

Culture for Radical Innovation: What can business learn from creative processes of contemporary dancers?

Nina Bozic

Mälardalen University

Bengt Köping Olsson

Mälardalen University

Abstract

Organizational culture is considered by several scholars to have a significant impact on the organization's capacity for innovation. However, there is little known about the specific aspects of organizational culture that facilitates radical innovation. This article investigates in what ways contemporary dancers' creative practice may contribute to our understanding as well as to the development of radical innovation in business. By interviewing twenty contemporary dancers and choreographers from different countries, we found five key elements that support their creative processes from idea to performance. These elements or categories are improvisation, reflection, personal involvement, diversity, and emergent supportive structures.

An interesting finding is the dancers' approach to work and their mindset, characterized by iteration between improvisation and reflection, rather than working with pre-planned goals and structures. We argue that this approach imprints their working environment and the culture for radical innovation emerges through their way of thinking, acting and relating. This study presents a systematic framework that will provide the basis for long-term strategic artistic interventions in business in order to enable cultural transformation towards radical innovation.

Culture for Radical Innovation: What can business learn from creative processes of contemporary dancers?

In innovation theory it is generally agreed that organizational culture has a significant influence on organization's innovation capacity (McLaughlin et al., 2008; Dobni, 2008). Shweder and Sullivan (1993) define culture as "those meanings, conceptions, and interpretive schemas that are activated, constructed, or brought on line through participation in normative social institutions and practices" (p. 512). Culture is thus a way of thinking that establishes in a group through interaction and importantly influences the way people act and relate to each other in a group or organization.

Different kinds of culture are needed to support different types of innovation, namely continuous improvements or radical innovation. Whilst a large proportion of the existing empirical research has concentrated on incremental innovation or innovation management in general, there is little known about the specific aspects of organizational culture that facilitates radical innovation (McLaughlin et al., 2008).

We believe that business could learn a lot about developing explorative culture needed to support radical innovation from artists. Many authors have written about the beneficial effects of using knowledge, principles and techniques from art in the business context, amongst others to stimulate creativity and innovation (Austin & Devin, 2003; Adler, 2006; Barry & Meisiek, 2010; Darsø, 2004; Guillet de Monthoux, 2004; Ladkin & Taylor, 2010). Despite this extensive research activity few studies seems to focus specifically on how to use insights from art to develop culture for radical innovation in companies and in other types of organizations.

In our empirical study, we tried to look into creative processes of contemporary dancers to understand how they move from ideas to a new performance and in what way members of contemporary dance groups think, act and collaborate in order to support the creation of something radically new in their work process.

While analysing the data from a series of semi-structured interviews that were done with different choreographers and dancers, a framework around the key elements of explorative culture emerged. To a large extent the concepts of this framework confirm and coincide with what several authors in the field of innovation define as key instruments for developing culture for radical innovation in companies (Daniels, 2010; Dobni, 2008; McLaughlin et al., 2008; Peschl & Fundneider, 2008, 2012). On the other hand the framework also gives new insights into core aspects of explorative thinking, acting and collaborating in groups. Additionally, it provides a starting base for developing a more systematic method and process to train business teams in explorative thinking, acting and collaborating to create culture for radical innovation.

This article starts with a theoretical background related to concepts of creativity, innovation, organizational culture for innovation, and the benefits of using arts in business. In the second part an empirical study within the field of contemporary dance is presented, including methodology and results. In the last part it is discussed how the framework about creative practice of contemporary dance groups compares to findings about culture for radical innovation in innovation literature. Different ideas and insights that dancers bring to business in this field of research are presented, and practical implications for business proposed. The article ends with a discussion of challenges for the future research.

Theoretical background

Creativity and innovation

In the mainstream literature on creativity and innovation it is common to define creativity as the production of novel and useful ideas in any domain and innovation as the successful implementation of creative ideas (Amabile et al., 1996; Mumford et al., 2002; Oldham & Cummings, 1996; Shalley & Gilson, 2004; Schepers & Van den Berg, 2007; Woodman et al., 1993). It is also widely accepted that creativity of individuals and teams is a starting point for innovation (Isaksen & Tidd, 2006), but while creativity is a necessary condition for innovation, it is not sufficient because successful implementation of creative ideas depends on different factors. One important factor usually stressed in innovation is to create a novelty that adds value (Crossan & Apaydin, 2010). But value we create with innovation will vary across different fields, for example among business, science, art or the social arena.

In the arts, the concept of creativity is much more commonly used than the term innovation, while business is usually more interested in innovation as a result of applied creativity that creates value for customers, business partners, or other stakeholders. Although artists usually do not talk about innovation in relation to their work (Elam, 2012), we believe that through developing new artistic products (such as performances and other types of artworks) they continuously successfully implement creative ideas, and thus produce innovations. But success factors and the value created in their case are differently defined than in business. For example, instead of looking at increased profitability or lower costs produced by innovation, choreographers we interviewed in our empirical study stressed that they would look at what the group has learned in the creative process. They would also evaluate their work by questioning if new things were tried out in the process, and how the collective changed, developed or moved to another level of communication and consciousness. They would explore if there is coherence, substance and integrity in the work, and how the audience relates to the work - how the work reaches spectators, either on emotional level, by steering new questions, or in some other way.

In our research and understanding of creativity and innovation we will detour from the mainstream literature that focuses mainly on the final product and the creator (Müller, 2012) and will focus on three other aspects that we find particularly interesting when studying creativity and innovation. One is that we are interested in creativity and innovation from a group perspective and not so much in the creative genius of individual inventors. The second is that we are looking into creativity and innovation from the perspective of the process and not so much from the perspective of the final product. And last, we are interested in the creative practice of making things which encompasses the dynamics of thinking, acting and relating to each other that emerge in the group through practice.

Peschl and Fundneider (2012) state that "knowledge processes are always embedded in social processes" and that "social interaction is a *conditio sine qua non* for the emergence of (radically) new knowledge in a collaborative setting" (p. 50). They also refer to Kelley (2004) and other authors (Leonard & Swap, 1999; Paulus & Nijstad, 2003) who have shown that "social groups are essential for bringing forth innovation and new knowledge" and that "the time for individual mavericks is over in the context of innovation" (Peschl & Fundneider, 2012, p. 50).

We concur with Peschl and Fundneider which is why we put specific emphasis on the group dynamics, practice and process that enable the creation of new knowledge and innovation. We do not focus on the individual, following the understanding of creativity as "creation", which discerns the product from person and process and is still dominating the mainstream literature in organizational creativity (Müller, 2012).

If we look at the two traditions in creativity, one focused on "creation" and the other one on "creating", we can see that the first one is reading creativity "backwards" through its products, judging it by the novelty of its outcomes, and the other one is reading creativity

“forwards”, through its processes and practices (Bucciarelli, 2002; Ingold in Müller, 2012). We are especially interested in the latter, since it invites us to look at the processes of creating and sees creativity as a practice where people, product and process are not only interacting but are closely interrelated and co-constitutive (Müller, 2012).

Woodman et al. predicated in 1993 that “researchers still know surprisingly little about how the creative process works, especially within the context of complex social systems” (p. 316), which is in some way still true today, as there have been few attempts to develop theory around the practice of creating (Müller, 2012). This is why we believe that our empirical study can give new insights into artistic creative processes which could be applied in business to develop culture for radical innovation.

Exploitative, explorative and emergent innovation

The existing research shows that organizational culture has a significant influence on the propensity of an organization towards innovation (Tidd et al. in McLaughlin et al., 2008; Dobni, 2008). But different types of culture are needed to support different types of innovation (McLaughlin et al., 2008).

The most classical approach in the innovation field is to distinguish between incremental and radical innovation, which builds on the concepts of exploitation and exploration framework of James G. March. March (1991) defines exploitation of old certainties with things as refinement, choice, production, efficiency, selection, implementation and execution. On the other hand he defines exploration of new possibilities in terms such as search, variation, risk taking, experimentation, play, flexibility, discovery and innovation.

Incremental innovation is thus based on the principles of exploitation and focused around minor changes and optimisation, while “the underlying core design concepts and the links between them remain the same” (Henderson in Peschl & Fundneider, 2008, p. 102). Radical innovation, on the contrary, is focused on exploration and on more profound changes of core concepts and base principles that imply radical changes in structure, society, product, service and context (ibid).

Peschl and Fundneider (2008) propose that besides incremental and radical innovation there is a third alternative which they define as emergent innovation. They talk about five levels and strategies of dealing with the challenge of knowledge creation and change in relation to incremental, radical and emergent innovation. The first level is “reacting and downloading”, which is the simplest way of reacting to change by downloading existing solutions, knowledge and patterns. The second strategy is called “restructuring and adaptation”, and corresponds to incremental innovation since the focus is on slightly adapting and changing existing knowledge and patterns by optimising them. The third level is “redesign and redirection” and focuses on exploring one’s own patterns of thinking and perception as a starting point of becoming able to take different standpoints and create new knowledge. The fourth strategy is called “reframing” and is the basis for radical innovation because it enables us to step out of our deep assumptions and reframe existing knowledge by changing our mental models. The last, fifth, level is called “re-generating”, profound existential change and “presencing”, and is connected to emergent innovation. Here the change is not only cognitive or intellectual, but touches more fundamental questions of finality, purpose, heart and will, and is thus existential. This emergent approach to innovation “does not primarily learn from the past, but shifts its focus towards ‘learning from the future as it emerges’” (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” (p. 105). The existential level of the person and the organization/society is brought into a status of inner unity/alignment with itself and with its future potential as well as with future requirements (p. 105).

In this article we will focus on radical and emergent innovation and on how to create the right conditions for them to happen, especially in terms of how groups should think, act and collaborate to support radical innovation and change. The concept of emergent innovation by Peschl and Fundneider (2008) is especially interesting for our research, because it proposes that instead of regime of control and forced change (which is common in business), radical change and innovation will rather happen through emergence and existential change from within. This can be supported by an ecosystem of cultivation, facilitation, incubation and enabling (Peschl & Fundneider, 2012). According to Peschl and Fundneider the enabling space that supports innovation processes and activities should be designed as a multidimensional space, integrating physical, social, cognitive, technological, epistemological, cultural, intellectual, emotional and other spaces (ibid).

Culture for explorative and emergent innovation

There are many definitions of culture, but for the purposes of this research we will refer to Shweder and Sullivan's (1993) definition of culture because it stresses its emergent nature (Sawyer, 2005) and defines it as "those meanings, conceptions, and interpretive schemas that are activated, constructed, or brought on line through participation in normative social institutions and practices. ...(Culture) is a subset of possible or available meanings, which by virtue of enculturation ... has so given shape to the psychological processes of individuals in a society that those meanings have become, for those individuals, indistinguishable from experience itself" (Shweder & Sullivan, 1993, p. 512).

We understand organizational culture as ways of thinking, acting and collaborating that emerge through dynamics of interactions of organizational members who influence and co-generate culture but are at the same time influenced by it. Or as Linstead (1993) states, "culture is continuously emergent, constituted and constituting, produced and consumed by individual subjects who are sites where influences converge" (p. 86).

Different authors describe the key elements that are needed to develop organizational culture for innovation. Some of the most common aspects of culture that supports innovation mentioned in the existing literature are freedom and autonomy, risk taking, strong teamwork/collaboration and close connection with customers and other external sources of ideas and knowledge (Daniels, 2010; Dobni, 2008; McLaughlin et al., 2008). Additional characteristics of culture that supports radical innovation are the curiosity and constant exploration of new ideas and solutions, creativity, trust and respect, confidence, and entrepreneurial attitude (Daniels, 2010; Dobni, 2008; McLaughlin et al., 2008).

Radical innovation will thrive in an informal, loosely structured, decentralised and heterogeneous organization (McLaughlin et al., 2008) with free flowing information (Daniels, 2010), where objectives are clearly defined but ways for achieving them are very open and there is just the right amount of resources, "not too much" and "not too little" (McLaughlin et al., 2008).

Peschl and Fundneider (2012) describe an alternative set of attitudes, values and habits that are needed to enable emergent innovation which is the basis for radical change and innovation. They underline the importance of openness, reflection, and the ability to radically question ourselves and to let go off the existing patterns of thought and behaviour. Furthermore, observation and listening, patience, availability/perceptiveness and the ability to wait for the "right moment" and follow the flow of reality are important. Besides the specific attitudes and values, a supportive environment is needed for innovation, which they call enabling space and is based on cultivation, facilitation, incubation and enabling (ibid).

Later on we will look at how this variety of qualities pertaining to culture for radical and emergent innovation and proposed by different authors from organizational science

compares with the qualities of contemporary dance practice observed in our empirical study.

Art as inspiration for innovation in business

Austin and Devin (2003) claim that since business became more dependent on knowledge to create value, and knowledge work adds value in large part because of its capacity for innovation, work became more like art. Managers should thus look at how artists work and be inspired by their collaborative models instead of applying the more traditional management models in order to create economic value in the new century.

Increased importance of knowledge and ideas and other trends in society are encouraging business people to look more closely at artistic practices and learn from them. Adler (2006) explains different reasons why art is becoming more relevant for business. In the world of rapidly increasing global interconnectedness, and complex and chaotic environment of fast change, continuously improving existing products and processes and increasing efficiency is not good enough. But creating the next great thing demands constant innovation. And this is not just an analytical or administrative function, but a design task. Such creativity has been historically the primary competence of artists, not managers (Adler, 2006).

As companies are shifting from hierarchic structures to more networked and multiorganizational structures, collective collaboration across networks locally and globally became more important. Artists performing in ensembles (actors, dancers, and musicians) who have developed team-based collaborative skills to a much greater extent than most managers, can thus be an inspiration for business to develop more collaborative environments (Adler, 2006).

In an unpredictable business environment, the ability to improvise also became important for an organization's effectiveness. Core skills are shifting from sequential planning-then-doing to simultaneous listening-and-observing-while doing (Kamoche et al., 2002). Trust and supporting each other in the team are also important for successful improvisation, which is why managers are increasingly learning from improvisational actors, dancers and musicians to incorporate more spontaneity and improvisation in their work (VanGundy & Naiman, 2003; Olsson, 2008).

These and other trends have caused a growing interest in the potential relevance of artistic knowledge, methods, and activities for business. Notions such as "creative economy", "artful management", and "leadership as art" have attracted increasing attention among academics, practitioners and policymakers (Koivunen, 2012). Organizational interventions inspired by art have become more popular and more researchers started to document and study the beneficial effects of using knowledge, principles and techniques from art to stimulate creativity and innovation in business (Austin & Devin, 2003; Adler, 2006; Barry & Meisiek, 2010; Guillet de Monthoux, 2004; Darsø, 2004; Ladkin & Taylor, 2010).

Art can be applied in different ways in the business context (Darsø, 2004). The oldest and the simplest form of art in business is to use arts for decoration by buying artistic works and exhibiting them in the working environment. Another approach is to use arts as entertainment, for example by inviting artists to perform in different types of business events or by giving employees free tickets to participate in artistic events in their free time. The third form of applying arts in business is to develop skills in specific areas, such as teambuilding, communication, leadership, problem solving and innovation. The last and the most complex level of using arts in business is when organizations integrate arts on strategic level and through a long-term collaboration with arts enable processes of transformation. This can happen on different levels, such as personal development and leadership, culture and identity, creativity and innovation, and others (ibid., p. 14-15).

Although short-term artistic interventions and arts-based training programs are becoming more common in companies, the long-term use of arts in business on strategic level that has transformative effects is still very rare. In this article we are presenting a systematic framework based on our empirical study in contemporary dance that could be used for long-term strategic artistic interventions in companies that would enable cultural transformation towards more radical and emergent innovation.

Methodology

The empirical study was done through a series of semi-structured interviews with twenty contemporary dancers and choreographers from seven different countries, of which 60 percent were women and 40 percent were men. The average years of professional experience as choreographers they had was 13 and the average age of interviewed choreographers was 35. The average length of interviews was one hour and 15 minutes.

Interviews were centered around four key questions. In the first question choreographers were asked to describe how their creative process from idea to new performance in a group usually looks like. The second question was about how the group thinks, acts and relates to one another in order to support the process of creating a new performance. The third question was about their understanding of the role of choreographer in creative process and the last one about the tools and exercises they use in order to support creative process. Choreographers were asked to openly talk about these four topics, while the researcher had prepared also a list of sub questions that could be used to gain additional data from choreographers during the interviews. After the first few interviews it was decided not to use the pre-defined sub questions, but rather focus on what the interviewees were saying and then pose sub questions in relation to the concepts that seemed most relevant to the interviewees. In this way a conceptual framework could be built from empirical data and not stirred by the existing assumptions of the researcher, following the research principles of the grounded theory approach (Glaser and Strauss, 1967).

After the interviews were transcribed, the data was analyzed by reading each interview several times and identifying key words and concepts which were eventually tagged as categories when they appeared more than one time in different interviews. These categories were then ranked by the number of times they were mentioned in different interviews, and subcategories were ascribed to the bigger categories. After analyzing how different categories related to each other, categories were grouped in five main groups and tagged with macro categories. In this way a conceptual framework about explorative culture progressively emerged based on analyzing empirical data from the interviews.

We would like to mention some specifics of the data collection that might have influenced results of the empirical study. The first limitation is that all choreographers we interviewed work and live predominantly in Europe and as such represent a specific view of contemporary dance and work principles within the field. It is also important to note that the way interviewees were selected was connected to the fact that they work in Sweden (where the authors of this article are based) or that they participated in two events in which one of the authors took part in - in the international contemporary dance [festival PLESkavica](#) in Ljubljana, Slovenia, in June 2011 and in the annual meeting of [Nomad Dance Academy](#), which took place after the festival PLESkavica in Ptuj, Slovenia. Nomad Dance Academy is an education, research, production and promotion program that aims to contribute to improvement and professionalization of contemporary dance scene in the Balkan region. All the choreographers we interviewed are free-lance performers and choreographers and work on the project basis and in different countries. This means their views might differ from the bigger and more institutionalized dance groups that employ dancers for longer periods of time and thus work with the same group during several years. But there are rather few institutions like that in contemporary dance field, where

the free-lance way of working is predominant, so most dancers and choreographers move from project to project, working with different groups of collaborators. We also interviewed only those dancers who are also choreographers, so the view might be different if we interviewed dancers who only work as performers in others' artistic pieces. All the choreographers we interviewed, though, have the experiences of working as performers in others' projects and also act as dancers and performers in their own performances. Almost none of them is taking the traditional role of choreographer as someone who is directing from the outside. They rather see themselves as co-creators of their artistic work which they usually develop in collaboration with other artists they invite in creative process.

Although there are some specifics in the selection of interviewees, we believe that the interviewed choreographers represent a wide and rich pallet of experiences and views, genders and age groups, coming from different cultures and all of them having professional and educational experiences from different European countries.

In this article we use a lot of empirical data from the interviews, including the quotes of choreographers which serve as illustrative elements of the more abstract conceptual framework we are presenting. The quotes are direct transcriptions of what choreographers said in the interviews. Only small language changes have been made to avoid grammatical mistakes, otherwise the same words have been kept to maintain the tone expressed by the interviewees.

Results

We understand and study contemporary dance groups as dynamic complex systems (Sawyer, 2005). They are usually relatively small groups of two to six dancers that form around a common idea or project and dissolve when the project is over. They are open systems and sometimes it is difficult to define a strict boundary of these groups because although the core group of choreographer and dancers is clear, there are usually other collaborators in the process. These could be musicians, light, set and costume designers, dramaturgs, producers and others who participate in the process and can importantly influence the dynamics of the group but are not there during the whole process. This network of actors thus collaborates through an iterative process that cannot be understood using linear laws. It is also not possible to understand the system by studying separately individual members of the dance group because the whole dynamics of the group emerges from the interaction of actors in the system. This is why in order to understand how contemporary dance groups function as complex social systems, we have to study simultaneously individuals, dynamics of interactions among them and the patterns that emerge on the group level through these interactions (ibid).

In this article we will focus on the way of thinking, acting and relating to each other that emerges through collaboration of group members and is characteristic for contemporary dance groups. The five main elements of the creative practice which supports dance groups to move from idea to a new performance are based on the analysis of our empirical data and are improvisation, reflection, personal involvement, diversity and emergent supportive structures. These five elements are presented in the conceptual framework in Figure 1 in different colours. Each of them has different subcategories that describe it. In the following section we describe the five macro categories of the framework and their subcategories.

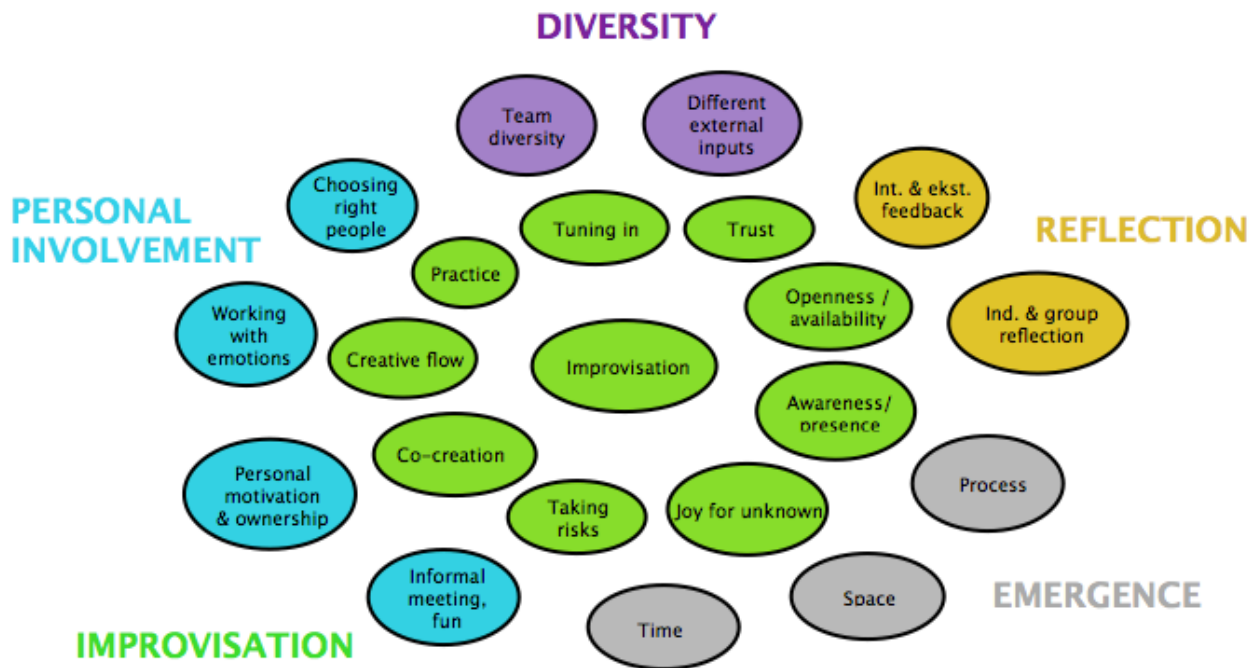


Figure 1: Five key elements of contemporary dance group practice

Improvisation

Improvisation was the only concept that was mentioned by all choreographers we interviewed as an important part of their creative process and thus became the central concept in our framework. By improvisation we mean that choreographers interviewed sometimes use improvisation in order to create performance material during creative process and they also sometimes improvise on the stage as a part of their performances. But most of all we are describing improvisation as a way of thinking, acting and collaborating in the group as a key strategy of working during creative process (Olsson, 2008). Improvisational way of working is based on certain principles that dancers described as important part of their creative processes and will be described in the following section.

Tuning in. In order for the group to improvise and work creatively together, the group has to first tune in. Tuning-in or warming-up allows everyone in the group to switch-off the existing thoughts and worries and brings people in connection with themselves and with the other group members. It quiets down the mind and helps the group members concentrate on the work. It opens up people and supports them in becoming more susceptible, feeling themselves and connecting with other people in the group on another level. A different kind of relation starts to be possible, and people start to have more trust. Tuning in can be done in many different ways, it could be by being in silence for a while, through meditation or massage, by having a group coffee and dialogue, through a very physical warming-up class or by doing different creative exercises, depending on the needs of the group in each particular moment or stage of the process. As one choreographer said:

Tuning in is important to quiet down the mind, so that the mind can start to focus and concentrate more on the work or starts going into communication with the subconsciousness, so that you can much more easily open to improvisation. (interviewee 10)

Trust. Before artists can be creative and try out new things together, taking the risks and going into unknown improvising, it is important that there is a feeling of trust that develops in the group. As one of the artists said:

Trust is really important. The idea that although I do not fully understand where the other person is going, I do trust him or her enough to try it out. In the sense that I do trust that there is a thought behind and that this person is going somewhere. I think that is crucial. (interviewee 2)

Since art is a risky business and dancers enjoy to work with high levels of ambiguity, not knowing what will happen in creative process, it is important that they first trust themselves. This helps them to deal with the unknown and with the inner critical judgment. It enables them to just follow, accept and work with what there is in each moment. This is important both for each individual and for the group. In this sense the group members have to trust not only themselves and each other, but also the material that is emerging through group interaction. Because although at times the material might look boring and it feels like nothing real yet, sometimes it is from the most boring material that something interesting comes out. One of the interviewees said:

It is important to trust the material, to not force things to happen, but to always be delighted at it. (interviewee 3)

The tricky thing with trust is, though, that it might take time to gain it, but it can be lost in a moment and it is very difficult to gain it back once you have lost it (interviewee 4). This is why the choreographers said that it is extremely important not to abuse the power they have as choreographers but to act as equals to everyone else in the group. To really mean what they propose and to share their own vulnerabilities with the group helps others in the group to open up, share and build trust.

Openness and availability. Another important principle in improvisational work is that the group members need to have a very open mind and a body that is not blocking or judging. This is why it is important to un-learn existing patterns of thinking and behaviour in order to create a feeling of empty space that can be filled with new things (interviewee 8). As one of the performers illustrates:

I always try to forget everything that I have learned. I never try to repeat something that I did before or something that I have already learned. (interviewee 9)

Improvisational work creates pathways that enable you to draw away from the existing pool of knowledge that you have (interviewee 7). It is important to make yourself at disposal of things that come and to be able to recognise them. Because often we get so involved in the creation or the feeling of responsibility that we have to produce something, that we do not see when things come to us (interviewee 8). This feeling of availability is in a way like trying to recreate a child-like state where you try to learn from the nothingness, from the scratch, being a body that does not know.

High sense of awareness and presence. In order to be available for things that happen in improvisation, group members have to also develop a high sense of awareness of themselves and other group members, creating new things in the moment, reacting to each others' suggestions and building on them instantly. They have to sharpen their listening, as one of the choreographers explains:

It is looking for an answer together and it is a process of a lot of listening, listening to words but also listening to what the other is proposing and seeing where that is going and reflecting together. (interviewee 2)

This high level of presence and awareness of what is going on right now in this moment, following what is happening to you, and insisting in it, can become a key strategy for working:

When I work with people, I first say to them: work with what you have and what you are. And secondly, don't focus so much on what you do, but on what you do with what is happening to you right now. (interviewee 4)

Joy for unknown. Creating in the moment and not knowing what is coming next also demands that we do not get scared of the ambiguity, but that we actually like the fact of surprise, of the travel into unknown. And some of the interviewed choreographers said that improvisation is at the core of their work exactly because they like not knowing what is coming next. One of the dancers said:

There is something connected to creative process that is always travel into unknown, like constant traveling into the unknown. And there has to be some joy and wish to travel into the unknown. It is really important that this darkness or this blurry picture in front of you doesn't scare you, that you are in peace with the unknown. (interviewee 8)

This is why most of the choreographers we interviewed allow a lot of open space for exploration when they come into the studio. They might have some ideas and proposals for the group, but they allow also that everything changes in the process, depending on the needs of the moment.

Taking risks and failing. An important part of explorative way of thinking and acting in improvisation is also connected to taking risks. If artists want to create something new, they need to take risks and try out things they have never done before. As one artist said, to access creativity, you need to be able to take risks (interviewee 7). And risks can be taken in many different ways. For example, by doing something you have never done before, by trying a medium you have never used before, by working with people you have never worked with before, or by taking radical decisions that you doubt a lot. Sometimes taking risks can also mean that you are not sure about something but you feel that it is the right thing to do or that you just want to try it out (interviewee 1).

Another important aspect of taking risks is to allow yourself to fail. And failure or making mistakes is a normal part of improvisation. One choreographer argued that there is no failure in improvisation because there is no right or wrong (interviewee 2). So it is more about trying out different things and seeing what you want to take further in the process. And a lot of things that come out in the process will be thrown to the garbage, which is just a step on the way of exploring and learning (interviewee 3). Another dancer said that failing is important also because it is many times in the failure that the most unexpected ideas happen (interviewee 1).

When interviewing choreographers it seemed that they find risk exciting, playful and as something that allows you going out of yourself, and not being you, but the other. Without risks, they said, art does not exist, but rather becomes a handicraft:

You need to have the ability to let your ideas fly - to take the risk of not knowing always where you are going. Because if you don't take risks, it becomes a handicraft rather than art. (interviewee 2)

Co-creation. Another important principle of working in contemporary dance groups that is a pre-condition for successful improvisation is the notion of co-creation. Everyone in the group needs to actively participate in creative process and co-create with others. A lot of choreographers talked about collective work, co-authorship and collaborations. Many choreographers said they do not like the word choreographer because it implies authority,

and rather perceived themselves as some sort of facilitators or catalysts. All choreographers we interviewed both choreograph and dance in their artistic pieces, which blurs the boundary between dancers and choreographer, who was traditionally somebody outside of the group performing on the stage. Choreographers often said that they like to collaborate with other makers who also create their own art and whom they find interesting as artists, so there is no hierarchy in the group.

The co-creation works in a way that everyone is sometimes proposing and leading and sometimes following. It is very much about supporting each other and recognising the potential of each others' proposals instead of criticising and saying what is good and what is bad:

It is a supportive process in which you can propose in some way and the other person can support the proposal by changing it, actively and positively, not by saying that it is not good but by proposing something rather than criticising. (interviewee 2)

So the positions or roles are constantly shifting and iterating, and at one point someone is on the stage and the other is directing and then somebody else is directing - it is as if roles travel around the group. In this process it is not important who proposed what, because the material is co-owned. As one dancer beautifully said:

Material doesn't really belong to anyone, because everybody is dreaming together a piece into existence somehow. (interviewee 10)

Creative flow in the group. When the co-creation works well, there are moments when the group reaches a feeling of creative flow and:

It is like a birth giving moment to the act of creation which is very often pre-conscious, not unconscious. I think a lot of times it comes out of this random access to information that we then suddenly connect consciously and we do combinations of things that nobody would combine. (interviewee 7)

The role of choreographer is in a way to create the right conditions for the creative flow to happen in the group and for different perspectives to meet, dialogue and merge. As a result, new ideas and strategies for living are born (interviewee 4).

In moments of creative flow one forgets about herself and is absorbed in the action of creation. There is a high sense of presence, but at the same time it feels as being out of the body and being part of something bigger than yourself. One dancer said it is for these magical moments that she dances (interviewee 1).

Building practice. But the magic of creative flow in improvisation does not happen without hard work. The group needs to build its improvisational practice together through a lot of trying out and exploration. As one choreographer explains:

Practice for me means the field from which I enter into experiential field. If you put practice together with improvisation and experiment, practice has been something that is more close to learning and not studying. Trying out and experimenting are important to build your practice. I always say that creativity has to do with ongoing learning process. Creativity is like a motor through which the brain expands its capacity. And I find that in creativity the practice means I can find much more. (interviewee 7)

Working based on the concept of practice means that the research and questioning is going on all the time and the performances are like photographs or slices of the ongoing

creative process (interviewee 2). One needs to come to the studio, day by day, building his or her practice through continuous learning and experimentation.

Reflection

Opposed to a common way of understanding innovation process in business as a linear stage gate process, following different stages, from generation of ideas, selection of ideas, development of ideas to commercialisation of ideas, dancers look at creative process as an iterative process. They constantly shift between generation and exploration of new ideas and reflection about the material they created. And these shifts might take several turns within each day. Because creativity has to do both with producing and being able to reflect (interviewee 7). As one dancer said:

Art doesn't happen without reflection. The key is that it is not just reaction, it is reflection - and this is a condition for art to happen. (interviewee 4)

Reflection helps dancers move forward towards the final product in creative process. It is practiced both individually and in the group in order to look back at improvised material and understand what happened, why, and what this means to the dancers. An important part of reflective practice is also giving and receiving feedback. Feedback is given both one-on-one and within the whole group. Sometimes the group also invites external people to watch the material and give feedback as a part of creative process.

Dancers often use camera to record their creative process and to be able to look at it and reflect upon it. There is usually such a variety of thoughts, styles, movements and ideas, that it would not make sense that it is only the choreographer who is standing outside and giving feedback. Everyone dances and then needs to see themselves and get surprised (interviewee 8).

When giving feedback to each other, choreographers stressed that it is important not to stay in yourself, criticising what you disliked, being busy with yourself. It is important to be able to tune into the other person and to recognise the potential in this person's action and in the material he or she is creating. Sometimes this is much easier to do through action, giving feedback through body movement instead of doing it verbally. Because when we move, we need to enter feedback with all our being, so there is no space for ego and critical opinions, which are very often present in the verbal feedback. That is why it is good to always have a specific task or focus when giving feedback with words. For example, to focus on explaining how something in material could really work or to focus on a specific topic. It is easier to be constructive in this way and propose to others how the potential of the material could be shaped, giving them new ideas for improvisation (interviewee 10).

Personal involvement

Artists are usually very personally engaged in their work and do not distinguish clearly between themselves as artists and as private persons. Personal aspects, such as personal involvement and responsibility, choosing the right people to work with, integrating emotions in work and informal socialising in the group thus become an important part of creative process.

Choosing the right people. Many choreographers said that the way people are, the process will be. So choosing the right people to collaborate with is very important. Choreographers are very careful about whom they invite in the process and they take this very personally. It is not exactly clear how the selection takes place, because many times it is not based on some specific criteria, but rather on a personal feeling. There has to be some chemistry or energy that feels right. Some choreographers say there needs to be a common interest or passion about a certain issue or question that will be explored in the

project. Others say it is about common values or ways of thinking. There also needs to be an interest in each others' work and many times they said they are looking to collaborate with people who are different from themselves but whom they admire because they recognise something interesting in them. One choreographer described the people she invited in her processes:

They have something brilliant in them that I admire because this is my psychology. It is a good base for expectation, to think that they are going to participate in a way that will give me a lot of pleasure to see or think, and usually they can do something that I cannot do. I never look for people that are like me. There is always a bit of passion and feeling how this relation could work ... it is like you fall in love with certain aspects of someone else. And the more people are themselves and the more radical they are in their own thinking, the more curious I get (interviewee 10).

Choosing people who are different than the choreographer yet very good in some field allows the group to learn from each other and from the diversity within the group. Inviting people who are independent and self-responsible also increases the feeling of engagement and co-creation. One of the interviewees said she usually looks for self-responsible, attentive, creative people, who are not too linear in their processes, and have a certain self-irony (interviewee 2).

Many choreographers stressed that it is also important to combine working with people that they already know and have a history with, with new people that they have never worked with before. Working with the long-term collaborators enables them to feel more stable and relaxed even if they work with something they have never done before. The trust is already there and they understand what the other means or wants. This allows them to explore things deeper and on a more complex level, not having to simplify it. On the other hand, working with new people is important to keep the freshness, newness, excitement and provocation. It brings new perspectives and foreign things into work that are needed when creating new things.

Working with emotions.

We are people so there is always emotions involved. If there would be no emotions, it would be a factory production. (interviewee 1)

As the above quote of an interviewee shows, dancers perceive emotions as a normal part of their work because we are all human beings, so emotions will always be present in us. Working with the body and movement makes people even more sensible and in touch with their emotions, because the whole body is engaged in the process.

Several choreographers stressed that it is important to be aware of your emotions that come out in the work process and to not run away from them or be afraid to express them. Acknowledging what is happening and then also finding a way to use your emotions in the work process is important, but one needs to be careful that emotions do not get abused and people hurt in the process. As one choreographer said:

I think that as a performer you need to be ready to transform emotions into your artistic process and creation. You have to accept emotions and in some way use them. But then it is a big question how you do that in order to keep respect for yourself and not hurt yourself. (interviewee 5)

Besides the fact that artists use their emotions as an important source of creativity in their work, they say that accepting emotions that are happening in the process helps the group to move forward and not get stuck in the process. Many times when emotions are brought up and dealt with, there is a transformational point that happens in the group and brings

change. These shifts can be very enriching because they bring you to a place you did not think to go to, and unexpected moments happen. It helps the group understand what is happening and it creates space for self-reflection (interviewee 2).

Personal motivation, responsibility and ownership. Artists have usually very strong intrinsic motivation and are very interested and involved in their work. As one choreographer said, artistic work requires a lot of personal commitment, investment and encouragement (interviewee 3). Believing in one's work and carrying for it seems to be important for the work to be convincing and able to stand on its own (interviewee 1). Being passionate about an idea or challenge one works with also enables the dancer to take big risks despite of the doubts she might have. When the passion about the idea is there, the artist gets completely absorbed in it and cannot stop thinking about it (interviewee 4).

But this kind of strong personal engagement, responsibility and feeling of ownership is not only important for the choreographer, but for all members of the group. As one dancer explains:

I think it is very necessary that the work has something to do with everyone who is involved. That it is something of everyone's concern and that it becomes "mine" for everyone. That each person really wants to invest herself in it, that each person connects with it, devotes herself to it and is not just someone who is executing it. It is really of crucial importance that every person feels the project as their own. (interviewee 8)

This means that constant questioning why you are doing something and what it means to you is an important part of the process for all members of the group. Each person has the responsibility to motivate herself and reflect upon the questions of motivation, responsibility and ownership, both individually and with the group. As one choreographer said, people need to be independent in their motivation, yet at the same time connected. Choreographer can sparkle others' motivation sometimes but cannot be its motor (interviewee 4).

Informal meeting and fun. Since artists are so engaged in their work, the normal working times from nine AM to five PM usually do not apply to their work. The boundary between work and private time gets blurred and the group working together on a project might continue to talk and socialise after the normal work in the studio. As one artist said, it is like a family situation during the period of creative process and the group spends a lot of time together inside and outside the studio (interviewee 9).

Informal socialising, like having a coffee or eating and cooking together, is very intertwined with the working process. One choreographer explained it is usual to start the day in the studio with a coffee, because this brings the group together (interviewee 1). It helps one to stop for a while, speak with other people in the group and together decide what the group wants to do. It brings some kind of excitement about the topic through conversation before the group starts working in the studio (interviewee 3).

Another important function of informal socialising is that it creates a safe place, empty of expectations to produce, where people can relax and not think too much. As one dancer said, in this way information is distributed and exchanged in informal way, and this becomes a safe place where no matter what happened in the studio, everyone comes together to protect each other. These moments give a feeling of a common force (interviewee 5).

The safe space without pressure to produce creates also opportunities for unexpected ideas to happen which can be later used in the studio (interviewee 2). As one choreographer said, unexpected ideas happen when you stop thinking what would be the

right thing to do rationally and you allow your brains to relax (interviewee 1). Having fun and joking around in a relaxed setting is thus an important part of the process.

Going out of the studio into a different environment can also stimulate new impulses and ideas and helps the group when it gets stuck in the process. One artists said that on days when things don't work, she always announces a coffee day and they go and leave the studio (interviewee 1).

Diversity

Diverse team. For contemporary dance groups to be able to come up with new ideas and be innovative in their work, diversity within team plays an important role. Most dancers work across borders, so it is common to collaborate in groups with people from different cultures and backgrounds. A lot of choreographers also said they like to work with people who bring different kind of knowledge or expertise into a project. One artist explained that she always invites people from other fields in the research process to see how other practitioners and theoreticians think about the topics of her interest and to find new ways to connect these different perspectives (interviewee 6).

Another dancer said that the variety in the group enables her to be in a permanent state of surprise. And creative process thus becomes a learning process where everyone tries to understand others from their different points of view, entering new strategies they have never used themselves before (interviewee 10).

Interdisciplinarity within the team helps the group also stay fresh and not get stuck in the existing patterns of thinking (interviewee 9). Dance groups traditionally work with a variety of collaborators from different disciplines who are part of the artistic process, like set, costume and light designers, dramaturgs and musicians. Nowadays this diversity of collaborators is expanding by using dancers with very different educational and technical backgrounds in the same project or by collaborating with artists from other fields (singers, theatre actors, visual artists, sculptors, poets, etc.). It is becoming also more common for choreographers to work together with people from non-art related fields, like engineers, fashion designers, scientists, philosophers, sportsmen ...

Connection with the outside world. Diversity of viewpoints and perspectives is also enabled by inviting people who are external to the core project group to contribute to the work process. Creation of a new performance is an open process that integrates inputs and bits from many different sources. If traditionally an artistic piece used to be shown to the audience only in its final form, it is very common today to have several showings of the work-in-progress to get external feedback and integrate it in the final performance. As one artist said:

External people are important because they are not concerned so much with the theme, the topic, the relations between people, with the goals, expectations, and internal projections. They only come to see the reality of the moment and they can give you the most valuable feedback. (interviewee 5)

Sometimes even having just one person as an audience makes the choreographer rethink certain things that he or she was not questioning when working alone. For this reason it is really important to not only share the product, but also the process (interviewee 2). It is crucial, though, to choose external people carefully because by giving their feedback they can drastically change the process.

Some choreographers said also that they like to talk about their work with external people who are not connected with the dance field during their creative process to see what they think about the work, and as a sort of an outside impulse. Sometimes they give interesting suggestions that the choreographers would never think of (interviewee 1).

Ideas from external environment are integrated into the process also because all group members are usually engaged in other parallel activities and bring those inputs with them to the studio. Sometimes certain members go to festivals or other events during the creative process and then bring back new ideas. A normal part of the process is also that the whole group goes together for a trip, or to a residency, in order to change the environment and get new inspiration. Dancers sometimes like to break their work process in the studio by going out and engaging in other external activities, like going to a cinema, seeing others' artistic work, reading texts - just doing something that is not connected to their work. This brings new perspectives and opens their eyes (interviewee 3).

Emergent supportive structures

Dancers are aware that in order for the group to think, act and collaborate in the way we described above, using improvisational, reflective, personal and diverse mindset, very flexible and emergent support structures have to be in place. Time, physical space, and process thus continuously adapt to the needs of the group in each specific moment of the process. They cannot be exactly planned and controlled, as we are used in business, but must adapt organically during the process.

Time. In business it is usual that people work within fixed time frames (nine AM to five PM) and that they plan their working activities very carefully in advance, knowing exactly how much time will be devoted to specific activities and when. In dance groups, time is usually used in a more flexible way. Because creativity is hard to plan and one never knows exactly how the process will look like in advance. As we described above, the boundaries between work and private time are very blurred for artists when they are engaged in a creative process. Even though they might not be working with the group in the studio, they might be still thinking and talking about the work outside of the studio.

Sometimes they also work at unusual hours, for example very late in the evening or during the night. As one dancer said:

I think my best times in the studio are always in the evenings. Then things just start to happen. The whole day is accumulated in this moment and because nobody is rehearsing after you, there is no rush. Your calm down and take time. And then things come, it is just there, and it is so amazing. (interviewee 1)

Productivity is not a constant category when one works with creativity. Dancers say that sometimes they might have a few days when the group is extremely productive and might work from morning to late evening, but then they might feel exhausted and would take a brake for some days. Taking brakes during the process is a normal part of the process and allows people to go away and come back with a new drive and inspiration. On the other hand, having periods of very intense work when one gets completely absorbed in the work and forgets about the time, is also very common.

Time, in general, is an important category in dancers' work that they consciously explore. For example, the same movement, if doing it very fast or very slow, can create a totally different effect. So playing with the dimension of time is an important part of dancers' creative process.

Since resources in contemporary dance field are often limited, the production frameworks force dancers to work within very short project time spans. The most common is to get money to work on a project in a studio between one and three months. This kind of pre-made time frameworks often don't fit the needs of the artists, so the more experiences they have, the more they try to create possibilities to be more flexible with the time. They might decide, for example, to work for two or three years with the same project, but engage in other shorter projects in parallel. This might demand from them to work many

hours for which they are not paid, and to work in all kinds of places they can get access to for free or for very little resources.

Space. Physical space is also an important aspect in dancers' work. Because a body moving is always in relation to the physical space, dancers work very consciously with the concept of space. They are aware that physical space in which they work influences how they think, act and relate to each other. For them it is important to feel good in their working space. One dancer said that the space where you work gives you a certain freedom or closeness. The ideal situation in his opinion would be to have a very light, open space without many objects in, so there is freedom of thought. The studio should be out of the city centre, in a peaceful environment (interviewee 5).

In different stages of creative process different types of spaces are usually needed. Dancers intentionally change working environments during the work process, moving from working in the kitchen, to a café, or to a big, empty studio, or a small black box, or maybe to a park or to an interesting building, like a museum. This depends on the needs of each moment, and of course on the financial possibilities. By using a wide variety of spaces dancers get new inputs into the process and see what happens with their material in another environment.

They also like to play with possibilities of making different interventions within the same physical space, by using objects, light, and sound, because this changes the performer's or spectator's perception of space (interviewee 4). Playing with the space and using a wider variety of spaces is not only done during creative process but also for showing art works to the audience. Traditionally the dancers were mainly performing on theatre stages, but nowadays it is becoming more common that dancers perform in all kinds of places, from private apartments, galleries and museums, cafés and restaurants, hair dressing saloons, public squares, industrial warehouses etc. As one dancer said, these new kinds of environments charge the space with a different kind of energy, and allow her to interact much more with the space while creating and performing the piece, giving her new ideas and enabling her to shift the conventions for the spectator (interviewee 3).

Process. Often more experienced choreographers said that they have changed their focus from the product to process, trying to overcome the production based thinking of the market economy which forces artists to constantly shift from one short project to another. Instead they are trying to create working conditions that guarantee continuity without constant stops. Because as one artist said, it takes time and a lot of work to be really radically new, creating a new language and new strategies (interviewee 10).

Choreographers who have been on the scene for a while thus see their work as one big continuous creative process in which the artist permanently makes small innovations that with the time become a new method and a bigger innovation in some sense (interviewee 10). As one choreographer explains, in this big process there might be different flows or bigger themes in which the artist is interested, for example concepts in mathematics and physics, ephemerality, or social level of art. The artist continuously explores these topics with different people, and during this process of exploration there are situations in which things connect and as a result something more concrete, like a specific project or performance is triggered, because there is a feeling that it just has to be done. In this way one could say that performances are almost like if you would cut the big flow at a certain point and you would get a slice - they are like slices of the continuous flow (interviewee 4).

As mentioned previously in the text, creative process of dancers cannot be perceived in a linear way through different stages that follow one another, but rather as an iterative process in which one constantly shifts between research, exploration and generation of ideas, making decisions through reflection, and production. One dancer explained his model of working, saying that the research, creation, production and education are four

processes that are constantly taking place and are parallel to each other. This means that if we want to create something, we will at the same time start to create also conditions for production, but in order to produce conditions for production, we need to do research and through this we also educate ourselves (interviewee 4).

Discussion

Work principles of contemporary dancers as enablers of culture for radical and emergent innovation

Results of our empirical study show that the key principles of creative practice of contemporary dancers are in many aspects very close to what different authors in innovation theory (Daniels, 2010; Dobni, 2008; McLaughlin et al., 2008) describe as key elements of culture supporting radical innovation. Trust and respect, openness, freedom, creativity and risk taking are put forward as important in both fields. The same goes for collaboration and teamwork, confidence, diverse teams, loose and flexible structures, and connection with external sources of new knowledge and ideas. This confirms our proposition that creative practice of contemporary dance groups can be taken as a good example of how teams can create a culture and environment that is stimulative for radical innovation and that could be taken as an inspiration and object of further study for business.

The attitudes and values that Peschl and Fundneider (2012) describe as necessary for emergent innovation, such as openness, observation, listening and availability also coincide with the key principles of dancers' creative practice as we describe it in the results section of this article. This is also the case with other attitudes, such as following the flow of reality, self-questioning, reflection, and breaking with existing patterns of thought and behaviour that Peschl and Fundneider (2012) consider important.

Improvisational practice and emergent support structures as central concepts

The concept of enabling space for innovation by Peschl and Fundneider (2012), in which the physical space is closely interrelated with the social, cognitive, emotional and cultural spaces, is also similar to dancers' way of thinking. Dancers stress the importance of physical space in their creative processes and describe how it influences the way they think and act, and can thus enable or hinder creativity and innovation. Although there is an increasing awareness of the importance of physical space for enabling culture for innovation, it is still not very common for companies and the industry to proactively use physical space in a way that would support radical innovation (Schaeffer et al., 2012). Dancers on the other hand strategically use and play with different qualities of the space to support different needs and stages in creative process (ibid).

The practical application of this idea in business could be for example a very flexible office space that allows continuous transformation depending on the needs in different moments of innovation process. Could we imagine an office that looks differently every week or month? Movable walls, furniture that has multiple uses, lots of natural light and nature around that can be used as an extended office? Instead of staying at the office building, innovation teams would be allowed to move in and out and use a variety of places to work in. For example, for awhile they might be working from an incubator where they would be surrounded by exciting high-tech start-ups. At another time they would be working from a hipster café where they could spot trends from the creative people around them. But maybe there would be time where they would go to the woods or to a monastery and spend a week in silence, focusing on finishing up a project.

In general we believe that business could learn a lot from the way dancers create emergent supportive structures for enabling creativity and radical innovation. Companies could experiment more with the flexible design and use of time, space and

process, adapting them to the needs of teams in each moment of innovation process. Because the flow of reality cannot be imposed, forced or strictly planned in advance in the context of producing radically new knowledge and ideas (Peschl & Fundneider, 2012).

The emergent supportive structures for innovation are very closely connected with the principles of improvisational practice, which is another central concept in the creative work of dancers that is not so common when talking about innovation in business. Dancers use improvisation as a central practice for generating, exploring and developing ideas in creative process. Different authors (Adler, 2006; Austin & Devin, 2003; Crossan, 1998; Barret, 1998; Mirvis, 1998; Müller, 2012; VanGundy & Naiman, 2003) have proposed that managers could learn improvisational skills from artists which would help them better cope with the chaotic and fast changing environment they are facing today.

Imagine how work in business would look like if there would be less planning and control and more improvisation. If meetings would be improvised in a way that would allow issues to emerge from what people are being busy with instead of following pre-defined agendas. If people would truly co-create and build on each others ideas following the improvisational principle of "yes, and ..." instead of mostly being in their critical mindset of "yes, but ...". If teams would come to office in the morning, starting to tune-in together through a group meditation, allowing the rest of the day to emerge from what would feel crucial right there in the moment. If instead of working 9AM-5PM all days, people would also have the flexibility to follow creative flow in the group and maybe work some day more and some day not at all. If more intuition, spontaneity, fluidity and collaboration would be brought into everyday work process.

Creative practice of dancers as an example of overcoming the paradox between exploitative and explorative culture

Another important difference between traditional innovation process in business and dance is that the first is usually divided in a linear sequence of phases following each other, going from generating, selecting and developing ideas to commercialisation. Dancers, on the other hand, do not look at their creative process through a linear optic of steps that are clearly separated, planned and timed in advance. Most of their creative process is marked by research, exploration and experimentation in which improvisation plays a central role. But improvisation is always iterating with reflection, which helps dancers critically observe the ideas and material they have created through improvisation and decide what they want to throw away and what they want to explore further to move forward towards production of the final performance. In this way we could say that they constantly shift between the explorative way of thinking and acting and between the more analytical and exploitative mindset (March, 1991). On the contrary, business usually separates the exploitative and explorative ways of working. Not only by clearly separating different phases of the innovation process, but also by isolating exploration in the R&D department, which is traditionally responsible for radical innovation, and by using the daily operations and production units as a platform for incremental innovations (Vance et al., 2008).

Creative practice of dancers could be consequently used as an example of how the same team of people can constantly shift between explorative and exploitative mindset and practice and thus overcome the paradox between the two (Lewis, 2000; Sánchez-Runde & Pettigrew, 2003). Dancers could train business people from different parts of organization how to constantly shift between these different modes of thinking and acting, moving between extremes and paradoxes, developing a more explorative mindset. Dealing with paradoxes and complexity is in general something that artists are comfortable with which is why they could help organizations either "resolve complexities effectively or learn to accommodate to them" (Arts & Business, 2004, p. 34).

Personal involvement and engagement of body and emotions as a basis for radical change

Another distinction between the creative practice of dancers and working with innovation in business is that for dancers a strong personal involvement, passion, and engagement of both their mind, body and emotions are integrative parts of their work. On the other hand, people in business still predominantly focus on engaging the intellectual level in work, excluding the engagement of body and emotions.

Intrinsic motivation has been described as a primary driver for creativity by many researchers (Amabile, 1996; Csikszentmihalyi, 1997; DiLiello & Houghton, 2006) who showed also how extrinsic motivation can be a constrain for creativity. Likewise, the research shows how emotions pervade also our cognitive life. Since "emotions and feelings come first in development and retain a primacy that subtly pervades our mental life" ... they "constitute a frame of reference for what comes after, and have a say on how the rest of the brain and cognition go about their business" (Damasio in Buswick et al., 2004, p. 36). This is why it is important that we do not try to ignore them or put them aside, as we usually do in business, but rather acknowledge them and use them as a source of creativity the way artists do. Hannaford (2005) also argues that learning and creativity are not processes of the brain alone, but of the whole body. Although the idea that intellectual activity exists apart from our bodies is deeply rooted in our culture, body, movement, sensations and emotions play integral part in all our intellectual processes and especially in creativity and learning (ibid).

Art can be particularly effective at eliciting emotional responses and influencing the intrinsic motivations of employees, which means that exposure to arts in business could help individuals' develop the ability to recognize, feel, and respond to various emotions (Art works, 2004; Buswick et al., 2004). As Peschl and Fundneider (2008) theorise, for radical change to happen, heart, mind and will need to be engaged through a process of deep self-reflection and existential questioning that enables breaking with existing patterns of thinking and acting. This seems to be a more established practice in arts than in business today, which is why it would be interesting for companies to collaborate more closely with art, especially with dance, which engages the body and movement and makes people more sensitive for accessing their feelings, intuition and emotions. Dancers could use their wide variety of methods to train business how to integrate body, intuition, emotions and their intellect in everyday work life. They could also help managers engage in self-reflection and fundamental questioning of the purpose, which can enable change on existential rather than just on intellectual level.

Conclusions

In this article we have tried to develop a systematic framework that describes key principles of creative practice of contemporary dance groups and explore how these principles overlap with the key attributes of culture for radical and emergent innovation presented in existing innovation literature. The similarities between the two indicate that the practice of contemporary dance groups could be used as a good example and inspiration for business to develop a more explorative culture.

We also tried to present some distinctive qualities of dancers' creative processes which are not commonly described in literature about business innovation. These include improvisational practice, emergent supportive structures and dancers' ability to constantly shift between explorative and exploitative mode of action, thus overcoming the classical divide between them in business. We tried to suggest that dance practice could be used also to engage business people not only on cognitive, but also on bodily and emotional level, affecting their intrinsic motivation and ability to change on a more existential level as a pre-condition for radical change. Different ways how principles from contemporary dance practice could be transferred into business practice to support radical innovation were suggested.

We found the concepts of emergent innovation and enabling space by Peschl and Fundneider (2008, 2012) closer to our understanding of innovation and creative practice of dancers than the mainstream literature on radical innovation and culture that supports it. This is why we would like to further explore these concepts and their connection with artistic practice in the future.

Although other researchers have written about different aspects of artistic practices that are interesting for business, we believe that our empirical study contributes to the field of connecting art and business, especially for two reasons. First, because of its specific connection with the concept of culture for radical innovation that is gaining importance in business. And second, due to its focus on contemporary dance practice, which is still quite rarely used in business, compared to visual arts, theatre and music.

We think that the proposed framework needs further study through observation of creative processes of dancers to prove its validity and relevance. When further elaborated, it can provide a basis for more systematic and long-term strategic interventions in business, helping organizations transform their culture towards more explorative and emergent innovation. This is why we plan to do ethnographic studies observing creative processes of dancers, improving and further developing existing framework. We think it would be interesting also to test the principles and methods from dance practice through long-term interventions in the business context to see and measure what kind of effects they could create on culture for radical innovation in companies.

References

- Adler, N. J. 2006. The Arts and Leadership. Now That We Can Do Anything, What Will We Do? *Academy of Management Learning and Education*, 5(4), 486-499.
- Amabile, T., Conti, R., Coon, H., Lazenby, J. & Herron, M. 1996. Assessing the work environment for creativity. *Academy of Management Journal*, 39(5), 1154-1184.
- Austin, R. & Devin, L. 2003. *Artful making: What managers need to know about how artists work*. New Jersey: Financial Times Prentice Hall.
2004. Art works – Why business needs the arts. London: Arts & Business. Retrieved February 20 2012 at http://www.aandbcymru.org.uk/uploads/Arts_Works.pdf
- Barrett, F. J. 1998. Coda: creativity and improvisation in jazz and organizations: implications for organizational learning. *Organization Science*, 9(5), 605-622.
- Barry, D. & Meisiek, S. 2010. Sensemaking, mindfulness and the workarts: Seeing more and seeing differently. *Organization Studies*, 31(11), 1505-1530.
- Bucciarelli, L. L. 2002. Between thought and object in engineering design. *Design Studies*. 23, 219-231.
- Buswick, T., Creamer, A. & Pinard, M. 2004. (Re)Educating for leadership: How the arts can improve business. Arts and Business Report. Retrieved June 15 2012 at http://www.aacorn.net/members_all/buswick_ted/ReEducating_for_Leadership.pdf
- Crossan, M. M. & Apaydin, M. 2010. A multi-dimensional framework of organizational innovation: a systematic review of the literature. *Journal of Management Studies*, 47(6), 1154-1191.
- Crossan, M. M. 1998. Improvisation in action. *Organization Science*, 9(5), 593-599.

- Csikszentmihalyi, M. 1997. *Creativity*. New York: Harper Perennial.
- Daniels, S. 2010. Innovative Culture. *Executive Excellence*, 27(1), 15.
- Darsø, L. 2004. *Artful creation – Learning-Tales of arts-in-business*. Frederiksberg: Samfundslitteratur.
- Davis, S. & McIntosh, D. 2005. *The art of business*. San Francisco: Berrett – Koehler Publishers.
- DiLiello, T.C. & Houghton, J.D. 2006. Maximizing organizational leadership capacity for the future, Toward a model of self-leadership, innovation and creativity. *Journal of Managerial Psychology*, 21(4), 319-337.
- Dobni, C. B. 2008. Measuring innovation culture in organizations. *European Journal of Innovation Management*, 11(4), 539-559.
- Elam, I. (Ed.) 2012. *Artists and the Arts Industries*. Solna: The Swedish Arts Grants Committee.
- Glaser, B. G. & Strauss, A. L. 1967. *The discovery of grounded theory: strategies for qualitative research*. New Brunswick: AdlineTransaction.
- Guillet de Monthoux, P. 2004. *The art firm*. Stanford: Stanford University Press.
- Hannaford, C. (2005). *Smart moves: Why learning is not all in your head*. Salt Lake City: Great River Books.
- Isaksen, S. & Tidd, J. (2006). *Meeting the Innovation Challenge – leadership for transformation and growth*. Chichester: John Wiley & Sons Ltd.
- Kamoche, K. N., E Cunha, M. P., & Da Cunha, J. V. (red.), (2002). *Organizational improvisation*. London: Routledge.
- Koivunen, N. 2012. Analogical Artifacts, Inquiry, and Discipline in Art-Based Interventions. Paper presented at the 28th EGOS Colloquium, Helsinki, July 2012.
- Ladkin, D. & Taylor, S.S. 2010. Leadership as art: Variations on a theme. *Leadership*, 6(3), 235-241.
- Leonard, D. & Swap, W. 1999. *When sparks fly: Harnessing the power of group creativity*. Boston, MA: Harvard Business School Press.
- Lewis, M. W. 2000. Exploring paradox: Toward a more comprehensive guide. *Academy of Management Review*, 25(4), 760-776.
- Linstead, S. 1993. Critical issues in the study of organizational cultures. *Management Research News*, 14(7), 83 - 87.
- March, J. G. 1991. Exploration and exploitation in organizational learning. *Organization Science*, 2(1), 71-87.
- Mirvis, P. 1998. Practice improvisation. *Organization Science*, 9(5), 586-592.

- McLaughlin, P., Bessant, J. & Smart, P. 2008. Developing an organisation culture to facilitate radical innovation. *International Journal of Technology Management*, 44 (3/4), 298–323.
- Mumford, M.D., Scott, G.M., Gaddis, B. and Strange, J.M. 2002. Leading creative people: orchestrating expertise and relationships. *Leadership Quarterly*, 13(6), 705–751.
- Müller, B. 2012. Organizational Creativity Revisited. An audio visual ethnography of the production of contemporary movement and dance theater as 'making events work'. Paper submitted to Workshop 'Performing ANT: Socio-Material Practices of organizing', February 2012.
- Oldham, G. R. & Cummings, A. 1996. Employee Creativity: Personal and Contextual Factors at Work. *The Academy of Management Journal*, 39(3), 607–634.
- Olsson, B. 2008. Descriptive languages in and for creative practice: Idea development during group sessions. In Swedish: Beskrivningsspråk i och för kreativ praxis: Idéutveckling under gruppsession. Doctoral Dissertation 1651-4238; 68. Mälardalen University. Västerås, Sweden: Mälardalen University Press.
- Paulus, P. B., & Nijstad, B. A. (Eds.) 2003. *Group creativity: Innovation through collaboration*. New York: Oxford University Press.
- Peschl, M.F. & Fundneider, T. 2008. Emergent Innovation and Sustainable Knowledge Co-creation. A Socio-Epistemological Approach to "Innovation from within". In M.D. Lytras, J.M. Carroll, E. Damiani et al. (Eds.), *The Open Knowledge Society: A Computer Science and Information Systems Manifesto*. 101–108. New York, Berlin, Heidelberg: Springer.
- Peschl, M. F., & Fundneider, T. 2012. Spaces enabling game-changing and sustaining innovations: Why space matters for knowledge creation and innovation. *Journal of Organisational Transformation and Social Change (OTSC)*, 9(1), 41–61.
- Sánchez-Runde, C. J., & Pettigrew, A. M. 2003. Managing dualities. In A. M. Pettigrew & et al (Eds.), *Innovative forms of organizing*. London: SAGE.
- Sawyer, R. K. 2005. *Social emergence: Societies as complex systems*. Cambridge: Cambridge University Press.
- Schaeffer, J. A., Bozic, N. & Backström, T. 2012. The physical space as an artifact of innovative culture - Findings in art and manufacturing industry. Paper presented at the 28th EGOS Colloquium, Helsinki, July 2012.
- Schepers, P. & Van den Berg, P.T. 2007. Social factors of work-environment creativity. *Journal of Business and Psychology*, 21(3), 407–429.
- Shweder, R. A., & Sullivan, M. A. 1993. Cultural psychology: Who needs it?. *Annual Reviews Psychology*, 44, 497–523.
- Shalley, C.E. & Gilson, L.L. 2004. What leaders need to know: a review of social contextual factors that can foster or hinder creativity. *The Leadership Quarterly*, 15 (1), 33–53.
- Vance, C., Zell, D. & Groves, K. 2008. Considering individual linear/nonlinear thinking style and innovative corporate culture. *International Journal of Organizational Analysis*, 16(4), 232 – 248.

VanGundy, A. B., & Naiman, L. 2003. *Orchestrating collaboration at work: Using music, improv, storytelling and other arts to improve teamwork*. San Francisco: Wiley/Jossey-Bass/ Pfeiffer.

Woodman, R. W., Sawyer, J. E., & Griffin, R. W. 1993. Toward a Theory of Organizational Creativity. *The Academy of Management Review*, 18(2), 293-321.

About the Authors

Nina Bozic is a PhD student in Innovation and Design at the Academy for Innovation, Design and Engineering, Mälardalen University, Eskilstuna, Sweden. Her research is focused on exploring how knowledge and methods from contemporary dance practice can be applied in organizations to enable innovation. Her research and teaching are influenced by her experience in both dance and business and her belief in emergent, people-driven processes. In parallel to her research she is working as a consultant in creativity, innovation and entrepreneurship.

Email: nina.bozic@mdh.se

Bengt Köping Olsson, Ph.D. in innovation and design, has a background as engineer and a degree in psychology. He has also a Master of Fine Arts in piano and has worked as a musician on a freelance basis. He is currently working as a lecturer and researcher in Innovation management at the Academy for Innovation, Design and Engineering, Mälardalen University, Eskilstuna, Sweden. His research deals with creative social activity such as creative group problem solving.

Email: bengt.koping.olsson@mdh.se