently to create more value and meaning for those innovating. Previously in the text, different concrete examples were given of possible applications of these tools.

The shape of the model of innovative practice is circular, and symbolically represents a spiral that grows over time, as the model suggests that the more an individual practices innovating in everyday work, the more her ability to innovate grows. It is usual that when people start developing their innovative practice at work, they will first make smaller improvements in what they already do in their everyday work, but the more they rehearse and embody innovative ways of being at work, the more radical their innovations can
become. Using more consciously various aspects of embodied knowledge, as suggested in the model, will expand an individual’s innovative practice until at some point they will be ready to innovate things that might be completely outside of their primary job role or function into the organization. They contribute to transformation on a larger scale that does not impact only their own everyday work routines, but also those of their colleagues, the users, other stakeholders, and potentially, even the society at large. In this way organizations build and develop their capacity for innovation from continuous incremental innovations in everyday work routines towards the capacity of radically innovating across the whole organization.
Get tjejer
mehr Utmärkung

Allas lite varme
samtal om
det

Josef Von der
Frimodig

Verksamhet för
människan blir
snygg och
samtal där

Objekt

Nuditbad

Het är
artfriad
verksamhet

Samlad om
nöden

Fotplantering

barndom
In the discussion chapter, a recapitulation of the overall purpose and research questions stated in the introduction will be made, and the research questions discussed based on the analysis of the results from the articles and returning to relevant theory introduced in the theoretical chapter. Other related ideas and issues which emerged during the research process and did not get space in the articles will be brought forward. Some thoughts on the limitations of the research presented and potential ideas for future research will be shared.

The overall purpose of the research introduced in the beginning of this thesis was to explore how knowledge and methods from contemporary dance and choreography can be used in organizations to enable individuals develop their innovative competence. In the following section, different research questions that can contribute to reaching this purpose will be discussed.

5.1 CONCEPTUALIZING INNOVATIVE COMPETENCE

The first research question presented in the introduction was: How can innovative competence be conceptualized? The proposed model of integrated innovative competence introduced in the results chapter (Figure 11) and discussed in more depth in Appended Article 2, tries to answer this question by connecting different pieces of existing research into an overview of core innovative behaviors or activities that are part of innovative practice (exploring, generating, championing and implementing ideas), but also different dimensions that influence an individual’s competence in practicing innovating, and are thus part of the the wider concept of innovative competence. Personal attitudes and characteristics (the intrapersonal dimension), combination of heterogeneous, expert knowledge and functional skills (content dimension), and various collaborative skills (interpersonal dimension) can all enable different aspects of innovating. One of the core characteristics reflected in the model is the ambidexterity of different elements, which suggests that in
order to practice innovating, one needs to be able to constantly move between diverging and converging, and exploring and exploiting ideas. It is suggested that as an individual practices innovating over time, her innovative competence will grow and enable her to move from innovating incrementally towards innovating more radically.

The model shows a complex picture of innovative competence with a wide span of elements that have an impact on it. This becomes even more complicated when considering the influence of organizational and wider external societal aspects on how individual actually uses competence in practice. This means that the proposed model discusses competence-in-use rather than the traditional idea about competence as formal competence that is a set of prescribed attributes (skills, knowledge and attitudes) required to perform a job and which is generic and can be as such applied in any context. The proposed model of innovative competence is closer to the interpretative approach (Sandberg, 2000) discussed in the theory chapter, understanding innovative competence as context-dependent, suggesting that how an individual will actually use her innovative competence in practice will depend both on individual factors (the knowledge, skills, and attitudes she possesses that are included in the proposed model), but also on other contextual factors and her own experience and assessment of a specific situation.

The integrated model of innovative competence provides a supporting argument for the idea presented earlier in this thesis that innovation has become a core competence that should be developed across sectors and organizational levels, and integrated in the educational curriculum from an early age (Vila et al; 2012; Borras and Edquist, 2015; Räsänen et al., 2015). The systematic literature review revealed that many of the elements in Illeris’s general concept of the competence (2013) mentioned in the theory chapter are closely connected to innovative skills that are part of innovative competence. Intuition, flexibility and persistence, for example, are elements of the intrapersonal dimension in the model. A combination of ability and fantasy are components of associational thinking, and critical perspective is crucial aspect of questioning skill. Both are included in the content dimension of the model. Empathy is close to the skill of empathic communication, which is an element of the interpersonal dimension in the model. Creativity is a wider concept and relates to many elements included in several dimensions of the model, among others divergent and associational thinking, flexibility and autonomy. The fact that Illeris (2013) suggests that these elements are part of any competence and can help individuals act competently not only in known but also in new and unknown situations supports the idea that innovation has become a generic part of being able to act competently in any field of practice.

The proposed model of innovative competence contributes conceptually to the research field about the phenomena as it synthesizes existing pieces of research into a more holistic and integrated model. It also has several implications for practice, as both a reflective tool for students and practitioners to better understand the concept of innovative competence and identify their strengths and opportunities for further development, and
to help HR specialists recruit people with the right innovative skills, and innovation managers to form innovative teams that combine a wide variety of characteristics and skills that can support different aspects of the innovation process. The challenge is that the model has been tested only to a limited extent in practice, which means that it needs to be further operationalized in different contexts in order to learn more about its relevance and applicability and see whether specific innovative skills are more relevant for certain job profiles, industries or even cultures.

Since cognitive skills are predominant in the model, it would be interesting also to explore how different forms of embodied learning could enable innovative competence development and be included in the model. A future assessment tool could be developed and tested based on the model, but the challenge would be the complexity of the model with many elements, and how to develop an assessment tool that takes into consideration the contextual specificity of innovative competence. In general, the danger of such a model is if it is used as a recipe or a prescriptive model by management to formalize and control innovation, measuring all individuals against the same success indicators, and not taking into consideration the specifics of each individual work context. Öberg (2013) also suggests that adding too many skills or competences can diminish the real innovative competence in use and decrease trust and commitment among those participating in innovation. This is why, for the purposes of using the model among practitioners, a simpler version could be developed to reduce complexity and make it easier to use in practice, including only those elements that past and future studies will reveal are of most relevance.

5.2 CONCEPTS FROM CONTEMPORARY DANCE AND CHOREOGRAPHY

The second research question presented in the introduction was: *What are the key concepts and practices from contemporary dance and choreography that can contribute to understanding and developing innovative competence in organizations?*

Different concepts that can contribute to understanding of innovative competence were presented in the results chapter and discussed in more depth in Appended Article 3. The three main concepts: “body and materiality,” the “method of practice,” and “undoing everydayness” suggest some possible changes to the concept and understanding of innovative competence.

Ideas surrounding the “method of practice” are close to the concept of practice-based innovation, as introduced in the theory chapter (Ellström and Nilsen, 2014). These ideas move the focus away from traditional understanding of competence, where the goal is to achieve set results and performance (like specific innovations in forms of new prod-
ucts and services), towards an emphasis on innovative “practice” as a temporal process, where attention is given to duration of action and continuous experimentation without knowing the end result, undoing and redoing current modes of working. According to this suggestion, it is in the action, as one “rehearses” innovating, developing and practicing different innovative skills over time, that innovative outputs will emerge and one’s capacity to move from innovating incrementally will develop towards the ability to innovate more radically. An important innovative skill in the experimental practice of dancers is improvisation, which is a crucial aspect of emergent innovation (Peschl and Fundneider, 2012) introduced in the theoretical part of the thesis. The idea of emergent innovation is based on improvisational attitudes, such as openness, listening and perceptiveness, and focuses on allowing important things to emerge, going with the flow of reality, and not trying to plan and control innovation, as in more traditional top-down approaches. In order to not only improve what we already know, or to innovate from the past, but rather open up to new possibilities and radically innovate from the future (Scharmer, 2009), one has to be present, available and accepting of new things that come and could not be predicted in advance. Contemporary dancers are skilled at working this way, and have developed different methods that can be useful in the development of employee innovative practices, or in an organizational context.

The second relevant concept identified in the field of contemporary dance discusses the importance of “body and materiality” in the creative processes of dancers. It further supports ideas about the crucial role of body and movement in the creation of new knowledge and meaning from the neuroscience (Varela et al., 1991, Sheets-Johnstone, 1999 & 2009; Johnson, 2007) introduced in the theory chapter. Since the focus in current innovation management research is mainly on the cognitive skills supporting innovation, the introduction of “body and materiality” proposes that more attention should be given to a more holistic attitude towards the body, including the use of senses, intuition, fantasy, emotional capacities, and embodied knowledge in the development of innovative competence. This would help employees balance the focus on user needs and expectations from top management, with their own needs and as proposed by Verganti (2016) produce more meaning-driven innovation. In this way employees could start innovating from an inner body awareness, centering their practice of innovating around questions relevant to them, and engaging more holistically in the practice of innovating. In this way they could also increase their sense of engagement and ownership of the innovation process as it would become more meaningful to them personally.

The third concept from contemporary dance, “undoing everydayness” suggests that innovating does not need to happen top-down and be predominantly related to developing new products and services in R&D departments, but can be brought closer to all employees by innovating something as mundane as their everyday work routines. This can make innovation less abstract and closer to everyday problems at work. The focus on employees innovating through learning in everyday work is close to the concepts of employee-driven innovation (Høyrup, 2010 & 20012) and practice-based innovation (Ell-
ström and Nilsen, 2014) presented earlier in the theoretical chapter. It suggests that innovating happens when employees encounter relevant questions and challenges in their everyday work. Through their own initiative they then find solutions or new ways of approaching problems, trying out new ways of working, instead of following only top-down innovation initiatives by management and problem-solving on demand. But the idea of “undoing everydayness” adds a new quality to established practices of engaging employees in continuous improvement in companies, instead of focusing on optimizing existing work processes to make them more efficient, it rather suggests to challenge and “undo” existing norms and ways of doing things, exploring new “potentialities” of what could be but is not yet there at work and maybe might never be. This involves the capacity for critical thinking and questioning the status quo, which Verganti (2016) and Dyer et al. (2011) suggest are crucial for radical innovation. The idea of undoing everydayness furthermore involves a curiosity to open up for new possibilities, use imagination and the explorative capacities of the whole body to sense and envision a future that does not yet exist. This is where methods from contemporary dance can be helpful, as this is not something that would traditionally be the focus in innovation management. Undoing everydayness can thus help support more radical, employee-driven innovation that also involves embodied aspects of learning, and new knowledge creation.

The challenge remains how the above discussed concepts from contemporary dance could be integrated into the current research in innovation management, which focuses predominantly on cognitive skills for innovation. A revised model of innovative competence was thus developed and presented at the end of the results chapter (see Figure 14), trying to combine ideas from contemporary dance innovation management fields. But the model hasn’t been tested yet, so this is one of the tasks for future research. Another problem with the proposition that innovating should become part of everyday practice for all employees and engage them holistically is that when subjectivity and creativity become the core inputs into work processes (Kunst, 2012), and workers are practically asked to leave their soul in the workplace (Berardi, 2013), this creates a space for abuse of people’s privacy and feelings for the purpose of maximizing value for someone else. Since the established logic of thinking that focuses on maximizing shareholder value is still the predominant drive in most companies, it is important to emphasize ethical principles on which ideas presented here are based, when doing such research studies in organizations. If new organizational models, which are very participatory in nature and based on principles of self-organization, wholeness and evolutionary purpose (Laloux, 2014) are applied, then the use of such methods can be beneficial for employees. But since this is still not the mainstream model of organizing, it is questionable how many organizations are currently ready to become truly people-centered, basing their work on the humanistic principles of putting people and their well-being first, and allowing them to co-create and innovate organizational processes bottom-up, with a higher purpose of building a more meaningful organization. In this sense it is not a coincidence that the research presented here was done mainly in Sweden, which has a long tradition of using non-hierarchical democratic principles in management. In the future it would be inter-
esting to apply methods from contemporary dance in other cultures and maybe design specific studies around each of the three concepts presented here: “body and materiality”, “the method of practice”, and “undoing everydayness” to deepen both conceptual knowledge and practical methods developed around each of the three ideas.

5.3 CONTEMPORARY DANCE AND CHOREOGRAPHY AS ENABLERS OF INNOVATIVE COMPETENCE DEVELOPMENT

The third research question presented in the introduction inquired how knowledge and methods from contemporary dance and choreography can be used in practice to enable innovative competence development among employees.

The results from empirical studies in Eskilstuna municipality, and the choreographic intervention at the AoMO conference (presented in results section of the thesis and discussed in Appendix articles 1 and 3), tried to answer this question by translating choreographic knowledge and methods, and materializing them in an organizational context, with the purpose of enabling innovative competence development. Both studies showed some positive effects of dance-based methods on innovative competence development, and resulted in the development of practical tools and exercises that can support individuals practicing innovating in everyday work.

The evidence from the study in Eskilstuna municipality shows that contemporary dance-based methods helped participants develop the five core skills of innovators: questioning, observation, experimenting, idea networking and associational thinking as defined by Dyer et al. (2011), and presented in the theory chapter. What was interesting was that the dance-based methods led participants to reflect upon the importance of embodied aspects of learning in innovative competence development that are usually not discussed in innovation management theory. They suggested that different embodied practices, such as training, mindfulness, walking, relaxation, explorative movement and dance improve conditions for being more innovative at work when integrated in everyday work routines, at the same time as they also increase the motivation and energy of employees. Participants thought that working with the body encouraged them to become more aware of how different senses can be used to see new perspectives and expand learning during the innovation process. Engaging the body brought forth emotions and made the process more personal and closer not only to organizational challenges, but also to questions and issues of personal relevance for engaged individuals. As Schiuma (2009) proposes, art-based methods can represent powerful means that organizations can deploy to enhance people’s experiences and emotions, increasingly playing a strategic role in affecting organizational value creation capacities.
Reflection stories written by participants in the Eskilstuna municipality revealed that they often reflected over their feelings. Many of them wrote about how fun and energizing it was to engage with creative art-based methods, both during workshops and when testing them in their project groups or with colleagues. The dance-based methods created engagement, a sense of playfulness, and creativity among participants. A few of them reflected that the methods made them realize that laughing and having fun helps create a better atmosphere, increases motivation within teams, and stimulates creativity and innovation. On the other hand, some participants felt anxiety and blockage when engaging in dance-based methods. This is why it was important to keep participation in exercises voluntary at all times and find other ways of engaging people as active observers when they didn’t feel comfortable to participate in certain exercises. It also highlights that different people might prefer working with different methods, so dance-based methods will not be a preferred way of working for everyone. What helps, is combining more traditional methods from innovation management practice with some experimental art-based exercises, and reserving the possibility to observe, in case someone feels being pushed too far out of their comfort zone. Yet, participants themselves reflected that stepping out of comfort zone was a crucial part of developing innovative competence, and that overcoming fears and experiencing uncomfortable feelings together eventually deepened trust and connection in the group. Keeping the right balance between feeling safe, trusting the process, but also taking risks is thus needed. What participants learned from using artistic methods which brought about different feelings was that feelings (both positive and negative) are a part of any change and innovation process so it is important to create space for them, rather than avoiding them, as is often the case in business contexts. In this way, dance-based methods made the innovation process more human. Sharing new experiences, and even feeling awkward or exposed in front of colleagues (sometimes through dancing or touching each other), led participants to open up and share their vulnerabilities more when they were reflecting on their experiences after the exercises. Sometimes simple activities, such as sitting together on the floor in a big circle or being together in silence, just present, observing the city, created a feeling of belonging and togetherness in the group. Experiencing flow and group creativity through movement, building on each other’s ideas, improvising, and learning from different perspectives, were positive feelings expressed by participants. In those moments of group flow, participants forgot about time, and were surprised by how productive they could be in a very short session when they completely immersed in a shared experience. Dealing with the emotional side of change and innovation processes that the dance-based methods brought attention to was an important part of the process. Though not always easy, it helped participants realized the value of more holistic approaches to innovating, taking into consideration people’s hearts, minds, and wills (Scharmer, 2009).

Although the choreographic methods showed some positive effects on the innovative competence development in both empirical studies, it is hard to generalize such conclusions based on only a few studies performed within specific sectors. Even in the studies performed, there was evidence that not everyone felt comfortable with dance-based
methods, which makes the voluntary participation in dance-based exercises important to allow people to step out of the process if they wish so, and take instead a role of an active observer, so they could still contribute to the process without feeling excluded. Another challenge identified was that since using dance-based methods in organizational context is usually something new for employees, it takes quite a long time for them to build trust in themselves, the process, and the methods, and to feel comfortable enough to implement them in their daily work practices. Most of the participants in Eskilstuna municipality started to integrate more simple embodied practices in their work they knew prior to the study (such as, training, mindfulness, yoga). While it would take more time for them to develop the knowledge and skills to a level where they would feel comfortable to use some of the methods tested in workshops and facilitated by choreographers in their office context.

The challenge with the intervention at the AoMO conference was also that it was too short a time period to produce long-term behavioral change. In the future, it would make sense to continue performing long-term studies (maybe even longer than the one in Eskilstuna municipality) and apply dance-based methods in other sectors and countries to see whether they can produce the same effects despite cultural and sectorial differences. It is interesting to observe that more women than men decided to participate in the studies here, showing that women might be in general more open towards dance-based methods. This is why it might be interesting to perform some studies in more male dominated sectors in the future, (such as tech and finance), to see whether the same effects would be reached. Another future deviation could be made by combining a structured approach with workshops integrating artistic and innovation management methods with more open formats and co-creation of art with participants in the studies, (for example making a dance performance together). In this way, employees could be urged to become even more explorative, trying out other forms of using art in an organizational context as a new medium to problematize, research, and communicate relevant work-related issues.

An attempt in this direction is currently underway in a 1.5-year study at a co-working space in Västerås, called Expectrum. Expectrum is a regional innovation hub where different local companies and innovation support institutions share office space. The empirical study at Expectrum has been exploring how employees from different institutions that work there can develop their innovative practice in everyday work and build an innovative community using choreographic methods. A systematic approach with a series of workshops and reflection sessions, similar to the ones in Eskilstuna municipality has been combined with artistic residencies of artists in the office space and building of a site-specific art exhibition. Six artists from different countries were invited to spend some time at Expectrum, observing how people work there and sharing their artistic practices with the employees in different formats. Based on their artistic research they then chose to problematize different aspects of innovating in everyday work, in their art, as part of the office exhibition. One aspect that could be changed in the future would be
that the artists engaged employees in their artistic research process, but then decided to make the art on their own for different reasons. In the next study, it would be interesting to engage participants more closely in the making of the art. The positive side of this study was that the artists maintained their own creative freedom, and could be more critical, opening space to problematize issues they found relevant in connection to innovation, but are not so often discussed in innovation management discourse. Some of the issues included the human aspects of our automated future with robots, questioning the lack of space for vulnerability and emotions in innovation, problematizing established language and aesthetic norms in innovation, and the absence of using bodily wisdom and contemplation in innovation.

5.4 THE POTENTIALITY OF CONTEMPORARY DANCE AND CHOREOGRAPHY USE IN DESIGNING LONG-TERM ARTISTIC INTERVENTIONS IN ORGANIZATIONS

The fourth research question formulated in the introduction was: *How could knowledge and methods from contemporary dance and choreography be used to design long-term artistic interventions in organizations on a strategic level?*

This question considers how knowledge and methods from contemporary dance and choreography can not only contribute to the field of innovation management, but also to the field of artistic interventions in organizations. The study in Eskilstuna municipality provided an example of how a conceptual model and basic tools from choreography could be used to design long-term, art-based interventions in organizations on a strategic level. Using a structured approach, based on a simple choreographic model helped participants understand the core principles they worked with throughout the process. They were given some basic structures, and balancing the challenge of going out of their comfort zone when engaging with dance methods in the workshops with some sense of trust, continuity and repetition that the design of the process using choreographic model created. The logic of continuous cycles of experiential learning that always followed the same principles and types of activities also helped participants to translate artistic knowledge to their work contexts, and slowly embody the new knowledge in daily work routines. If they would be only exposed to artistic methods once and not stimulated to integrate artistic knowledge and tools in their everyday work through a series of experiments, the effects of dance-based methods would be very limited although they might have provided a fun experience. Using a longer process with several learning cycles was thus crucial to making an impact on behavioral change. Such a structured approach also helped sell the project to the top management and gain their support, which is not always easy with art-based interventions. Combining choreographic concepts with more established ideas and methods from innovation management facilitated management to
understand the connection with organizational strategy and the value that intervention would create for the organization. It was crucial that facilitators had both experiences and skills from dance and innovation management. Often, artistic interventions are performed by artists who lack knowledge from business and the ability to clearly connect artistic intervention with overall organizational strategy and goals. Translating knowledge between such different fields as art and business is not easy and it takes a lot of time to reach an understanding, which is why artistic interventions need time, so people can get to know each other and build trust, as they initially come from very different backgrounds. As Darso (2004, 2016) suggests, more long-term artistic interventions are needed in organizations to show the strategic value that the use of art and artistic methods can create. In order to be able to “sell in” such projects, knowledge about how to design this kind of interventions and the skills that facilitators shall possess needs to be further developed. Hopefully the ideas and choreographic approach presented in this thesis can contribute to the endeavor. One of the challenges encountered in the study in Eskilstuna municipality was that although top management highly prioritized innovation and spent a lot of resources in building innovative competence, which was shown in the fact that the innovation leaders participating in the study were expected to train all 350 managers in the municipality, plus 350 innovation ambassadors that would help managers further spread the knowledge throughout organization, top managers did not decide to participate in training themselves. When this issue was raised with top management and suggested that a special coaching and training program would be developed also for them so they can act as role models and embody the leadership needed to build an innovative culture in organization, resistance was noticed, as they thought it was sufficient to delegate this role to the innovation leaders trained in the study. In future studies it would be important to include top management more closely in the entire learning process, and not only as sponsors of the study, discussing how to sync the program with the overall organizational strategy, plan the process and provide the needed resources. Art-based methods can be scary for top managers because they put them in a situation where they lose their position of power and authority, and where they have to expose themselves in front of their colleagues as human. But it is only in this way that top managers can also discover the value of art-based methods and go through a process of change themselves.

Another challenge identified in the study in Eskilstuna municipality was that using the systematic approach where certain activities (workshops, reflection sessions etc.) are planned in advance, repeated several times in the same order, and where art-based methods are always combined with management methods, with a clear goal of what their purpose was in the context of organizational strategy, is that the space for artistic freedom and more radical exploration is limited. On one hand, the systematic approach is necessary to “sell in” long-term artistic interventions and communicate more clearly the strategic value of the intervention to the management, having some level of predictability or expected results. But on the other hand, in the future studies, other more open forms of engaging employees in art and art making could be tested. This would demand the
studies to be quite long, because in the beginning, it makes sense to start with a more systematic approach in order to slowly build trust in an artistic approach, and with time when people open up and become more ready to try out new things, more explorative formats can be tested.

One of the specific values that the dance-based approach contributes to designing artistic interventions in organizations, is that it gives embodied interaction between people a central role in this kind of processes, and in this way, increases the kinesthetic empathy of both employees and leaders (Biehl, 2017). It also offers choreography as a new approach to understanding and composing choreographies in work processes, and establishing new principles for collaboration in organizations that are in constant flux, motion, and negotiation (ibid.). This was also revealed in the study in Eskilstuna municipality where the use of the choreographic model in designing the entire intervention showed that participants started to use choreographic principles to support thinking in innovative ways about organizing their own daily work routines. From the reflection stories, it can be seen how they started to become more aware of and playful with the body, movement, physical space, and timing in new ways at work. Engaging the body also increased participant awareness of their own needs, feelings, and the conditions needed to become more innovative. In this way it brought innovation (something very abstract for them in the beginning of the process) closer to their everyday work routines and made them understand how they could use innovation to feel better at work, and become more creative and effective. It increased the feeling of ownership and intrinsic motivation for practicing innovation. This implies that another strategic value of using dance-based methods when designing and implementing art-based initiatives in organizations can be to increase ownership and intrinsic motivation of participants, which can support the change and innovation processes in an organization.

5.5 REVISED CONCEPTUALIZATION OF INNOVATIVE COMPETENCE INCORPORATING IDEAS FROM CONTEMPORARY DANCE

The last research question presented in the introduction was: How can innovative competence be conceptualized integrating embodied ways of learning that can enable more radical employee-driven innovation?

In the results chapter, a revised model of innovative practice of everyday work was presented, combining the insights from a systematic literature review on innovation competence, the results of empirical studies and relevant concepts identified in the literature study on choreography. The revised model focuses more attention on the individualized practice of innovating that is not centered around traditional steps in a linear innovation process. Participants shift from exploring, generating, championing and implementing
ideas, to drawing inspiration from the iterative practices of tuning-in, exploring, reflecting and composing. These activities are inspired by contemporary dance and are conceptually more open, with no clear, pre-planned outcome, but rather the idea of creating the right conditions for opening up to new potentialities and enabling something unexpected to happen, a necessary aspect of more emergent and radical innovation (Peschl and Fundneider, 2008; Scharmer, 2009).

Compared to the original model of innovative competence, the revised model is a bit simplified, focusing only on elements that showed to be relevant, based not on literature studies only, but also on empirical results. The enabling skills that are depicted as supporting innovative practice (see Figure 14), on one hand add embodied aspects to some of the existing skills mentioned also in innovation management literature (see Figure 11), for example suggesting that observation or giving and receiving feedback can expand if one uses the senses, feelings, and other types of embodied knowledge.

On the other hand, it proposes new skills inspired by the creative practice of contemporary dancers, such as slowing down, connecting within and sensing potentiality, which are not discussed so often in innovation management literature. These skills can help individuals become more aware of embodied knowledge that can expand their learning and knowledge creation, tapping into the bodily to explore the unknown, or sometimes simply notice things that are there but not often attended to. In this way they can, as dancers, establish relation with the potentiality of life as such, and numerous variations of possible materialized modes of being (Kline, 2016, p. 44), applying specific ways of engaging in innovation processes as a way of practicing “alternative life,” examining “not what we are but what we are not but could be” (ibid, p. 175). This can allow them to observe, contemplate and reconsider how they form their own perceptions, enabling another choice, sensibility, and knowing to take place (ibid.).

In this way, embodied knowledge can be used to help employees develop their innovative competence from a more exploitative attitude of continuously improving and optimizing current work processes towards more radical innovation. The challenge with the revised model of innovative competence is that it needs further testing in practice, with specific attention given to developing tools that can enable employees to not only become more aware of the bodily, but really extend the development and use of different types of embodied knowledge in their innovative practice. It would be interesting to more deeply explore embodied aspects of different skills described in the model, trying out new dance-based methods that could support their development. In the empirical study in Eskilstuna municipality and in the current study at Exspectrum, it became clear that when more explorative movement methods, which bring about unconscious material inscribed in the bodies are applied, it becomes not only harder for participants to translate this knowledge into their work context, but can be quite sensitive, because it evokes feelings and highly personal issues that people might not want to share in the work context. Once these feelings surface, there is a responsibility on the researcher and artists hosting activities to process the material in a way that prevents people from hurting themselves. This
can sometimes create situations that border on becoming therapeutic, which is not the original intent of such studies. Developing more knowledge about facilitating such processes where sensitive personal material is activated through embodied practices, finding the right balance, is a crucial aspect that needs to be given more attention in future studies.

5.6 EMBODIED APPROACH TO ACTION RESEARCH

Another interesting aspect of research presented in this thesis is that it opens up the methodological question of how a more embodied approach to action research could be developed in the future. It integrates levels of experience and learning by participants in the research process that are hard to express with words or capture with more traditional research methods. This is closely connected with further development of embodied methods for collecting and analyzing data, and the distribution of knowledge from the research processes that involve more tactile formats beyond just text. Although this issue was not included in the core research questions presented in the introduction, it emerged as a relevant question during the research process and is worth discussing and exploring further in the future studies.

There is a lack of research methods for doing “aesthetic research,” using artistic knowledge in organizations (Waren, 2008), as aesthetic experience can often not be broken down into language (Langer, 1957), and most aesthetic studies in organizations still focus on the aesthetic experiences of the researcher, rather than on those of organizational members (Warren, 2008). In the studies presented in the thesis, it became obvious that by using dance-based methods in the process, a more holistic learning and knowledge creation took place among participants. It engaged them not only on cognitive level, but also stimulated them to use their emotions, senses, the moving body, intuition, imagination, and will, helping them to explore ideas with the whole body and sensing future potentialities using the wisdom of the body. The following researcher in the Eskilstuna municipality study tried to record, on video, some of the movement exercises done in the workshops and then bring back parts of the video recordings to facilitate group reflections, analysis and interpretation of data, but it turned out that participants did not want to either be recorded or to watch themselves on the video, so these experiments were quickly abandoned. While different dance-based exercises enable a more holistic and embodied way of learning for participants that they found useful, the challenge still remains in terms of how this type of data could be collected and analyzed as it is highly subjective and hard to put into words, and consequently how results of such research can be communicated to others that did not directly participate in the studies in more multidimensional formats that go beyond language.

Pässilä et al. (2013), who use theatre-based methods in organizations, discuss how theatrical images and dramatic actions can be used as alternative methods for reflective inquiry upon attitudes, feelings, ideas, and relationship when using artistic methods in
organizations. According to them, theatrical images establish a distance between an actual experience, and emotions generated through these experiences, creating conditions for dialogue that brings forward tacit and self-transcending knowledge (which precedes tacit knowledge) on both the individual and collective levels (ibid). Pässilä et al. (2018) further developed ideas about methods beyond text, describing two experiments where data collected in studies was read out loud, and then researchers started to create images physically, beginning to move and embody their interpretation of the data, and to play with the data and let it speak in a more embodied way. When a particular physical image or movement attracted attention, it was repeated or further elaborated in an attempt to expand its interpretation and understanding (ibid.). This kind of embodied reading and analysis of data that researchers can practice in groups offers another layer of interpretation concerned with emotions, that can reveal new insights, for example about power relations and structure in the research process and the studied organizations (ibid.).

A similar thing happened in the study that is currently performed at Exspectrum where artists were provided data collected in the study and invited to do their own artistic research, spending time observing and interacting with people working at Exspectrum, inviting them in different kind of activities connected to their artistic practice. Based on this, they built a site-specific exhibition in the office space, problematizing different aspects of innovation in everyday work. The interactive artworks re-constructed some part of the office space and provided a platform to experience the office in a new way, sensing, seeing and reflecting about aspects of innovation that are rarely discussed in innovation management. In a way, the exhibition communicated research results in a more multi-layered way, engaging thought as well as senses and emotion through an artistic format. It also reached out to a wider audience that engaged not only the participants in the study and other people working at Exspectrum, but enfold new target groups that usually wouldn’t visit Exspectrum, including refugees, pensioners, children and teenagers, local companies, researchers and public officials from different municipalities. These visitors were invited on guided tours which were combined with group reflection and discussion about innovation in everyday work and the role of art.

Another interesting experiment that was part of the study at Exspectrum and provides a good example of how research results can be communicated in a more embodied way, was that one of the participating artist, choreographer Dejan Srhoj. He invited employees to develop choreographies around the typical movements they perform in their daily work. Watching each other dance initiated a lot of reflection about their work patterns, and when the choreographer asked participants to play with different qualities of movement, for example increasing or slowing down the tempo of their “work choreographies,” participants realized how they would feel if they changed the rhythm and intensity in their daily work. The effects of this experiment were expanded when participants did a sort of dance flash-mob during a lunch event in the office cafeteria, where they danced their “work choreography” for other people working at Exspectrum. This enabled them to communicate some of the research results in a very tactile or em-
bodied way that shocked the people working at Expectrum, as they suddenly saw their colleagues dance for the first time, which created an emotional response, but also led to reflections and conversations about their own daily work patterns.

In the future, it would be relevant to further develop embodied research methods both to facilitate learning for participants in the study, to collect and analyze data, and to share the research results through embodied formats that go beyond text.

5.7 THE TENSIONS BETWEEN BUSINESS AND ARTISTIC PARADIGMS AND A PROPOSAL FOR A MORE CRITICAL AND HUMANISTIC APPROACH TO INNOVATION

The last issue that will be discussed is that the research presented highlights an interesting tension which occurs when knowledge and methods from various disciplines, which have quite a different paradigmatic background, meet and how this influences the research results and the researcher. In this case the main area of research is innovation management, which still relies on predominantly positivistic logic, while theory from contemporary dance, used as inspiration, often uses references from critical theory and postmodernism (like Marx, Lacan, Deleuze, Baudrillard, Bourdieu, Foucault, Guattari, Negri, Butler, Lyotard, Zizek etc.). The tension arises from the basic premises or reasons for existence where arts and business differ. Companies are driven by the goal of maximizing shareholder value, and other organizations from the public sector often focus on solving some sort of user problem, aiming to maximize value and satisfaction of the user or citizen. Artists, on the other hand, want to open and problematize questions they find relevant in their art, but never with the aim of offering a solution, a final answer to a problem, or simply making the audience happier and satisfied by entertaining them. Instead, they open space for new ways of experiencing, perceiving, sensing, exploring and critically questioning the surrounding world.

My experience with inviting artists to work in the organizational context is that one of the first questions they pose is what the purpose of their work in an organization is. They often problematize that they don’t want artistic knowledge and methods to be (ab)used for the purpose of maximizing profits or offering instant recipes, tools and solutions. However, they might be interested in providing a platform for new ways of thinking, experiencing, and sensing for employees that will create the conditions to question and reflect about established norms and systems, enabling exploration of alternative possibilities.

Artists I have worked with in organizational contexts also prioritize the people we worked with in our studies before organizational goals, trying to understand and respond to what they felt was relevant for participants in the process, and engaging with
them primarily as people and not as employees or tools to achieve someone else’s goals. In this way artistic methods have always created quite a personal way of working with organizational issues, such as innovation, taking into account people’s needs, feelings, and motivations. They have turned attention from working towards external expectations of developing new processes, products and services, towards the question of why the people who were participating in the process needed to innovate in the first place. Artists contributed to a more human-centered way of working with innovation, where innovation is for people first, and not working against them.

During my more than ten years of experience working with different organizations, I have observed that this is often not the case in business. People are often so busy trying to convince themselves that they need to innovate to survive, compete and grow that there is often very little time to stop and reflect. I’ve seen people taking part in the studies struggling to take the time to be kinder to themselves and engage in proposed activities to improve their own conditions for work, because they were so stressed by their daily or weekly performance goals that it even led them to burn out sometimes - I asked myself what kind of innovation I want to enable and to stand for.

Using art-based methods in innovation has thus brought about important existential questions about the meaning of work and innovation for me and others involved in our projects. It has contributed to a more humanistic and participatory way of working with innovating from within, challenging each participant in the process to start practicing innovating for themselves first. To innovate her or his own ways of working, to sync them more with their own needs and drives, and to create better conditions for experiencing flow, creativity, fun, and meaning at work.

This might sound naïve, but I think using dance-based methods in organizations can help people both to dare pose more critical and reflective questions about the meaning of innovation and hidden aspects of innovation that are often not discussed in organizations, but also to immerse in explorative processes more fully, using the capacity of the whole body to innovate around questions that really matter – not only to top management or company owners, but also to themselves and society. Contemporary dance can thus hopefully enable a more critical and humanistic approach to innovating that can make our lives better or at least enable us to envision potentialities of life we have not experienced yet.
CONCLUSION

I sit on a bench in the park close to my house, my arms spreading out, feeling the warmth of the wood beneath them. I close my eyes and let the fingers of the sun gently caress my skin. I can hear the water from the lake nearby, drops from a fountain bursting into the sky, then tumbling down, being caught by the lake. People are passing by, their feet talking to the sand on the path spiraling around the lake. Some steps have fast and slightly nervous voices, others more slow and low-pitched. I listen to my breathing and to sensations in my body. I feel calm and relaxed after my morning walk. I open my eyes and observe the new yellow and violet flowers that started to bloom in the park since I was here last time. I see the little, puffy ducks, following their parents still with insecure steps, trying to find something to satiate their hunger in the grass. I realize that some years ago, when I began my PhD, I wouldn’t be in a park at this hour of the day. It is 9:30, time to be in the office. But during these years, I have learned that one of the things that helps me write is to take my mind for a walk or some kind of detour before I start writing. I have developed my personal practice of tuning-in to the writing process. I reflect back on the years before my PhD, and notice how things have changed for me, due to my own research process and personal experimentations in my everyday work. I have become kinder to myself, softer. Allowing myself to be vulnerable, not just in private life, but also at work. More present. Closer to my needs. And more playful and explorative. I never cared so much what others thought, but now I allow myself to do more unexpected things even in rigid environments, (as the office often is). I may make funny faces at my colleagues, or sing and dance in unexpected moments. I might lay or sit on the floor while others stick to their desks. Maybe I come with a little game for a meeting, or suggest going out, and doing walk-the-talk instead. I take a course with a choreographer who teaches me her dream techniques, helping me connect with images coming from unconscious material in my body, which I then use as creative input for my writing process. I have developed my own approach to innovating in everyday work, a personal innovative practice. But the work has just started and there is so much more to learn.

Looking back at the studies done during my PhD process, I can conclude that methods from contemporary dance might not suit everyone. They do demand a certain level of curiosity, openness, and daring to go into unknown (where they may potentially con-
front their own inner fears and insecurities). But these methods also connect us with the richness of our fantasy, feelings, creativity, ability to experience joy and playfulness, and help us discover new ways of expressing ourselves beyond language. Connecting with our core-selves and our colleagues on a more human level. While it is easier to control the image we want to project into the world through language and speaking, the body is more revealing; we might feel exposed when we dance. So although knowledge from contemporary dance might not be seen as useful by everyone, and cannot provide a universal formula or recipe for managing innovation in organizations, it can definitely provide a new set of tools, and a new frame of thinking about innovation.

It suggests that rather than aiming at creating a pre-set recipe for becoming innovative, dance can teach us a lot about creating the conditions for innovating in a more holistic way, finding a balance between using our cognitive skills and embodied knowledge, and discovering our own personal approach to innovating in everyday work. Working with choreographers, and using dance-based methods has helped me sharpen my own focus and approach to innovation management. I now dare to be more critical, and ask managers why they do things the way they do, sometimes posing uncomfortable questions. It also allowed me more insights into the enormous potential of the wisdom hidden in our bodies, and how it can expand our creativity in innovation processes. This is an area so complex that I can continue to research and learn more about it for the rest of my life. It has also made me more curious about how we can organize work in more meaningful ways based on bottom-up principles of self-organization and improvisation, that give more freedom and power to everyone in an organization to decide and co-create, engaging them holistically, and helping them find a shared higher purpose that can inspire us in everyday work.

All of us have discovered the world around us through movement. All of us have probably loved to dance when we were kids. There is no society in the history of humankind that hasn’t danced. There is something primal in dance that connects us with our core self and the joy of life, but as we age we often become more stiff and controlled, as if putting on a protective coat. For me, nothing is better than to end this thesis with the hope and thought that dance can help us take off a layer of that comfortable protective coating, allowing us to get closer to who we are, and to lead a more meaningful life.
7
REFERENCES


Berardi, F.-B. (2013). *Dusa na delu (Soul at work)*. Ljubljana: Maska.


All original photographs in this thesis were taken as part of the two empirical studies by Elisabeth Helldorff and Nina Bozic Yams