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Content

Creativity as opening toward new beginnings <i>Steen Halling and Finn Thorbjørn Hansen</i>	5
Creativity assessment as intervention. The case of creative learning <i>Lene Tanggaard and Vlad Petre Glăveanu</i>	18
How play enhances creativity in problem based learning <i>Ann Charlotte Thorsted</i>	31
How Do Artists Learn and What can Educators Learn From Them? <i>Tatiana Chemi and Julie Borup Jensen</i>	45
Considering Collaborative Creativity <i>Thessa Jensen</i>	60
Rewarding and Promoting Creativity. New Approaches, Old Realities <i>Lukasz Swiatek</i>	73
Creativity in phenomenological methodology <i>Pia Dreyer, Bente Martinsen, Annelise Norlyk and Anita Haahr</i>	87
Creativity in ethnographic interviews. Reflexive participatory observation <i>Lene Teglhus Kauffmann</i>	100
The use of the three fold mimesis. New Approaches, Old Realities <i>Susanne Dau</i>	112
Revealing Hearts. Paul Tillich's Concept of Revelation: an Application to Business Innovation <i>Kristin Falck Saghaug, George Pattison and Peter Lindgren</i>	126
Creativity and the Study of Emotion. A Perspective of an International Relations Scholar <i>Dr. Susanna Hast</i>	139
Turning Gigabytes into Gigs. "Songification" and Live Music Data <i>Professor Deb Verhoeven, Dr Alwyn Davidson, Alex Gionfriddo, James Verhoeven and Dr Peter Gravestock</i>	151
Finding Oneself Lost in Enquiry. Being a Researcher <i>Mo Mandić</i>	164
How the researcher's experience of visual images can contribute to qualitative research <i>Anne Maj Nielsen</i>	175
Experiencing creativity in the qualitative data analysis. A theoretical model for pedagogy <i>Edith Ellefsen</i>	188

Researching online supervision. The need for a “torn” methodology <i>Søren S.E. Bengtsen and Helle Mathiasen</i>	198
Hello, it’s Noelle™. I think I am in labour... The case of creative learning <i>Susan James</i>	211
A Student Project as an ‘Extra Group Member’. A Metaphor for the Development of Creativity in Problem-Based Learning (PBL) <i>Chunfang Zhou</i>	223
The Dispositif of Creativity & The Subjectification of the Creative Individual. What the Creative Human Being can/ cannot be <i>Martin Mølholm</i>	236
Words Within. Creativity, Flow, and Body <i>Sarah L. Morris</i>	249
Creation between two minded-bodies. Intercorporeality and social cognition <i>Shogo Tanaka</i>	265
A creative designerly touch. Nurturing transformation through creativity in the meaning-mattering of design processes <i>Søren Bolvig Poulsen and Anete Strand</i>	277
Explore, Understand, Share and Show How. Four creative ways to use hermeneutic phenomenology to inspire human-centred creativity in engineering design <i>Dr. Ian Coxon</i>	291
Abductive sensemaking through sketching. A categorization of the dimensions in sketching capacities in design <i>Peter Vistisen</i>	308
Looking at a Photograph – André Kertész’s 1928 Meudon. Interpreting Aesthetic Experience Phenomenologically <i>David Seamon</i>	321
Narratives and communication in health care practice. What competences are relevant for tomorrow’s health care professionals to communicate about illness, life and death? <i>Mariann B. Sørensen</i>	336
Transformative Wonder. An Ex-Con Talking about Heidegger to a Class of Graduate Students <i>Marcianna Nosek, Elizabeth Marlow, Earthy Young and Yema Lee</i>	348
Art Therapy Psychological Creativity in the healing of mild depression <i>Vibeke Skov and Inge Nygaard Pedersen</i>	363
Air Hunger. The Sublime In Nursing Practice <i>Erika Goble and Brenda L. Cameron</i>	376

Creativity as opening toward new beginnings

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Background and motivation for this issue of Academic Quarter

We are happy, as invited guest editors, to present this special issue of *Academic Quarter* on creativity and creative approaches in human science. About forty human scientists from all over the world have contributed to this issue, and we are very grateful to them.

The initiative to organize an issue on this subject originates from our participation in the 32th International Human Science Research Conference (IHSRC), which took place at the University of Aalborg in the Northern Denmark in August 2013. Here the overall theme of the conference was 'Creativity in Human Science Research, Methodology and Theory'.

More than 150 human scientists from all over the world participated in the conference in Denmark. According to the conference flyer:

All human sciences exist in a tension between tradition and renewal. At the conference, we hope that participants will discuss how to renew the human sciences creatively, and also to present ideas about what creativity is as a basic human phenomenon. How can phenomenological, hermeneutic and other human science traditions be respected and yet renewed in creative directions? How – and how much – should human scientists experiment with creative methodological practices when researching human phenomena? What role can the arts play? Are there limits to creativity? Can human beings become too creative – in life as well as in research? And what can human scientists actually contribute with to the current creativity discourse?

Many of those who have contributed to the present issue attended the conference.

Since 1982 the International Human Science Research Conference has been a place for phenomenologists, hermeneuticists, and other human scientists to meet around important research issues in health care, qualitative research, and education or other professional areas. Methods of qualitative research, phenomenology and hermeneutics and other kinds of 'heuristic' research approaches have been discussed in the area of psychology, sociology, anthropology, and philosophy. But this time the focus was explicitly on creativity both as a path to more thorough inquiries and as the object of study for the researcher.

The mystery of creativity and the creative dimensions in human science

This issue raises a fundamental question that must be of importance for every human scientist: What is creativity really? And how can and why should a more 'creative' approach in human science be understood and defended? In what ways can phenomenology and hermeneutics become more open to insights into the nature of creativity and how should we talk about creative ways of *doing* phenomenology, hermeneutics, and human science as such? Before we give the words to the authors of this issue, we would like shortly to mention some possible comments and answers that respectively

Hans-Georg Gadamer and Maurice Merleau-Ponty give to these questions. In an interview with Alfons Grieder on the subject 'On phenomenology,' Gadamer says:

I would say that there has been too much talk about phenomenology, and not enough phenomenological work. One does not always have to insist that what one is doing is phenomenology, but one ought to work phenomenologically, that is, descriptive, creatively – intuitively, and in a concretizing manner. Instead of simply applying concepts to all sorts of things, concepts ought to come forward in movements of thoughts springing from the spirit of language and the power of intuition.
(Gadamer, quoted from Palmer, 2001, p. 113)

Intuition and creativity, though, seems to be paramount when working as a human scientist and especially in what could be called hermeneutic phenomenology.

But Gadamer also made it clear (in the third edition to the afterword of *Truth and Method* in 1972), that philosophical hermeneutics and hermeneutic-phenomenological approaches that follow this *philosophical* approach are not at all *against* scientific methods. Philosophical hermeneutics recognize and respect the methodological rigor of modern science. The human scientist should indeed learn to work with rigor and precision in his or her scientific approaches and methods. However, if this scientific rigor is not driven and stirred by an ethos or 'spirit', that goes *beyond* what can be reached through the scientific methodology and epistemology, then the researcher will lose touch with the subject matter and 'truth experience'. As Gadamer writes:

...No productive scientist can really doubt that methodical purity is indispensable in science, but what constitutes the essence of research is much less merely applying the usual methods than discovering new ones – and underlying that, the creative imagination of the scientist ["die schöpferische Phantasie des Forschers"]. This is not true only in the so-called *Geistwissenschaften* [human science]. (Gadamer, 2006 [1960], p. 555)

How then can we as human scientists today be inspired by this 'creative imagination' and the more personal intuitive and existential dimension of the researcher's work? What is at stake in those creative and intuitive, and maybe even artistic and improvising moments, where the researcher moves into the un-known, in a kind of 'touched not-knowing' or deep wonderment, where we are touched by something, we don't know yet what is, and yet – when we are brought to silence by wonder – it seems to speak to us.

Is it especially that because we, as human scientists, are working with *human* relations and with existential life phenomena that spring from within human interaction and living, we must also be sensitive to that in human life and life as such which scientific rigor, technical words, concepts and theorizing *cannot* capture?

Are creativity and intuition and artful and philosophical wonderment exactly what are needed for the human scientist to work *through* because of the limitations of scientific language and methodology?

Gadamer seems to think so, and so does the phenomenologist Maurice Merleau-Ponty.

Merleau-Ponty describes phenomenology and especially the 'phenomenological reduction' as a special slowly inspired form of philosophical and lyrical wonderment, a way of careful listening to and receiving 'something', which may be described as a kind of silent but saturated meaningfulness. And words, concepts, and thoughts can only be in resonance with this kind of saturated silence if the words spoken or written are in some way indirectly pointing toward what *cannot* be expressed in the form of representative and proportional knowledge and cannot be made visible through scientific empirical methods. It is a kind of 'pointing act' and attuned speech that, as Yeo (1987) formulated it, "...does not simply break the silence but expresses it" (p. 257).

To be creative in this phenomenological sense is to be invited to a return to the ground of this speech, or to the invisible 'wild Being' before it coagulates into civilized and constructed expressions of being.

The existential phenomenologist wants to 'be there' in the very moment when the phenomenon is still alive and not yet solidified or 'gestalted' or 'Gebildet' in psychological and social constructions and 'meaning-making'-movements from within a language

game or life form. For that reason existential phenomenology also is described as a return to beginnings (Sallis, 2003), and philosophy and the philosophical movements of wonder within our thoughts and inspirations can – like art – be seen as doorways to these kinds of ever new beginnings.

Or as Merleau-Ponty writes in *The Visible and Invisible* (1968, p. 197):

Philosophy – precisely as ‘Being speaking within us,’ expression of the mute experience by itself – is creation. A creation that is at the same time a reintegration of Being: for it is not a creation in the sense of one of the commonplace Gebilde that history fabricates: it knows itself to be a Gebilde and wishes to surpass itself as pure Gebilde, to find again its origin. It is hence a creation in the radical sense: a creation that is at the same time an adequation, the only way to obtain an adequation. Being is what requires creation of us for us to experience it.

Or said in another way: Maybe the metaphor of the jazz musician captures what is going on when a human scientist learns to let go of his or her rigorous scientific methods and technologies in order better to hear ‘something’ (Husserl, Gadamer, and Heidegger call it *die Sagen Selbst* or the phenomena in itself), which has not yet appeared but seems to seek an appearance in an articulation or manifestation.

The jazz saxophonists will have to be very skilled and practiced in specific musical techniques, methods and a handcraft in order to play the saxophone. To follow the master by imitating him or her to the very last detail and be immersed into the unique ‘Gestalt’ of this master’s way of perceiving and embodying and expressing the music is a very important part of becoming an artist and to get a sense of the ‘materiality’ of the practice and handcraft of making music.

But the apprentices will only find their own voice and become jazz *masters* and the music will only become an art and reaches a unique moment of improvisation and novelty, *if* the jazz musicians in that moment are also present on a very *personal and existential* level.

There seems to be a more personal and existential dimension that transcends the psychological and socio-cultural and socio-material dimensions of the creative and artistic processes. In these moments of inspiration and transcendence the musicians seem to be connected to on the one hand *what* they are playing, the concrete tones and rhythms, and yet, in the mist of this presence to themselves being *in* the music and relations with the other musicians, they will on the other hand and at the same time hear and react and get into a dialogue with 'something' in the music (or maybe behind the music which wants to be expressed by the music), which is secretly or imperceptibly calling at them beyond the knowledge, skills, crafts, and lived experience of playing the concrete jazz tones.

And it is in this experience of calling and transcendence that they may experience new 'breakthrough meanings' or 'inspirations-from-nowhere', which the jazz musicians in the improvising moments tries to connect to or get closer to.

We wonder whether the human researcher also has to learn to improvise, to stand in the open and 'play' intuitively and with creative imagination in order to hear what does not yet exist (empirically) but is about to unfold. When Gadamer (1989) talks about the ontological 'event of understanding' and 'the spirit in language' and about having an 'inner ear' for the 'inner word,' and when Merleau-Ponty (1968) writes about 'the ontological cipher' in the empirical experience and the invisible in the visible, we believe that they are pointing to hidden or secret phenomena in their origin before they coagulate into appearance in a concrete culture and language or psyche. Like the jazz musicians, the hermeneutic phenomenologists strive to keep themselves as well as the writing situation open for the call of being in a similar way as they may hope for a miraculous and creative adequation with the phenomena itself through their writings and wonderments. These are moments of clarity and improvisation, which cannot be calculated beforehand. Or as Merleau-Ponty describes the researcher's situation as he sets out to write:

This book [*Phenomenology of Perception*], once begun, is not a certain set of ideas; it constitutes for me an open situation, for which I could not possibly provide any

complex formula, and in which I struggle blindly on until, miraculously, thoughts and words become organized by themselves.”(Merleau-Ponty, 2007 [1945], p. 429)

Three themes on creativity and creative human science in the current issue

The above considerations and wonderments are ideas and ideals which we think capture some of the important themes in dealing with creativity and creative human science. The work of the French existential philosopher and phenomenologist Gabriel Marcel comes to mind here. He uses the word ‘creative fidelity’ in order to catch what is going on in the moments when we are trying to open ourselves for the call of being, and when we philosophize in giving a creative and personal answer to this calling (Marcel, 2002 [1964]). And this, we will conclude, also calls for a special kind of readiness (or *Bildung*) for ‘standing in the openness’ in a wondrous, open-ended and evocative receptiveness in the hope of that “...miraculously, thoughts and words become organized by themselves”. The question now then is how can we make room or create practices for this kind of *Bildung* and wondrous creativity in human science?

In the current issue you will find many different answers to what creativity is and what a creative human science approach could look like, and how to practice it.

We have organized the content of this issue (28 articles) under four main themes:

- Promoting Creativity
- Creativity and Research Methods
- Educational Approaches and Methods
- Design, Aesthetics and Creativity

What follows is a brief and, we hope, evocative overview of selected key features of the articles under each of these four themes. For the sake of brevity we identify the article author or authors but not title.

Promoting Creativity

One of the basic questions about creativity is how it can best be assessed. The first set of authors, Tanggard and Glävèneau, propose that the current emphasis on divergent thinking to the exclusion of

idea creation is a problem; instead they propose a dynamic developmental approach to assessment that is closely tied to collaborative activity in such a way that it can actually foster creativity rather than just measuring it. In line with the emphasis on collaborative work, Thorsted shows how a more playful approach that she has developed (known by the acronym FIE), helps students working together to become more creative, open-minded and engaged compared to some of their earlier learning experiences in the context of a Problem-based Learning Process (PBL). And what about artists, the people whom we regard as the par excellence example of creativity? This is the topic that Chemi and Jensen take up through an interview study. They want to find out how artists create and learn and how, in turn, educators can learn from them. The sixth article focuses on creative collaboration in the virtual realm: Thessa Jensen studies the process (fanfiction) where authors post their stories on websites and their readers provide suggestions and input. Finally, Swiatek raises questions about the rewards and accolades, given to scientists and other scholars, that are based primarily on an individualistic notion of creativity even though much of groundbreaking research arises from collaborative activity.

Creativity and Research Methods

This section, starts with an article by Teglhuis Kauffmann, in which she presents an innovative approach to interviewing, namely what she calls a reflexive participatory observation strategy. This approach allows for an open-ended and flexible structured discussion between interviewee and interviewer so that both become active participants in a shared creation of meaning while drawing upon a broad range of knowledge and theory. The next article deals with interpretation, drawing upon Ricoeur's approach to hermeneutics, as Dau offers a deep and philosophically anchored understanding of processes that go on in many interpretative and reflective research processes. She illuminates crucial dimensions of interpretation, exemplified by an analysis and interpretation of a Danish case study of blended learning.

Falck Saghaug addresses the concerns of small business owners who want to balance personal values with economic ones. She uses a case study approach to demonstrate the relevance of the theologian Paul Tillich's notion of revelation for helping business owners

to find, through an intuitive path, what gives meaning to the heart. In a related vein, Hast argues for the creative value of including emotions, the sublime, and subliminal in academic research. She uses examples from a study of violence and compassion in Chechnya and presents emotions and open-mindedness as means to tap into something deeper than what the intellectualist model of thinking encourages. Emotions can certainly be related to research but so can music, according to Verhoeven and her colleagues. Their study explores how data about historical live music gigs can be analysed, extended and re-presented to create new insights. Using a unique process called 'songification,' they demonstrate, among other things, how enhanced auditory data design can provide a medium for aural intuition. If music has application to research, surely poetry has as well. Mandic draws upon the Hölderlin's poem "Remembrance" to look at the existential significance of being a researcher and the experience of undertaking research, especially with regard to the phenomena of familiarity, disorientation, and illumination. In the next article, Nielsen examines children's drawings, arguing that the researcher's active sensory awareness, observance, and description of sensory perceptions can fruitfully be included to throw light upon the world of children. Finally, Ellefsen presents a dynamic representation of the creativity involved in the qualitative research context. The goal of this representation is to make it easier for teachers to support students in the development of their own individual creative process.

Educational Approaches and Methods

Fostering Creativity

As Bengtsen and Mathiasen point out, the presence of innovative technology in education poses significant challenges for qualitative researchers. Looking specifically at the use of digital media in supervisory dialogues they propose, drawing on phenomenology and systems theory, that digital tools be viewed as autonomous things in themselves, possessing an ontological creativity of their own rather than as poor substitutions for face-to-face contact. In contrast, James takes a critical look at the use of a simulator in educating nurses: Noelle™ is created in the image of a pregnant woman who gives birth, talks and can haemorrhage on demand but surely, she suggests, this is quite different from developing a personal at-

tunement to a living, breathing woman in labour. In the context of Problem-Based Learning involving university students, Zhou examines, through multiple methods, the idea or metaphor that, metaphorically speaking, a student project is like “an extra group member,” and discusses what the practical, theoretical, and methodological significance of such an approach might be. So far the articles have simply assumed that creativity is a good thing, but Mølholm raised some questions about the possible downside of the relentless emphasis on promoting creativity within the European Union, including Denmark. Based on the work of Michel Foucault, his article explores how the late-modern human being is incited to become a creative individual. In a different vein, Morris takes up the neglected theme of embodiment and creativity, with a focus on the actual process of writing teachers. To illuminate this topic, she carried out a phenomenological study of movement meditation and the activity of these teachers. This theme of embodiment is also developed by Tanaka as he analyses how meaningful communication is generated from embodied interactions between the self and the other. As part of his approach, he draws upon Merleau-Ponty’s notion of intercorporeality, understood as the reciprocal perception-action loop between the self and the other.

Design, Aesthetics, and Creativity

Of course, there is a large world outside of education, including the world of design. Bolvig Poulsen and Strand focus on the capacity of creative methods to nurture meaning-making and reframing during design processes. They demonstrate how the method, “Object theatre,” can be applied as a meaning-making activity and can effectively support the novel development and refinement of both problem formulation and future solutions. And then there is the realm of engineering design where Coxon describes the use of hermeneutic phenomenology in a broad spectrum of projects for understanding everyday human experience. He and his colleagues have experimented with and explored creative ways to ‘get into’ the lives of participants within areas as diverse as the health, pharmaceuticals, education, manufacturing and local government sectors. In the context of inquiry into problem spaces, Vistisen discusses and categorizes the ways designers use a kind of innovative sketching to test and challenge assumptions about both current and

possible future states of the environment, and suggests that sketching should be understood as broader than a mere set of techniques. The next article, by Seamon, draws upon André Kertész's photograph of a Paris suburb to point toward a phenomenology of aesthetic encounter. Making use of the progressively-intensive designations of philosopher Henri Bortoft, he highlights a spectrum of aesthetic experience that extends from limited assimilation to a more comprehensive and engaged participatory understanding. That phenomenology is also highly relevant to the field of nursing education is demonstrated by Sørensen as she argues that narratives (i.e., autobiographies) and creative approaches (i.e., arts) should be part of future practice in educating health care professionals. She suggests this is especially the case as there is a new official requirement that professionals be able to communicate about existential and spiritual topics with patients as well as with their families. Next is an article that is similarly about innovation in education, but with focus on the university classroom. Nosek and her colleagues describe an on-going project where they bring formerly incarcerated adults into the classroom to share their experiences of incarceration and illness with graduate nursing and public health students. They focus on the experience of one formerly incarcerated adult, Earthy, as they consider his transformative process from participant to teacher of Heideggerian concepts of a person within the context a 'community of wonder.' Then Skov and Pedersen present a Jungian based integrative model of therapeutic change using art therapy methods as practical tools, with the aim of improving quality of life and in the prevention of depression. In their research study, the participants worked with painting, clay work and drumming and imagination and personal dialogues were linked to the artwork. It seems especially fitting that the last article in this edition deals with sublime moments, in this case in nursing practice. Globe and Cameron, using Jean-Luc Nancy's understanding of the sublime, consider how the experience of a patient's breath can be existentially revelatory of nursing practice and how, in such a moment, one may be brought close to what normally remains at a distance.

Conclusion

As we mentioned at the beginning of this essay. Gadamer has called for more phenomenological work and less talk about phenomenol-

ogy. These articles, we are pleased to say, exemplify the practice of phenomenology, broadly defined. What is so encouraging here is that these researchers' have been willing to go against the grain, in terms of method and theory and practice, that they have taken risks and stepped into the unknown. We assume that in many instances they did not at the outset know whether their creativity and imaginative perspective would bear fruit, their critiques and novel perspectives appreciated or even understood, and their patience rewarded. From a common sense point of view, one that many practitioners within the social science related disciplines adhere to, one should be focused on getting results and proceeding in a systematic and pragmatic way, upholding scientific rigor and following tradition. Obviously this viewpoint is of value and it is also, as we have indicated, the point of departure for creativity. Jazz musicians, in the example we used, must be skilled before improvisation becomes possible, just as psychotherapists must have a basis in a sense of personal security and knowledge based on practice, before they can step into the "unknown" with their clients. What these articles have shown is that this stepping into the new or the unknown is in the most fundamental way of value and of use, in applied areas, such as developing business solutions, effective approaches to psychotherapy, or innovative design in engineering. It would be an interesting project to talk at length to some of our contributors and ask them to talk about their creative process and the ups and downs of such their creative endeavors. However, in place of this project, we would like to theorize that in this process something akin to what Marcel calls "creative fidelity" shows up. This entails an opening up, at least in moments, to the call of being and responding deeply to what emerges. It might well be, as Derrida, Levinas, Buber and others have suggested that these moments are characterized by a radical receptivity within which one receives something that is surprising, startling, wondrous and even unsettling. Then, of course, one has to take what has been received and give shape and words to it, and with that there is a certain kind of categorizing and fixing in place. But then, later, the process starts all over again, and one returns to wonder and the possibility of a new beginning. As a reader you bring these insights and studies to life, approaching them with your own interests, agenda, and histories, and, we hope, finding yourself encouraged to find paths to creativity and wonder in your

own research and discipline. As editors we have learned a great deal from studying these articles and dialoguing with these authors and have been inspired by their spirit of adventure and the thoughtfulness of their approach.

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Creativity assessment as intervention

The case of creative learning

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Abstract

Creativity, innovation, and entrepreneurship are among the most celebrated concepts in today's world and this places them high on the agenda in the educational system. Everyone wants creativity, but few people have suggestions as to how to proceed developing or assessing it. This leaves educators around the world with the dilemma of how to integrate creativity, innovation and entrepreneurship into the curriculum. The present paper will discuss how current definitions of creativity and creativity assessment often stand in the way of working constructively towards this goal as they typically disconnect idea generation from idea evaluation and develop creativity measures that focus almost exclusively on divergent thinking. We will argue for a dynamic type of creativity assessment that considers it a developmental rather than purely diagnostic tool. Practical concerns regarding the assessment of creative learning will support these theoretical and methodological reflections.

Keywords creativity, definition, assessment, intervention, cultural psychology, education

Creativity, innovation, and entrepreneurship are among the most celebrated concepts today, globally, and are high on the agenda in the educational system. Everyone wants creativity, but few people have suggestions as to how to proceed when it comes to explaining or enhancing creative expression. While psychological research into creativity increased considerably in the past decades (Hennessey & Amabile, 2010), there is still much to be understood in relation to the nature of creative work and our possibilities to assess and foster it. At a societal level, these concerns are reflected in the explicit, collective effort to find new ways of using creativity as a resource for growth and social transformation.

Many politicians, civil servants, and policy makers see creativity as the key to commercial success and education is supposed “to produce the kinds of individuals who will go on to succeed in a knowledge-based economy” (Moeran & Christensen, 2013, p. 2). Within the management literature, researchers strive to define the necessary skills of the future leader and many point towards the need to foster creative, design-thinking among employees in organizations striving to become more innovative. Design-thinking is here addressed as a particular kind of thinking often employed by designers, defined by user-orientation when designing new products and services and an abductive, constraints-driven thinking (Dunne & Martin, 2006). The basic point is that these skills are seen as relevant for all employees today, and not only for designers. All of this means that educators around the world are currently trying to find ways to integrate creativity, innovation and entrepreneurial skills into the curriculum.

However, our current definitions of creativity and innovation often stand in the way of working consistently towards this aim. For example, in the psychology of creativity, there has been a long tradition of contrasting idea generation (divergent thinking) and idea evaluation (convergent thinking), and many people believe that evaluation and judgment act as eradicators of creativity (Sawyer, 2013). However, we know from studies on design thinking that innovators often employ both abstract and concrete as well as analytic and synthetic thinking (Beckman & Berry, 2007) and assessment studies show that evaluation and learning are closely connected because evaluative practices inform and structure what is learned by students (Tanggaard & Elmholdt, 2008); moreover, a great number

of different evaluative processes are necessary for good creative work (Sawyer, 2013). Accordingly, it is timely to reflect on the evaluation of creativity and how this can be seen as integrative to creative learning processes within the educational environment in order to coordinate our theoretical efforts of defining creativity and fostering it within learning communities. We take as a starting point in this article the broad definition of creativity elaborated, within the educational setting, by Plucker, Beghetto and Dow:

“Creativity is the interaction among aptitude, process, and environment by which an individual or group produces a perceptible product that is both novel and useful as defined within a social context” (Plucker, Beghetto and Dow, 2004, p. 90).

In the following, we will proceed by introducing a story of the lack of assessment of creative learning told by the participants at a workshop conducted by the first author. The story concerns the difficulties faced by teachers who would like to recognize creative learning while experiencing that standardized curriculum goals often work against this. Thereafter, examples of assessment of creativity in psychology, mainly in the form of tests of divergent thinking, are presented. In the final part of the paper, our model of dynamic assessment of creative learning is introduced and discussed as one way forward in the attempt to reconcile dilemmas related to the assessment of creative learning in teaching situations. The sociocultural framework of creativity assessment we advance in this paper moves beyond an exclusive focus on the individual being tested or the test itself to account for the role of others in the testing situation. This perspective challenges the existing separation between assessment and intervention and considers them inter-related in an ever-advancing cycle of observation, evaluation, and enhancement.

“We would so much like to change the standards....”

The above sentence is a direct quote from a teacher telling the first author about real-life challenges related to the assessment of creative learning in a higher education context. Having done more than 100 workshops during the last years with practitioners on the topic of creative learning, one controversial and difficult aspect tends to

come up again and again: the assessment of creativity. How to measure creativity, what to look for and what to do as a teacher? Indeed, teachers do engage in a wide variety of evaluative practices when they strive to recognize and understand what students do. The main trouble with assessing creative learning is that this is a process that generates something new which can therefore be difficult to assess by using existing standards. At a recent workshop with teachers at a Nursing College in Denmark, the above issue came across as highly topical. A group of teachers said that they had begun experimenting along the lines of inquiry learning often described as facilitating creative learning (Tanggaard, 2014), but they felt the existing curriculum standards worked against this. As they explained it:

“During the last few years, our curriculum has become more academic. Our students are expected to gain competence in using scientific methodology. They are supposed to write about this very close to the style used in academic journals. However, our feeling is that it is sometimes very hard for the students to actually meet these demands. The quite strict requirements related to the justification of methodological approaches applied in their projects sometimes hinder students in approaching their project topic in more creative ways. Also, we fear that the practice field does not really gain anything from this. We are currently widening up the gap between school and the field of practice rather than creating the kind of boundary crossing and mutual connections we are also aiming for. We would therefore very much like to change this, to open up for less restrictive and more open approaches to methodology. In our opinion, this would allow for better relations to the field of practice and more open and improvisational projects. Furthermore, this can actually be part of ensuring that the students gain competences within creativity and innovation which are highly relevant for a constantly changing practice. But how may we do this?”

This dilemma voiced by the teachers in the workshop was connected to the increasingly academic profile of nursing education in Denmark. The teachers related creative learning very much to student

projects creating something new, often in collaboration with practitioners, while the official curriculum goals tend to focus on students' ability to work with research methods in an academic fashion.

The author's response to the dilemma posed by the teachers was actually twofold. First of all: Is it a real problem? Would it not be possible to interpret curriculum goals related to research methods so that they fit the goal of creative learning? Indeed, researchers often creatively change their research design in response to the requirements of the tasks encountered, so creative work is very often closely intertwined with research. And secondly: What can be done to change the curriculum goals so that they fit the ambition of promoting students' creative work? However, while driving home, I (the first author) began to reflect on the story told by the teachers. Is the whole act of setting goals or striving towards more academic standards in the curriculum actually detrimental to promoting creativity? Can teachers do more to dynamically access the potential of students' creativity as an integrated aspect of learning as such? Would it actually be beneficial for the teachers and the students to work with an explicit kind of goal-setting and testing for creativity? Do they have, in methodology projects, to work within the boundaries set by a competence-oriented curriculum or are there other ways forward? In essence, many shortcomings associated with the evaluation of creativity come from a strong association with testing or from a disconnection between disciplinary subjects within a given curriculum, on the one hand, and creativity understood as a general psychological cognitive process on the other. It is therefore important, before questioning current forms of assessment, to understand better the logic of psychometric evaluations and their use by psychologists as this lays the ground for the above-mentioned problematic in education.

Creativity assessment in psychology

Any effort to assess or measure creativity should necessarily begin with observing and understanding the everyday activities and discourses that are shaping this practice and, in turn, are shaped by it. In our case, we should start from an in-depth exploration of the particular educational contexts and what is specific for them, for the students involved and for their learning activity. In contrast, most widely used creativity tests are usually built based on a gen-

eral conceptual model of what creativity is (e.g., Guilford's model of the intellect), rather than take a bottom-up, practice based approach. This leads to the easy assumption that creativity tests assess something 'universal', in contrast to a contextual, situated perspective that would direct researchers towards what children and students 'do in context' and how their activity is 'seen' by others (Tanggaard, 2014; Glăveanu, 2014).

There is a great consensus among scholars that creative products are described by both novelty and value (Sternberg & Lubart, 1995). The exact nature of the process leading to such outcomes is however less clear, and a long tradition points towards divergent thinking (DT) as a key factor of creative potential (Guilford, 1950; Runco, 2010). Paper and pencil tests of divergent thinking are extremely common in the psychology of creativity and in educational settings (Zeng, Proctor & Salvendy, 2011) and they typically invite participants to generate as many ideas as they can in response to verbal or figural prompts. Responses are subsequently scored for fluency (number of ideas), flexibility (number of categories of ideas), originality (rarity of ideas), and elaboration (completeness). This kind of practices are becoming more and more common in educational environments, including in Denmark, although access to actual testing instruments – and especially batteries that have been validated for the local population – is rare and often teachers are left to create their own tasks or apply the testing criteria to whatever product the students are working on. This is not an advisable practice for several reasons, most of all the fact that the logic of psychometric measurement, with its strengths and limitations, should be well understood by the teacher before being used as part of any assessment.

For example, the best known instrument in this regard is Torrance (1966)'s Tests of Creative Thinking (TTCT). The TTCT has two forms (A and B), both including verbal (ask-and-guess, product improvement, unusual uses, unusual questions, and just suppose) and figural tasks (picture construction, picture completion, and repeated figures of lines or circles). It is, by far, the most popular instrument for assessing creativity (Davis, 1997), particularly in educational settings. The TTCT can be administered as an individual or group test, from kindergarten up to graduate level (and beyond). Despite ongoing discussions concerning its validity, reviewers tend to agree that this is "a good measure" for both discovering and encouraging crea-

tivity (Kim, 2006, p. 11). While a central feature of the TTCT relies on asking participants to generate ideas and solve problems, it is not just divergent but also convergent/evaluative capacities that are important for a comprehensive study of creativity (Rickards, 1994) and, as mentioned earlier, both divergent and convergent skills appear to be necessary in almost every innovation process (Beckman & Barry, 2007). This double focus is what distinguishes the Evaluation of Potential for Creativity (EPoC; Lubart, Besançon & Barbot, 2011) from other creativity measures. In the words of the authors, this is a “multifaceted, domain-specific, modular test battery that allows evaluators to capture the multidimensionality of the creative potential and to derive profiles of potential for creativity” (Barbot, Besançon & Lubart, 2011, p. 58). With tasks covering the graphic/artistic and the verbal/literary domains (soon to be joined by the musical and social domain), EPoC can be used with children in elementary and middle-school – kindergarten to 6th grade.

What teachers should know is that divergent thinking tests, for as popular as they are, have been also subjected to repeated criticism in psychology (see Simonton, 2003). Zeng, Proctor and Salvendy (2011) listed in this regard six major limitations, namely: lack of construct validity; not testing the integrated general creative process; neglect of domain specificity and expertise; and poor predictive, ecological, and discriminant validities. Nevertheless, other scholars responded to these claims (see, for instance, Plucker and Runco’s, 1998, article ‘The death of creativity measurement has been greatly exaggerated’) by showing that, although not perfect, creativity tests are actually valid, reliable, and practical. For Runco (2010, p. 414), “the research on DT is one of the more useful ways to study ideas, and therefore creative potential, as well as our more general everyday problem solving”. And yet, if we are to connect to the concerns expressed by teachers during creative learning workshops we still need to ask a fundamental question: how can psychological assessment be used practically to help students? How can it be used to tell us something meaningful about their capacity to create, innovate, or be good entrepreneurs? Moreover, how can this be done in the context of a rather rigid curriculum constraining what activities teachers can integrate or evaluate? Our answer to this pressing question is that it is possible to use assessment as a form of intervention but, in order to do this, we would first need to reflect

on the principles behind traditional creativity measurement and re-think them.

A new look on creativity assessment in education and beyond

Studies of the learning processes involved in innovation (Beckman & Barry, 2007) point towards the need to give consideration to the very diverse set of skills necessary to succeed and to teach teams to pay due attention to both divergent and convergent, analytic and synthetic skills. The key is to develop teams willing to learn and collaborate in the complex, real tasks required by producing new and valuable products and services. This means that they must constantly be willing to assess their own work processes and change them in a dynamic manner, according to the given task. But how can we teach students to acquire this kind of adaptive, creative and flexible thinking?

Focused on dynamic models, cultural psychology, as well as situated accounts of learning, is highly concerned by traditional practices of assessment and their decontextualized approach to individual performance. For example, Cole (1996) challenged the mainstream psychometric tradition with the means of ethnography, showing that the instruments we use to assess intelligence propose a definition that is foreign to non-Western populations. For a psychologist, working in educational settings, assessment is or should be closely related to learning, not only as a 'measure' of its performance, but used as an opportunity for its development (Black, Harrison, Lee, Marshall & Wiliam, 2002; Shepard, 2000). The novelty of this approach resides in the fact that, on the one hand, it expands the traditional focus of assessment from student to 'learner in context' (a context that includes students, teachers, parents, as well as the institutional and cultural frames of education) and, on the other, it proposes to integrate assessment activities within the teaching and learning process in ways that make evaluation not a separate activity in school but an integral part of educational practices aimed towards understanding and fostering creativity.

How is this possible at a practical level?

In building a sociocultural psychological approach to creativity assessment we could start from a similar premise as Moss, Pullin, Paul

Gee & Haertel (2005, p. 77) who eloquently argued that “testing shapes people’s actions and understandings about what counts as trustworthy evidence, as learning or educational progress, as fairness or social justice, and as appropriate aims for an educational system”. From this position, unpacking creativity assessment requires an in-depth exploration of its premises and implications. The test itself is part of a wider network of ‘actors’, including psychologists, teachers, parents, etc., as well as lay and scientific representations of what creativity (or the ‘creative person’) is. Moreover, the activity of testing (creativity evaluation) represents only one moment within a cycle that reunites observation (of current creativity practices) and enhancement (of creative potential and expression). In agreement with Houtz and Krug (1995), we share the view that creativity tests “might best be used to help ‘awaken’ creative thinking in individuals” (p. 290). Figure 1 below captures this intrinsic relationship that points to the intricate and continuous inter-relation between processes of observation, evaluation and enhancement of creativity in educational practice. In addition, it shares some of the basic premises of design thinking (Dunne & Martin, 2007), in which the ability to work with ill-defined problems by way of abductive reasoning is seen as one of the most important skills in the future and, therefore, of utmost importance for the educational system to consider developing. Rather than trying to find the ‘creative child or

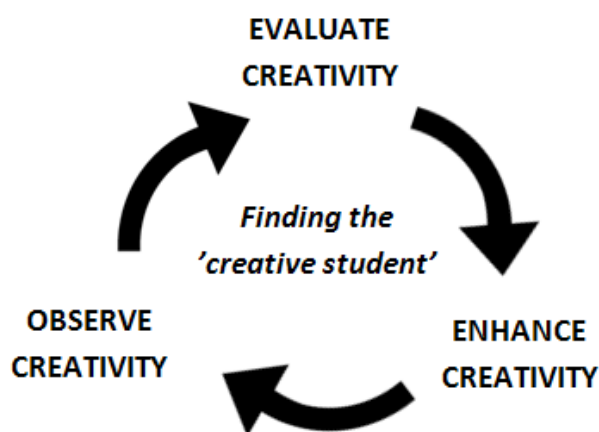


Figure 1. A framework for creativity assessment as intervention in educational settings

student' as a static one-moment-in-time process, the development of creative capabilities is considered here a dynamic, on-going process in which any form of assessment becomes an integral aspect of the learning process rather than a separate activity.

Towards the future of creativity assessment: Dynamic and formative testing

We started this paper by outlining the importance of creativity and innovation in educational systems that strive to develop active and creative students, capable of taking initiatives and seeing them through (thus having strong entrepreneurial skills as well). However, as we have seen from a brief case of encountering educators during creative learning workshops, these efforts are constantly challenged by different features of testing, of the curriculum, and by the way some teachers tend to interpret new curricular standards. We then proceeded to a close analysis of how creativity is being assessed in psychology as it is primarily this professional groups teachers look to in search of advice on these issues, in general. And yet, divergent thinking tests, the 'golden standard' of creativity assessment, rarely live up to their promises. First of all, they tend to disconnect idea generation from idea implementation and focus largely on the latter which is a major problem considering the evidence that these skills are integrated in concrete innovation work. Second, there are many individual and cultural factors that are not taken into account by these tests, which make them too general to be useful in many concrete settings.

In this context, a new look at measurement, informed by cultural psychology and learning theory, was advocated for, one that considered the inter-relation between observing, assessing, and enhancing creativity in the school context. How can creativity tasks be used as intervention and not only for purposes of assessment? There is a strong line of thinking pointing towards this direction, again in psychology. It goes back to the scholarship of Lev Vygotsky (van der Veer & Valsiner, 1991; Cole, 1996), and is reflected in recent efforts made to formulate and apply 'dynamic assessment' (see Lidz, 1987; Tzuriel, 2001; Haywood & Lidz, 2006) and 'formative interventions' (Engeström, 2011). In essence, dynamic assessment involves adapting the tasks presented to children or students to their level, interest and needs, and both identifying and expanding their potential by

facilitating interaction with others. While this type of evaluation exists for intelligence testing, there are virtually no studies of dynamic creativity assessment which is not only a theoretical gap but one with very serious practical consequences¹. Dynamic assessment promotes collaboration in working together on a creativity task and this is what students do most of the time in class. By not paying sufficient attention to these moments, or not structuring them in such ways that students get the most out of their activity (in line with the aim of enhancing creative expression) and teachers become capable of observing and assessing their work as it unfolds, we are missing valuable teaching and learning opportunities. In the end, it is the artificial separation between divergent thinking (ideation) and convergent thinking (evaluation) that we are reinforcing when detaching assessment from intervention. A more holistic way of looking at educational practices is required in order to transcend such divisions for the benefit of all those involved.

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Notes

- 1 We are grateful to Todd Lubart for suggesting this new line of theory and investigation.

How play enhances creativity in problem based learning

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PhD, is an assistant professor and head of Play Lab at Aalborg University, Institute of Communications, Denmark. Her research is in the field of play amongst adults in the area of Organizations and how play may foster learning and more profound and interpersonal relationship together with more creative, innovative and collaborative dialogues. Her research builds on action research with a certain phenomenological approach.

Abstract

This article draws on 20 Danish university students' reflections *in and on* a Problem-based Learning process (PBL). The study showed how a more playful approach changed how the students collaborated, communicated, and approached a given task. They felt more creative, open minded and engaged compared to some of their earlier learning experiences. They sensed a change in how they interacted with each other, a different tone arose in their social bonding, which led to the overall question for this article: What happens when play becomes part of a PBL process and how can we understand the relation between play and creativity in higher education learning processes?

Keywords Play, creativity, PBL, Learning, collaboration

Introduction

At Aalborg University the problem-based project-form and project-organized learning have formed the foundation for pedagogy since 1974 (Kolmos, Fink, & Krogh, 2006). The grounding philosophy emanates from John Dewey, Kurt Lewin and Jean Piaget and

their ideas of ‘learning by doing’ as a way to teach students both content and thinking strategies. By using concrete problems or a theoretical problem as starting point, students develop an ability to define problems, analyze, collaborate and learn. In the Aalborg model focus is on teamwork and creation of knowledge emerging most abundantly from a concrete practice experience. These real-world problems are primarily the motivation and driver for the students’ learning.

In contrast to traditional teacher-centered learning the Aalborg approach is characterized by being student-centered in that students are asked to take responsibility for their own learning and expected to gain new knowledge and develop flexible knowledge through integration of information across multiple domains in a self-directed way. This inter-disciplinary learning demands an ability to combine methods, theory and subjects across traditional subject-boundaries in endeavor of transferring knowledge from one field to another.

In the Engineering program of Architecture & Design a new over-all PBL model bringing in play was introduced in 2004 (Kiib, 2004). The approach was called the PpBL model. The idea behind it was to create a deeper interplay between the goal-oriented aspects of the university pedagogy and a more intuitive, artistic and reflective approach. In PpBL play is seen as mediator for beautiful, functional and meaningful design emerging from a stronger focus on intuition and artistic development. The implications of this approach were never developed further, as far as I know. Hence, we still have many unanswered questions regarding the role of play. What is play? What happens when we start integrating play and how can we understand play and play-based learning more theoretically as well as empirically? What is the relationship between play and creativity?

The role of play

Seeing play as the point of departure for creativity, we acknowledge it as a way to give rise to new ideas, to understand, learn, and find new forms, symbols or patterns on which new design, knowledge, society etc. can be built or organizations develop. Huizinga already argued for the importance of play fifty years ago, when he introduced it as a central life function, which we cannot regard purely as a biological, psychological or a physical function (Huizinga, 1963/1993). Instead, he together with other theorists have empha-

sized that it is acknowledge as a phenomenon that exceeds our basic needs of sustenance (Fink, 1968; Gadamer, 1960/2007; Schiller, 1967; Winnicott, 2005). This brings us to an understanding of play as a spontaneous act of vital impulse calling upon something even deeper in us as human beings than the immediate feelings and reactions, which we at first hand might connect with play (fun, energy, excitement, relief etc.), or play regarded merely as a ‘tool’ for an artistic learning process, as Kiib asserts it with his reference to Schön and his practice-epistemology.

Play is ‘not just’ a matter of fostering *intuition* and *new knowledge related to praxis* (Kiib, 2004, p. 205); it does also open for a more existential influence being an ontological event, a ‘geschehen’ or a life-phenomenon that catches us, if we open ourselves to it (Gadamer, 1960/2007). It is not just a tool for building new skills, to fulfill certain purposes, or a way to reach a goal as means to an end. Play is an ongoing *Bildung* process, a liberal learning or self-cultivation that goes beyond the improvement of required abilities. “*Play is always a confrontation with being*” (Fink, 1968, p. 23).

This overall understanding of play does make it a paradox that we are confronted with when we talk of bringing it in as a mediator. On one hand we need to acknowledge it for its own sake, its own internal purpose, but on the other we challenge this acknowledgement when we try to ‘use it’ to reach certain goals. Realizing that play is not a tool to be mastered, but an ontological and unpredictable event that may take us in unexpected directions makes it clear that the outcome of a play process can never be predicted or controlled. So what do we do when we want to bring play into organizations or as part of an education?

Empirical study

During the years I have developed a model called FIE (Thorsted, 2013), which is a concept to support facilitators and participants in their navigation in unpredictable processes. This concept was also the framing for the empirical study for this article. In 2013 at Aalborg University, Institute of Communication and Psychology, Human Centered Informatics 7th semester, 20 students participated in the course “The role of a Consultant in Practice”. The overall learning goal for the students were to gain knowledge around different interventions methods, the role of being a consultant and its theo-

retical foundation, combined with concrete skills in performing and facilitating intervention in practice. This experience should lead to competences in handling different consultancy tasks. The students were a mix of students from Human Centered Informatics and newcomers from other educational programs both inside and outside the university.

The course began with a three days workshop where the group of students worked with an external consultant, who introduced them to a ‘real world challenge’ on the first day. To pass the course, each student had to complete a written assignment of 10 pages after the workshop. This assignment should include reflections on the challenges they had met in the creative process and the strengths and weaknesses they had experienced regarding the playful approach and the use of FIE as a concrete intervention method. The assignments produced all together 200 written pages reflections, upon which this article builds.

Each assignment has been read and more spontaneous and interesting observations and reflections of the students have been marked. This left me with nine assignments, which were re-read carefully and condensed into themes. Once again I returned to the text to divide the themes into few overall categorizes. Each of these categories were more closely scrutinized and leading to a selection of a few student statements to elaborate on (Kvale, 1997).

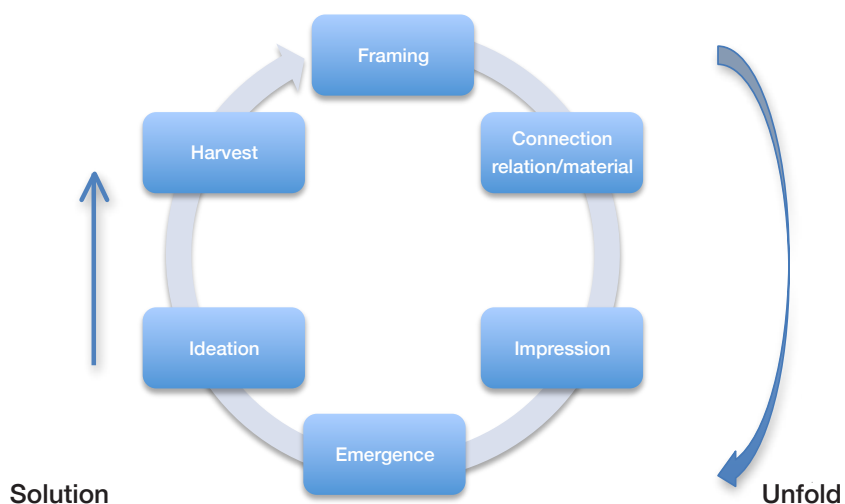


Figure 1: FIE © Ann Charlotte Thorsted

FIE as a creative intervention method

The task given the students was framed by FIE (Figure 1), a new *social technology* (Jöhncke, Svendsen, & Whyte, 2004) and a concrete playful intervention form centered around the establishment of a ‘social field,’ meaning a space and time of a certain quality, collective sensitivity, creativity, attention, intention and engagement (Scharmer, 2007).

The name FIE refers to the first letter in each of the titles for respectively step 2, 3 and 4 in the model, which all together represent the novelty of the process compare to other creative approaches. The three steps are in Danish ‘Forbindelse’, ‘Indtryk’ and ‘Emergens’; in English Connection, Impression and Emergence.

The entire model holds of six steps. For the first four steps it is important that the participants do not enter with a solution-mode, but try to establish room for openness, collaboration and meaningful contact to the given challenge. This is also called the ‘unfolding mode’. Not until the participants reach step 5 and 6 are they expected to turn their attention towards finding a solution to the given challenge (solution mode). At the first step (Framing) the external consultant and I had already established a frame for the whole process before we met with the students. This framing was a mutual agreement between the consultant and us as a group to make sure that we all knew why we were gathered under what conditions. Who were expected to do what and what was the time schedule? What would be the product delivered from the student group to the external consultant?

Step two (Connection) refers to the development of a collaborative and trust-based relationship between the participants in the co-creation group and a connection to the challenge or ‘Material’, which the co-creators were gathered around in endeavor to find a solution, novelty or new understanding of the given challenge. The purpose of this step is to help the group to reach a stage where they feel safe, comfortable and trusting, so they dare to let go, start playing, become open minded and creative. This I also calls the creation of a ‘community of play’ understood as “a personal and trust-based relationship that unfolds us as human beings at an individual as well as a collective level and hereby enhances a more meaningful and personal human encounter” (Thorsted, 2014, p. 1).

At the third step (Impression), the focus is on getting fully immersed in the task and to reach a point where the participants understand the challenge in depth. Earlier presuppositions have been unfolded, discussed and set aside for new impression as required by phenomenology (Van Manen, 2014), which is the grounding philosophy for FIE. The participants are now standing in front of the window of new possibilities, the field of what they do not know (Darsø, 2011). They may more intuitively have sensed new potentials, but they are still expected to remain in the open, play out realities in the *double existence of reality and illusion* that characterizes play (Fink, 1968). When playing we move between two worlds, the ‘real world’ and a ‘play world’. In play world we are allowed to experiment, try out new ideas before arriving at final closure on a solution.

At step four (Emergens), the participants are filled with impressions, almost bursting with new insight. They are now in the cross field between what they already know and what is to come. In the emergent moment we listen for whatever calls us. Part of this ‘calling’ will of course always be: a) rooted in whom we are as persons (the idiosyncratic and personal voice of the subject), b) the epistemological and professional knowledge and know-how, we have learned (the voice of our knowing) c) as well as demands and interests of the political, professional and institutionalized systems we work with or are part of (the voice of the systems). But there is indeed also a ‘fourth voice’ that neither has to do with the voice of knowing, voice of doing, nor the voice of our personal being. This fourth voice is, according to the Danish professor Finn Thorbjørn Hansen, *the voice of the phenomenon itself*, as it presents itself to us ontologically (Hansen, 2014).

In the emergent moment “*a sudden insight reveals a truth about a phenomenon*” (Van Manen, 2014, p. 235), new meaning takes form, perhaps experienced as a certain flash of insight.

To sum up, what we have done in FIE so far is to bring in lived experiences, collect impressions collectively to be able to connect ourselves profoundly to a query to make original thoughts strike. This we do through a state of *active passivity* (Van Manen, 2014) and a “*pregnancy and affective gestation period and condition necessary for an inceptive happening to happen*” (Van Manen, 2014, p. 239). The term ‘inceptive’ refers to Heidegger and his understanding of the fragile moment, when we are struck by something.

Step five (Ideation) and six (Harvest) are similar to other creative approaches, and therefore these will only be mentioned briefly. During the last two steps the impressions are given a new expression, new ideas developed (Ideation). The participants have entered the solution-mode and are now directing their attention fully towards finding a solution to the problem to be able to ‘harvest’ from their engagement in the process. Play can still be a part of this last part of the process.

Although the different steps are presented linearly, it is important to underscore that this only count for the theoretical presentation. In practice the process evolves in a much more blurred fashion.

FIE practiced amongst the students

This section offers a few examples of activities from the workshop.

The first day, the students were invited to bring their own favorite toy (Connection/Relation). As part of the activity, chairs were organized in a circle from which each student introduced themselves for the rest of the group through their toy. After the introduction, they were divided into smaller groups and given time to establish their groups.

In one of the next activities the students used LEGO bricks to reach a deeper understanding of the introduced challenge (Connection/Material). At step three (Impression), each group drew a map of all the information and impressions they had gathered, which led to the formulation of a series of questions and wonderings that was used as part of a Socratic Dialogue (Hansen, 2000).

As entrance to step four (Emergence), the scene was changed completely. Had we been closer to nature, it would have been ideal to integrate this as part of the process. Instead I chose to use the gymnastic facilities, and for half an hour the students played in the big hall. Here they were challenging each other, being physical and doing something that, at first sight, had nothing to do with the given task. Using their bodies was another way to reflect and let their impressions percolate, which led on to an accumulation of all their impressions into a living sculpture.

To mark the shift in the process from the ‘Unfolding mode’ to ‘Solution mode’ the students were dressed up in identical white work-suits (Ideation). At this point they were offered all different kind of materials (painting, paper, yarn, clay etc.) to play with, to

illuminate and conceptualize their ideas. At the last step (Harvest), the students conducted a catalogue with new ideas to be passed on to the external consultant.

Plays emotional and bodily impact

We have now reached the point where concrete reflections of the students' are brought in. Not surprisingly did the students in general experience play as great fun, something that gave them energy and made them laugh and feel joyful.

“It was an interesting break from the more traditional teaching and still relevant and giving in spite of not being pure lectures. Perhaps because this is more like the real world and personally these kind of processes have a huge impact on me, as I use my whole body and therefore remember most of the content afterwards, which enhances my chances for profiting from the experiences in the future”. This reflection from one of the students emphasizes that the learning process differed from most of her other experiences. Play made her use not only her brain and intellect, but her whole body, which made her remember and open to deeper learning.

Another student pointed out, how play made it easier for him to visualize and conceptualize new ideas. One could say, with reference to J. Heron, that the playful approach offered the students a possibility to enhance different knowledge forms. Heron talks of ‘experiential knowing’ as a “knowing through the immediacy of perceiving through empathy” (Heron & Reason, 2006, p. 149) and ‘Presentational knowing’ building on experiential knowing providing an expressive form of imagery through all different kind of movements and materials, as practiced in FIE.

Variation

After a relative short period, the students began to accept that there was no precise time schedule for the three days, no listing of activities outlined beforehand. They began to relax and even enjoy being surprised and continuously challenged by new activities. One of the students described the variation in the whole program as stimulating for his thoughts and actions. Not knowing what came next was conducive for his ability to be creative. This is very much aligned with another study conducted by Tara Fenwick, who studied innovative learning in workplaces (Fenwick, 2003). Her study also

indicated that variety, challenges, inventive activities are some of the basic elements for creativity and generative learning.

Time

Several of the students stressed the importance of having enough time to immerse in the process and to enter a space of play, where preoccupation with clock time falls away. Similarly, Amabile rejects the common assumption that people come up with their best ideas when time is tight. Her studies showed how creativity ‘under the gun’ is not the best solution for the development of creativity (Amabile, Hadley, & Kramer, 2002).

Freedom

Another element found in the assignments was the freedom to try out or ‘fool around’ as March already advocated for in 1979, when he was one of the first to talk of introducing play into organizations in order to explore new possibilities and challenge the necessity of consistency in organizations (March, 1979). Innovative or generative learning requires time and space without too many constraints.

Some of the students had earlier taken part in another creative process at Aalborg University building on the ideas of “The Creative Platform” (Byrge & Hansen, 2008). In this process one of the students had felt pushed, controlled and manipulated in a way that took away her creativity. “*I actually felt it was unpleasant to be creative on demand*”, as she formulated it. As already emphasized is FIE building on phenomenological and the idea of *active passivity* understood as moments where a sudden insight (inception) comes to us, when we are ‘actively waiting’ for it to occur. This approach seemed to have suited the majority of the students well. In FIE we frame the process in endeavor to create something but just as important is the given time and spaces and a will to let us be seized by an inceptual thought through active-passivity as Van Manen asserts (Van Manen, 2014).

Getting out of the closet

The same student explained in her assignment how she had experienced how the first introduction activity “*got her out of the closet*”. By this she meant that she did not feel intimidated nor did it make her hide. Her earlier experiences had been that staying in the safety of

the closet produced a barrier for her creativity. *“That is why I see this welcome play as an important factor for the openness of the whole group as it opens up for our own personal closet.*

In her view, trespassing one’s personal boundary early in the process, showing who you are and by this one’s own vulnerability, enhanced a mutual respect amongst the group members right from the beginning of. Being courageous, putting herself at stake by telling her personal story around her favorite play toy made her overcome her fright for others judgment and reservation. This together with the openness of the other participants created a feeling of belonging.

Getting out of the closet can also be explained through Rollo Mays talk of *social courage* as an important element of creativity. Social courage is the courage to relate to others and the capacity to risk one’s self in endeavor to achieve something, just as the students had done.

The American professor of management Lloyd Sandelands says: *“Play is an enlargement of love that calls upon the deepest vitality of human community and thereby upon its greatest possibilities for adaption and development”* (Sandelands, 2010, p. 2). The young student did not talk of love but a mutual respect for the individual and a shared openness as the key for the creation of a human encounter. By showing her own vulnerability, she felt acknowledged, which made her relax. Her own openness, together with the openness of her fellow students mediated a respectful way of being together and an acknowledgement of the different students as individual human beings.

Another student wrote; *“it is one of the most collaborative acts I have ever taken part in”*. Several of the students were taken by surprise, because it felt so easy and comfortable to work together, to co-operate and co-create with people they hardly knew while playing. This ability did not only come forward in the small groups, it also spread out to the whole group of 20 persons, as observed by others.

A new social field

One could say that building up this new kind of intimate relationship created a shift in the students’ attention to each other and made them enter a new social field. This field was also characterized as a place where a unique ‘mood’ and ‘attitude’ emerged. One student explained the rise of the certain ‘mood’ with reference to Tina Berling Keiding and her studies of the psychical rooms importance for

informal learning processes at a university (Keiding, 2012). Having the opportunity the first day to establish and organize their own room made it easier for them to give themselves away to the unknown and become playful. They felt safe, comfortable and a certain “*power of cohesion*” developed in spite of the fact that they had only known a few of the group members beforehand. The ‘tone’ changed, as it was formulated by several of the students. It became more appreciative and mutually engaging.

The Norwegian professor in nursing Kari Martinsen speaks of the ‘tone’ as an utterance in a situation, we share with others, where a certain attitude or way of being in the world is unfolded (Martinsen, 2006). The tone is shifting, when we get attuned and have accepted the invitation of the other to attend his world. To be attentive is both an activity, something we do (get out of the closet) and at the same time a stepping back to give room for the other to come forward, to sense, to listen more intuitively for whatever the moment calls us to do.

To find a tone, a certain attunement together with others is like the creation of a shared pulse that characterized the resonance within the whole group and influenced how they communicated, acted and responded to each other. The tone is like a separate layer, as Martinsen describes it, carrying deep significance, as it plays a crucial part in the way the relationship in a group is performed and how a group is working, as the study showed.

Conclusion

I began the article by discussing PBL and PpBL as it is utilized at Aalborg University, where the later is centered on play and creativity. The discussion emphasized a need for a deeper understanding of creativity and play and how the two phenomena can be understood in relation to each other and learning.

An empirical study brought in gave 20 Danish university students’ reflections in and on a playful approach to a PBL task given in 2013 framed by the playful method FIE. The study showed how the students’ attention to each other changed and how they developed a ‘social courage’ as an important step for fostering creativity. By investing themselves more personally in the learning process the relationship between the students changed. It became more respectful, which encouraged them to be more open-minded and sen-

sitive. The mood and tone in the group shifted and a more appreciative and collective engagement rose. A new ‘social field’ was created, or one could say, they developed a Community of Play.

Not surprisingly, the variation in activities not only offered the participants the opportunity to enhance creativity, but also the use of their body, the freedom and time to explore, became important elements for the development of creativity as a whole. The ontological dimension of play did also lead to the emergence of a more existential calling; they got out of the closet and dared to show their own vulnerability, which had an important impact on how they experienced the whole learning process. It could be interesting to follow up on this to see whether and perhaps how, this experience has influenced their further approach to their study.

Given the limited empirical documentation, one should be cautious about generalizing too far. However, this study does point into some interesting future directions for generative learning and creativity. Is it true that it is more difficult to gain inceptual insight in concert with others as van Manen asserts? This tentative study shows something different, which would be interesting to investigate further. What more precisely does the Creative Platform or other creative processes building on different epistemologies offer compared to FIE?

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How Do Artists Learn and What can Educators Learn From Them?

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Abstract

Among scholars and practitioners interested in creative learning, many assumptions and even stereotypes are nurtured about artists' creativity. The myth of the lone genius, for example, is neither close to artistic practices nor beneficial to education. We address the topic of artistic creativity, looking at its relevance to educational settings. Through asking the question: *how do artists create, learn and how can education learn from them*, we have investigated and described professional artists' creative and learning processes. In this article, we present findings from a qualitative research project that explores these questions as an empirical and theoretical contribution to the field of arts and creativity research from a learning perspective. We found that the interviewed artists experience learning and the creative process as interwoven phenomena and that they develop intentional learning strategies that they use in the effort of creating works of art. One of the strategies, based on challenging oneself, is articulated in this article.²

Keywords creativity, arts, transformative learning, artistic learning

Domain or not domain?

Whether or not creativity is domain-specific is the subject of much discussion within the field of creativity studies. Both sides have supporters and opponents. The position we take is a mediation of the two extremes, as do Plucker & Beghetto (2004). Creativity unfolds necessarily within domains and contexts, but it is not an exclusive product or process of only one—or a restricted number of—domain(s). In the research that constitutes the background for the present article, we did not understand (and still do not understand) creativity as a phenomenon exclusive to the arts. Still, we wanted to focus on the domain-specific form of creativity in the arts, because artists and artistic communities cultivate and nurture creativity as one of the means and ends of learning, communicating, engaging in relationships and living their lives (Baer 2010). Our previous studies on creativity had showed that there is still a definite need for more focused attention on the specific domain of artistic creativity. Therefore, we designed a research study that aimed at describing the background of artistic creativity, making use of the power of focused observation (Chemi, Jensen & Hersted, in press). Our purpose was to describe the phenomenon of artistic creativity in a learning perspective, by means of artists' recollections, retrospective narratives, conceptualisations, ideas, processes and relationships.

Previous studies have examined artists' creativity, often in correlation, opposition or comparison to scientists' creativity (Csikszentmihalyi 1997, Gardner 1994, Weisberg 1993). Other studies have looked at artistic creativity as domain-specific (Baer 2005, Locher 2010, Weisberg 1993, Weisberg 1999). The problem with both approaches is that they may give rise to assumptions and even stereotypes about artists' creativity: either artistic creativity is likened to ordinary cognitive, procedural or behavioural processes (domain-general) or it is seen as special and as a product of extraordinary genius and talent (domain-specific). The myth of the artist, as an isolated, sometimes even mad genius, seems to be still accepted and taken for granted amongst educational practitioners. However, during the last two decades we have seen a growing tendency in creativity research questioning this myth (Weisberg 1993, Sawyer 2007, Sawyer 2014, Amabile 1998). In this article, we will argue that we can bypass the myth of artistic genius by investigating artistic creativity from a learning perspective. Therefore, we have asked

outstanding, highly creative people within different art fields the overall question: *how do you create, how do you learn (to be creative, to make art, to learn) and how do you organise your work?* In the present article we will focus on the theme of creativity and learning. By studying learning and creative processes among exceptional achievers in the arts and by letting them articulate how they learn and create, we assumed that we could unfold a number of learning traits. This approach demystifies some of the elements of artistic creativity and thereby makes them useful in the field of education. We briefly describe and present the background considerations for our qualitative research project, as well as its design, structure, methodological and conceptual challenges. We conclude by summing up our findings and presenting several implications for education and learning environments.

Empirical material

In order to investigate and describe the different artists' compositional processes and the assumed link to educational creativity, we formulated the following research questions: How are art and learning connected and interrelated? Can specific learning traits be identified of artistic work processes that might enhance creativity? Do artists learn to create their art in specific ways and if so, are there elements or patterns that might be interesting for areas such as education and development? If so, how can these patterns be conceptualised? Can the concepts be transferred into principles applicable to other domains such as teaching and process facilitating and if so, how and why? To work with these questions, we established the premise for the present article that the artists' working processes had the aim of *leading to* creative outcomes. The empirical material for the research project consists of 18 qualitative research interviews with 22 professional artists (some interviewed in groups), desk research and artworks.

The interviewees work within several artistic modalities: literature, poetry and scripts (Siri Hustvedt, Morten Ramsland, Michael Valeur); dance and choreography (Palle Granhøj); acting and directing theatre and performance theatre (Eugenio Barba, Julia Varley, Kirsten Dehlholm); composing and performing music (Anders Koppel, Benjamin Koppel, Marco Nisticó, Mira Kvartetten); film-making (Mary Jordan, Annette K. Olesen); visual arts (Michael Kvium, Julie

Nord); digital arts (Signe Klejs, Niels Rønsholdt); design (Rosan Bosch, Rune Fjord); architecture (Inger Exner, Johannes Exner). We are aware that some of the modalities, like architecture or design, are not considered as traditional fields of art. Nevertheless, for the purposes of this study we assume that these fields contain artistic dimensions and the creative processes involved can be viewed from an artistic perspective. The desk research was on information and expressions from the interviewees' web-material such as web-pages, online examples and excerpts of artwork, virtual and physical exhibition rooms and the like and in several cases we carried out a desk study of the interviewees' artistic work. The artwork research was carried out by viewing and experiencing rehearsals and exhibitions, attending their concerts or watching their performances.

We developed the sample of interviewees based on the criterion that they make a living from their artistic work in the sense that being an artist is their profession and that they are acknowledged at the very least in their professional environment and often beyond as well. A second criterion was that they work at an international level and the third criterion, that they are reflective about their own creative working processes, so that the likelihood of getting new information on creative artwork and learning would be high. The following artistic traits were covered in the interviews:

- Big C creativity: Often ground-breaking and renewing existing traditions
- Pro C-creativity: Creativity as an approach to work/learning/action, often involving specific routines or habits of thinking/acting (Kozbelt, Beghetto & Runco 2010; Simonton 2010)

The research question guiding our interviews was to ask the artists how they learn and create and how their creative learning and change processes come about. All the material was collected over a period from September 2012 to December 2013 and the overall research is documented in Chemi, Jensen & Hersted (in press).

Methodology and analytical framework

Our study is based on qualitative research interviews in which we asked the artists how they experience working with artistic processes and how they interpret and create meaning in their activity

and in the results of their creative working processes. Our approach is a consequence of our research question, where the aim is to investigate the concepts of learning and creativity as they appear to the artists. As qualitative researchers, we were open to the phenomena as conceived and expressed by the interviewees when we collected narratives (Brinkmann 2012). We used the semi-structured research interview as described by Brinkmann (2012) as the method for data collection. The interviews were recorded as audio files and afterwards transcribed verbatim, translated into English and analysed. All the interviewed artists were offered the possibility of commenting the excerpts from the interviews and the opportunity to rectify our understanding or to specify concepts.

Our analysis of the collected data corresponds with the qualitative approach by being inspired by Giorgi & Giorgi's descriptive data analysis method (Giorgi & Giorgi 2003). Even though Giorgi's method is developed to conduct research in the field of psychology, we considered the method relevant for exploring the field of learning and creativity, as learning and creativity, like psychology, are ways to understand human activities in a life-world setting. Therefore, we were guided by his method in exploring and revealing the learning and creativity aspects of the research participants' varied expressions. For this article, we emphasise the learning perspective analytically with the intention of exploring its significance for creativity.

This required that we, as researchers, approached the interview transcriptions with what Giorgi (2012) terms a phenomenological reduction attitude, 'setting into brackets' previous knowledge while examining the interview data. This attempt to work without presumptions towards data was a way for us to raise the probability of understanding ways in which creativity and learning were perceived by the individual interviewed artist. However, our approach to data was, following Giorgi's method, also guided by our research focus on learning and creativity (Giorgi 2012). This double perspective in the approach to data allowed us to analyse the interviews in both open and focussed ways, following five steps as described by Giorgi (2012, pp. 5-6): 1) Reading through the interviews to get a sense of the whole. 2) Constituting meaning units relevant to the theme of learning. 3) Transforming meaning units into expressions corresponding with terms and concepts within a learning perspec-

tive. 4) With the help of our imagination, expressions that were meaningful to the learning perspective were transformed into situated structures, and 5) Clarifying, interpreting and comparing the characteristics of the interviews (Giorgi 2012). This analysis frame was our method for identifying meaning and patterns of learning that were either broadly in common across the interviews, or meaning that was unique and specific for one artist in particular.

While identifying meaning units and transforming them, we worked partly individually and partly together as a research and writing team. We also interpreted selected works of the interviewed artists. In the following section, we will introduce the concept of learning as related to and sometimes even originating from processes of artistic work.

Artists as learners

Findings from the present study have mostly confirmed and defined what other qualitative creativity studies have documented, suggested or formulated about artistic or general creativity. The originality of the study lies in the characteristics of the artists' narratives when interviewed about learning and creative-compositional experiences. The narratives have added to our understanding of specific descriptions from the artist's everyday engagement with creation, problem finding, problem solving and collaborative negotiations with peers, traditions, materials and media, ideas, spaces and environments.

Concerning the relationship between learning, creativity and artistic processes, we found that the interviewed artists perceive creativity as intertwined and interwoven with artistic work processes. Given that not all kinds of learning processes involve creativity and not all kinds of learning promote or foster creativity, creative processes seem, for the interviewed artists, to be related to specific understandings and creative experiences that are explorative, problem-based, accommodative, mediated and sensory-aware. These types of learning have both an individual-personal as well as a collaborative, social and cultural side.

The interviewed artists tend to develop personal strategies for intentional learning, which begin with mastering the craft of a chosen art form and aim at creating opportunities to engage in open, explorative and continual learning processes. These strategies are used in relation to technique acquisition, continual learning and

open engagement with the world. The artists implement the strategies by practicing skills involving sensory awareness and reflection, by challenging their own knowledge, meaning and basic assumptions and through cultivating curiosity and continued exploration. The outcome of these learning and development processes is sensory openness, experimentation and improvisation, reflective processes and transformative learning.

Concerning the collaborative, social and cultural sides of the explorative learning processes, we found that artistic communities of practice provide a range of learning opportunities and possibilities. These learning opportunities seem to be of non-formal or informal and (situated character within the given communities. In this situated understanding of learning, apprenticeship seems to be a fundamental, non-formal educational structure, which passes on knowledge, understanding and possibilities of artistic expression to newcomers and novices, and provides with opportunities for continual learning.

Within the formal educational system, such as primary school, high school and higher education including arts programs, the artists also experience learning opportunities, but often of a negative nature. Our findings show that the learning potentials of these educational environments, although containing explorative and social learning opportunities, often seem to involve an overweight of conforming learning aspects like imitation and adaptation into the cultures of the given educational institution and an experienced excessive emphasis on conformity to educational goals and structures. The interviewed artists generally seem to experience discouragement and demotivation in such learning environments.

Perspectives for learning

The findings of this study have several interesting implications for learning theories and the fields of pedagogy and teaching. In this section, we will present some of the more surprising insights from our study, which may add to existing knowledge on artistic creativity.

The interviewed artists seem, first and foremost, to experience several creative processes as interwoven or even intertwined with learning. Therefore, many of them do not distinguish between the two concepts – it seems as if the creative process is experienced as a

knowledge building process, where the artists learn new things at different levels – about their material, art form and its expressions as well as about phenomena in the world, or even about themselves and their potentials and limitations. We see this in expressions like “a mega learning process” (R. Fjord), “verbalising a hunch” (J. Nord), “investigations of the world” (K. Dehlholm), “learning new things all the time and using them” (B. Koppel), “learning by doing” (A. Koppel), “learning by writing” (M. Ramsland), “learning by receiving and expressing” (M. Kvium).

The most striking consequence of this is the way in which the artists use a variety of learning experiences as intentional strategies in their artistic work. They are also quite specific about the qualitative and experienced opportunities for learning provided by the social environment within the field of their art form as well as within other fields, especially educational or collaborative settings.

The interviewed artists seem to instrumentally “use” learning as different strategies within their work at several levels and in different stages of their work:

- As a means of acquiring skills and craftsmanship to be able to perform their art form
- As a means as well as an end to renewing artistic expressions and own knowledge
- As a means and an end to engage with the world.

These findings indicate that learning in itself is perceived as an integral part of their bread-and-butter creative processes and in general of creative activities: a constantly active engagement with the surrounding environment in novel and meaningful ways.

Challenging oneself and learning

When focusing on learning in the artistic work processes in the interviews, we found that one learning strategy stood out in particular, as it was mentioned by all of our informants. We have termed it *the continual learning strategy*, that is, the persistent and deliberate need for and acquisition of learning, sustained through time and experiences. One example is the following quote by Julie Nord, painter:

I am very good at setting myself tasks and then being inspired by them, but I do not work very well if those conditions are too narrow. So I set myself tasks all the time, right, that I can break, so that it will not become too monotonous.

Julie Nord elaborates her way of getting around a key problem that most of the artists mention: how to get beyond routine and renew oneself and how to develop the artwork and the conceptualisation of it. We interpret her statement according to the understanding of learning presented by Peter Jarvis (1999), who claims that an important element of learning is *challenge*. According to Jarvis, there are two ways that challenge occurs in a learning perspective:

- 1 When the person experiences a situation, which differs from what is expected. The person is forced to rethink the situation, identify the problem and compose a strategy for solving the problem. This is much in line with the pragmatic perspective on creative 'problem identification' (Jarvis 1999).
- 2 When the person challenges him- or herself in well-known situation, trying to imagine how things could be different, or trying to see the situation from a different perspective or interpretative angle. Here, there is a link to pragmatic and problem-oriented concepts of hypothesis making and testing and also exploration and experimentation (Jarvis 1999).

The latter form of challenge is, according to Jarvis, the expert's way of getting beyond routine and making intuitive use of knowledge and interpretative competences. It is this expert way of challenging herself that shows how Nord perceives learning as interwoven with the creative process of painting.

The following quote is from author Siri Hustved. When describing her creative process, she tells us that she is deliberately challenging herself by reading writers with opposing attitudes or with whom she disagrees:

I'm driven to read and read and read more. I even read against myself, that is, I read writers, Anglo-American analytical philosophers, for example, with whom I have little

sympathy, writers whose sensibilities are directly opposed to mine, but I like to take in their arguments because they sharpen my own and they have altered my thinking about some questions.

Nobody but herself urges her to get to know the arguments of her “opponents”, but in this way she learns more about her own arguments and she is building up her own expertise. In this process, we see that Siri Hustved has used a helpful tool to be creative, which to a large extent can be related to Jarvis’ concept of challenging oneself. Thereby, she builds new knowledge in her field and is applying this to novel situations – in other words, she is learning. The point for Jarvis is that what constitutes an expert is the capability of setting up challenges for him- or herself, *without* the need of it, without the circumstances or the situation imposing it on the artist. These challenges are experienced by the interviewed artists in the shape of a learning problem that serendipitously but willingly is sought and nurtured. The expert is occasionally and deliberately questioning his or her knowledge, anticipations and perception of situations, also on their own initiative, by setting up and inventing tasks that challenge routine (Jarvis 1999). In light of this, the two interview excerpts above can be interpreted as the painter’s and the writer’s way of establishing a learning setting during the artistic work process by the use of tasks to break routine.

This point is a pattern found throughout the interviews. It is underlined by theatre director Eugenio Barba, who explicitly mentions challenges as part of creative and learning activities:

You teach people to be creative in the sense that challenge is the daily bread. You challenge yourself, you challenge yourself that you must not say it is not possible. The impossible is the possible, which takes more time.

Here the concept of challenge is seen from the point of view of the master or educator and in this case also the artistic leader. He deliberately works with the aim of making the actors overcome inherent limitations and routine-based solutions to problems. This fine balance between challenge-finding and challenge-breaking is mentioned by several artists under the key word of “rules”. Some

specific rules seem to stimulate artistic challenges rather than stifle them. For instance architect Johannes Exner talks about his teaching experience at the School of Architecture and how he framed the limitation issue to his students:

I have found that problems [are positive]: “congratulations on that, I hope they are really big!” Why? Yes, because if you can solve them, then you’re brilliant, you may well be if no one else can solve them. Yes, all problems. I think it’s great to be able to turn those things and say, yes, it is a choice, you know it’s pretty hard, it’s a very big problem that is there and then you say, it’s a challenge. So you could say that your mood can be up and down, but if you turn it in this way, it becomes fun.

In this case, rules and limitations are tools to engage in artistic dialogues with other members of the field and optimal learning opportunities.

Summing up: What can educators learn?

In the light of Jarvis’ learning perspective, the concept of the learner challenging him/herself seems to be one of the tools that artists use for implementing the strategy of continual learning. However, as pointed out by Mezirow, a challenge or, as he terms it, a disorienting dilemma, will often put the person under pressure, being understood as a learning activity that challenges the individual’s existing meaning perspectives and existential values. The individual can respond to this dilemma either by learning and initiating a transformation (of identity, of understanding, of knowledge and so on) or by rejecting learning and change (Mezirow, 2010). There is reason to believe that the rejecting response might impede a given creative process, also possibly impeding learning. Therefore, challenge may not *per se* promote explorative learning related to creativity, but must have specific qualities in order to work as a tool in strategies for continual learning and creativity.

What seems to unite these types of diverse challenges, in respect of supporting explorative, continual learning, is first and foremost voluntariness. Secondly, there seems to be a cultural understanding within artistic communities that challenging oneself serves a pur-

pose of developing artistic ideas and expressions. This means that it seems to be culturally accepted as a shared strategy for exploration and continual learning and is conveyed in teaching, collaboration and other relations, which points to the concept of scaffolding within a community of practice (Morcom 2014). In this case, challenging oneself seems to be one of the ways in which artistic communities (Lave & Wenger 1991) scaffold and create opportunities for learning. There is also reason to assume that artists experience these strategies as necessary. If we connect this to the theme of on-going learning, the deeper purpose of this learning approach seems to be that artists use specific learning strategies to develop and renew artistic expression. Many individual character traits and collaborative dynamics might potentially support the unfolding of artistic creativity. These include curiosity and a readiness for exploration, a mindset of persistence and resilience, together with more relational or context-based experiences such as enjoyment of creation and learning, playfully acting-reacting (to peers, to artistic or cultural traditions, to situations and so on).

All together, the study indicates that similar principles apply in artistic creativity as in education in general: the development of learners' creative approaches and skills depends on optimal learning environments, where challenges are experienced as positive and as being part of the development of artistic creation. The learning environment's ability to provide aesthetic, explorative and reflective learning opportunities and support is fundamental to artists as learners and in learning terms can be understood as scaffolding. One effective tool for achieving creative learning environments is a pedagogical focus on individuals' possibilities of finding their own uniqueness and realising their unique potential. This seems to be achieved by relating to and interacting with a community collaboratively, but also by questioning it.

Our research furthermore shows that application of the artistic mindset, approaches, values and more practically methodologies is central to approaching learning as self-discovering, collaborative and explorative. We believe that addressing the questions of how to create momentum in learning, enthusiasm and curiosity would help build an appropriately challenging learning environment inspired by artistic creativity. In this enterprise, the arts can be a tool

for engaging exploration by means of open-ended questions that open up to more questions and create a chain of curiosity.

This said, we should note that our research also points to the fact that the field of artistic creativity in learning perspectives deserves serious further investigation, as well as practical development of pedagogy. Central questions, such as the following, should be addressed: How can learning environments scaffold and facilitate encounter and dialogue with an artistic community (of practice)? How can the artists' approaches to learning and creating inspire schools? How can artists pass on methods and tools of creation? What can be really learned in, by and through the arts?

Our hope with this present contribution is to have specified a several central themes and issues through qualitative methods and to have begun a process of articulating significant questions for future research.

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Notes

- 1 Both authors have contributed equally and collaboratively to this article.
- 2 The present article is based on a research project conducted by the authors together with Lone Hersted, colleague at the *Department for Learning and Philosophy, Aalborg University*, to whom goes our due acknowledgement.

NOTE TO THE READER: All quotes that are not referenced are part of the qualitative interviews with the artists.

Considering Collaborative Creativity

Thessa Jensen

Ph.D. associate professor, InDiMedia, Aalborg University, Denmark. Jensen's research revolves around the ethics of the Danish theologian and philosopher Knud E. Løgstrup. Her focus is how design can support co-creation and collaboration, as well as helping develop relationships between users on social media sites.

Abstract

This article develops a framework for understanding the creation of online content on social media sites. Focusing on creativity and its social context, the study is narrowed to the field of fanfiction and fanfiction sites. Using the Systems Model of Creativity by Csikszentmihalyi as a template, this article analyses roles, processes, and products found in fanfiction communities and on fanfiction sites. The specific needs for motivation and support of especially the writer and the collective (Thomas & Brown, 2011) surrounding them are looked upon and compared to the present functionality and usability of the fanfiction sites in question. Further, I elaborate on how the infrastructure of the different sites, as well as their possibilities for interaction, encourage or discourage collaborative creativity, as well as participation in the development of the stories. Finally, a modified Systems Model is presented, containing the preliminary findings.

Keywords social media, fanfiction, creativity, collaboration, co-creation.

Writing fanfiction

As an avid, if inexperienced, reader of fanfiction, I have always wondered how it was possible that so many people would spend time and effort researching and writing their stories, only to be published online without any kind of monetary reward or fame, except for a few so-called big name fans, BNFs (Driscoll, 2006, p. 93). Even then, BNFs will typically only be recognised by their online identity, their pseudonym, keeping their real-life persona anonymous. Why do writers spend hours, days, months, and even years writing and publishing stories online? Why do they expose themselves to the vulnerability inherent in showing their fantasies and ideas to fan communities on sites like fanfiction.net (FFnet), archive-of-our-own.org (AO3), or livejournal.com (lj)?

Using an autoethnographical approach (boyd, 2008; Ellis et al., 2011), this article is based on my experiences through the last two and a half years as a part of the *Sherlock* BBC fandom. I was taken by surprise when I saw the first episode of the modernisation of the original Sherlock Holmes stories by Sir Arthur Conan Doyle, since I thought it was impossible to trump Jeremy Brett's performance in the Granada television series. I soon discovered the online fandom. After lurking in the shadows of anonymity for eight months, I wrote my very first comment on a fanfiction that I had, by then, read and re-read several times.

It took another year before I was ready to write, finish, and publish my own fanfiction. I crossed several perceived boundaries in the process and, even now, wonder what made me do it. How did the balance between wanting to write for an audience outweigh the fear of exposing myself to the scrutiny of much more experienced writers, readers, and fans in the community?

Publishing the first chapter was a milestone, but persevering through the following months of writing, editing, and re-writing turned the experience into so much more than just writing a story. Simultaneously fearing and welcoming every single comment, watching the hits and kudos rise in numbers, and comparing statistics on the different sites with another all became factors. While I had seen other writers having an almost symbiotic connection with some of their readers, I had never thought I would experience anything like what happened in these months of writing. I was not alone. The readers were cheering me on, and several comments

gave me a boost whenever I was low on motivation. I had spent more than six months outlining the story in a notebook with bits and pieces of text, dialogue, and backstories, as well as writing several parts of a handbook, which was referred to in the finished story. I thought I knew how the story would end and how the characters would develop their relationship with each other. It turned out, the reactions from 'my' readers made me change part of the plot, ultimately deepening characterisations and exploring parts of the story I hadn't expected to be of any interest.

Since then, I have become more actively involved in fandom life. But still, I wonder why I am writing, commenting on stories, blogging, and re-blogging posts. I feel uneasy whenever initiating an interaction or responding to an inquiry. While much of this could be attributed to me being new to fandom life, I have found that comments, emails, and responses show that even experienced fans have some of the same fears.

During the past years, many questions and very few answers have entered my mind. In the following, I will try to give a possible framework to understand part of the creative process that seems to drive fanfiction writers.

Creativity

"Any definition of creativity that aspires to objectivity, and therefore requires an intersubjective dimension, will have to recognize the fact that the audience is as important to its constitution as the individual to whom it is credited." (Csikszentmihalyi, 2006/2013, p. 3)

With the advent of the Internet and especially social media sites (boyd & Ellison, 2008), the role of the audience has changed dramatically. Producer and consumer become a 'prosumer' as foreseen by Toffler (1980), both roles interchanging when user-generated content is published on the Internet. While fanfiction in its early days was written for and distributed through fanfiction magazines, so called fanzines (Coppa, 2006; Busse & Hellekson, 2012), sites like FFnet, founded in 1997, and lj, founded in 1998, were some of the first social media sites created and still in use today (boyd & Ellison, 2008).

Unlike Twitter and Facebook, fanfiction sites are not used to 'be seen', but rather to be 'recognised' in the sense of Løgstrup's sense of spontaneous life manifestations (Jensen, 2013, p. 244, 247) and

Thomas & Brown's (2011, p. 22) acknowledgement of the other user's product. According to Csikszentmihalyi (2006/2013, p. 7) creativity is defined by the recognition through the social system: "In order to be called creative, a new meme must be socially valued." Acknowledging a writer's fanfiction by reading and commenting changes its status from original to creative, rewarding the writer and increasing the story's value in the social system of the fandom in question.

Csikszentmihalyi's Systems Model takes the social context as well as the technology and culture into account when an individual is creative. Figure 1 shows the different elements of the system as well as their interconnectivity.

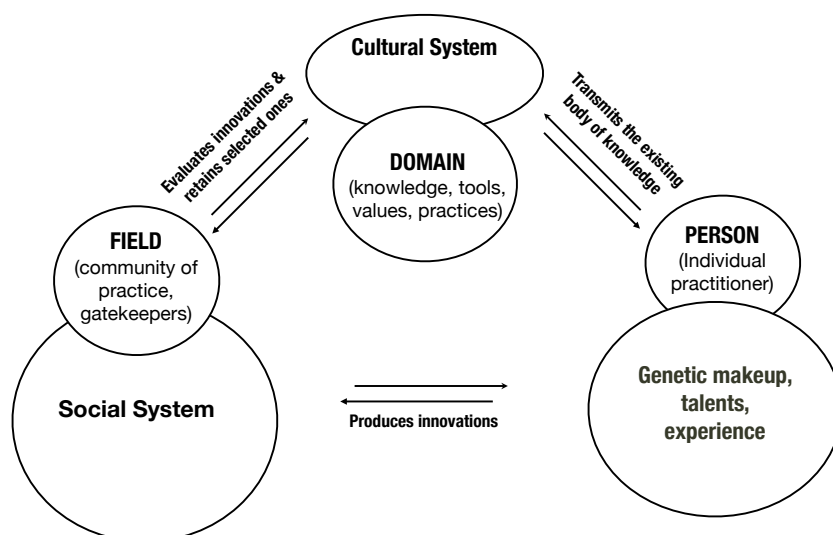


Figure 1: The Systems Model of creativity (Csikszentmihalyi, 2006/2013, p. 4).

The cultural system consists of a set of domains that preserve the rules and the body of knowledge, techniques, values, and practices of each one. In this way, overarching fandom activity will be seen as the cultural system, while each specific fandom will be one domain, with, for example, Sherlock BBC as one domain, and the American television series Supernatural as another.

The field consists of the social system, this being made up of the actual people participating in the creation of material for the do-

main. The social system retains opinions, the community of practice as well as actual gatekeepers. In fandom, every single fan will be part of the field. Even fans who 'just' read fanfiction without commenting will be part of the evaluation of the work, since their click will be recorded in the tools of the domain, here the statistics on the fanfiction sites, and thus contribute to the feedback of the community to the individual writer.

While the field evaluates and selects the products and materials its participants deem worth keeping, the domain transmits the existing knowledge, including rules and values, to the individual practitioner. Since every story is archived on the fanfiction sites, the tools of the domain and the organisers of the sites, more than other fans or gatekeepers, retain the products of the individual. The field of fanfiction can be seen as a collective, where people gather freely to explore their passion for the characters of a media event on one hand and their passion for writing and telling stories on the other.

The individual, who is writing and reading fanfiction, has a genetic makeup, talents, and experiences that shape their way of participating in the domain of a given fandom, just as their opinions and actions will shape the field.

The Cultural System and its domains: Fandom and its specifics

"Examples of memes are tunes, ideas, catch-phrases, clothes fashions, ways of making pots or building arches. Just as genes propagate themselves in the gene pool [...], so memes propagate themselves in the meme pool by leaping from brain to brain via a process which, in the broad sense, can be called imitation." (Dawkins, 2006, p. 192)

The cultural system is defined by its set of domains. Cultures differ in the way their memes are stored. Easy access to existing memes and easy development of new ones have an impact on the development of novelty production. With the Internet, the possibilities to store, share, and access information have become increasingly faster and easier than ever before. At the same time, the threshold for participation is lowered considerably, since the functionality and usability of sites like tumblr.com, Twitter, and Facebook have improved over time.

Fanfiction sites can be seen as the tools a fanfiction writer uses to publish and share their stories. The stories themselves become part

of the body of knowledge, together with the canon, which need to be stored, shared, and worked with.

Comparing sites like FFnet and AO3 shows how different the approaches to the values and practices of fanfiction communities are. FFnet can be compared to a 'cyber siberia' (Mitchell, 2000, p. 123), keeping any possibility to connect to other sites via links almost impossible. Linking is only allowed in the profile text of the user. Everywhere else, the user has to develop a workaround, if they want to include a link to another website. AO3, on the other hand, allows for any media incorporation into the story, both by embedding or linking away from the site itself.

Likewise, FFnet does not allow for other media to be incorporated in the text of story. The rigidity of FFnet has its value when used by new writers and young readers, since FFnet also uses a heavy-handed censorship on explicit sexual content. The last censorship campaign resulted in an exodus to AO3 (Milestones, 2012; AO3, 2012), whose policy differs widely from that of FFnet.

Where FFnet employs a set of rules, including a list of original works not to be used in fanfiction, AO3 uses a tagging system which both serves as a filter and a search-engine. Every writer has to tag their stories. Not the staff, but both readers and writers, will enforce the correct tagging strategy in order to avoid unwanted surprises. This ensures co-operation between reader and writer as well as a responsibility toward the audience that in this case lies with the writer.

On both sites, readers can comment on a story. FFnet only allows one 'review' per chapter, and the writer can only respond to a review via 'personal message'. If a writer wants to respond in public, they have to write 'an author's note' in the story without being able to set the note apart from the story text itself.

On AO3, a reader can write as many comments as they like to every chapter of a given story. The writer can respond in public, and other readers can respond and start a discussion as well. What is missing from AO3 is the possibility of responding in private.

Returning to Csikszentmihalyi's model, the above shows that fanfiction writers value their freedom when creating content. Accessibility of other sites and content, as well as a well-functioning search-engine, makes AO3 a fast growing fanfiction site, attracting both experienced and new writers and readers.

Easy to use, as well as featuring a functionality which takes the specific needs and wants of a writer and reader into account, AO3 is designed and developed by the users themselves. The Organisation of Transformative Works (OTW) is the organisation behind AO3, and it consists of users, researchers, and other interested parties who, among other things, work for legalisation of fanfiction (OTW, 2014).

The Social System and its field: A collective of fans and a community of practice

“The stronger claim made here is that there is no way, even in principle, to separate the reaction of society from the person’s contribution. The two are inseparable. As long as the idea or product has not been validated, we might have originality, but not creativity.” (Csikszentmihalyi, 2006/2013, p. 7)

The social validation of fanfiction writers can be found in multiple ways. The writer themselves can use the statistical data, which every fanfiction site provides on different levels. AO3 shows hits without differentiating between unique visitors and number of hits, number of kudos, subscribers, and bookmarks. FFnet gives a more specific overview, differentiating between number of visitors, hits, hits on single chapters, number of reviews, favorites, and date. All of this provides positive feedback to the writer, and validates the story and the writer in the community.

Contrary to Csikszentmihalyi’s model, fanfiction as such does not have gatekeepers. While other fields have specialists or other gatekeepers to approve of new memes and new participants, fanfiction cannot live without new stories, memes, and alternative universes. A search on AO3 (15 July 2014) showed only 2,8% of the available stories having less than 20 hits, including new stories and multiple chapter stories. A story and its writer do not depend on BNFs to become known, but of course a recommendation or review will likely boost the number of readers.

Fanfiction needs a common ground found in canon, but this is expandable if a new meme shows potential for developing new storylines, new ways to describe the relationship between the characters, or in other ways gives new life to the fandom in question. Memes can even jump from fandom to fandom, thus pollinating fandoms that normally are unrelated.

Csikszentmihalyi's community of practice can be compared to Wenger's (1998, p. 7f) ditto. Both include an extrinsic motivation, for example, given through the need to earn a living or do well at exams. Wenger's communities of practice are defined by the active participation in the community, but none of his examples are based solely on free involvement in the community. This freedom of engagement is the core of any fan activity, and it is defining for the individual, whether writing or otherwise contributing to a fandom. While both Wenger's and Csikszentmihalyi's participants can be forced in some way or other, any use of coercion in the fanfiction community will result in less motivation and normally end the writing process. The difference can be explained through Thomas and Brown's notion of the collective, being "defined by an active engagement with the process of learning" (2011, p. 52). They continue to explain the difference between communities and collectives by collectives being active, and people belonging to collectives in order to learn, because they want to explore the subject they are interested in. A collective exists as long as there are people who actively engage in the collective and produce new material. Participation is needed one way or the other (ibid, 52f). This means, the readers and commenters have to give some kind of feedback if they want the story to progress and the writer to continue writing.

Thomas and Brown (2011, p. 22) have the following answer from a boy who plays Minecraft and is asked what the most important part of the game is: "[T]he single most important thing was 'not to be mean' in your comments and to make sure that you commented on something good when you came across it, as well."

The answer shows not only that a reward for the producer is needed, no matter if they are a fanfiction writer or a Minecraft player, but also shows the community itself socialises its members. Remembering to give a positive comment or giving kudos means more stories to read.

The Individual: Being a fanfiction writer

"The systems model makes it possible to see that before a person can introduce a creative variation, he or she must have access to a domain and must want to learn to perform according to its rules." (Csikszentmihalyi, 2006/2013, p. 11)

Basically, the individuals writing fanfictions must have traits of the autotelic personality as described by Csikszentmihalyi (1990, p.67). Autotelic implies that the person is able to motivate themselves by posing challenges to creatively enhance otherwise uninteresting tasks.

Amabile (1996, p. 120; 1998) has conducted several investigations, to find what makes a person creative. Like Csikszentmihalyi, she found several cognitive and motivational factors that have to be present to enhance creativity. One is the above-mentioned willingness to interact with both a domain and a field, learning the rules and getting to know the existing opinions of the people participating in the given field. Once having done that, 'breaking rules' and 'divergent thinking' are likewise surprisingly essential personality traits of creative people (Csikszentmihalyi, 2006/2013, p. 12). Again, in a fanfiction setting this makes sense, since the writer needs to know canon and have an intimate knowledge about and passionate relationship with the characters of the tent-pole, the original media event (Jensen & Vistisen, 2013), yet be able to make up new interesting and surprising plot- and storylines, as well as characterisations.

This inherent passion for a subject doubles when it comes to fanfiction. The writer must have a passion for the characters they want to write about. This part is about participating in fandom life, learning the canon, and interacting with other fans. The other passion is for writing, a skill; the writer wants and needs to learn to be able to create stories which will be read by the collective. Csikszentmihalyi (2006/2013, p. 12) points out that a creative individual needs to be able to convince others of their ideas and have a personality that makes it possible to be taken seriously by other participants. The needed access to the fandom field would mean profiles on different fanfiction sites and at least a tumblr account, as well as a network of contacts to enhance the creative potential, using the contacts and access to get more readers, inspiration, and information.

Intrinsic motivation is needed to be able to persevere during the writing and publishing process, as well as being able to absorb the relevant memes and knowledge (ibid, p. 13). While extrinsic motivation, like money and fame, can be positive, Amabile and Pillemer (2012, p. 4) show that it is the intrinsic motivation, finding the reward in the activity itself, which is the main part of writing. In fact, Amabile (1996, p. 120) shows that contracts, as well as surveillance

or even just the expectation of a critical evaluation, will have a negative impact on motivation and, with it, on creativity. Her research explains why so many fanfiction writers abandon their stories when they receive a negative comment or review. “Threatening critical evaluation connoting incompetence” (ibid) will have a negative impact on creativity, and a negative comment will be viewed as such an evaluation. This is equally important regarding the writer’s real life. Anonymity or pseudonymity is needed to ensure the safety of the fanfiction writer (Romano, 2014; Tang, 2014 on China’s detention of young fanfiction writers) and give them the peace of mind needed to fully explore their own fantasies and ideas without fearing repercussions (Busse & Hellekson, 2012, p. 38; boyd, 2012).

On the other hand, Amabile (1996, p. 120) shows how the social environment can enhance motivation and creativity. Giving the individual autonomy and a sense of control, as well as recognition, will have a positive effect. As shown above, restrictions and limitations in the form of censorship were the main reasons for writers choosing to leave FFnet and post on AO3 instead. Co-creating through beta-ing each other’s work, developing so-called plotbunnies, or even co-authoring a story are well-known events within fanfiction communities.

This shows that the organisations behind fanfiction sites should be aware of the needs and wants of the individuals who generate the content, as well as the needs and wants of the group. These organisations need to be able to continue as a dynamic environment for both readers and writers. Likewise, readers and commentators need to be aware of the problematic relationship between writer and commentator. A commentator cannot demand anything from a writer. The writer has published the story because they wanted to do so, not because they needed to. Any coercion or threatening behaviour will likely bring about the opposite of the intended: an abandoned story.

Conclusion

“In order to want to introduce novelty into a domain, a person should first of all be dissatisfied with the status quo.” (Csikszentmihalyi, 2006/2013, p.15).

A typical definition of fanfiction explains the stories as ‘filling out plot-holes’ or ‘fixing’ the original tent-poles storyline. As shown

above, this does not cover all of the elements involved in the creation of fanfiction. The “status quo” can be seen as the shortcomings of the original media event, but fan communities also discuss gender, politics, and representation (or the lack thereof), just to name a few topics not covered here and which are important if one seeks to

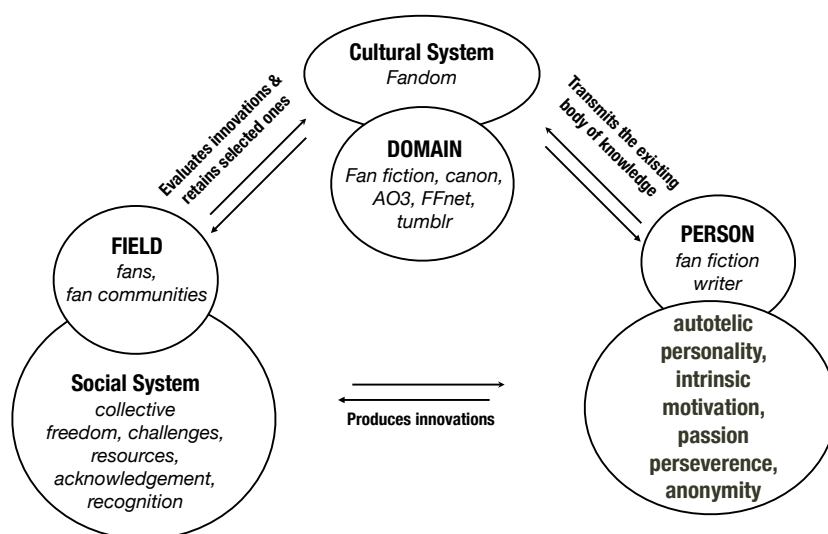


Figure 2: The modified Systems Model.

understand the collective of fans and their quest to write fanfiction.

Still, we are now able to put a few extra concepts to the revised Systems Model by Csikszentmihalyi (See figure 2).

The dual passions of love for the characters and love of writing and telling stories is the very basis for the individual as well as the community, or rather collective, of fandom and fanfiction. While the OTW takes many of the needs and wants of the individual and the field into account in their design of AO3, other social media sites such as FFnet need to enable cooperation and collaboration, as well as linking to external sites and media, if they want to keep writers on their sites and support the development of a collective.

This is it, then? Case closed, creativity and fanfiction explained? Far from it. Many questions remain open, many more questions could be asked. Where does the initial passion come from? A need to write? Falling in love with the characters? And why is the popu-

lation of fanfiction sites mostly female? One of big questions, though, is, whether we even should do research into the realm of fanfiction. Is it really a good idea to turn the collective of a fanfiction site into a public place for academic scrutiny?

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Rewarding and Promoting Creativity

New Approaches, Old Realities

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Abstract

Awards and prizes are designed to encourage creativity. They help stimulate and promote it among professionals and members of publics-at-large. This article focuses on ex-post accolades. It argues that, although these honours promote old and new approaches to creativity, it is the old approaches that tend to dominate in the international ex-post reward system, especially in the sciences. The Nobel Prizes, and particularly the Nobel Museum, serve as the article's case study, with an analysis of the exhibition Cultures of Creativity illustrating its argument.

Keywords reativity, accolades, ex-post awards and prizes, Nobel Prizes, Nobel Museum

Introduction

Creativity is a multifaceted and complex phenomenon that involves an array of processes and practices. Drawing on Beadle-Darcy's (n.d.) and Welsch's (1980) definitions, creativity is understood in this article as any divergent approach to a situation through which existing entities are transformed into different ones. Awards and

prizes are among many instruments that encourage creativity. They help drive it either by stimulating innovation to achieve pre-defined goals (in the case of ex-ante accolades), or by recognising and showcasing model or successful approaches to creativity (in the case of ex-post accolades).

This article focuses on ex-post honours and the ways in which they help to promote and encourage creativity. These accolades have had a “stunning rise” over the last 200 years (English, 2005, p. 1). Societies – especially developed, western ones – that are preoccupied with recognition, credentialing and status (Best, 2011) increasingly use these instruments to evaluate creativity. However, these accolades have been under-researched in this area, with existing studies only noting that they help encourage innovation or output. Hence, this article asks: what kinds of creativity do ex-post accolades help foster?

The article first describes the relationship between accolades and creativity, explaining the difference between ex-ante and ex-post honours and how both types of accolade help to nurture creativity. It also outlines the current limitations in knowledge in this area. Using Montuori and Donnelly’s framework (2013), it then discusses the old and new approaches to creativity that ex-post awards and prizes can communicate to societies. Next, the tensions and problems inherent in ex-post accolades’ promotion of creativity are discussed. Specifically, as the article explains, old approaches tend to prevail in the international reward system, especially in the sciences, even though accolades promote both approaches. The article’s argument is illustrated through a case study of the Nobel Museum, focusing on its exhibition *Cultures of Creativity*.

Accolades and Creativity

Ex-post and ex-ante accolades stimulate creativity in different ways. Ex-ante awards and prizes, offered for explicitly stated tasks, are presented once those tasks have been accomplished (Morley, 2008). They are also known as ‘innovation’, ‘inducement’ or ‘targeted’ (Scotchmer, 2004) accolades, because they elicit breakthroughs in response to specific problems. Examples include the prize offered by Spain’s King Philip II in 1567 to the person who could develop a method of finding longitude at sea (claimed in 1773 by James Harrison, the inventor of the marine chronometer), and, more recently, a

\$2 million prize offered by the United States' Defense Advanced Research Projects Agency (DARPA) for the first robotic vehicle to complete a course from California to Nevada in under 10 hours (claimed by the Stanford Racing Team in 2005) (Kamenetz, 2008).

Research is increasingly and empirically demonstrating that ex-ante accolades often spur creativity. For example, in the field of technological development, research and design, scholars have found that these accolades have helped lift the quality of products submitted for competitions (Brunt, Lerner and Nicholas, 2011), motivated individuals to develop innovations over and above what was expected of them (Kay, 2011), and prompted the design of innovations that have significantly advanced whole industries, such as aircraft manufacture (Davis and Davis, 2004). In the field of economics, finance and business, incentives such as prizes have been found to help motivate individuals who seem to be less creative or averse to risk and ambiguity, as well as helping to foster creative attitudes within cooperative corporate cultures (Charness and Grieco, 2013).

Ex-post accolades recognise accomplishments and are determined either on the basis of concrete outcomes or on the basis of opinion. Honours given for concrete outcomes include laurels won at sporting contests (such as the Olympic Games), while examples of opinion-based accolades include the Pulitzer Prizes and BAFTAs. A key criticism of opinion-based honours is that many are decided subjectively, by a jury of experts or by a public vote. As a result, they are often seen to be arbitrary or biased (Axelrod and Cohen, 2000). These honours do not function as incentives, like their ex-ante counterparts. Rather, they provide feedback or praise, rewarding achievements perceived to be excellent. In doing so, they "create and establish role models [and] distribute information about successful and desirable behavior" (Frey and Neckermann, 2009, p. 76). By signalling to others that particular work is valuable (Wijnberg, 2011), ex-post accolades highlight successful or model creative practices that others can themselves then adopt or adapt. This exemplary work is highlighted through publicity that communicates individuals' or groups' achievements widely. Publicity can take simple or complex forms; for instance, it can be achieved through (simple) announcements published in newspapers or on websites, or through (complex) events and multimedia, such as elaborate ceremonies or exhibitions.

Research confirms that ex-post accolades often do encourage creativity by publicising creative behaviour that can be admired or emulated (Duguid, 2007). However, significantly fewer studies have been undertaken in this area. Moser and Nicholas (2013) have found that ex-post honours awarded for high-quality innovations help to encourage future innovation. Rose (2011) also argues that these rewards can improve employees' output, as well as increase their engagement and motivation, by recognising their work and achievements. According to Mokyr (1990, p. 177), all types of rewards – from pensions to medals – have provided individuals throughout history with the stimulation needed to “keep up a high level of inventive activity”. Although these existing studies, together, recognise that accolades encourage output or innovation, they do not indicate what types of creativity they help to foster.

Ola and New Approaches to Creativity

Montuori and Donnelly's (2013) framework is useful for understanding the different approaches to creativity that ex-post accolades highlight and promote. In their wide-ranging review of literature about creativity, the authors argue that it is understood and practised differently now, in the 21st century, than it was in past centuries. Creativity used to be reserved for eminent, highly educated individuals: for 'lone geniuses', such as Van Gogh, Mozart or Einstein. It was a process seen to arise inside this sort of individual, leading to significant breakthroughs or “Eureka!” moments, and producing revelatory, earth-shaking insights and products. Also, the arts and sciences were perceived to be the preserve of creativity.

In the 21st century, however, these longstanding paradigms have been challenged or even overturned. Creativity is not reserved just for distinguished, solitary geniuses; it is a relational, collaborative process, in which anyone can engage. It occurs not just in special, isolated contexts, leading to major breakthroughs, but also in everyday, ordinary settings, involving mundane activities. It is a basic human capacity that everyone can nurture and use to some degree. It is not limited to the arts and sciences, but rather occurs in a wide variety of fields. Also, it is characterised by paradoxes or incompatibilities that must be navigated; these include forces such as order and disorder, rigour and imagination, and work and rest. Finally, it is an unpredictable, emergent process

arising from the constantly changing systems with which individuals interact (Montuori and Donnelly, 2013). Figure 1 summarises these different understandings.

Old Conceptions	New Conceptions
1. Lone geniuses	1. Universal
2. Occurred inside individuals	2. Relational and collaborative
3. Resulted in special breakthroughs	3. Occurs in mundane activities
4. Earth-shaking insights	4. A basic, everyday human capacity
5. Occurred mainly in the arts and sciences	5. Occurs in a variety of fields
	6. Involves paradoxes
	7. Unpredictable

Figure 1. Old and new approaches to creativity as identified by Montuori and Donnelly (2013)

While this framework helps conceptualise changing approaches to creativity, it has limitations. It can be argued that the old dimensions are still relevant. Creative achievements today are often individualistic, ground-breaking, and realised by remarkable individuals. For example, many Academy Award categories, such as “Actor in a Leading Role” or “Actress in a Supporting Role”, must necessarily recognise individual talent. Also, Montuori and Donnelly’s two dimensions need not be mutually exclusive; outstanding performances and products can be both collectivistic and individualistic, and recognised as such. Elite sports demonstrate this; the FIFA World Cup Awards, for instance, are presented to both teams and individual team members.

Tensions in Promoting Creativity

The promotion of these varying creative approaches is problematic. On a global or macro-level, old notions of creativity tend to dominate ex-post awarding systems, because of the way in which accolades have been designed. In other words, old dimensions have been locked into the regulations governing many honours. As English (2005) notes, many accolades have been modelled on the Nobel

Prizes. The Nobels feature specific characteristics that have been adopted in other accolades. For instance, the rules governing the Ellen Richards Prize, established by the Association to Aid Women in Science, were modelled on the Nobel Foundation's (Rife, 2007). Other such examples include the Canada Gairdner International Award, the Shaw Prize and the Lasker Awards (Houghton, 2013). The statutes governing the Nobel Foundation stipulate, among other things, that the prizes can only be awarded after the nominees' achievements have been found to be of "outstanding importance" by experts, and that a prize can never be shared by more than three people in any year (Nobel Foundation, 2006 [1900]).

This last restriction has been particularly contentious. Researchers, especially in the sciences, have been driven to disputes with colleagues when they have been excluded from receiving recognition. Memorably, the physicist Oreste Piccioni unsuccessfully sued the two physicists who had won the Nobel for discovering the antiproton, claiming that he had been wrongfully overlooked in receiving the prize (Quinn and Nir, 2008). Meyers (2012) similarly recounts that the scientist Candace Pert wrote a letter to the Lasker Awards committee, commenting that she felt upset to have been excluded from that year's award. More recently, the scientist Michael Houghton declined the 2013 Canada Gairdner International Award because the honour omitted two of his five colleagues. Reflecting on his decision, Houghton (2013) commented that it is "inherently unfair" for awarding organisations to insist that accolades be limited to no more than three recipients per topic per year, especially as "knowledge and technology grows exponentially around the world ... with an increasing need for multidisciplinary collaborations to address complex questions and problems".

A corollary to this "overemphasis on individual achievement" (English, 2005, p. 86) is that many accolades foster exclusivity by esteeming some while disesteeming others. Zuckerman (1996 [1977]) confirmed this phenomenon in her classic study of Nobel Prize-winning scientists in the United States, noting the existence of a 'scientific elite' in that nation: a stratum of scientists standing apart from the rest of the scientific community. Nobel winners, she also argued, tend to come from elite colleges and universities. This exclusivity has significant implications for the promotion and encouragement of creativity. In professional contexts – such as corpo-

rations, universities and government agencies – the presentation of divisive accolades can foster cultures of individualism and competitiveness, as well as discourage collaboration and group-based innovation (Stevenson in Sinoway, 2012). This spirit of competition reaches members of publics-at-large, too. As Moeran and Christensen (2013, p. 35) point out, individuals have a growing awareness – thanks to media – of major, high-level honours such as the Oscars and Nobels, and of the eminent individuals who triumph over others in winning them.

The Nobel Museum and Creativity

The Nobel Museum provides an excellent case demonstrating the problematic relationship between ex-post accolades and creativity. Established in 2001, the Stockholm-based museum collects “stories about creativity, determination and individuals who through their work have conferred great benefit upon mankind [sic.]” (Nobel Foundation, 2013, p. 30). In this respect, the *Museum’s Cultures of Creativity* exhibition is particularly noteworthy. Launched in 2001, and timed to coincide with the centenary of the Nobel Prizes, the exhibition comprised two goals: showcasing the prizes and their 100-year history, as well as exploring the idea of creativity in relation to the Nobel Laureates and the milieus in which they lived and worked. A permanent version opened at the museum in Stockholm that year, and a travelling version concurrently began to tour the globe, travelling for six years through fourteen major cities (Nobel Museum, n.d.a). By 2005, approximately two million visitors had seen it (Lindqvist, 2006 [2005]). The exhibition consisted of short film presentations of laureates and their creative work, as well as short films of creative milieus around the world, in addition to artefacts belonging or relating to laureates, a history of the life-story of Alfred Nobel, and explanations of the Nobel organisations (Nobel Museum, n.d.b).

Both the exhibition and the museum in general demonstrate that ex-post accolades are promoting creativity in multifaceted ways. The museum is highlighting successful, prize-winning approaches to creativity and encouraging individuals to think about, and implement, those approaches. It also creates spaces – whether in the travelling or permanent versions – for publics-at-large, innovators, professionals and researchers to engage more deeply with creative

practices. To that end, for example, the museum launched a programme in 2010 for business professionals called *The Spark of Creativity* (Nobel Museum, n.d.c).

However, the museum and its flagship exhibition are problematic. They reflect the tensions in promoting creativity discussed in the previous section. Specifically, while they demonstrate that both old and new understandings of creativity are now promoted by awarding organisations, it is still the old dimensions that appear to be dominant.

Textual Analysis and Discussion

An analysis of the exhibition's official companion catalogue, *Cultures of Creativity*, by Ulf Larsson (2006), was undertaken to substantiate these insights. The catalogue was chosen for analysis because it captures the exhibition's contents in one comprehensive publication that can be readily accessed by individuals worldwide (as opposed to the permanent exhibition itself, which is only accessible to those visiting Stockholm). A non-frequency content analysis was conducted on the catalogue. This involved identifying the presence or absence of content characteristics (George, 2009), which, in this case, were the tensions lying at the heart of ex-post accolades, and the new and old approaches to creativity.

The catalogue is divided into several sections. Two forewords written by the former museum director are followed by an introduction and two sections that provide an overview of "Alfred Nobel and His Times" and "The Nobel System". Next comes a section about "Individual Creativity" that features biographical sketches of fifty selected Nobel laureates and explanations of the ways in which they engaged in creativity. "Creative Milieus" follows; this section describes fifteen locations in which the laureates worked, and explores the ways in which creativity operated in these locations. A list of Nobel laureates from 1901 to 2005, references, and publication details close the catalogue.

New approaches to creativity, as identified by Montuori and Donnelly (2013), were readily evident in the text. The complex nature of creativity was identified in the introduction, which noted that "[c]reativity is many-faceted and difficult to capture" and asked: "How is creativity achieved? Through wild rebellion against the establishment? A quiet walk away from the well-trodden paths?"

(Larsson, 2006, p. 13). A range of old and new conceptions of creativity were then explored, highlighting the museum's consciousness of the many paradoxes that feature in creative processes:

The inspiration for some revolutionary advances seems to appear from nowhere, while in other cases only a hard-fought battle will turn the status quo upside-down. Creativity is sometimes the fruit of consequential, goal-oriented work, but at other times coincidence seems to be the source of a groundbreaking discovery. (p. 13)

The presentation of new understandings of creativity continued through the portraits of individual laureates. For example, the collaborative nature of creativity was emphasised in the biographical sketch of Ahmed Zewail, who, "[l]ike most scientists today ... finds his surroundings and colleagues of great importance" (p. 63). The ordinariness and mundanity of creativity were evident in the profile of Barbara McClintock, whose research simply "began out in the field, among cornstalks" (p. 67).

At the same time, old conceptions of creativity were evident throughout the catalogue. For instance, a key focus of Ernest Hemingway's description was of his solitary life (p. 85). This notion of the lone genius was also evident in Max Perutz's research, which "required the collection of huge amounts of data, gigantic calculations, and relentless analysis" (p. 97). This was echoed in the description of Peyton Rous, who "lived a long life filled with patient, habitual work. He began and ended his workday by writing" (p. 133). The description of Fridtjof Nansen's "broad, groundbreaking activity and his stubborn, ingenious work" also correlated with old understandings of creativity.

A scan of the book's contents page immediately gave the overall impression that old notions of creativity seemed to be dominant. Of the catalogue's fifty laureates listed on the contents page, only four were partners or colleagues: Irene Joliot-Curie and Frederic Joliot, and James D. Watson and Francis Crick. Two pairs, and no teams, were presented. The very presence of the section "Individual Creativity" also underscored old approaches to creativity marked by individualism. Additionally, the creative milieus presented in the exhibition publication reflected the tensions at the heart of the re-

warding system. Of the fifteen locations, four were specialist or academic institutions (the Basel Institute for Immunology, the Pasteur Institute, CERN, The Chicago School of Economics), while four more focussed on such institutions, though were not directly mentioned in the section titles (the Bohr Institute for Theoretical Physics in relation to Copenhagen, the Cold Spring Harbor Laboratory in Cold Spring Harbor, Berkeley Laboratory in Berkeley, and the University of Cambridge in Cambridge). This indicated a heavy focus on academia, research and scholarship as sites of creativity. The exclusiveness of these institutions also entailed elitism, again emphasising the tensions at the heart of the ex-post rewarding system.

Of course, one could ask: is it fair to subject an exhibition that was developed around 2000/2001 to a typology of creativity that was developed in 2013? Given that a good deal of the literature on which Montuori and Donnelly (2013) drew dates back to the 1990s, 1980s and earlier, it does not seem unreasonable to use these authors' framework.

Conclusion

Ex-post accolades can encourage creativity by highlighting innovative ideas and practices that others can then adopt or adapt. These honours publicise both the old and new conceptions of creativity – often in mutually inclusive ways – identified by Montuori and Donnelly (2013). Old approaches include lone geniuses, special breakthroughs, and earth-shaking insights, while new approaches are everyday, mundane, popular, relational, paradoxical and unpredictable.

Although awards and prizes promote both dimensions of creativity, it is old approaches that tend to prevail in the international ex-post reward system, particularly in the sciences. This is due to the fact that many accolades are modelled on the Nobel Prizes, which are governed by rules set over a century ago. The Nobel Museum and its exhibition *Cultures of Creativity* reflect this; despite showcasing both approaches to creativity, the exhibition gives the overall impression that old approaches are dominant.

As the international rewarding system grows, and as accolades continue to proliferate, the ways in which creativity is recognised and promoted will become increasingly important. Many approaches to creativity – old and new – can be encouraged by both ex-post

and ex-ante accolades. Awarders, then, need to be aware of how they promote creativity, and how their awards are designed. Do they encourage new modes of creativity, or are they publicising old approaches? It could be argued that current, constrictive rules should be redesigned to allow for more collectivistic approaches to be rewarded, or that another set of Nobel Prizes be founded to recognise collectivistic achievements.

The research leaves open a number of avenues for further study. Analyses of other Nobel Prize-related communications and events could be undertaken to test whether this study's findings are widely applicable. Also, other ex-post accolades' communications could be analysed to understand whether they encourage old or new approaches to creativity. These sorts of studies would help to better understand the diverse roles that awards and prizes play in encouraging greater and more varied engagements with creativity worldwide.

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Creativity in phenomenological methodology

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Abstract

Nursing research is often concerned with lived experiences in human life using phenomenological and hermeneutic approaches. These empirical studies may use different creative expressions and art-forms to describe and enhance an embodied and personalised understanding of lived experiences. Drawing on the methodologies of van Manen, Dahlberg, Lindseth & Norberg, the aim of this paper is to argue that the increased focus on creativity and arts in research methodology is valuable to gain a deeper insight into lived experiences. We illustrate this point through examples from empirical nursing studies, and discuss how each of the above approaches allows for creative expressions and art-forms such as poetics, narratives and films, and hereby contributes to a profound understanding of patients' experiences. This creativity generates extraordinary power to the process of understanding and it seems that creativity may support a respectful renewal of phenomenological research traditions in nursing research.

Keywords Phenomenology, hermeneutic, art, creativity, methodology, nursing research

Background

Discussions about credibility and methodological rigour within nursing research seem ongoing. In an attempt to compete with, and at the same time distinguish itself from medical research, nursing research has opted the methodology of the social sciences (Rolfe 1995). Nursing is a relatively young academic discipline and in our fervor to be recognised by the scientific community, our research appears to be obsessed with methodological rigour. Several nurse researchers have argued that nursing has lost touch with the essence of its subject matter; the people and their lived experiences (Rolfe 1995) and have questioned whether the methodology commonly used in nursing research is a hindrance to originality and creativity in an attempt to be rigorous. Thus, an increased focus on acknowledging a more creative approach to nursing research, where alternative research methods such as storytelling, role-play, poetry, and literature and artwork have been attempted (Rolfe 1995). Finlay (2009) furthermore discusses the challenge researchers' face when aiming to be both scientifically

“distant” and open to the experiences of the participants. She asks whether phenomenological methods are science or art, as prominent phenomenologists describe different views. She puts forth the belief, that researchers should address the audience they are writing to. To write in a manner and language that speaks to the reader of the text (Finlay 2009).

Since the late eighties, the traditional interfaces between art and science have been explored and discussed. It is often argued that science is understood as the process that generates knowledge, and art as the process that expresses that knowledge and exemplifies quality and moral rightness (Mitchell & Cody 2002). In this form of inquiry, art is characterised by imagination, creativity and aesthetics, and it is fluid, dynamic and flexible (Holloway & Todres 2007). The researcher communicates with the audience or readers while going beyond traditional limits. Therefore, communication is a crucial element of the art in relation to the findings (Holloway & Todres 2007). However, the entire research process is also a creative and artistic process. Art is a part of the methodology and the researcher therefore has to argue for its rigour and credibility. Mitchell et al. (2011) maintains that art may expand understanding, but that we need to find new methodological ways where art actually builds knowledge and understanding. For example, could poetry and literature be a helpful research method to explore and understand the content of lived life, as it has a special closeness to life. In this type of research, the balance of art and science is about the distinction between pure expression and scientific presentation (Holloway & Todres 2007). Artful expressions need to be faithful and evocative while still being grounded in scientific practice (Holloway & Todres 2007). Qualitative nurse researchers tend to overcome this scientific challenge by drawing on different methodologies as van Manen, Dahlberg and Lindseth & Norberg, who value art and creativity as crucial aspects.

This paper questions how art and creativity in three methodological approaches is a way to gain deep insight into lived experiences. Thus the paper contributes with new ideas and an increased focus on creativity and art in nursing research, by illustrating how creative expression and art-forms may be presented in empirical nursing studies.

van Manen

Van Manen argues that human science research consists of a phenomenological sensibility and a hermeneutic interpretive approach and thus distinguishes himself from human scientists who see phenomenology as purely descriptive (van Manen 1990). Artistic and creative endeavours are crucial in van Manen's thinking, and the process of writing is more artistic, more creative than merely putting words together in sentences. With reference to Merleau-Ponty, he states that a good phenomenological description enables us to grasp the true nature of a phenomenon in a way that goes beyond the spoken word:

“when a phenomenologist asks for the essence of a phenomenon – a lived experience – then the phenomenological inquiry is not unlike an artistic endeavour, a creative attempt to somehow capture a certain phenomenon of life in a linguistic description that is both holistic and analytical, evocative and precise, unique and universal, powerful and sensitive” (van Manen 1990; p 39).

Through the story of the Orphean gaze, van Manen illuminates how it is not possible ever to come to a complete truth, or to understand an experience in its fullest. One must be driven by a desire that makes one wonder, and requires the ability to engage in the text in an openhearted and passionate manner. When we just search for facts, or convert lifeworld experiences into “results” it limits our possibilities of really understanding. Thus artistic expression must favour the ability to wonder (van Manen 2006).

Narratives, poetry or literature, may be sources for data or ways of presenting of lived experiences, using metaphors, illusions or stories to create a felt sense in the reader (van Manen 1990). In fact, we need, says van Manen, “*a mantic language of poetic reach to get beyond the realm of what, in Kockelmans's (1987) words, can be said clearly and distinctly*” (van Manen 1997; p 349-350).

Examples of creativity in research dissemination

Van Manens methodology is a popular research method among nurse researchers, but a search that combined van Manen and

nursing with the words creative or art surprisingly retrieved only a few hits.

At a glance, the studies revealed the use of a metaphor or a sentence from an interview as part of the title of the paper. Such as "Being in an alien world" (Hall 2005) "Being in it together" (Haahr et al. 2013), or "You'd think this roller coaster was never going to stop" (Foster 2010).

When randomly looking in to the structure of the studies, data were often collected through narratives, interviews or observations, and findings were described in themes, using metaphors and rich descriptions of the lived experiences with a variety of quotes to underline the statements made. A few studies seemed to engage more in creative activities, such as Hammer and colleagues (Hammer, Hall & Mogensen 2013) who used drawings as the source of data when aiming to picture womens' experiences of hope when newly diagnosed with gynaecological cancer. Finally, a study by Lane (2005), transformed interviews into personal stories and exemplified the themes that emerged from the interviews.

Paul Ricoeur and creativity

Another common used methodology within phenomenological hermeneutics in human science research is described by Lindseth and Norberg (2004), who are inspired by the French philosopher Paul Ricoeurs interpretation theory. They explicitly describe phenomenological hermeneutics as a methodology that:

"Lies between art and science. We use our artistic talents to formulate the naïve understanding, our scientific talents to perform the structural analysis and our critical talents to arrive at a comprehensive understanding" (Lindseth & Norberg 2004; p 152)

Ricoeur (1976) states, that we often have more ideas than we have words to express them, and therefore we have to stretch the significations of those we do have beyond their ordinary use, or we may use figurative words in order to please or perhaps seduce our audience. In other words, making the audience sense the meaning and understanding, not in a truths seeking way, but to gain a deep understanding. This is possible using poetic language e.g. through

poems, metaphors, narratives and lyrics. An important argument is that this creative act does not reflect reality, but a re-description of meaning in text form, and through poetry we take in a new way of being-in-the-world (Ricoeur 1973). This poetic discourse articulates sensation that projects a new way of reflecting, to reach the essence of things, and through language, the reader may be touched and moved by the text (Dreyer & Pedersen 2009).

Examples of creativity in nursing research

When looking into randomly chosen studies that refer to Ricoeur's way of thinking, most of them build on data collected through narratives, interviews or observations, and only when presenting the findings are narratives, stories and poems used. The titles reflect metaphors or quotes from the interviews (Flaming 2005, Lohne 2008), e.g. "The battle between hoping and suffering" (Lohne 2008). The titles may touch the reader with a sense of connectedness to the article right from the start when confronted with the researchpaper, and this will, as Ricoeur states, please or perhaps even seduce the reader. Furthermore, the findings are mostly described in themes or metaphors, and rich descriptions of the lived experiences are often used with a variety of quotes to affect and convey the interpreted meaning.

Different creative methods are used in some studies. One study uses poems to enhance the evocation of the meaning of experienced bodily suffering (Öhlen 2003). An example of this poetically condensed transcription (only the two first sections) is this narrative of suffering:

How it was when I got ill?
Well, the thing is
that I do not remember it
That's what's so odd
I don't really know when it was
I do think
I must have become
more tired little by little (Ohlen 2003; p 561).

Öhlen (2003) argues that poetic expressions help to articulate suffering as a supplement to the common use of formal and rational

language of researchers. Another study uses photo stories to understand how psychiatric patients construct and reformulate meaning to their disease experiences, and the patients review their life story with a photographic essay (Sitvast et al. 2008).

Other studies uses poetic narration linked to the meaning or understanding of what all the text (interviews) is communicating (Dreyer & Pedersen 2009, Martinsen & Dreyer 2012). For example the meaning and understanding of the postoperative period:

“Thousands of small holes are flowing together in an odd pattern. Sometimes it is far away, and suddenly it is heading directly towards me, but then I close my eyes. I hope it is the ceiling. I am awake, but I don’t think they know. My mum is sitting in a chair, and she is asleep” (Dreyer & Pedersen 2009; p 70).

Such creative studies generate extraordinary strength to the presentation of the essence of meaning and aim to provide the reader with a different and hopefully deeper understanding.

Reflective lifeworld research

Drawing on the four philosophers Husserl, Heidegger, Merleau-Ponty, and Gadamer, (Dahlberg, Dahlberg & Nyström 2008) seek to bridge the gap between the phenomenological and hermeneutical research traditions, arguing that the notion of the lifeworld is a unifying theme running through both the phenomenological and hermeneutic philosophy. Dahlberg, Dahlberg & Nyström (2008) states that individuals can never be fully understood without taking their lifeworld into account and develop a descriptive approach called Reflective Lifeworld Research (RLR).

RLR does not explicitly describe creativity as an aspect of the research process. However, creativity can be disclosed in least two dimensions of RLR. Firstly, the authors state that lifeworld research requires a variety of methods, techniques and means to facilitate the gathering of rich data, which they object to consider as a mechanical process comparable to picking flowers. Instead, data evolves in the relationship between the researcher and the phenomenon under study. Since the phenomenon presents itself to the researcher, i.e. is perceived by the researcher, the activity of data collection is

an intersubjective relationship. The nature of the phenomenon, the specific research question and an honest intention of being open throughout the entire research process should direct the method for data collection, and RLR suggests a variety of possible methods (Dahlberg, Dahlberg & Nyström 2008) such as interviews, narratives, observations/ fieldwork, drama, drawings, paintings as well as other forms of art.

Creativity is also called for in the data analysis, when the researcher attempts to identify the essence of the investigated phenomenon without including any external source interpretation, explanation or construction. This work is characterized by the balancing of free discovery and attachment to scientific guidelines. Drawing on Husserl Dahlberg et al. (2008) argue that the process of illuminating essences begins in particularity and gradually becomes more and more arbitrary, when the researcher uses his or her imagination to describe all possible variations of the phenomenon.

Examples of creativity in data gathering

The question is whether nurse researchers who base their studies on RLR, use a variety of creative methods for data collection. Ekebergh (2011) aimed at developing a new model for learning support in nursing education; and performed an intervention study where groups of students reflected upon patient narratives. This reflective work was '*carried out with the help of caring science concepts and theory, and with elements of creative didactics of in the form of drama activities*' (Ekebergh 2011; p. 385). Data could be collected using a combination of photographs and interviews in a study dealing with the experience of being cared for in a critical care setting (Olausson, Lindahl & Ekebergh 2013). Interview is a predominant method among nurse researchers using RLR, even when data is collected with more than one method. The motivation to use other methods seems to be ignored.

Turning to the concretisation of the investigated phenomena's essences described in the above scientific papers, it is difficult to see through the underlying processes of the analysis, as they build partly on the imagination of the researcher. However, the linguistic elegance of the essence may sometimes indicate the character of the work behind the final wording.

Four narratives were formulated aiming to describe the meaning of living conditions related to an adolescent girl's health: *'Approaching everyday life in a balanced way –feeling harmonious'*, *'Approaching everyday life with ambiguity –feeling confused'*, *'Approaching everyday life as an intellectual project – striving for control'* and *'Approaching everyday life as a struggle –feeling forlorn'* (Larsson, Sundler & Ekebergh 2012).

The headings mirror that the authors pay attention to the significance of consistence in the naming of themes. They also seem to balance between abstract formulations to be contextual and mundane formulations to be enlightening.

Discussion

Human science research based on the hermeneutic – phenomenological tradition in nursing science faces several challenges, being faithful to the research traditions chosen where artistic endeavors and evocative descriptions are more or less an important and essential part of the research, and on the other hand fulfilling the academic and scientific demands of sound research.

It seems that both smaller parts and the entire research process can be a creative and artistic process. The question is though, to what extent it is a possible and well-argued part of the methodology. We have exemplified with studies where the researchers were drawing on approaches that explicitly favour creativity. For example, in the analytic process van Manen emphasises that our interest always has a certain pointing to something (van Manen 1990). So the challenge may be to integrate this in the dissemination of nursing research regardless of the methodological approach. In this way, researchers may methodologically bridge the gap between science and art.

With reference to Holloway and Todres (2007), we ask: *"How, and to what extent, can research findings be transformed whilst still being faithful to the essential meanings captured in the research process?"* Here, the notion of transparency for the reader cannot be underestimated. In response, we find it important to present the research process and the results to the reader as complete and transparent as possible (Dreyer & Pedersen 2009). Sandelowski (1998) furthermore stresses that researchers are obliged to clearly convey to their readers when they are moving from research participants' accounts to accounts of their own. This is not common in research papers based on RLR,

where the analytical processes identifying the essence and its constituents are normally invisible, as they are not part of the paper. According to Gadamer (1993), it is customary that the reader does not have access to the full account of the participant's experiences, why the reader has to trust the researcher's judgement. Both art and research findings are essentially incomplete even when finished, since both require an interpreter to make meaning of the artist's/ researcher's creation. Referring to Bernstein and Gadamer, Mitchell and Cody (2002) state that understanding of phenomenology and art requires involvement of the spectator or the reader. Meaning comes to realisation only in and through the 'happening' of understanding. This line of thought may be parallel to the use of 'free discovery' in RLR, which imposes the reader to indulge in the task of understanding not only the essence, but also the connection between the investigated phenomenon, data analysis and the identified essence. As Ricoeur (1973) and Gadamer (1993) describe, the aim in phenomenological hermeneutics is to identify and interpret the most appropriate and significant meanings in the lived world, interpreted through history and horizon. Creativity is key in the process of understanding, but lies in the reader why it can't be described as an exact 'step'. It seems that creativity may support a respectful renewal of qualitative methodology in nursing research. Good qualitative research adds imagination and creativity, combining art, science and craft (Holloway & Todres 2007).

Concluding remarks

We have found excellent examples of the use of creativity in the dissemination of nursing research, and we have argued that the most used methodological approaches allow for these creative forms of data collection and presentation of findings. We found that creativity and art is very useful and gives extraordinary substance to the understanding of lived experience. This on the other hand leaves us puzzled as to why there are not more studies that use artistic expression – are we still running the risk of converting lived experiences into mere "results" in our fervor to keep nursing research pure and free from subjective contamination to be representative for nursing practice? Several methodological approaches as described in this paper weight the use of writing methods like metaphors, poems, novels and even theater play. This may be both pro-

vocative and strange to some nursing researchers but it seems very useful to achieve insight into lived experiences. Therefore, with this article we want to encourage nurses to use creativity and art in nursing research and bring nursing and research to a different and deeper level of understanding.

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Creativity in ethnographic interviews

Reflexive participatory observation

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Abstract

The article discusses interviews as participatory reflexive observation. It is based on experiences of interviewing policymakers and researchers about knowledge and evidence in health promotion. This particular group of informants challenged an approach to interviews as getting informants to describe their everyday work life. By employing a methodological framework focusing on reflexive processes, interviews became consensual interactions, and the content of the interviews turned out to be analyses, interpretations and meaning making, that is, knowledge production. Interpretation and meaning making drew on ideologies, norms and values central to the field and thereby the strategies employed by the informants as well as by the researcher could be seen as wayfaring strategies; creating the paths in the field as they go along. Such an approach to interviews opens up the creative character of knowledge production and points out the role of the researcher as an active participant in the creative process.

Keywords ethnographic interviews, experts, creativity

Introduction

This article is about qualitative interviewing. It is based on my experiences with interviewing a particular group of informants who could be called 'experts'. I did the interviews as part of my Ph.D. project about knowledge and evidence in the field of health promotion in Denmark.

Bounded for the purposes of analysis, the field of health promotion consisted of actors and events, policy documents and knowledge in different forms; statistics, evaluations and theoretical ideas. The actors were policy makers on different levels of bureaucracy as well as researchers producing knowledge within different disciplinary frames such as public health, sociology, anthropology, health economy and education. The disciplinary frames created diverse approaches to knowledge and evidence as did also the state and its ideology.

Health promotion is a field pervaded by political strategies. As lifestyle-related diseases increased alongside longevity and welfare, public health and health education became issues of pivotal importance for upholding a competitive and economically viable society. By increased effort in prevention and health promotion, expensive medical treatment and hospitalisation should be reduced and longevity should be increased. The aim of health promotion is then to improve the health status of the population and make the state into a competitive and economically viable one. This means prioritising 'what works' in policymaking, to secure economic viability as well as having a positive effect on the health status and longevity of the population. Thus, the idea of evidence and evidence-based policy and practice is based on these political strategies. They are part of a particular worldview and entangle an ideology or a set of norms that influences the everyday work of both policymakers and researchers in the field.

In the article, I will explore interviews as a central practice of my fieldwork in the field of health promotion in Denmark. I did 25 interviews; 7 with policy makers and the rest with researchers and of these, 4 were based in research institution outside the university. The interviews lasted from an hour up to almost two. I recorded and the recordings were transcribed. Although the interviews were an important part of the face-to-face interactions during field work, they cannot be isolated from the rest of field work; they were analysed as

equal to participation in meetings and readings of policies and academic articles. In each and every interview, I drew on the insights I had gained at that particular stage of fieldwork. I often shared insights from my previous interviews, from my participation in policy meetings and conferences and from my readings of policy papers and articles with my informants. I asked for comments and reflections in relation to my understandings and I used also my insights to guide the questions I asked. This means that although I had a question guide, the questions were not asked in a rigid fashion. This way of conducting the interviews created a dialogical process in which both of us gained new or deeper understandings of the problems we discussed. These dialogical processes of knowledge production are what I will explore in the pages below.

Grand tours and open ends

A unifying term for researchers and policymakers in health promotion that I interviewed is 'experts'. This means that they were all highly reflexive, academically trained and many of them had their own experiences of doing what I did – interviewing. I had from the start prepared a guide for semi-structured interviews with about 15 open-ended questions, drawing in the themes of practices in research and policymaking, knowledge and evidence, quality, reasonableness and health promotion. I tried to work with the same question guide in all interviews and I expected all the informants to answer for example: 'what forms of knowledge do you see as relevant or useful for policymaking?' This did not always work, however. For example, one informant in research said: 'I think you should ask policymakers about that, not me'. This led me to reformulate questions to researchers, but in practice, I used these also when interviewing policymakers. For example, the question 'describe what methods you employ in your research (examples)' turned into 'describe the process of policymaking (in relation to an example). Questions in the guide were open-ended, as for example 'describe the most recent piece of research/ policymaking you have been working with and reflect upon the quality of it' or 'how does research influence policymaking/how does policymaking (and the demand for 'applied' knowledge) influence research. This open-ended style furthered more questions to follow the starting point and it promoted dialogue and interaction. The methodological idea

behind this is to alternate between what Spradley (1979) called 'grand tour' and 'mini tour'. This means that the questions in the guide start from a kind of bird eye-perspective (the grand tour) and then, to stay in that metaphor, the bird fly into the tree, find the nest, see the eggs, feel the movements inside them. Thus, the 'mini-tour' kind of questions comes closer and closer to details. Interview dynamics was precisely the movement between these different perspectives. However, as I will demonstrate by quotes from interviews below, the conversation also became characterized by *reflexivity*. By reflexivity I point to the specific way the informants considered issues at stake in a thoughtful and informed way, drawing in broadly defined knowledge and experiences about societal 'facts' as well as ideological aspects.

Reflexivity and co-fielding as a methodological framing

My initial ideas about interviewing were challenged during fieldwork. Spradley tells us to ask for descriptions, not for meaning and analyses (1979) but my informants constantly provided more or less theoretically informed analyses and abstract explanations of their work situation, reflecting the worldview and the ideology of the field. These framing aspects of health promotion, described briefly in the Introduction, are resources for the interpretations and the production of meaning in the interviews. Reflexivity means thinking and talking about the world at issue and making sense of it through drawing in the word view and ideology as ideas that seem now and then rather internalised. However, internalised should not be understood as ideas unconsciously guiding the way actors think and talk. The point is that internalised ideas influence meaning-making in that they are resources for the process, but the reflexivity produced by the interview situation made them now and then issues of critical consideration.

In this way, interviews were 'co-fielding' - an activity discussed by a Swedish sociologist, Linn Holmgren (2011) who points out that the 'co' is the joint character - pointing to the interview as something *produced in consensual interaction*. 'Fielding' indicates that the field is not a fixed entity out there but rather, it is constructed in a dialogue, not out of imagination (only) but out of shared familiarity with the reality about which the knowledge production is concerned. This indicates that the interviewer and the informant in

their 'co-fielding' come to share language and definitions of concepts, theoretical interests and the knowledge - societal frame, that is the worldview and the ideology. This is then, obviously, a benefit of doing fieldwork in familiar fields – and it is simultaneously, a potential shortcoming in that there is a built-in risk of reproducing the common opinions and prejudices of the field.

The psychologist Svend Brinkmann (2007) has discussed what he called doxastic and epistemic interviews respectively: doxastic are the experience-centred phenomenological interviews focused on life world; epistemic interviews are dialogical in a 'Socratic' way, focusing on reasoning and justification. The 'Socratic' form of interviewing can be seen as producing knowledge rather than extracting information from respondents, in that the informants articulate the basis of their judgement and engage in reflecting on ideologies, norms and values (2007). This is in accordance with my way of conducting interviews. However, I only occasionally challenged my informants the way Brinkmann suggested, that is, in the way a 'Socratic' dialogue would imply. Rather, informants challenged themselves in their aim of explaining and justifying their viewpoints. Sometimes their reason for doing this was in direct response to my questions but in many cases, it was due to a shared endeavour of investigating the theme of the interview, theoretically and politically. Thus, even though Brinkman's 'Socratic dialogue' is helpful in terms of its focus on the basis of judgement and on the ideologies, norms and values that frames the interview, the term 'reflexivity' takes these considerations more directly into the very process of intersubjective exploration of the area discussed.

To make the discussion less abstract, let me quote from two interviews; the first demonstrates how the reflexivity is played out while the second shows how the informant challenges herself in explaining her considerations. Still, both quotes also show how the frame of the interview, that is, the worldview and the ideology were drawn in as resources for justifying choices and priorities.

Interviews

Jacob, a university-based researcher in health economy, talked about an investigation he was currently working on, of the difference in resource consumption in two different treatments of a certain disease. We had been talking about different models and de-

signs of studies as marks of quality and reliability, after which Jacob reflected on the investigation he is working on. The dots in between sentences mark pauses.

Lene: Ok, could you say something about this relation between models and quality on a more concrete level?

Jacob: In the investigation I mentioned, we choose to talk to the users and the providers about the processes of the two treatments. This was instead of, for instance, counting minutes of the treatment processes ... the choice of method has created an *expert assessment* that is not really high ranking; it goes all the way to level d or something, in the 'evidence hierarchy, *you know ...* We aim to demonstrate that there is a difference between the two different treatments – I believe there is. It is of course interesting if the difference financially is one of fifty 'kroner' or of several thousand. So, we investigated systematically, we use an economic model for assessment, so that it is transparent how we reach our results, and then we can discuss them with others.... We bring in objectivity... it is the *transparency and the systematic way* in which we work that makes the assessment reliable ... still, it also matters that the knowledge comes from a university; this is more *trustworthy* than if the investigation was performed by the producer of the drug used in the intervention that we investigated.

The way Jacob speaks here about 'evidence hierarchy', 'systematic investigation' 'transparency' and 'objectivity' shows how he drew in certain criteria for, and categories of, knowledge, in interpreting what kind of knowledge is needed to decide which intervention is cost-effective. The evidence hierarchy, with its methodologically delimited value ascription to knowledge, and the ideals of systematic, transparent and objective research are the resources taken into the interpretation of the knowledge produced. With a more classical ethnographic approach, I would have asked him to describe the hierarchy, define what level d is and to exemplify what is meant by transparency and systematic assessment. But having learned that such questions led the informants to refer to the literature where I could find information about these issues, I had become more inter-

ested in the interpretations interviewees performed when they employed ideas about knowledge as evidence, as systematic, etc. Thus, when Jacob said 'you know', I nodded and allowed him to continue his explanations and justifications. He started off by saying that the investigation was an expert assessment, not high-ranking in the evidence hierarchy, which led him to reflexive considerations about how the research conducted was systematic and transparent. In so doing,, he justifies the quality of knowledge in relation to decision-making. 'We bring in objectivity' he said, marking that this is an important sign of quality, and then he paused again, before saying that quality is also a matter of what kind of institution conducted the investigation.

In talking like this, Jacob constructed the value and trustworthiness as concrete aspects of the knowledge production. He did this by drawing on resources offered by the frame, that is, the ideology, norms and values, but at the same time, he seemed to consider these critically, with his comment about the value ascribed to knowledge produced in the university.

My role as a researcher in this example is not very obvious. Of course, I was more active in other parts of the interview, but the aim here was to demonstrate how Jacob interpreted his work situation by drawing in aspects of the worldview and the ideology in health promotion. I listened and left Jacob thinking when there were pauses, which brought him to reflexive interpretation of criteria of validity. My role as interviewer was to observe the process of thoughtfulness and to participate in the reflexivity by realising when not to interrupt the train of thought.

Let me now turn to the second interview quote, this time with a policymaker in the National Board of Health. The quote is rather lengthy as it contains elements 'of co-fielding' and if not 'Socratic dialogues', then at least it promotes reflexivity that challenges the norms and ideologies.

As all the policymakers in my study, she was well educated – she holds a Ph.D. degree. We talked about the role of knowledge in policymaking and Alice explained that she does not have the time to investigate details about knowledge or check if the quality is good. Still, she would look into reports or reviews and if she finds there is some documentation about interventions that work, that can be part of the decision making process. Our conversation started as

a description of a particular mental health policy that Alice had been responsible for. Let me quote a section of the interview:

Lene: So, good documentation is needed for good decisions, - that is the message; that is what is meant by the comments about evidence in the policy papers?

Alice: oh yes Well, we could not argue that advanced investigations such as RCTs (randomised controlled trials) are necessary, because in this particular area (health promotion), such do not really exist. In the policies, we used documentation that is published in journals, peer-reviewed Studies, where the method is well described and there is *transparency* It is clear that if possible, we prefer some kind of certainty, that is, if it is with *control groups, randomised, you know* but in this field, mental health We cannot accept such conditions, such strict criteria of what can count as the knowledge; we cannot do anything if we stick to these criteria, because there is no documentation of that kind. Therefore, we must look into grey literature and more soft knowledge...

Lene: So, it is softer knowledge that can be found about this issue?

Alice: Yes ... sometimes is this about evidence ... I mean, sometimes it is a cheat. Sometimes it refers to classical, I mean the evidence hierarchy, but other times....

Lene: *Other times it is more like documentation? Is that the word you use?*

Alice: We have often talked about that it is disturbing, that concept of evidence, because it can have a rather broad or a very narrow meaning. As broad it means just knowledge, right? And then there are all sorts of knowledge.... It is maybe more reasonable to talk about knowledge then, and for all sorts of knowledge then, ... for qualitative knowledge there are specific criteria of quality, right, and for case studies, and so on, so in relation to each question, we should look into what kinds of knowledge, what methods, to ensure that it is the best available For evidence, it is sometimes reserved for those advanced studies, although the National Board of Health has struggled to

broaden it ... But here, there is also a question of strategic use of the concept.... I don't know really if that strategy is wise, though.

Lene: Strategy, like political or what do you mean? In relation to medicine or.... In academic articles in medicine they do in fact point out these days that evidence is only part of the decision making process, many other aspects are part of it too. In other disciplines it seems that the strategy is to *broaden the concept* itself so that more knowledge generating methods can fit in ...

Alice: Oh yes, broadened, yes ... What we talk about is just knowledge, but maybe there is a sort of movement ... As you know, the health promotion field was marginal to the health care system as a whole and to get a position, to be acknowledged as a field in the health system, it was necessary to operate with concepts that were acknowledged there, and then we just tried to broaden the concept, because, if we cannot talk about evidence, we might be excluded ... This is of course just speculations, but health promotion and prevention has now a much more central role in the health care system, right? I would suggest that we just talked about knowledge, documentation, and that we were then paying attention to criteria of knowledge, what questions are posed and what methodologies are employed. There is nobody that for real believes that there is evidence for real, in the finest meaning... So there are misunderstandings about what we can actually know with certainty.

Lene: Is this something you discuss with your colleagues?

Alice: No, not really ... well maybe sometimes...I think we (in the department) agree on at least some of the issues we have talked about now...That is interesting; if research, if there is a change in the way ... I think we are on the move, things change also here, maybe even without much notice ...

Although the quote is, of course, just an extract, its lengthy character underlines how the questions I asked were of a particular kind. I had asked for descriptions of the particular policy process related

to a policy on mental health, and this part is just after that in the interview. Alice had described how it had been a challenge to work on a new area, with a problem placed in between two policy areas; health and employment, and an area where there was not much research, at least in comparison with the more classical health promotion like smoking. Thus, I had understood that mental health was an area where the problem with evidence was perhaps exceptionally challenging and I was eager to learn more about her considerations about this.

The first question about documentation takes Alice to reflect on randomised controlled trials, peer review, transparency, certainty and soft knowledge. The concepts are in line with what Jacob in the quote above also talked about. Then Alice takes a different route than Jacob in that she talks about evidence as a 'cheat'. This is an important issue for her and she even ignores my next question. Thus, although she continues with pauses, I nodded and listened carefully. In the question that follows, I share some of my own reflections on the question about evidence, and Alice seem to use this as a springboard to reflect upon the changes in the status of health promotion and she ends up suggesting what she could think of as relevant criteria for judging the quality of knowledge. The final part demonstrates how the dialogue produced thoughts and considerations that might extend what is an everyday consideration; the dialogue created in a way the world in a new way and challenged the ideology, norms and values dominant in the field.

The interview quote demonstrates how the creation of meaning is a shared endeavour; we both observed how evidence is contested; Alice in her work with the policy on mental health and I in my own work with knowledge production. My participation in the meaning making process, built on observing and listening carefully to the words and moments of silence, opened up different versions or interpretations of the meaning of evidence in health promotion.

Psychologists work with a type of questions they call 'reflexive'. These are questions that aim at activating reflexivity in relation to the meanings (Tomm 1992). In psychology, the aim is to bring forth or expand realisation in the client or family that are in therapy. In the ethnographic interview, these kind of questions can facilitate considerations and possibly new realisations, in other words, creative processes. Alice explained that she only rarely discusses these

issues with her colleagues, , but my questions seem to encourage reflection on these issues..

Interviews as wayfaring

Hallam and Ingold (2007) point to the difference between painting and puzzle making as similar to that between life itself and ways of living. In the puzzle, the picture is made from the already existing pieces, while the painting is created from intuition; following the traditions and techniques in interpretive ways, creating the world anew in each painting. Meanings - of the patterns of particular Indian drawing techniques in their example 'can be grasped only by an intuition that enters into it, or follows its trails, rather than by [...] attempts to reconstruct the puzzle from its solution' (ibid: 49). It has been crucial for me to see the interviews I conducted not as something I should interpret independently of the interactive process itself as reconstructing 'the puzzle from its solution'. Rather, following the trails by intuition is the core heuristic device of the way of interviewing that I suggest. This implies exploring interpretations, sometimes also challenging them in a 'Socratic' way, but also sometimes listening to silence, to give the informants space for their own thoughtful exploration of them.

In relation to his work on 'lines', Tim Ingold has distinguished wayfaring from travelling. Travelling is destination oriented, has a route-plan and a pre-composed plot (2007: 75). It builds on a static landscape in which the movement can follow its route. Wayfaring, on the other hand, is a movement in the landscape where actors thread their own paths though the environments, 'tracing paths as they go' (ibid). The way the informants and their interpretations 'took the lead' more than the questions I had prepared set me off on what Ingold calls wayfaring; tracing the meanings as we talked. In relation to the discussion of lines, he connects wayfaring with the line that is free to go where it will for movement's sake (ibid: 73). This is a great image of the second interview; the informant feels free to let her train of thought go where it will for the movement's sake. She still uses the frame as a set off, but she questions profoundly – in a Socratic way, perhaps, the meanings of health promotion and of knowledge.

Conclusion

In this article, I have discussed interviews as reflexive processes, and I pointed out different characteristics of such approach; it is 'co-fielding' in its consensual interaction, it opens up spaces for critical considerations in a 'Socratic' way and it asked for a wayfaring strategy, leaving space for creativity. I suggest that the strategy is called reflexive participatory observation. It relates not to a physical place or event visible for the researcher, but it builds on a shared creation of meaning as people interpret, maintain or break down versions of reality. This is precisely the process described in the examples provided. Different versions of reality are explored by the researchers' participation in the interpretive processes. It makes the role of the researcher more participatory and it brings forward the knowledge producing character of interviews.

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The use of the three fold mimesis

New Approaches, Old Realities

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Abstract

This article aims to illustrate how mimetic interpretation methodology in humanities research can be viewed as a creative continuous process of interpretation. The article offers a deepened and philosophically anchored understanding of processes that go on in many interpretative and reflective research processes, by shedding light on crucial dimensions of interpretation. The research question addressed is how the mimetic processes of interpretation can be used for generating novel and useful knowledge.

By revealing the creative element in mimetic interpretations exemplified by interpretation of empirical data, the article sheds new light on the processes of generating novel and useful knowledge. It is argued that a Ricoeurian-inspired mimetic hermeneutics reflective process of interpretation is not only about textual interpretations carried out by the researchers, but also about readers' or listeners' interpretations. It is concluded that a Ricoeurian-inspired interpretative mimetic process is a process of creativity, adding new or extended knowledge to the readers of the text

Keywords Narratives, mimesis, creativity, metaphors, plots

Introduction

The mimetic process offers a complex elaboration of the relation between narrative and life (Verhesschen, 2003). The method is suitable for combining informants' perspectives with those offered by researchers' composition and interpretation. According to Polkinghorne (1995), there are two kinds of narratives; narrative as research data (also known as analysis of narrative), and narrative as a research outcome (named narrative analysis). In this article, both types of narratives are used. This combination of narratives in the method allows the researcher to transcend the meaning generated by informants with the composed meaning in the written text. It is a process where informed creativity and imagination is revealed in the textual composition and organization of events. In that sense, the composed narrative is meaningful to the extent it portrays features of experience (Ricoeur, 1984, p. 3). This method takes temporality, sociality and place into consideration (Clandinin & Connelly, 2000) throughout the mimetic process of prefiguration, configuration and refiguration.

In human science, Ricoeur's approach to analyzing and interpreting a text is widely used, for instance, in research carried out by Kristiansen (1998), Ghasemi, Taghinejad, Kabiri & Imaniand (2011) and Coomb (2012). Ricoeur's phenomenological approach to narratives and narrative interpretation has thus had major attention in the last decade, especially in health care research and in particular within the field of nursing (Fried, Öhlén & Bergbom 2000). Nevertheless, many mimetic processes of interpretations appear to be limited to the researchers' own processes of interpretation, as for example in the study by Tan et al. (2009). Several researchers in nursing, e.g. Öhman & Söderberg (2004) and Dreyer & Pedersen (2009), pay attention mainly to structural analysis where they to some extent leave the creation of narrative, instead seeming to separate the text into minor themes and failing to take advantage of the whole of the narrative. Furthermore, many researchers' use of a Ricoeurian-inspired mimetic process of interpretation lacks attention to the refigurative parts going on outside the "researcher's desk". Instead, they merely add theoretical and existing knowledge to their interpretations in an attempt to gain a comprehensive understanding e.g. Lindahl, Sandman & Rasmussen (2003), Lindseth & Norberg (2004) and Pusa, Hägglund, Nils-

son & Sundin (2014). An exception is Flaming (2005), who mentions that readers are also interpreters.

Despite many researchers' use of a mimetic-inspired analysis and interpretation, there has been less focus on narrative inquiry as a process of creativity.

Therefore, the question raised is: How can the mimetic processes of interpretation be used for generating novel and useful knowledge?

In an attempt to answer this question, the article offers a description of mimesis as a creative process of imitation, followed by an example of interpretations and ending with a conclusion and discussion.

Three fold mimesis process in Ricoeur's philosophy and methodology

The methodology of threefold mimesis draws on both phenomenology and critical hermeneutic tradition and acknowledges the influences of semantics, structuralism and pragmatism. Ricoeur's philosophy combines Greek tradition with both German traditions, and with Anglo-Saxon philosophy of language and structural linguistics (Vigsø, 1996, p. 150). Ricoeur uses Aristotle's concept of 'muthos' and translates it to 'emplotment' (Ricoeur, 1991, p. 20), which is the composition of a narrative in mimesis 2. This emplotment gets its characteristics from its intermediate position between mimesis 1 and mimesis 3. It is a creative art of composing coherent plots of elevated human actions into an emplotment. In this sense, Ricoeur's use of semantics addresses the essence of not dividing the phases into single components, but seeing the phases as a whole. Hence, meaning is built into this whole (Vigsø, 1996, p. 157, Ricoeur, 1999, p. 9, Ricoeur, 1989, p. 63), and the mimetic process does not copy-paste words into themes, as sometimes seen in different kinds of hermeneutical thematic analysis.

In the following section, I will describe how mimesis can be viewed as a creative process.

Mimesis - a creative process

Creativity is defined in several ways and from several traditions, but many of these definitions agree that it is a process of creating some novel outcome (Parkhurst 2011). I will not dig deeper into

the different definitions in this article, but solely clarify that mimesis is an artistic creation process going on in textual inquiry. In that sense, it is not limited to an individual person's creative abilities or to unchangeable outcomes.

Mimesis is instead a poetic action of imitation portraying peoples actions. It is a discursive practice linked to a concrete actor's context through understanding, explanation and interpretation (Ricoeur, 1996, p. 159). Metaphors and plots create new complex meaning in discourses as metaphors are ways of portraying reality in concepts, images and symbols (Olds, 1992, p. 55). It is a creative textual re-ordering of events. "The basic condition of creativity is the intrinsic polysemy of words that is the feature by which words in natural languages have more than one meaning" (Ricoeur 1981, p. 11). Within the narrative lies a semantic innovation by the inventing of a synthesis in a plot. The plot brings the narrative close to metaphors. The as-yet unsaid and unwritten appear in the text as productive imagination (Ricoeur, 1984, p. ix). Thus, the narrative represents humans' actions and experiences and is revealed in the three stages of interpretation in the mimetic process of prefiguration (mimesis 1), configuration (mimesis 2) and refiguration (mimesis 3). Accordingly, the mimetic process contains a prefigured time that becomes a refigured time through the mediation of a configured time (Ricoeur, 1984, p. 54). Mimetic creative activity has a threefold relationship with praxis: it presupposes it, represents it and renews it and in that sense it creates novel outcomes.

In the next sections, I will give an example of my interpretations inspired by the mimetic process. This is followed by a conclusion and discussing of the interpretative value of mimesis within interpretative and reflective research processes.

Mimesis in use

The use of mimesis 1 is in this article exemplified by data as pre-narratives gathered among informants in radiography education. The informants' experiences and actions are portrayed by the transcription of all interview data. The quotes are presented as a representation of the informants' narrative about implementation of blended learning.

The informants experiences and actions (past) are presented as stories in the time of the interviews (another past representing a pri-

or past) and written in a present form pointing backwards to these data but also forwards to further analysis and interpretation. Thereby, there is a shift from the narratives of the informants (analyses of narrative) to the narrative of the author/researcher in the move from mimesis 1 to mimesis 2.

Mimesis 2 is exemplified by the construction of the case and the mimetic structured narrative of radiography education. The case is described before the methodological examples of mimesis 1, 2 and 3 in an attempt to give the reader an insight in the context. Spaces in blended learning are portrayed by the metaphors; tradition-space, disturbance-space and non-space. The different metaphors and plots become situated in the emplotment taking both the elements and the whole of the text into an overall description with some response to whom, how and where.

In mimesis 3 a refiguration is made by the author/researcher (also a reader) and new perspectives are added. The narrative is taken into a level of theoretical interpretation displaying a new stage of time. In mimesis 3 the past, the present and the future are captured by explanatory and more general concepts. Informants, other researchers and people involved in the reading can question or expand the field of inquiry and add further events, experience and data to the mimetic interpretation, and thereby the process continues. This is for instance the case, when I bring the interpreted data back to informants and when I present papers and write articles for peer review and publication.

In the following section my process of inquiry is illustrated by an introduction to the case (inseparable from the following mimesis 2), and some selected examples of the mimetic process.

Introduction to the case of implementing blended learning in radiography education

In spring 2012 a model of blended learning was developed by lecturers in radiography education at UCN. Blended learning is a well-planned combination of face-to-face learning and online learning with the use of information technology (Garrison & Vaughan, 2008, p. 148). One of the main purposes of implementation of blended learning had its origins in a wish to recruit students from rural areas. As a result, local educational stations were established with rooms equipped with technology such as Smartboards and

computers, available for local residents. Mentors were hired to take care of students' access to the technology offered at these educational stations.

Students were enrolled in the educational programme in autumn 2012. Radiography students were all in the age-group 19 to 25, except for four students between the ages of 35-49. Some of the students were residing in rural areas.

At the end of 2012, a half year after students' enrolment, students, lectures, practitioners and mentors were interviewed in focus groups, revealing their common understandings and experiences of the implementation of models of blended learning. Throughout these interviews it became significant that the different spaces of blended learning offered different possibilities and constraints. The classroom environment was expressed as a room for sociality and as a familiar environment for well-known activities such as instruction and learning. In other words, a traditional space for learning activities. The home environment, in contrast, was regarded as a space of disturbance, as the home space triggered unintended leisure activities, making it hard for students to participate in studying either online or offline. Furthermore, the educational stations were rejected as a space for learning both in the present and for the future. They were a kind of non-space.

The disturbance space, the tradition space and the non-space are used as metaphorical terms in the mimetic process. These main metaphors are here derived around plots concerning the meaning of different spaces in blended learning. The metaphors create new complex meaning in discourse. They are a part of the whole (the case and the narrative) and a part of the parts. I will in the following section extract how emplotments, plots and metaphors are derived as a part of the three levels of mimesis.

Example of the use of mimesis

For the purpose of consistency in the reading of this article I will draw attention to the 3 metaphors of spaces along with the three fold mimesis. These metaphors are constructed by the author, but has emerged, though the narratives gained from informants in mimesis 1.

The level of prefiguration is retrieved from the full transcript of four focus group interviews of radiography students, radiography

lecturers, practitioners and mentors. As it isn't possible to recall all empirical data in this article, only selected quotations of relevance will appear. Mimesis 1 is schematically illustrated in Table 1 below.

Table 1: Mimesis 1

Mimesis 1	Tradition Space:	Disturbance Space:	Non-Space:
Quotes from empirical data	<p>"Here (at UCN) you are 100% focused" (Students).</p> <p>"I think we all prefer to meet... that's what you are used to from high school... it is easier to discuss something when you are up here" (students).</p> <p>"It is safer (to meet face to face)" (students).</p> <p>"The social contact (at UCN)" (Lecturers).</p>	<p>"There are thing that constantly distracts me... you sleep more, watch television and there is a couch to lay on... and things like that" (Students).</p>	<p>"It's frustrating me a little bit, that this project, it seems invisible". (Mentors).</p> <p>"... There are some things about FlexVid (stations) that is completely out of touch with flexibility" (Lecturers).</p>

In mimesis 1 the first metaphors appears, as informants use them to make their points more clear. For instance metaphors such as "it is safer..." "invisible" and "out of touch" are a part of the plot conceptualized in the tradition space and the non-spaces. In this first distancing there is a movement from of the words of the world in the past to the words of the text in the present. There is a progression of the metaphors derived from mimesis 1 moving towards new forms of metaphors and plots in mimesis 2. These metaphors are configured by emplotment into a narrative structure in mimesis 2. This is illustrated in Table 2 below.

Table 2: Mimesis 2

Mimesis 2	The narrative of spaces in blended learning – plots and emplotment
Metaphor: Tradition space	<p>At the beginning of radiography students' enrolment in the blended learning environment the students faced both new and old learning environments. They experienced the classrooms as a well-known safe space for social connections, discussions and learning. The students were familiar with the classroom as a space for focused working. The classroom was considered as the traditional space of learning due to students' prior experiences from high school. However, the blended learning approach demanded that the students also had to use their home as a space for studying both online and offline but the students did not seem to do so adequately. They faced troubles when they were away from the traditional classroom space of well-known activities. It seemed that the home was triggering leisure activities as relaxing instead of study activities. The home, as a disturbance space, made it difficult for students to focus on online and offline study activities. As an alternative, the educational institution had offered students a possibility to study in spaces outside their home. Unfortunately, many of the students did not live near to the educational stations offered. Furthermore, both students and lecturers did not acknowledge these stations as a proper place for studying, because the stations did not contribute to the intended flexibility of the blended learning approach. The educational stations were regarded as non-spaces, because they were neither used nor useful. Instead the students were left studying online and offline at home and in the school environment, despite the troubles they faced.</p>
Metaphor: Disturbance space	
Metaphor: Non-space	

The tensions between past and present are revealed in mimesis 2 where there is 'concordant discordance' in the students' confrontation with different spaces, their own references and the spaces offered by the institution. The blended learning environments require new activities in various spaces with inherent traditions or none.

In mimesis 3, explanations from the whole of the text are coupled with theoretical considerations and concepts. Thereby, a further distancing is added by the author / researcher who is also, in this case, a reader of the text. This refiguring is exemplified in table 3.

Table 3: Mimesis 3.

Mimesis 3	Tradition Space:	Disturbance Space:	Non-Space:
<p>Points towards the future and the readers of the text. Explanations occur from the world of the author (e.g. Theory) and the world of the readers. Plots expand to a higher level.</p>	<p>The referential whole in the familiar environments in classrooms at UCN affords certain actions, cognitive processes and emotions (Turner, 2005). The affordance of the space is both perceived and real (Norman, 1988), as the sociality is fundamental in the knowledge creation process (Krogh, Ichijo & Nonaka, 2000).</p>	<p>The familiarity of the home environment gives rise for activity of daily living instead of study activities. The backgrounds affordance (Dohn, 2009) misleads the participants to other kinds of well-known, but non-study-related actions. The mediating artifact (Engestöm, 1987) of the couch or the television has a stronger impact of the participant than the computer and the homework. The disruption is a part of the non-intended affordance of the (home-study) environment (Gibson, 1979). Embodiment and enmindment counts in the situated activity (Ingold, 2000). The embodied mind drives the activities (Fredens, 2012).</p>	<p>The educational stations have no real or perceived affordance (Norman, 1988). They seem to be invisible and of no use. They appear to be non-spaces. Thereby there is a correct rejection of the space (Gaver, 1991) as the affordance is not only hidden, but also perceived as false. This is illustrated when the participants speak of them as without meaning.</p>

The explanatory theoretical element in the re-figuration draws on mimesis 2 and 1 and adds theoretical concepts in the explanation process¹. This level elaborates further explanations and contextual-

ization beyond the primary narratives. It is a critical heretical exploration of the configured story. This is illustrated in Table 3, in column 2 by the referential space and sociality; and in columns 3 and 4 by highlighting the affordance of the environment in designing blended learning. The theoretical conjunctions point towards further considerations of an unknown future. The adding of new interpretations is a continuous process of investigation derived from prior levels of mimesis, without ignoring these. As long as the research progresses, more data can be collected and added to the first encounter with empirical data. It is an ongoing, emerging and progressing action, which might never end. When the research period ends, interpretations in the future will continue. The reader of the text might not only be the researcher, but also communities of researcher, peers and others. These people's readings and interpretations can release new perspectives and feedback to the researcher and feed-forward the research process. In my research, I have continuously delivered access to all published papers and articles to informants, to provide them with possibilities to add their reflections on and action in the educational practice. Similarly, feedback from informants (on the researchers' interpretations in interviews conducted more recently), other researchers and professionals has raised new perspectives for the researcher to take into account.

In the above section, I have on a practical level revealed how a Ricoeurian process of hermeneutic interpretation can be conducted. In the final section, I will draw some conclusions and discuss how the methodology can be regarded as a creative process, expanding and adding new awareness into processes of research.

Conclusion and discussion of the use of threefold mimesis and its interpretative value within reflective research processes.

The illustrated Ricoeurian-inspired method offers a philosophical argumentation for the processes of interpretation by extending the way in which knowledge creation can be articulated as an ongoing process afforded by textual possibilities. These possibilities concern both the authors' and the readers' understanding of the text and plots, adding new interpretative dimensions to their existence. The methodology offers different dimensions of the text: a dimension of authors' knowledge creation, a dimension of readers' knowledge

creation and a dimension of knowledge created for future activities. The mimetic process is a creative process of knowledge development: "... a process of knowledge creation. It is a dynamic process in which the reader (or the listener) interacts with the story and becomes a participant-creator by filling in some gaps in his/her imagination." (Ogilvy, Nonaka & Konno 2014, p. 11). The externalization of tacit knowledge by the textual explication and the subsequent combination with different readers' perspectives followed by internalization is a process of knowledge creation as described by Krogh, Ichijo & Nonaka (2000). Hence, knowledge creation seems to be afforded by the mimetic process. Knowledge emerges which is not only bound to formal procedures of analysis and interpretation, but allows the researcher to bring in experiences, craftsmanship and continuous interrelated holistic perspectives. The use of mimesis expands the narrative, both by adding metaphors and plots in the text and by adding explanatory elements around the plots. It is a discursive journey where the text takes an active role in prefiguring, configuring and re-figuring.

The process of mimesis gives rise to new perspectives of the domain under investigation, making constraints and possibilities visible through emplotment, and it lays foundations for further development. Creativity emerges from the use of metaphorical language in the plots, which are further extended to generality supported by the explanatory elements. The creative process, in the move from prefiguration to configuration and re-figuration, makes it possible to take a scientific step through detachment from the initial understanding, by allowing critical investigations and explanation through exploration.

Based on both the practical and the philosophical revealing of the mimetic-inspired interpretative process in this article, I will claim that it is a commendable methodology to make use of when investigating cases or other kinds of empirical data that ought to be interpreted as a whole, taking all essential elements into consideration. The approach expands the hermeneutic circling-processes of interpretation by pointing towards matters of concern and future innovation, by offering a deepened and philosophically-anchored understanding that goes on in many interpretative and reflective research processes. The methodology offers a conceptualization of research processes where the role of the researchers' imagination in

textual constructions is acknowledged. Furthermore, the methodology offers an understanding of how the text can transfer or refigure both the readers and the author and vice versa. In that sense, it also raises different kinds of textual potential across periods of time, something that seems to be underestimated in recent research use of an Ricoerian mimetic process.

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Notes

- 1 Ricoeur do not link the processes of interpretation to perspectives using theoretical concept, however, he does make use of concepts of theoretical and philosophical matter in his own descriptive analysis e.g. in his references to Augustine and Aristotle.

Revealing Hearts

Paul Tillich's Concept of Revelation: an Application to Business Innovation

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Abstract

Some small business owners want to balance personal values as well as economic values. "I have to follow my heart" or "it must be meaningful" some of them say. But how might they be able to *know* what gives meaning to the heart? The philosophical theologian Paul Tillich finds that the problem is that 'controlling knowledge' (e.g., technical testing) might be safe but unimportant, while 'receiving knowledge', that can only be verified by direct participation (e.g., intuition), might be important but uncertain. This paper shows how this tension can be made fruitful in relation to business innovation with reference to Tillich's account of the meaning of revelation through culture and art, summed up in the statement that "(...) revelation is the manifestation of the ground of being for human knowledge" (Tillich, 1951, p.94), which, we argue, can be extended to everyday experiences, for example, in business life. In Tillich's own

terms, even preliminary concerns may point at an ultimate concern (Tillich, 1964), which can also be understood as 'knowledge of the heart'. Our account is also connected to wider discussions concerning the nature of intuition.

Keywords Paul Tillich, values, business innovation, small business owners, revelation

Introduction

The background to this article is a sustained reflection from a theological perspective on the potential conflict between economic values and personal values among small business owners when they are creating something new within their businesses. A 2012 survey of 37 small business owners participating in an EU project on 'Innovation and Growth' indicated that for several of them personal values were just as important as economic values. 91% of the respondents answered that their own values were highly important as a strategic element for a future business model innovation¹. In connection to this we have pondered about phrases like: "I need to have my heart in it" and/or "it needs to be meaningful". These quotes stem from interviewee responses during the project and suggest that the notion of something being 'meaningful' seemed to be related to the needs of 'the heart'.

The main focus of this article is on applying the theoretical reflections of the philosophical theologian Paul Tillich (1886-1965) to revelation in art and culture.

Tillich argues that the traits of creativity that were formerly used to describe God have been turned into human qualities. But instead of depicting the heart of human activity they become a means of increasing production and profit in the mainstream economic understanding of value (Tillich, 1962; Tillich, 1964). This analysis is supplemented by material from participative observation in focus groups, from four semi-structured interviews, and from personal encounters (Davies, 2008) and illustrates how some business owners think of what gives meaning to the heart. Methodologically this article is based on an interpretative approach that seeks connections across different domains, an approach that Tillich's own 'method of correlation' richly exemplifies. We are by no means arguing that these few examples *prove* the reality of religious revelation but are merely indi-

cating how knowledge of the heart *can* happen for some people and how Tillich's thought provides one theoretical horizon that helps interpret what this 'happening' means (Gadamer, 2004; Tillich, 1951, 1947). What we call knowledge of the heart can be seen as relating to what is often called intuitive knowledge, so we begin with some preliminary remarks on intuition.

A short account of some research on knowledge through intuition

The origin of intuition stems from the Latin verb *in-tueri* – to look inside, or to know from within as in, contemplation (Zakay, 2009, p. 3). As a philosophical concept related to epistemology it has a long history. Spinoza, for example, regarded intuition as superior to discursive knowledge since it points to the concrete and the particular (Allison, 1998).

Although we cannot hope to give a conclusive account of a large and complex field of research, we note that some scientific researchers have moved away from what they claim to be the mainstream focus on intuition as a cognitive process. They have instead begun to address intuition as a sensuous feeling and they find that the heart is a locus of intuition (Bradley 2011; Tomasino 2011). The heart rate might literally indicate that the heart 'knows' about future events (Tressoldi et al. 2009) and the body, that is, the heart, may respond to some stimulus "before it is actually experienced" (McCraty et al. 2004, p.133). A more recent study also suggests that there may be tacit knowledge about the future that is perceived as a result of two bodies' psycho-physiological systems communicating passionately through resonating energies focused on a non-local object. When the individual experiences this bodily communication of energies, it calls it intuition (Bradley 2011). This tentatively gives a *scientifically-based* model of intuitive insight using physiological responses.

Intuition is often perceived as a 'gut feeling' that merely reflects the prejudices that we bring with us into a situation and that blind us to other possibilities (Bonabeau 2003; Myers 2010). However, Gigerenzer (2007) offers a more positive account, showing that there are a number of situations in which gut feelings are far more reliable than rational logic, even within areas including economy and finance. Intuition therefore offers possibilities for a kind of foresight. But it can also be seen as a way of focusing experience gained

through practice, exemplifying what Polanyi calls the tacit dimension of knowledge that emerges within the situation in which it is needed and is based on extensive experience that cannot, however, be reconstructed in a logically seamless way. This could be compared with the pottery maker knowing with her/his hands how much more she/he needs to work with the clay in order to bring the clay to its optimum shape. Herbert Simon's understanding of intuition amongst managers as a phenomenon related to their experience is in line with this (Polanyi 1961; Simon 1987). In these terms, intuition might even be described as constitutive of the very being of human life, even though it is colored by our prejudices, since these are, after all, integral to our humanity as such (Gadamer 2004; Gadamer 2006; Heidegger 1971). This idea has also inspired some qualitative, pedagogical as well as psychological research (Halling 2002; Hansen 2012; Janesick 2001).

Paul Tillich – knowledge through love

Bearing these approaches in mind, we now turn to the question of *the heart*. In Book 1 of his *Confessions*, Augustine (354-430CE) addresses his God: "For Thou hast made us for Thyself and our hearts are restless till they rest in Thee" (Augustine 2006, p.3). The heart is here understood as the center of personal life, but it is also restless because it is disconnected from a presence and a knowledge (i.e., the presence and knowledge of God) that is essential if the person is to live a happy and fulfilled life that exceeds their capacities, including the capacities of what is here identified as the heart. This Augustinian understanding of human existence is also present in the work of one of the 20th century's most influential philosophical theologians, Paul Tillich. Augustine and Tillich share a notion that this restlessness of the heart is visible in the human quest for meaning. In his sermon on *Knowledge through Love* Tillich says that: ... "our very being is a continuous asking for the meaning of our being, a continuous attempt to decipher the enigma of the world and our heart" (Tillich 1946, p. 111).

The following example illustrates how this might become concrete in the context of business practice.

Five business owners were gathered together in a room a cold winter's day at a so-called Growthgathering. When

they were asked about what the ideal network for their businesses would be like, one of them, the owner of a larger handicraft company, replied: "The network must give meaning here..." she knocked at her chest above her heart. The other business owners looked at her and some said "yes" and others nodded.

Between what the speaker says about the need for meaning and the hand knocking at her heart there is a movement expressive of despair. Why 'despair'? Because it was not enough for her just to *place* the palm of the hand above the heart. No, she *knocked* at it. Could this be a gesture related to this unspoken question: What gives meaning? But how might this relate to the religious category of revelation?

Tillich's characteristic expression for what Augustine talks about as the restless heart is *ultimate concern*, which he finds reflected in the first commandment: "You shall love the lord your God with all your heart, and with all your soul..." (Deut.6.5, Luke10.27). It is, metaphorically speaking, a question coming from *the heart* of human existence and, as Tillich defines it, this is the 'object' of theology and therefore theology should courageously (Cf. Lat. "cor" = 'heart') engage with areas where this ultimate concern is expressed. These may potentially be anywhere, because such concern permeates all human culture, indeed Tillich (1964, 1951) defines culture as a whole as expressive of human beings' ultimate concerns. In these terms, a workshop for business owners or a business owner's reflections is also a cultural expression and, as such, potentially a site of ultimate concern and revelation.

Tillich distinguishes between different kinds of knowing. On the one hand, he speaks about "*controlling knowledge*", which "is verified by the success of controlling actions" (Tillich 1951, p.100,102). Such knowledge may be perceived as secure but does not necessarily contribute to significance and meaning². On the other hand one could have knowledge that is not secure but is significant and meaningful. This would be a kind of "*receiving knowledge*" which is knowledge through participation (Tillich 1951, p.98)³. This would be the kind of knowledge relevant to intuition and the heart, and, insofar as it validates what we bring to a new situation, we can also see why it might allow for a certain kind of legitimate prejudice,

that is, an assumption or set of assumptions that we bring to a situation (Gadamer 2004).

In Tillich's generation this distinction was often addressed in terms of the tension between fact and value (i.e., between what 'is' and what 'ought to be'), a distinction especially associated with the Neo-Kantian movement (app. 1870-1920s).⁴ Within this philosophical environment, Tillich sought to find ways of achieving knowledge that took account of the facts but that also addressed human beings' ultimate concern. To this end, Tillich sees the desire for knowledge as a kind of *Eros* (the Greek word for love) since *Eros* is the power that strives for the reunion of elements that have become estranged (e.g., individualization and participation)⁵. As for Augustine, it is therefore love that provides Tillich with the key to overcoming the tension of fact and value and bringing us closer to the knowledge we need but lack. And again as for Augustine this is not just a matter of love in the modern sense of a certain kind of 'feeling' but love as revealing our very being. In Tillich's terminology, love has ontological force. In fact, Tillich believes that the question about the kind of being that human beings are (what he calls the ontological question) is "present to everybody at every moment" (Tillich 1954, p.25). Love therefore manifests life as it truly is, in its 'being', to use Tillich's terminology. And because love reveals the truth of human being and because everyone who exists has 'being', to participate in being is also to participate in love, even if in a fragmentary and estranged manner – not every love is a perfect love but, despite its imperfections, even an imperfect love can tell us something about who we really are.

But this still leaves the question as to how we might know about love or know what it is that love is telling us about our human situation. Here we turn to Tillich's views on art, which, like love, crosses the fact/value distinction. A work of art is a fact, a reality, but it is not 'just' a fact, it is also meaningful, expressive of deep value – of the heart. Art is therefore able to connect people to the ground of their being. It fragmentarily reveals the human situation of estrangement but also shows how the essential human being could be. In fragmentary ways it both opens the abyss (the 'groundlessness' of the human condition) and also discloses a potential ground. Art represents the fragments that, negatively understood, are only bits and pieces of what we may see – as St Paul wrote " (...)now I know in

part (...) “ 1 Cor.13:12. However, fragments are also gifts from God; in *Knowledge though Love* Tillich expresses how they are the openings that make it possible for us to see anything at all or to know that there is something and not just nothing. Even what he calls the shock of non-being, that is, the awareness of death and finitude that comes when we wake from a dreaming child-like innocence to the realities of life and becoming a fully actualized adult human being who is aware of their finitude may also reveal another side. Art gives us a privileged access to this other side, because art is the medium that, according to Tillich, points at the creative ground of our being and reminds us that knowing is a matter of reuniting what has been separated in existence or in life (Tillich 1948;1952; 1954; 1963).

In the light of this discussion, we turn to the next business owner, an architect and owner of a 20-year old company. Asked what she finds is most rewarding in her work she answers by saying “most fun?” and then she says:

C: The most fun is when you see the things, like when you have a kind of a...when you have a vision, in fact...

K: yes...

C: ...and this often happens when you are sitting together like this ...when you hear different things/stuff ...and in those different constellations with different people, and then suddenly ...Wow! You just like see it somehow... it is so damn funny! (She laughs)

I ask her to give an example. She chose to tell about a project where they were called out to a social housing area that was going to be upgraded due to the fact that the ground was sinking. They approached the area as a whole. Suddenly the problem gave her a visionary experience. She ‘saw’ how the current stairs could become a small supplementary-building that had its own underpinning. The solution was more expensive in the first instance. On the other hand it created value on several levels (e.g., energy saving, disability friendly). It made the area more attractive and gave people living there a possibility for an additional income by renting out the extra room they now got.

Collecting such bits and pieces is illustrative for the way she works and this illustrates how there seems to be more in play than a creative design thinking process at a purely conscious, rational level (Boland Jr et al. 2008). This business owner repeatedly said how important it was that she could work in a way where initial problems could be turned around and become a part of the final solution.

We suggest that the value that is being offered is in this case more than a service or a product. Having your heart in the business also seems to make the balance between economic and personal values become important for this business owner as the perspective at the 'whole' seems to be a focus for her business model. Following Joseph Beuys⁶ saying that "Everyone is an artist" (Mesch et al. 2007 p. xiv), we interpret business owners too as artists when they are creating something new in their businesses that serves a higher purpose than profit. Art as work is not so much the work itself but what the work creates as a process in which new possibilities of knowledge, new imaginings of something different, and new relationships come into view (Meisiek and Hatch 2008, Borriaud et.al. 2002). As such the work of the heart is transformative in the sense that it brings about change by generating new sets of relationships between people or between people and objects.

Our next business owner offers an example of what this might mean:

A young entrepreneur creating a business with digital services aimed at connecting people in new ways was asked about how she considers value. She answered just as the questions ended: "My motivation is not money at all, but only the value that the service may create for others".

This is further present in the previous mentioned architect's reflection below:

After she had been writing in a mail about her passion for the work she adds: "(...) I notice that the things that you engage yourself in actually make things happen".

To return to the question 'What gives meaning to the heart?' We argue that revelation offers more than 'meaning'; it also offers a spir-

itual presence that is beyond our control and that opens a room for contemplating the situation beyond the intuitive experience or the event. It takes both the suffering (passion) and the passion (love) and unites them - at least fragmentarily.

A final excerpt from another business owner may serve to illustrate this.

A former nurse was asked if there were any event that influenced her current focus in the service her business offered. She told that when her child became ill a number of years ago she heard about an alternative treatment abroad. Sitting on the plane towards the other side of the world she made a vow. If her child got well from the treatment she would tell about it and somehow give it further. The child recovered almost miraculously as she experienced it. Shortly after she left her old job and she started to educate herself abroad. She started her own practice and now she is also learning to give others the same treatment as her child received.

How is this little story linked to Tillich's revelation of the ground of our being as love?

The woman makes this vow in a situation of extreme distress of pain. However, this also becomes one of these decisive revelatory moments in life marked by the confluence of the abyss-like uncertainty of the situation and the love that creates a kind of double-sided knowledge that transcends pain and even transforms it into passion. It shows that, when they become grasped by their ultimate concern, people may be able to create a product or a service that is for the benefit of others, as she has done. This *fragmentarily revealed presence*, is a presence that is both linked to the history, the background and values of the business owner as well as embracing their present and the future that they anticipate for themselves, their work, and those their business will relate to.

Conclusion

Our initial question was how business owners might be able to know what gives meaning to the heart. As we have seen, some recent research has found that the heart might literally be the organ for

intuitive responses and thus vindicating the possible epistemological value of 'gut feelings'. Using Tillich's (Augustinian) understanding of *Eros* we found that knowledge of the heart was closely linked to a human quest for meaning, which might be revealed through culture and art. In accordance with a relational understanding of artwork as action and search for meaning we also found that through the way these business owners address their work even the everyday can become the locus of revelation. Knowledge of the heart is then intimately connected with this revelation. The reflections from business owners describe their experiences of gathering fragments into a whole against the background of a certain vision, the urge to give something beyond the ordinary, the experience of relating people in new ways, and the need to give healing to others. Through a certain kind of participation they thus become able to change things. Although we cannot develop this idea fully here, we also believe that these kind of experiences and outcomes also show the way to overcoming the division of fact and value in the sense of economic facts and personal values or between the 'value' that is reflected in a 'bottom-line' approach to business and an approach that looks more to personal fulfillment and social meaning.

The 'heart' thus reveals an intuitive knowledge that goes beyond self-interest and toward foresight and participation, revealing a presence that allows us to be creative in meaningful if fragmentary ways. It is a kind of intuition that may be seen as a lens through which to address and synthesise fact and value – and, via love, reveals how we might move beyond both in concrete action. This is one of the central contributions in this article which we hope have demonstrated one aspect of the relevance of a revelatory theology for our secularized times.

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Notes

- 1 20 of 22 respondents on this question answered in the high end of a 10 scale. These data has been collected as a part of Kristin F. Saghaug's Phd study and as a part of the European EU project KASK – WIB from 2009 to 2011
- 2 This does not mean that Tillich opposes science, it is vital for our knowledge and our society, (e.g., he was inspired by neuroscience) but his concern is that technical science should not go beyond its proper limits. (Tillich 1951)
- 3 This mirrors the dualism stemming from Descartes and Kant. In his own critical philosophy Kant tried to solve this conflict between nature, subjected to mechanical laws, and morality, determined by free will, by means of introducing the art experience as a possible locus of reconciliation in which intuitive knowledge by the artist (genius) would be able to link the person to a spiritual dimension. Beauty became a symbol for the moral good (Gadamer 2004;Mason 2003, Kant 1781 trans. J. M. D. Meiklejohn <https://archive.org/stream/thecritiqueof-pur04280gut/cprn10.txt>).
- 4 For further on the Neo-Kantian movement look in (Staiti 2013).
- 5 This sense of Eros is, of course, distinct from contemporary sexualized connotations of eroticism.
- 6 Joseph Beuys (1921- 1986) was a German artist known also as a key figure in the student movement in the sixties. He approached life creatively in the sense that not just everyone was an artist but everything could, and even should be subjected to art. His perception of art was highly influenced by the idea of transforming the existing society e.g. at Documenta V 1972 with his work Office of Direct Democracy. Here he was present and discussing and explaining his ideas with the visitors for 100 days. Here he also stated that even "explanation is an art form" as well as he demands "creativity for every person" (Bodenmann-Ritter, 2007, p 189ff).

Creativity and the Study of Emotions

A Perspective of an International Relations Scholar

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Abstract

The article discusses creativity from a methodological perspective. It takes the point of view of an International Relations scholar commenting on the constraints and possibilities of creativity in incorporating emotions, the sublime and subliminal in academic research. The article uses examples from a study of violence and compassion in Chechnya and examines emotions and open-mindedness as means to tap into something deeper than what the intellectualist model of thinking encourages. It is argued that by welcoming emotions into the field of human sciences the researcher can better harness creative sensibilities.

Keywords Chechnya, compassion, emotions, International Relations, mindfulness, politics, sublime, subliminal, war

Cultivating and Expressing Creativity

It is a warm August evening in Helsinki in 2013. I am waiting for *Nick Cave and the Bad Seeds* to come on stage at the Flow Festival. Finally the show begins and it does not take long for the serene atmosphere to transform into one of pure drama. The audience looks hyp-

noticed as the singing and playing intensifies by the second. “Can you feel my heartbeat?” Cave cries out and reaches to the front row of the audience with his hand. Cave is terribly convincing and that is terribly inspiring. I never expected that the social scientist in me would be awakened by the concert but it happens and I can see something clearly. I see the artistic creativity represented by Cave’s performance as something to strive for in science. The concert reinforces for me the view that science is in fact a form of art.

Creativity goes hand in hand with courage. This means that in order to move people, one should be concerned not only with cultivating creativity, but also with performing it, sharing one’s innovations. Unfortunately the academic world does not always eagerly embrace passionate outbursts that which place trust not only in the head but also in the heart. Tim Ingold (2013), in a recent interview, stated that “much academic writing has become soulless, devoid of passion and feeling”. He continues:

Worse still, many colleagues feel bullied by the pressures of research assessment and peer review into adopting such sterile forms of writing, for fear that their work will not otherwise be accepted. This pressure has been compounded by the tyranny of ever-lengthening bibliographies. [...] As for impact and indexing, the whole point of research in the humanities and the social sciences is that it can transform lives. That is where its impact lies.

I work in the field of International Relations (IR), in which scholars are trapped in judgemental evaluations and interdisciplinary hostility and competition. IR is probably not the only discipline where hostility breeds. Then how does the competitive environment influence our performance? Does fear and anxiety encourage creativity? Do the pressures of following a school of thought or hiding behind the big names of science encourage innovative and creative research? I believe not. Elina Penttinen (2013) reflects on the matter in terms of *mindfulness* as a practice of scholarly work – alignment with the present moment (instead of ego), open-hearted curiosity and nonjudgmental awareness; this contrasts with *mindlessness* – judgement based on an evaluation, acting on our beliefs rather than that which arises of the present moment, confusion and hos-

tility towards other researchers. Judgmental attitude which springs from one's constructed belief system can easily kill creativity, especially in the case of young researchers, who then then turn to pleasing the reviewers.

Now that I have pointed out the challenges posed by the academic world to the researcher who tries to be creative, I will continue to encourage the researcher to harness her creative sensibilities. What I propose is a research agenda which emerges from an open-minded approach and taps levels of consciousness beyond the conscious mind. I refer to the study of emotions and the concepts of the *sublime* and the *subliminal*. I do not discuss the meaning of creativity at length, but remain at a very practical level, putting forward ideas on how to inspire and be inspired in research in the social sciences.

On Emotions

I use the study of emotions as an example of a research topic which challenges the intellectualist model of thinking and suggests an entanglement of the researcher and the world she studies. I have been studying the two wars and their aftermaths in Chechnya which took place after the collapse of the Soviet Union. What I have come to understand in a study which concerns themes such as compassion and violence is that as much as emotions matter in politics, they matter every bit as much in research. Emotions are in fact the very basis of our conscious minds: our self-perception, thinking and decision-making². Emotions in research affect the individual's imagination and sensibility, and they are at the very heart of the question of creativity and the cranial processes from which both originate: the *subliminal*, that is below the threshold of conscious perception. To use Floyd Merrell's (2003, p. xiii) words, this means *subjective qualitative sensing* which springs from the fact that the world is every bit ambiguous and characterised by non-linear processes.

In IR the study of emotions is only beginning to gain ground³. According to Roland Bleiker and Emma Hutchison (2008, p. 387), "Although the role of emotions has been debated extensively among philosophers, sociologists, anthropologists and psychologists, few if any of these insights have entered the study of politics and reconciliation". One reason why emotions have been largely ignored in IR is the difficulty of inter-disciplinary dialogue, which would be

necessary if the rationality model of human behaviour is to be challenged. There are exceptions, such as the study of *neuropolitics* by William E. Connolly (2002), a daring venture into the neurosciences by a political scientist. I will come back to neuropolitics later.

Bleiker and Hutchison (2008, p. 387) write about the need to study the role of emotions in order to establish a culture of healing and reconciliation, arguing that “there is evidence to suggest that an active engagement with emotions can actually be a source of political imagination, inspiration and hope”. When studying emotions in a violent conflict such as that in Chechnya, compassion is not the first thing that comes to mind, but rather emotions such as fear, anger and resentment (see Petersen 2011). Moreover, experiences in war are most often understood in terms of trauma. Ordinary people are described as traumatised and fragile, but often so are the soldiers, rebels and criminals who perpetrate violent acts. But even if trauma is the dominant experience of war, this does not mean there is no room for compassion. By confining human experience in war to trauma and anger, we reinforce a very limited view of human capacities and ignore the power of self-healing and healing through compassionate exchanges. This is how the murdered journalist and human rights activist Anna Politkovskaya (2003) describes a compassionate encounter in the midst of war in Chechnya:

Rosita was taken from her home at dawn, while everyone was sleeping. Her home was surrounded and she wasn't given time to dress properly. They threw her into a pit on the military base.

“They shoved and kicked you?”

“Yes, just as they always do.”

Her legs drawn up under herself, Rosita sat on the earthen floor of the pit for twelve days. The soldier guarding the pit took pity on her one night and threw her a piece of carpet.

“I put it under me. That soldier is a human being too.”
Rosita's lips barely move. (Politkovskaya 2003, p. 48)

In this account, humanity is restored for an instant: the soldier feels pity, gives a piece of carpet to the prisoner, and Rosita sees a human being. This is an encounter that is not only personal but has wider social and political significance. Compassion is a central social emotion. Social emotions have had an evolutionary role for the human-kind in maintaining a sociocultural homeostasis, that is, structures of care and community that have been valuable for the species (see Damasio 2012, pp. 27, 292–293; Goetz et al. 2010, pp. 4–6). Compassion as a social emotion is not only a cognitive layer of consciousness. Rather, it is a corporeal experience in which mirror neurons are activated enabling a simulation of other person's body state (Damasio 2012; 126, pp. 103–104). Compassion physically *moves* us.

Rosita's story, as a representation of the social emotion of compassion, is politically produced by the war and the Russian anti-terrorist operation, and it is politically represented as an example of the realities of war. It is also a hope-inspiring story, which can be read by Russians. Also Chechens can have access to this experience through Politkovskaya's book and it can become a part of their memory. Chosen by Politkovskaya for a book that tells a very sad story, these gestures of compassion are thus exposed to the public, and remarked on by Georgi Derluguian (2003, p. 25) in the very last and most intensive words of the foreword to Politkovskaya's book: "[...] she shows us how complex and contradictory the war is – exceedingly cruel and violent yet there are sublime moments of human effort to just stay humane". The societal implications of sharing survival stories are significant, because just like memories of hatred can spread like disease so can stories of healing, forgiving and helping.

Creativity and courage are also needed when choosing the research material. For me the choice has been aesthetics, which approaches politics as *representation* in the form of images, narratives and sounds (see Bleiker 2001). When we move beyond discursive representation, such as in the example above, we can observe sound, silence and movement and use our senses more fully in the interpretative process. Using film as research material made me notice Chechen dance as a repeated theme expressing compassion as an internal and interpersonal dialogue – movement as a form of knowing through being, empowering and encouraging. Chechen dance is not a dance of war, but of peace. I saw dignity in those strong movements; dignity arising from within when, on the outside, the person

has been stripped of any semblance of it. I saw silence. There is so much expression in silence, and when it is fused with the dignified dance it creates appreciation for life. The reason why such expressions in war often go unnoticed is, first, because IR has not yet fully began appreciating aesthetics, and second, because we focus our attention more on acts of violence or acts which seem to represent reason and logic, so much that we easily miss other forms of politically significant activity. Dance might not be rational, or even consciously politically oriented, but its representations are *politics*.

Penttinen (2013, p. 13) argues that the world is not broken and waiting to be fixed: the world already contains everything. For Penttinen (2013, p. 34) the wholeness of human experience in war is best studied with an open-hearted approach to the world, one that enhances clarity, creativity and informed action. In war, human experience is not only about suffering but also joy, compassion and even humour. As a researcher I can choose to either offer advice on how to fix the world or to bring forth *possibilities and potential*, reinforcing their existence and making them visible to provide hope and inspiration. I have chosen the latter.

I believe in the methodology of Penttinen, just as I believed Nick Cave in that concert, because it touched me, not only intellectually but also on a deeper level. Mindfulness can help one to overcome the soulless research of which Ingold warns. The sort of open-mindedness Penttinen advocates gave me courage to step out of the comfort of disciplinary limitations and search for the personal, neurological and aesthetic. I became to utilise those emotions that were stirred up in me as a human being when analysing the research materials in order to broaden my vision. I was reassured that the emotions of the researcher are significant in the creative process. Rather than suppressing them for the sake of objectivity, the researcher should welcome them and take advantage of her sensibilities.

The Sublime and the Subliminal

In order to better grasp the emotional states (such as trauma and compassion) relevant for research in human sciences I utilise Roland Bleiker and Martin Leet's (2011) discussion of the sublime and the subliminal in aesthetics. Referring to Kant and Burke, Bleiker and Leet explain that where beauty is associated with pleasure and comfort, the sublime refers to excitement and astonishment as well as to

awe and respect and even pain and terror. Sublime triggers powerful emotions. They cite the example of the terrorist attacks of 9/11 and the associated global visual representations of pain and suffering, which “superseded our understanding of the real, or at least our conception of what could, conceivably, happen”. They continue:

Terrorist attacks and other major events give rise to a range of political legitimisations that are made possible by the highly emotional and seemingly contradictory nature of the sublime. Sublime occurrences constitute a break in the normal course of affairs. They create opportunities and evoke strong responses. (Bleiker and Leet 2011, p. 719)

The sublime experience shocks us to the core, and it can be utilised in legitimising retaliation against incomprehensible evil, such as in the case of terrorism, but it can also empower us by creating a sensation of having survived a tragedy of great magnitude (see Bleiker et Leet 2011, p. 721). Analogues can be found in the case of Chechnya: the hostage siege, which began on October 23 2002 at the Dubrovka Theatre in Moscow, was an event where spectators close and far away were shocked and amazed by what was taking place. Armed Chechens took more than 800 hostages in the theatre, demanding an end to the Second Chechen War. Yet this did not prompt as much astonishment among the public as the fact that some 130 people died – most not by the hands of the Chechen militants, but by the chemical gas pumped into the ventilation system by Russian armed forces. This is an example of experiencing a sublime sense of shock internationally caused by the drastic measures Russian authorities took to end the siege. Chechens who have directly experienced war, and survived, have gone on to live in an environment of the most horrific human rights violations. War is traumatising, but there can also be a sense of relief at having survived, as a spectator to death. People can even cease to fear death and find a sense of mission in a hostile environment, as I observed was the case for the human rights activists presented in the documentary film *Coca: the Dove from Chechnya* (Bergkraut 2005). If we take the sublime experience to represent not a fragmented view but a human experience in its wholeness, it means that even pain and terror can be empowering. This is not to justify the causing of

suffering and pain, but to try to understand the human capacities for healing.

We are challenged to interpret and understand this sublime dimension – ours and others alike when faced with events and their representations. Epistemologically we are moving in uncertain territory, yet in the realm of creativity and innovation. For Bleiker and Leet (2011, p. 722),

[t]he sublime is about events that are too overwhelming, too awe-inspiring to be adequately represented. [...] But out of this confrontation with the limits of our cognition, frightening as it may well be, emerges insight into the very nature of representation. We are forced to confront the fact that all objects and events, small or big, spectacular or daily, cannot be known as they are.

For Bleiker and Leet, a focus on the sublime is somewhat problematic, because it entails preoccupation with dramatic events and masculine and heroic features. They propose a sense of the subliminal which focuses on a more everyday enchantment with the world⁴. In other words, we can wonder about the world without dramatic events and shocks in our search for answers to the pressing world political challenges (Bleiker and Leet 2011, p. 728). Moving from the sublime to the subliminal also means a step beyond “the bright lights of the conscious” to such states as dreaming and wonder (Bleiker and Leet 2011; p. 714, 728). In a dream, one creates an imaginary world which represents the subliminal – life’s hopes and fears, its potential. Since the sublime involves intense emotions it is like the visible form of the mind but the subliminal is more hidden from our observation. Even if more hidden, it is possible to tap one’s own subliminal mind, reaching “beyond the threshold” as Bleiker and Leet (2011, p. 731) phrase it, in order to communicate with the lives one is studying.

The sublime and the subliminal should not be considered as opposites, but as complementary. Both concepts attempt to capture that which the intellectualist model of thinking fails to adequately acknowledge: the power of emotions. Sublime is the more evident and shocking type of emotional experience whereas subliminal is more subtle, less evident. Both are experienced in interaction with

the surrounding world. Even mindfulness as a personal or scholarly practise means cultivating a sense of interconnectedness of life, even when practised in solitude.

Techniques of the Mind

The subliminal occupies a central role in the decision-making, perception and thinking of a human being. I want to go back to *Neuropolitics* (2002) by Connolly in order to suggest that the researchers in the human sciences can benefit from different techniques that affect the mind – its subliminal processes. Connolly (2002, p. 12) proposes *thinking* as body/brain/culture network which can be better understood by adding an appreciation of genetic endowment, image, movement, sound, rhythm, smell, touch, technique, trauma, exercise and sensibility in order to complement intellectualist models. *Thought* is multi-layered and affect-imbued, consisting of ideas in movement and energetic assemblages; these are non- or minimally ideational – the unthought (Connolly 2002, p. 111). Creativity in thought is *becoming*, or rather, *becoming with*. Referring to Deleuze, Connolly (2002, pp. 93–94) explains that thinking is an encounter between “new events and established thought-imbued conventions or between those conventions and something mute in the world that has not yet been translated (that is, lifted and altered) onto the register of thought”.

Throughout *Neuropolitics* Connolly implies that creativity and sensibility can be cultivated through techniques. Techniques of thinking which modify the body/brain connections are varied and include brain surgery, drugs, alcohol, music, lightning, studying neuroscience or philosophy, physical exercise, mental exercise and the like. Connolly (2002, p. 16) is particularly excited about studying film as a technique offering a source of insights into the interaction between perception and affective states. As I interpret the approach of Connolly (2002, p. 98), the creative space in thinking lies in cultivating “techniques to extend the fragile zone of indiscernibility in which it [thinking] moves”. The fragile zone is the movement of thinking which is neither cyclical nor lineal but a process where the past and the future meet. This encounter, which Connolly refers to as the “forking of time”, can result in thinking which takes novel and unpredicted directions (Connolly 2002, pp. 96–103). One of the best-known techniques is meditation, in which si-

lencing the constant noise of our minds makes room for new thoughts while also diminishing tension. Another related technique is mindfulness, which I mentioned earlier, where the focus is in the present moment and nonjudgmental awareness.

My argument is that paying attention to the subliminal can encourage innovative thought and help us imagine better futures. Of course, all techniques for mastering the mind require time, patience and perseverance. We are all short of time, but when one develops techniques that enhance creativity and open-minded thinking, one eventually works more efficiently and effortlessly and gains back many times over the time devoted to the training. Letting in non-rational forces means higher-risk research but it also enables a fuller and more encompassing understanding of the research topic. The value created by such an approach is that its results are genuinely undetermined. As Connolly (2002, p. 15) writes, "A little vertigo is indispensable to creative thinking".

Engagement with the Environment

Here is where questions of research ethics may arise. Can creativity go to such extremes that researchers ends up in a corner too far from the scientific core? Can one trust the sensations which arise from the subliminal? I would say yes – if we give up the idea altogether that the knowing mind, the rational, the emotional, the subliminal, and the body are separate entities. I believe creativity is not the problem, but the issue is how and for what purpose it is used. Here the responsibility of the researcher comes to the fore to consider questions of ethics in terms of respect for the lives studied and the objectives set.

Furthermore, just like techniques of the mind affect the emotion-imbued thinking from which creativity springs, so does our external world. In particular the cumulative effect of sensing acoustics, lightning, shapes and colours in the physical and digital environment affects our internal world – our creativity and anxiety (Sjöroos 2014). Thinking back to the Nick Cave concert, as a result of a combination of sense stimuli created by music, lights, atmosphere, people and architecture I experienced the sublime sense of awe and wonder. It was the concert that inspired me to give more thought to creativity and its subliminal origins, and finally write this text. I want to conclude that sensitivity to the intense emotions of a sub-

lime experience and the everyday subliminal insights, along with the mind/body/environment connection is needed within the human sciences, as an enriching addition to the intellectualist tradition and intra-disciplinary competition – and as the means to cultivate creativity.

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Notes

- 1 I want to thank Emma Hutchison for valuable comments on this article.
- 2 Damasio (2012, pp. 8–9) explains how somatic markers, emotion-based signals, allow the mind to perceive the self. Connolly further elaborates the importance of somatic markers, which make it possible to “perceive and decide in a timely manner”. Somatic markers can lead to both creative and destructive thinking but without them we would have a hard time making up our minds on anything (Connolly 2002, pp. 33–35).
- 3 Some examples on emotions-studies in IR include Ahmed 2004, Bleiker & Leet 2011, Boltanski 1999, Brennan 2004, Craford 2014, Hutchison 2014, Nussbaum 2003, Petersen 2011 and Ure & Frost 2014. On the role of emotions in Feminist IR scholarship, see Sylvester 2011.
- 4 As a term subliminal refers to stimuli beyond the threshold of sensation or consciousness (Oxford Dictionary).

Turning Gigabytes into Gigs

“Songification” and Live Music Data

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Abstract

Complex data is challenging to understand when it is represented as written communication even when it is structured in a table. However, choosing to represent data in creative ways can aid our understanding of complex ideas and patterns. In this regard, the creative industries have a great deal to offer data-intensive scholarly disciplines. Music, for example, is not often used to interpret data, yet the rhythmic nature of music lends itself to the representation and analysis of temporal data.

Taking the music industry as a case study, this paper explores how data about historical live music gigs can be analysed, extended and re-presented to create new insights. Using a unique process called 'songification' we demonstrate how enhanced auditory data design can provide a medium for aural intuition. The case study also illustrates the benefits of an expanded and inclusive view of research; in which computation and communication, method and media, in combination enable us to explore the larger question of how we can employ technologies to produce, represent, analyse, deliver and exchange knowledge.

Keywords Sonification, Creative industries, Live music, Songification, Cultural data

Introduction

"A band is as good as it sounds
whether they play at Woy Woy or the Fillmore."
Billy Thorpe (James, 1969)

Choosing to represent data in creative ways can advance the understanding of complex behaviours and ideas. Most data exploration and representation relies heavily on visual tools in the forms of tables, graphs, maps, and intricate and compelling visualisations. Whilst visualizations provide strong support for determining patterns in data, auditory pattern recognition has been comparatively underutilized and untested in data exploration and interpretation. One technique for data analysis that does exploit auditory perception is sonification; "the transformation of data relations into perceived relations in an acoustic signal for the purposes of facilitating communication or interpretation" (Kramer et al., 1999, p. 4). This

paper presents the results of a pilot project to better understand creative industry data through the creative extension of sonification; specifically, presenting music industry data as music to musicians in order to improve analysis of the history of live music performances ('gigs') in Melbourne, Australia.

Sonification

Sonification is typically associated with scientific data and specifically in the interpretation of large quantities of scientific results. Researchers have adopted sound as the basis for data analysis in a number of cases for various reasons, some of which include:

- Its capacity to involve 2-3 dimensions of data typical of visualisations
- Its capacity to better represent temporal patterns and changes in data
- Its ability to be combined with visualisations, adding another dimension when the eyes are busy at another task

Walker (2000, p. 18) notes that sonification is often considered a superior method when visualization techniques have failed, e.g. for radiation monitoring (e.g. Geiger counter) or for discoveries such as the "quantum whistle". Given this context its not surprising that the relatively recent field of sonification studies is dominated by the application of sonification techniques in science-based disciplines along with analysis of the psychological and technical acoustic subtleties involved in the procedure.

There are however a number of different types and techniques used in sonification. The functions of sonification can be broken up in to four broad categories: (1) alarms, alerts, and warnings; (2) status, process, and monitoring messages; (3) data exploration; and (4) art and entertainment (Walker and Nees, 2011). This paper is particularly concerned with (3) data exploration and (4) art and entertainment. Data exploration functions are intended to communicate information about a dataset or subset of relevant information about a dataset and can be considered what is most generally meant by the term 'sonification'. Data exploration sonification techniques include parameter mapping (for examples see Flowers and Hauer, 1992; 1993; 1995; Flowers, 2005; Grond and Hermann, 2011; Stock-

man et al., 2005; Grond and Berger, 2011; Smith and Walker, 2005), and model-based sonification (for examples see Hermann, 2011; Hermann and Ritter, 1999; 2002; 2004; Bovermann et al., 2006).

The fourth listed function of sonification, art and entertainment, primarily uses datasets as the basis for musical compositions. This approach often takes the sounds that result from a sonification process and combines them with more traditional musical instruments. Compositions driven by datasets include the works of Quinn (2001, 2003), and performances such as "Listening to the mind listening: Concert of sonification at the Sydney Opera House" (2004) and "Global music – The world by ear" (2006) (as cited in Walker and Nees, 2011, pp. 5-6). There have been a number of excellent creative adaptations of sonification where musical composition is not the primary focus. "The Quotidian Record" by Brian House (2012) sonifies the location-tracking data of the artist's movements for a full year, highlighting the habitual patterns and daily rhythms of his travels. The inherent rhythms and patterns found in music are also explored by Paul (2012), through the "Sonification of Everyday Things", using lasers and the measure of distance to create audio loops for everyday objects. Jones and Gregson (2012) together with Britten Sinfonia have created a continuous piece of music based on Twitter activity, a creative mashup of sound excerpts used to communicate the overall types of conversations, thoughts, and feelings of 500 Twitter users. There is also a strong use of sonification applied to data depicting natural occurrences, such as climate change (Crawford, 2013), tree growth (Traubeck, 2011), and solar wind (Alexander, 2009). The focus of these creative examples is not on data exploration, but more on creative sonification techniques.

One study that has pushed their creative work into data exploration has been "Darwin Tunes" (MacCallum and Leroi, 2012), creating musical loops that depict different stages of evolution. This project has placed an emphasis on the musicality of the loops by crowdsourcing input from critics to create sound that is pleasing and interesting. As a result, this research has placed itself somewhere in the gap between the function of data exploration (3) and art and entertainment (4).

This gap, between the evidentiary demands of science and the affective aspirations of art and entertainment, is not as wide as it might first appear. Increasingly some science based disciplines are

required to understand the 'artistic' aspects of their work – the ways in which certain design decisions affect the success of data visualizations for example, or how computer scientists frequently consider the 'aesthetics' of their code and the way physicists describe the 'beauty' of certain theoretical formulations. Similarly, there has been a significant computational turn in the humanities and creative arts which has profoundly changed the way research is undertaken in these disciplines (Berry, 2011). The technique of Songification proposed in this paper also explores this conjunction between data exploration and the more creative side of sonification through extending musical presence in audio analysis. This technique has the additional effect of opening up avenues for data exploration to members of the creative industries themselves.

Give me a 'G' - Songification

Songification is the extension of sonification through enhanced auditory data design; using music in place of sound to communicate and interpret data. By transforming auditory 'beeps' into music, we intend to create a data format that is easier to listen to and will extend the time listeners will spend interpreting the data, leading to better understanding and analysis. The technique of songification arose from work with The Ultimate Gig Guide (TUGG) database application (<http://tugg.me>, see Verhoeven and Gionfriddo, 2013). TUGG charts the Australian music industry at the level of individual performances from the mid-1960s. The existing data in the TUGG dataset relates primarily to the city and surrounds of Melbourne and currently consists of over 11,000 gigs performed by almost 2,000 bands/performers in 816 venues across the greater city area. This data has been predominantly sourced from gig guides published in an influential popular music magazine during this period (Kent, 2002).

TUGG was specifically developed by creative industry researchers to better understand the flow of live music culture across historical periods, through studying the itineraries of bands and the socio-spatial location of music performances (Bennett, 1997). Creative industry analysts can perform flexible queries on the TUGG data, view their search results in both google map and list form, generate printable reports or download data in a CSV format for statistical analysis.

Several challenges have arisen from this approach to representing the results of TUGG research queries. For example, the shifting scale of travel distance between music venues is difficult to view in the google maps. Bands often played gigs around various inner city venues before travelling a much longer distance to a country located venue (sometimes in the one night). In these cases it's difficult to see the intricacies of adjacent movements around the city in the same map view as a gig in a rural location without losing a great deal of important detail. Furthermore, the static nature of the google maps means it is neither possible to 'see' the sequential order of a band's gigs; nor to perceive variations in the temporal 'stagger' between events.

To better represent these variations of spatial scale and temporal sequence we undertook a process of data sonification in which we represented a sequence of live music gigs as sound frequencies. Although, from a purely analytical perspective, the results of this procedure were promising, they were less successful as a listening experience – to the extent that they compromised any advantage gained from the approach. It was clear we needed to enhance the design of the auditory data in order to provide a better medium for aural intuition. By transforming our research data into music we not only created an improved experience for discerning the relations and rhythms in the data, but we also provided an inclusive, 'vernacular' opportunity for non-professional research participation, in this case by engaging musicians and music fans themselves.

Music about Music for Musicians

Songification raises the question of whether creating music based on music industry data might also engage the live music communities themselves. Our intention is to turn the data into something that resembles and gives tribute to the phenomena we are representing. As MC Zirconium states, "If I am listening to radiation emanating from distant parts of the universe, I want to feel horrified by the scientific majesty of it all" (as quoted in Angliss, 2011). We are consciously not just representing data, we are representing the movement, longevity, and intensity of gigs in a city and its vicinity. We are turning live music data into music.

The benefit of songification in this sense is ramifying. By "thinking through" our research in formats that make the most sense to

the communities and industries we are studying we have an opportunity to engage them on their terms. The typical division between academics-as-agents (generating Analysis) and non-academic communities as the objects of research (generating Content) can be limiting for researchers, particularly in the humanities and creative industries. Songification ensures that our music industry research explicitly acknowledges that although academics might enjoy written texts for developing and communicating their thinking, other communities might prefer to think visually or in this case aurally. By recognizing from the outset that there are multi-modal approaches to knowledge we also recognize that it is possible to create recursive opportunities for research design, in which the typical temporal relationship of exploration followed by analysis and then the delivery of results belies a lack of genuine engagement with the communities under study.

Method

The process of sonification was centred around exploring individual bands itineraries which changed spatially and in the frequency of performance over time. One particular point of interest was the movement of artists in and out of the CBD, or the spread of gigs from the city, suburb, and beyond. The variable of distance (from the CBD) and changes over time (itineraries) was particularly suited to music by looking at distance as variation of pitch from a central note and change over time as the temporal sequence of music. Three contemporaneous Australian artists with different music styles and patterns of venue attendance were selected for sonification: *Max Merritt and the Meteors*, *Doug Parkinson*, and *Billy Thorpe and the Aztecs*. Using TUGG all gigs were search for a specific band (for example *Max Merritt and the Meteors*) and their associated attributes needed for analysis (band name, date, and venue location in latitude and longitude) were exported. The following approach to sonification used in the method is parameter mapping, defined as representing “changes in some data dimension with changes in an acoustic dimension” (Walker and Nees, 2011, pp. 6-7) through event-based data.

The distance to each of the gig venues from the Melbourne CBD was calculated in metres using a Google Maps API. This figure was then translated into frequency (Hz). The range of this data is from 584 metres/Hz to 151413 metres/Hz – the later which is impossible

to register. As a result, we need to take this range of data and translate it proportionally (pro-rated) to a narrower range – one that we can hear and recognise easily. The lower and upper limits of this range were chosen as C3 (130.81 Hz) to B7 (3951.07 Hz). In musical terms this is from C below middle C to B, 4 octaves above middle C.

To translate these frequencies to notes that can be recognised, the nearest note on the 12 note scale was chosen for each frequency. This was then further transposed to the nearest note in the C major scale. What resulted was an array of C major notes which represented the distance that the venue was from the CBD. When the notes/gigs were played in the sequence in which specific bands played at the venues we produced the following band gigs sonification. The resultant inharmonious ‘beeps’ however, defeated the idea that the sonified data could be easily shared. [File 1: ‘Max Merritt Sonification MP3. Listen]. To songify the data and make it easier to interpret patterns and honour the musical provenance of the band that generated the data further enhancement was needed.

The length or duration of each note was set to the number of days between the current gig and the next gig played by the band. Therefore, the bigger the delay between gigs, the longer the note. When all notes/gigs were played in succession we produced a melody that was represented as a lead guitar riff in keeping with the period and band attributes of the performances under study. As you can hear from File 2: Max Merritt Lead Riff, [File 2: Max Merritt Lead Riff MP3. Listen] this guitar melody is ‘easy listening’ compared to the inharmonious ‘beeps’ produced by the sonification method. To augment this melody and to create a full band sound, backing tracks were written in the style of the respective performers.

The process to create the backing tracks involved firstly identifying the average beat for each artist. This was done by looking at tracks on YouTube of the artist and tracking the beat to a metronome – the average beat rate could then be calculated. The method for producing the chord structure varied depending on the band. For example, the backing chords for the *Max Merritt and the Meteors* track was obtained by going on to a popular guitar tabbing website and obtaining all the chords that had been tabbed for the band. The four most common chords were then used for the track and played in the order of what was most musically pleasing. The backing track for *Doug Parkinson* was more difficult as there was just one tab available.

Therefore, YouTube was used to determine the playing style of the band and the common chord structures. The backing track for *Billy Thorpe and the Aztecs* was based on a basic 12 bar blues riff as per the average song on his playlist.

To date, there have been three pieces of music written and performed live using this process of songification for the bands during the height of live music in Melbourne (1965 to 1972): *Max Merritt and the Meteors* [File 3: Max Merritt Songification MP3. Listen], *Billy Thorpe and the Aztecs* [File 4: Billy Thorpe Songification MP3. Listen], and *Doug Parkinson* [File 5 Doug Parkinson Songification MP3. Listen]. These tracks have also been performed on stage before an audience by the research team in order to emphasise the significance of serendipity in live music events and their songification.

Findings

The process of songification led to innovative methods for studying and understanding the creative industries and creative labour. The shift from sonification to the more musical songification and the creativity involved in this shift has created a better product for data exploration, interpretation, and understanding. The ensuing musical renditions of band itineraries encourage the listener to spend time with the data by playing the tracks through multiple times. This is advantageous over pitched ‘beeps’ simply through the willingness of the analyst to listen to music over inharmonious sounds, resulting in more attentive interpretations of the data and wider opportunities for engaging non-academic music specialists in the research.

We limited our songification to the use of pitch (the perceptual dimension of frequency) and note length to display patterns in itineraries. Subsequent investigations could use other sound dimensions (e.g. loudness, tempo). Further research could also be applied to a number of key aspects of this project. For example, in order to test sound parameters should greater distances be represented by higher pitches (a “positive” mapping polarity)? Are there other, more sensible ways to represent patterns in the data? Is the scaling of pitch in keeping with the changes conveyed? Extending our work further, we intend to explore the understanding of sound metaphors (the expectations and feelings that are evoked

by a particular use of sound) particularly as they apply in and differ between specific contemporary music scenes.

Conclusion

With the advent of 'big data', the impetus for researchers to focus their investigative efforts on the determination of patterns in data, in order to make 'sense' of large, multidimensional information, has only ramified. To date, most data exploration however, relies on visual tools; failing to exploit the evident advantages of our auditory senses, and necessarily excluding those with sight impairment.

As creative industry researchers we need to use all the resources at our disposal; technical, social and perceptual. As music industry researchers we might even more specifically ask, what properties of space can be experienced through listening? How might the auditory representation of spatial data enhance geographic analysis? What might the practice of live music offer in terms of a cognitive enterprise rather than merely artistic contemplation and enjoyment? And conversely, how might the representation of auditory data be enhanced through artistic extension? In what ways can the use of auditory technologies extend human capability and comprehension? The process of songification suggests at the very least, that it ain't all over 'til the big data sings.

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Finding Oneself Lost in Enquiry

Being a Researcher

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Abstract

Drawing on Heidegger's later writings on Hölderlin's poetry, this paper explores the existential significance of being a researcher. Heidegger's characterisation of our being-in-the-world is used as a basis for exploring Hölderlin's poem, "Remembrance" in order to throw light on the experience of undertaking research. The paper argues that the very phenomena of familiarity, disorientation, and illumination characterise this process of researching.

Keywords Heidegger, Hölderlin, Researcher, Lostness, Finding, Illumination, Astonishment

Introduction

This paper looks to address the experience of research through an existential lens, in order to arrive at the position that researching itself can be understood more as a dynamic, lived process rather than a rigidly followed procedure or method.

Having previously undertaken research in various disciplines and domains, from business management to psychotherapy, the experience of research itself has prompted me to question our un-

derstanding of the phenomenon of researching. Put otherwise, if we were to strip away all the procedures and frameworks that give shape and structure to any methodological approach, what is the essence of being engaged in research?

To be a researcher, we might say, is a mode of being that characterises and identifies a particular way in which human beings show up or stand out in a certain context of meaning, or 'world'. This necessarily involves both a 'doing' (the 'what') aspect as well as the 'being' (the 'how') of the 'doing'. To put it in a more Sartrean way¹, we might express this distinction otherwise in terms of there being an essence to research (and we might tie this to Husserl's phenomenological project here) – what research is up to, methodologically speaking – as well as its being a particular kind of human activity – its existence – that is distinct from any other in our cultural, social and institutional practices.

In this essay, my aim will be to avoid any overly theoretical, abstractly philosophical or simply remotely-based approach that is unrelated to the world of research. However, I draw almost exclusively on Heidegger's comments on Friedrich Hölderlin's poem, "Remembrance", as a way of relating the meaning of its content to the activity of researching. My analysis introduces Heidegger's particular term, being-in-the-world, and the meaning of 'world' in the context of research, as a way of elaborating on the aspect of being a researcher. I then move on to a description of the researcher's experience of moments of disorientation, which we might articulate as disturbances in the research process. I conclude that such moments or experiences illuminate how we are being as researchers, which itself informs the research being undertaken.

Being in the world of research

Rather than taking the Cartesian starting point of characterising ourselves as detached, objective observers of the world around us, I adopt Heidegger's fundamental ontological position of our human being-in-the-world. This is a unitary phenomenon, which might be better expressed in a similar hyphenation that conveys the inseparable condition of always being-there, or being-in-a-context, never being subjects that are isolated off from a world that, in turn, would render us context-free. However, in keeping with the approach taken in Heidegger's *Being and Time*, I isolate the terms

within this phrase in order to understand better the sense of its meaning as a whole.

Being-in-the-world

We might plausibly ask, what is *any* being-in-the-world? Perhaps one approach is to assert that we are not thinking of ourselves here as autonomous, detached, rational subjects that occupy a 'reality', that is, a Newtonian world of space and time that is independent of our thought, talk, knowledge or experience, but rather, that we are always already enmeshed, embedded and involved in a context of meaning and familiarity that we understand as a *world*. It is in this sense that we are being-in-the-world.

Being-in

As being-in, we are typically *in*-volved in our world. The way in which this manifests itself in the world of research is that we cultivate a particular 'style' of carrying out or 'doing' research. Methodological approaches act as pre-established paths, or more commonly, procedures or sets of rules that are followed in order to arrive at results and findings that, in some sense, justify the methodological approach taken. For example, let us assume that, I as researcher, pursue the question of the experiential moment of being challenged by a therapist in a psychotherapeutic setting. The enquiry is centred around an existential experience that I want to illuminate. Since any theoretically-based methodological approach abstracts from that experience to *another* realm, namely, of explanation, I opt for a phenomenological approach to my enquiry in order to remain 'experience-near'. Whilst the 'doing' aspect of researching is a core element, the way or the 'how' I as researcher engage with the research process is reflected in my stand, or 'understanding', of being a researcher. So, I can engage with this in one of two ways. I can 'own' my experience of being a researcher, acknowledging the difficulties, hurdles, anxieties and moments of meaninglessness that come with this as I experience the process. Alternatively, I might maintain a more detached and 'scientific' attitude through a more tenacious hold on the structure and procedure detailed in my method, such that I experience a certain predictability and groundedness in my activity of research.

World

As human beings, we relate to an open region that allows us to engage in certain meaningful practices that absorb us. The world of research is one particular kind of such practice that makes sense when we are engaging in particular ways. It is a world that is existentially bound off from or different to a world of music, say, although there may be creative ways in which worlds 'meet' or interact with the aim of promoting and being in the service of one or both, as in the case of research on music, or using music creatively to inform research².

Research

The essence of research can be elucidated in various ways, whether it be etymologically, conceptually, phenomenologically, or hermeneutically. Minimally, I characterise the phenomenon of research as an exploration that attempts to illuminate some particular topic, theme, experience or concept that already occupies a familiar place in our social and linguistic practices. Our enquiry is motivated by a re-search, re-turn, or re-visit, to disclosing something that is not necessarily explicitly experienced in our everyday dealings with the particular phenomenon or concept under investigation.

Method in the world of research

Our common understanding of method is based on procedure and a set of steps that direct our actions and ways of investigating the research question. However, this is very much 'doing' – oriented and has the characteristic of closing down some, but admittedly not all, creative elements to the research itself. Typically, the researcher who is wholly devoted to following a particular method is predominantly concerned that he or she is following the prescribed method 'correctly'. In contrast, we should be guided by the origin of the meaning of 'method', namely *μετα* ('from here to there') and *ὁδός* ('way') in order to construe a way of employing it more accurately. As Heidegger puts it in the *Zollikon Seminars*, it is

[a] "way" ... "from here to there", "toward something" ... It is the way we pursue a subject matter. How the particular subject determines the way toward it, and how the way toward it makes the subject matter obtainable³

Being in research and *doing* research are not mutually exclusive terms or approaches, but rather complementary and in a relation of synthesis to one another. The former emphasises involvement, engagement, embodied immersion that affects the being of the researcher, and doing the research intimates actions, behaviours and steps that are pursued and can be counted as events that move the research process along. Being in research evokes, among many other things, uncertainty, anxiety, vulnerability, inspiration, equivocation, steadfastness, ennui, excitement⁴.

Heidegger, Hölderlin and Adventuring

The Phenomenon of Losing and Finding Oneself as Researcher

My reflections on the existential experience of being-in-the-world-of-research, as outlined above, have been significantly influenced by Martin Heidegger's 1942 essay on Friedrich Hölderlin's poem, "Remembrance" (*Andenken*), itself written in 1802 during Hölderlin's journey to, and stay in, Bordeaux, South-West France. My intention here is to draw on Heidegger's creative reading of the poem as a way of illuminating and highlighting the metaphorical significance that it bears on researching any aspect of human experience. My aim here is not to conduct a line-by-line critique of Heidegger's commentary, nor indeed a line-by-line analysis of Hölderlin's poem, but simply to try to say what strikes me as compelling about the meaning of the poem in the context of enquiry.

"Remembrance" describes the journey of mariners (Hölderlin here is really referring to poets), who set sail to foreign lands, with the impetus of the North-East wind behind them. They are travellers, adventurers, who must, as Heidegger puts it, 'know the heavenly bodies and be masters in reading the quarters of the sky'⁵. This illuminates a particular way in which the mariners demonstrate a certain openness to the expanse of possibility, that is, 'sky' understood ontologically. They are open to be struck and astonished by the 'fiery spirit' in the foreign land, as Hölderlin puts it in the first stanza of the poem. In Heidegger's words, they have a 'love for what is not like home, purely for the sake of becoming at home in what is one's own'⁶: the mariners embody a particular type of person who travels to foreign lands precisely in order to prepare to be astonished by what is most close and familiar to him. That is, once in a 'strange land' i.e. away from familiar surroundings that one

might call 'home' and where one 'dwells', the mariner experiences what is 'foreign' to him. It is in this very experience that he undergoes a process of being astounded by the realisation of what is closest to him i.e. particular aspects of his own cultural and social practices are illuminated and made clear to him.

As researchers, therefore, I suggest that we are *also* mariners, setting out on a journey or ad-venture (venturing out), looking to research or 'see again' some aspect of our world, be it the world of psychotherapy or business or academia, by sailing out *from* that world, into a foreign one. In letting us experience its strangeness and unfamiliarity, it illuminates (lights up, throws light on) the very world in which we live in our everyday familiarity and understanding. The question arises, why do we really need to sail out to strange lands to experience this? Understandably, it is because we are not able to simply 'extricate' ourselves from our deeply embodied practices in some simple and straightforward way. To think that we can do so is to conform exclusively to a representational mode of thinking.

The representational mode of thinking is important to us, and has been, ever since we have embraced metaphysics as our fundamental frame of understanding. In relation to Hölderlin's poetry, however, it is itself a meditation *on* poetry, what it is for poetry to *be* poetry, or its meaning. This is certainly what we encounter in "Remembrance". It is not descriptive poetry, in the sense of the poem representing a thing or idea with the words in the poem that describe it, as we find most clearly expressed in, say, representational art. This approach takes it that the role of art – or art when it is working at its best – is a representation or correspondence of 'fit' to the object or idea that it represents. As such, a spectator, the reader or the audience of the work, can marvel at the accuracy and 'adequation' of the representation to the state of affairs that it depicts. One can even go further in saying that, to find oneself 'lost' in the illusion of taking the art-work for the real thing, is 'true art' in this context.

In the case of Hölderlin's poem, therefore, it is not trying to correspond to the way that something is, or really is, or to some kind of adequation to the facts, such as the fond remembrances of Hölderlin's own journey and stay in South-West France. Rather, it is trying to show us something much deeper – a fundamental truth – about *the kinds of beings that we are*. So, the poem is not reporting on Hölder-

lin's 'subjective' and 'inner' experience, and it is not reporting on what's out there in the world. Rather, it is concerned with our situated position or perspective that is contextually grounded in being-in-the-world.

When we see what Hölderlin is engaged in, we realise that he is attempting to articulate his experience of *dwelling poetically*. Hölderlin is trying to convey what the poet needs to do, the process that he has to go through, in order to really see what is true, proper, his own. But he needs to *appropriate* this, see it and acknowledge that this is what is closest and most disclosive to him in his existence. However, Hölderlin – and, likewise, the researcher – has to undergo a process in which he prepares himself to be open to being astounded, to develop the sensitivity to being struck by what's being called out to him, and to see something new in what is already familiar. This cannot be captured in an explicit, representationally-oriented way.

When we are at our most engaged in research, we are *also* open to finding ourselves *lost*, but not in the context of representing one thing with or for another. In that latter mode of finding oneself lost, there is an anchor or foundation that we return to that is object-based and that renders us able to validate as 'true' insofar as it is a true representation. Rather, we find ourselves lost *when we are in the event or moment of (non-representational) truth*, something that we experience in a very fundamental way that cannot be represented. In that moment of experiencing, we might be lost for words, or have a feeling of being overwhelmed such that we cannot accommodate it into our existing methodological or philosophical framework. Sometimes, we might be lost because we feel that we cannot 'successfully' apply the method that we have adopted, and are therefore feeling frustrated, disoriented, and even dejected. This latter experience, however, is itself a representational way of thinking about the research process, and presents its own internal tensions that can only be undone through embracing a 'being'-oriented approach in research.

The Mood of Being Astounded as a Kind of Lostness

The intention behind this exploration is that, as researchers, we are trying to uncover that which is most 'me' that I can experience in the context of research-ing. When I am in an unfamiliar place or setting, I am overwhelmed, taken over, and even submerged by my experi-

ence of discomfort, anxiety, oddness, strangeness, despair, uncertainty, unsettledness. When I experience this, I can either numb myself into passivity, helplessness or hopelessness, and moreover, stay in this mood, or I can be open to the way in which something is being disclosed to me. When I am open or receptive to such disclosure, a sense of wonder, or even astonishment, can draw me to see exactly what provides me with my grounding of intelligibility when I, for the most part, dwell seamlessly in the practices in which I am familiar, settled, and transparently coping. Why is this important? When I see that being a researcher has to also involve my lostness, because it opens me to the fundamentally existential experience of enquiring, rather than solely following a pre-set procedure that I attempt to adhere to diligently, I embrace the project of research in a more authentic⁷ way. However, it should be noted that the experience of lostness is not something that can be brought about by an act of will. This is important, since we might assume that we have to orchestrate this in the course of our research endeavours.

‘Losing oneself’ can mean different things, however. Our different understandings of being lost all have in common a certain experience of ungroundedness, or of not being able to find or return to the path that directs us towards further investigation of the phenomenon. This might be epistemologically-based (‘I don’t know what I’m doing’, or ‘I don’t know what to do next’, for example), or more existentially founded in terms of a certain mood or disposition (‘I’m bored with the whole question’, or ‘I feel out of my depth, I don’t experience this going anywhere’).

In terms of moods and dispositions, when we acknowledge the ‘being’ of our engagement in research, we can adopt a position of trust towards ourselves and our circumstances (our being-in-the-world-of-researching). As such, we embrace our lived experience of vulnerability, uncertainty, ungroundedness, and lostness. In this experience, we also recognise that this lostness and ungroundedness invites a certain mood of astonishment and disorientation with regard to the phenomenon or topic being researched. In other language, we might call this ‘wonder’, that is, a mood that opens us to the possibility of seeing something in a different way. The experience of ungroundedness illuminates and intimates the fact that we may have been too dependent only on ‘doing’, staying within our rigidly held method, as if it were offering certainty. As a conse-

quence, our experience of being open to being struck, or being receptive to what we encounter in the course of our research – and further, how we do so – furnishes us with a more authentic and rewarding experience of undertaking our enquiry.

Wandering in Wonder

When the 'being' aspect of the experience is acknowledged and embraced, the researcher has the scope to then be open to what becomes manifest in the very disorientation or sense of 'strangeness' that is occasioned at such periods in the research. It is at such times that a 'creative void' illuminates something or other that the methodology that is applied and followed does not accommodate or address in the lived experience of being the researcher. It thus impoverishes the potential wealth of opportunities that can come to the fore in generating creative insights and inspirational moments⁸. Here we acknowledge the valuable work of Max van Manen who, I think, offers some scope for this kind of experience in the very struggles and tensions encountered in writing. As he says,

Writing is a producing activity. The writer produces text, but he or she produces more than text. The writer produces himself or herself. The writer is the product of his or her own product. Writing is a kind of self-making or forming. To write is to measure the depth of things, as well as to come to a sense of one's own depth⁹.

Conclusion

I have attempted to articulate the starting point of our understanding ourselves as being-in-the-world, involved and engaged in the 'regional' or localised world of research, in an existential sense. The implications of this include the possibility that we experience disorientation in its many possible manifestations, and that, as such, we undergo what Heidegger calls, an unready-to-hand relation to our situation: the moment becomes conspicuous, obtrusive or obstinate in its very disorientation. It is a moment or stretch of the temporal in which our habitualised ways of dealing with ourselves and the localised world (of researching) become shaken or 'ungrounded'. At such times, we encounter a positive challenge of seeing something that is so familiar to us about ourselves and our practices but

which is also necessarily remote and withdrawn from us in our everyday engagements. Lastly, the disorientation itself is the necessary means by which illumination of the phenomenon is possible, and without which astonishment and wonder arises. It is precisely this whole process of familiarity, disorientation, and finally illumination that can be understood in terms of being a researcher.

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Notes

- 1 I refer here to Sartre's distinction between essence and existence in his *Existentialism and Humanism*, p.26.
- 2 Heidegger (1927/1962) distinguishes between four conceptions of 'world', and it is the distinction between his first conception, namely the scientific world in which objects and entities that are present-at-hand i.e. objectified, and his third conception, namely, the world of one's engagement and involvement that is relevant here, but this will not be developed in any detail here.
- 3 Heidegger, M. (2001), *Zollikon Seminars* pp.101-2.
- 4 I have purposely omitted mention, let alone discussion, of Gadamer's very important work on method and its relation to truth, since this would require more extensive attention than space allows.
- 5 Heidegger, M. (2000), "Remembrance" p.111.

- 6 *ibid.*
- 7 'Authentic' in Heidegger's (and the Kierkegaardian) sense of being resolute in the finite, temporal, factual situation (1927/1962).
- 8 van Manen (2013) has referred to these as 'inceptual' moments or experiences, *pace* Heidegger's use of the term in his *Contributions to Philosophy*. See his *Phenomenology of Practice* pp.237-239 for further elaboration.
- 9 van Manen, M. (2014), *Phenomenology of Practice*, pp.364-5

How the researcher's experience of visual images can contribute to qualitative research

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Abstract

This article presents a theoretical argument exploring how visual images appeal to sensory knowledge, and how sensory knowledge can contribute to qualitative research where visual images are included as part of the method. The argument is based on a phenomenological approach and a conceptual model of 'the aesthetic object'. The experience of the aesthetic object comprises three different attitudes, each of which approaches specific aspects of the aesthetic object. By reflectively differentiating between these various attitudes, the contribution of sensory-experienced knowledge can become explicit in qualitative research.

Keywords art experience, aesthetic object, sensory knowledge, visual images, qualitative research

Introduction

Research on children can include children's art and drawings to study children's feelings, experiences, intentions and engagement in their everyday life (see e.g., Boyatzis & Albertini, 2000; Braswell & Callanen, 2003; Braswell, 2006; Bruselius-Jensen, 2013; Burkitt &

Barrett, 2011; Burkitt, Jolley & Rose, 2010; Clark, 2010; Eng, 1961; Fink-Jensen, 1998; Flensburg, 1994; Goodnow, 1978; Havskov-Jensen, 1986; Kragh-Müller & Isbell, 2011; Lowenfeld & Brittain, 1972; Nielsen, 1999, 2012; Pedersen, 1993; 1999). Studies of children that include visual methods often encompass interviews, dialogues and other means of articulation (e.g., Braswell, 2006; Bruselius-Jensen, 2013; Burkitt & Barrett, 2011; Clark, 2010; Fink-Jensen, 1998; Kragh-Müller & Isbell, 2011; Nielsen, 1999). In most of this research, interest is directed towards studying something specific about which the drawings must 'tell' us something. But how can the researcher handle drawings as data with the specific visual qualities differing from speech and text? In verbal interviews children refer to experienced phenomena and situations. To interpret that kind of data the researcher must recognise what the words refer to. The interviewer can respond and ask about articulations indicating feelings and specific meanings in the interview situation. In this dialogue, the interviewer can clarify whether the immediate interpretation of affect, feeling or engagement is meaningful for the interviewee. When it comes to children's drawings, however, I have not seen any examples of similar visual dialogues between researchers and interviewees. Instead, the researchers ask children to define what their drawings 'mean'. As a result, the processing of children's drawings is often reduced to illustrations of the spoken narratives in research on children.

In this article I explore how sensory knowledge in children's drawings can contribute to qualitative research.

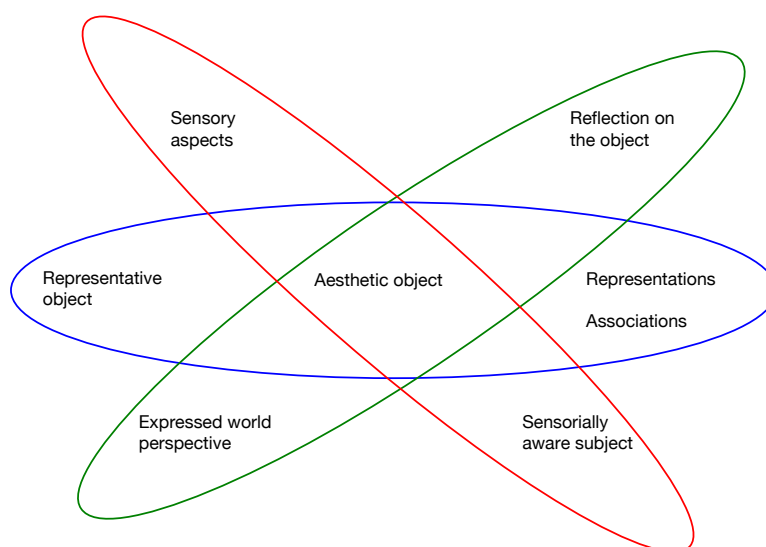
The exploration involves a theoretical argument applying a phenomenological approach. This approach is chosen because it offers conceptualisations that fit with the author's sensory experiences as a former artist and illustrator. More generally it fits with sensory experiences in research including visual methods. Visual perception is integral, and sensory and aesthetic recognition is experienced and expressed in, for instance, affective or emotional reflection, an impulsive emotional response, direct intuitive interpretations or a profound 'certitude' that cannot be 'translated' into simple conceptual explanations (Funch, 1996a, 1996b; Hansen, 2010; Hohn & Pedersen, 1996; Todres, 2007). By a reconceptualisation of 'the aesthetic object,' I will show how the researcher can endeavour to make his/her own experience of children's drawings a reflective part of the

research process. The theoretical argument includes an illustrative example from a research project.

The aesthetic object

With inspiration from phenomenologist Mikel Dufrenne's analysis of aesthetic perception of art as 'aesthetic objects' (Dufrenne, 1973), Fink-Jensen and Nielsen (2009) have focused on three aspects that are relevant to all aesthetic perception: a sensory aspect, a representative aspect and an expressive aspect.

In the researcher's (the subject's) aesthetic experience of a child's drawing (the aesthetic object), both object and subject help to determine which aesthetic experiences are possible. The object provides special *sensory* options which can be experienced by the sensorially aware subject. The object also provides special *representative images* for the subject to experience, depending on his/her own experiences, knowledge and associative options. Finally, in the *expressive* aspect, the aesthetic object expresses a special perspective on the 'world', and the subject can experience this perspective through his/her own special feelings, thoughts, actions and articulations (model 1, Fink-Jensen & Nielsen, 2009).



Model 1: Experiential potential of the aesthetic object

- The three aspects of the aesthetic object show how aesthetic experiences and recognitions can be described and analysed by emphasising the *object's* sensory qualities, representative qualities and reflective qualities, and the potential experiences provided by the aesthetic object for the sensorially aware subject – such as the researcher. The model was developed by Fink-Jensen & Nielsen (2009).

From this point of departure, children's drawings can be characterised as sensory objects which stand out in special ways by virtue of their materials and expressive qualities. Drawings can be perceived as sensory objects by researchers and others who actively sense, perceive and relate to any sensations, feelings and conceptions triggered and created in the encounter with the drawing as a sensory object.

The model can guide different researcher attitudes to drawings as part of the method. Each attitude is described further below. Firstly an illustrative example is presented, not as 'evidence' for a specific method, but to illustrate the different approaches.

An example illustrating a researcher's experience of a child's drawing in a research context

In a study of nine children's learning processes that applied various modes of expression over three years at a kindergarten, school and after-school care facility, we included visual conversations as one of the study methods (Nielsen, 1999; Fink-Jensen & Nielsen, 2000). The children took part in visual conversations at the kindergarten in groups of three five-year-old children. The groups were introduced to the assignment and colouring materials as follows: "Please look at this! I have brought some new paper and new crayons with me today. Have you seen this kind of paper or these crayons before?" The children had not, so the researcher demonstrated how to use them as she talked:

"You can use the crayons to draw with, just like ordinary crayons. After you have drawn something, you can drip some water on the crayon colour on the paper and then paint with it. You decide whether you just want to colour with the crayons or whether you also want to paint with them. We would like you to draw and colour and perhaps even paint a picture about something that happened to you today. It could have happened at home this morning. Or it might be something that happened on your way to the kindergarten, or here at the kindergarten. As long as it was something that happened today."

In one of the groups, a boy named Johan drew his house, where he had eaten breakfast with his older brother that morning (Figure 1).



Figure 1.

As a researcher, when I look at this picture, I have a feeling of both lightness and stability, but I also notice great energy and mobility at the same time, as the picture shows something that is both standing and falling. I remember Johan's hesitant drawing process, the attentively observant look in his eye and his meticulous choice of colours and colouring of the curtains in the two windows. Offhand, I see the entire house as his own head and eyes looking at an airy sphere floating down with a wavy line from the upper section of the drawing. He drew with concentration in the group after having observed another child's drawing process. When asked what he had drawn, he was very pleased to explain how his older brother had dropped a bowl of cornflakes on the floor that morning. Their mother saw it happen, and he described how she had a new red hairdo. When he tried to paint the drawings of himself and his brother, the lines became blurred and the dramatic situation became unclear in the drawing. Looking at it now, it still seems brimming with energy. The image arouses a number of aesthetic recognitions in me. Some of these feelings are aroused by the drawing

itself, and some by associations with the situation in which I experienced Johan drawing and painting. Regardless of whether one has witnessed the actual depiction process, children's drawings can move the onlooker – including researchers. This emotive dimension and sensory knowledge can easily disappear as the drawing is moved from situated production to academic categorisation. In the following an attempt is made to show how sensory knowledge can contribute to research using the notion of the aesthetic object.

Experiencing a sensory object

The researcher can relate to the child's drawing as a 'sensory object' by observing the drawing's sensory qualities: material, strokes, surfaces, colours, shapes, textures, light, dark, dimensions, vigour, gravity, lightness, etc. In order to approach the drawing like this, the researcher can assume the attitude of phenomenological reduction and the attempt to perform the epoché by setting aside the natural attitude (Giorgi, 2012). In the natural attitude the subjects perceive their life-world as taken for granted, including the assumption that objects exist and 'are' as they are perceived (Zahavi, 2003). The perceived objects present themselves and appeal and call for the attention and action of the intentionally oriented subject (Fink-Jensen, 2008). The sensory-material phenomena appeal to the subject's embodied intentionality, that is, an energetic rhythm appeals to energetic rhythmic movements, and moving gestures of another living being appeal to similar forms, intensities and timings in the bodily movements and/or mood and attunement of the subject (ibid.). Visually experienced movements in the life-world correspond to emotional intensities, according to Sheets-Johnstone (1999); motion is experienced in modes of embodied e-motion. Similarly, aesthetic articulations such as children's drawings appeal to embodied experienced phenomena like feelings and intentionality. In the natural attitude, these experiences are 'taken for granted'.

By performing the epoché, the phenomenologist attempts to suspend the 'taken for grantedness' of experience and instead to wonder and approach experiences with an open mind. This reflexive attitude is important if we intend to study another subject's experiences. In this attitude the researcher considers what he/she has been given in the moment, and at the same time refrains from defining it as being the way it presents itself to her consciousness. This is

an attempt to describe what can be seen and sensed in the drawing without interpreting what is being described as an expression of something specific. What can be seen and sensed in the drawing? How does it manifest itself as a sensory object? How can these visual and sensory perceptions be described?

Experiencing the representative object

The researcher can also relate to the child's drawing as a 'representative object' by describing what he/she perceives the drawing as referring to: Does it represent objects, figures, living creatures, movements, activities, relationships between objects and figures? How are they represented? How does the researcher experience these images – for example in the form of feelings, thoughts, conceptions, associations, memories, etc.?

This concept of representations does not refer to the cognitive psychological concept of representations as 'some-thing' in the mind mirroring 'some-thing' in an 'outer world'. On the contrary, in this context representations are lived experiences evoked in the encounter with the perceived object. The researcher's evoked lived experiences from other contexts can be re-lived in the encounter with the child's articulation in drawing and narratives about it. The researcher can gain access to life-world phenomena by observing and/or participating with other people in their everyday life contexts, as we did.

In the phenomenological approach every subject is understood as situated in and interdependently contextually interwoven with the life-world. The life-world "is an integrative complexity where we live, act and have experiences, (it) can neither be reduced to a single quality nor transcended. ... It is an integration of life and world, object and subject, inner and outer, mind and body, individual and society, etc." (Berndtsson, Claesson, Friberg, Öhlen, 2007, p. 259). In the natural attitude the subject pre-reflexively intentionally orients towards, perceives and responds to changes in the life-world. The interdependency of life and world means that the life-world is personal and personally experienced, and at the same time subjects can to some extent share life-worlds with people more or less close to them. "...research within a life-world approach implies interrelating with and, to some extent, sharing other people's life-worlds." (op.cit., p. 261).

In the study of the nine children's learning processes in everyday life, we were participating observers in some of their everyday life contexts and thus interrelated with their life-worlds. The knowledge gained is included in the drawing as a 'representative object', but it is not the only relevant form of knowledge involved. When the researcher focuses on the drawing as a 'representative object', this equates to describing the experiences, direct associations, meanings and any preconceptions experienced in the encounter with the drawing. Which sensory sensations, feelings and thoughts are aroused by the encounter with this drawing? What types of personal and technical knowledge are evoked as recognisable and relevant in working on this aesthetic object?

This part of the analysis includes 'free imaginative variation' (Giorgi, 2012) and brings in or makes use of the creative potential of the researcher's pre-reflexive, lived and embodied experiences as well as reflexive knowledge based on other studies, theories etc. In this part of the process I am a researcher subject with lived experiences through a lot of artistic activities such as pencil-drawing, the use of watercolours, etching, oil-painting, and modelling in clay and plaster. My immediate and pre-reflexive sensations when encountering Johan's drawing include shared life-world experiences of what it is like to move a colour intentionally, attempting to define something on the paper with firm movements, and then see that the result differs from my preconceptions and yet provides a new context for the next lines. My hands re-live what it is like to move a brush while attempting to control the stream of water blurring the colour lines and the tension in the body when these materials work on their own and disrupt the lines. The sensation is of something deteriorating, 'losing its grip', with the tentative formation of a theme which is slipping away. I re-live a brief moment of wonder, disorientation and intention to grasp 'what was almost there'.

As I look at the drawing, this kind of experience is intertwined with my memory of Johan's silent and wondering tone of voice as he talked about his brother dropping cornflakes and his mother's new hairdo, and with the memory of the social encounters of three children who were drawing and two researchers asking questions and providing yet unknown drawing materials in the kindergarten. These various associations merge into the experience of the drawing as a representative object.

The expressed world

Finally, the researcher can relate to the child's drawing as an 'expressed world': Which feelings, perceptions, experiences or knowledge is the child depicting in this drawing? What is the child seeking to articulate and render visible through the specific use of the given materials and skills available to the child? In this aspect, the researcher's aesthetic experience focuses on reflections on the 'world' expressed in the aesthetic object. In an artistic experience, this could be reflections in the form of actions and articulations (such as personal conceptions of aesthetic objects); but it could also be feelings, thoughts and conceptions of the experienced 'expressed world'.

In Johan's drawing the situated expressed world can be characterised as 'a wondering and observing approach to what is going on'. Johan tries to produce the drawing that the researcher has asked for, and he observes the other children in the group: How do they perform the task? He assumes the motif is 'my home', inspired by one of the other children's drawings, and he intends to articulate what he experienced in his home this morning. He uses the drawing tool and moves it to define a 'frame' of home, a transparent house, a large square in which he can arrange figures to articulate his morning experiences. His intentionally directed drawing activity includes an attempt to experiment with changing the coloured lines to paint, like his peers have done, but when he sees the result he immediately stops the painting movements. His lifted eyebrows and surprised expression indicate that he did not expect or want the particular result of the painting process. The expressed world in this particular drawing can reveal a five-year-old boy's wondering attitude to what he becomes aware of in the drawing situation and in his home context – and the study can describe a couple of moments in his experienced life-world and situated experiences that contribute to learning processes in lines of intertwined preceding moments and moments to come.

Focusing on the expressed world in the research process is equivalent to using the drawing to look for what the child intends and seeks to express using the resources available. The child's intentions expressed in the drawing can be relevant to the actual research project, but they can also turn out to deal with other factors. For clarification, it could be relevant to compare the researcher's description of the drawing as a sensory object with descriptions of the

representative images experienced. This makes it possible to consider how the researcher's subjective experience of the depictions, in the form of feelings, for instance, enables him/her to recognise feelings that the child who made the drawing might also have experienced. In the researcher's aesthetic perception, the child who makes the drawing can come to the fore as an existential being with feelings, corresponding to those the researcher perceives in his/her own encounter with the drawing. The researcher's awareness of his/her own sensory and aesthetic perceptions of a drawing's representative aspect can open the way to sensory knowledge by recognising commonly experienced phenomena. It can also make it possible to differentiate between the type of potential knowledge emanating from the researcher's sensory and aesthetic experiences and the potential knowledge relatable to sensory qualities that can be described in the drawing. The child's narratives and any knowledge or concepts relating to the child's drawing styles and processes can add information as well.

The resources available to the child during the drawing process include the child's ability to draw with the tools at hand and in the particular context and social situation. The subject moving and perceiving in drawing processes can be illuminated in the phenomenological approach. Social and material tools, their contribution to mediation and symbolic meaning, opportunities and constraints can be studied applying a culture-psychology approach. Such an approach is also applied in the study of the nine children and their learning processes across contexts, but this part of the study is not included here.

Summing up

In order to see and describe the world expressed in children's drawings, the researcher must be able to differentiate between his/her natural approach and the immediate experiences, deciphering, associations, etc., on the one hand, and a wondering attitude towards what a child is trying to accomplish and is capable of articulating and expressing in his/her drawings, on the other. Talking to children about their drawings can help to qualify the work, particularly by inquiring about their use of materials and conceptions which are difficult for a researcher to recognise and decipher.

It is possible to render some of the otherwise implicit formations of sensory knowledge and meaning transparent by differentiating between the sensory aspect, the representative aspect and the expressive aspect in drawings as aesthetic data material. It is worth considering how such data can qualify the research, for instance by contributing something unexpected or giving rise to new questions.

Taking this approach, the drawings can create knowledge about the child's perception and perspectives in several different ways. A vital aspect of this approach is the researcher's active sensory awareness, observance and description of sensory perceptions as part of the processing, and the perceived feelings, meanings, references, associations, definitions, etc. as sensory knowledge that can be described. This also includes any theoretical categories or concepts that come to the fore in the researcher's perception. This does not mean that the researcher's perception is identical to that of the child who makes the drawing, or that the meaning of feelings can be directly understood. It means that emotive qualities can be communicated, as in Johan's sudden stop of the brush and surprised embodied expression when water dissolved his coloured lines.

It is worth considering how the articulation of feelings and perceptions is linked to various experiences, cultural meanings and theoretical conceptualisations. I should like to know whether a reflective differentiation between the different attitudes proposed in the reconceptualisation of the aesthetic object is useful for other researchers using drawings as data. Does it provide them with an opportunity to explicitly include how the researcher's sensory feelings and aesthetic experiences can contribute recognition, understanding and perceived knowledge in the processing of drawings in qualitative studies?

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Experiencing creativity in the qualitative data analysis

A theoretical model for pedagogy

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Abstract

In this paper, a theoretical model is proposed to understand how creativity is involved in the qualitative data analysis experience to support students' learning. It is important to ensure that students' intuitive and personal knowledge about creativity is structured in a conscious manner. To do so, they should develop ways of reflection in action enabling them to adapt their own individual creativity in the qualitative data analysis experience. In this original model, I describe the process of qualitative data analysis as a reflection-writing dialectic combined with three movements of creativity which are: inspiration, working-out and detachment. This text highlights specific skills that are required at different times of the qualitative data analysis process to encourage teachers to support these skills development among their students.

Keywords creativity, qualitative research, qualitative data analysis, theoretical model, pedagogy.

Introduction

“The world is but a canvas to our imagination”. (*A Week on the Concord and Merrimack Rivers*)

Henry David Thoreau

As Paillé and Muchielli (2008) state it, qualitative data analysis is first an experiential transaction involving sensitivity (researcher) and experience (research participant) for the purpose of producing meaning. In this mysterious encounter, the researcher sensitivity appears decisive. I will define it as the researcher ability to detect the fine variations in the phenomenon under study while activating the theoretical or experiential elements capable to advance its understanding. Qualitative data analysis is often difficult since it cannot be reduced to a general set of strategies or research techniques. In contrast, it requires sensitive interpretive skills and creativity from the researcher (van Manen, 2014). But what is creativity? How does it manifest itself in qualitative data analysis experience?

I will define creativity as ‘the use of the imagination or original ideas, especially in the production of an artistic work’ (Oxford Dictionaries, 2014). In other words, creativity refers to intellectual skill to create something new or original. As Chinn and Kramer define it, a theory is ‘a creative and rigorous structuring of ideas that projects a tentative, purposeful, and systematic view of phenomena’ (Chinn & Kramer, 2008, 182). In this definition, creativity appears therefore inseparable from the theorization process involved in qualitative data analysis experience. Based on my experience of qualitative research in phenomenology (Ellefsen, 2010, 2013), on van Manen’s phenomenological research activities (van Manen, 1997) and a representation of the creation process in arts (Gosselin & al., 1998), I have developed a theoretical model of creativity in the context of qualitative data analysis experience. For pedagogical reasons, I will highlight specific skills that are solicited at different times in this process to encourage creativity among students in their qualitative data analysis experience.

A theoretical model of creativity for the qualitative data analysis experience

This theoretical model is declined in a reflecting-writing dialectic combined with three movements of creativity which are: inspira-

tion, working-out and detachment. Thus, the reflecting-writing dialectic is defined as a hermeneutic process to grasp meaning of a human experience (van Manen, 1997). To uncover or isolate thematic aspects of a phenomenon in the participants' stories, the researcher can use three approaches. First, in the wholistic approach, he examines the text as a whole and asks: 'What sententious phrase may capture the fundamental meaning of the text as a whole?' Secondly, in the selective reading approach, he listens or reads a text several times and asks: 'What statement(s) or phrase(s) seem particularly essential about the experience to be described?' Finally, in the detailed reading approach, he looks at every single sentence or sentence cluster and asks: 'What does this sentence or sentence cluster reveal about the experience being described?' (van Manen, 1997, p. 91). This hermeneutic process is expressed in the researcher's 'dialogue inside-outside' in which reflections inhabiting his interior space interacting with the text, the external representation that specifically evokes these thoughts about participants' stories. The hermeneutic process aims a match between what inhabits internally the researcher and what is gradually materializing outside (the text). As Gadamer (1996) mentions, conducting this dialogue is an art since it implies a dialogue with oneself and seeks agreement with oneself. It presupposes ignorance since not knowing or not understanding requires to be tuned in. The reflecting-writing dialectic becomes not only an act of creation but also a meaning celebration (Quintin, 2012).

This theoretical model is shown in figure 1. The reflecting-writing dialectic (in black color) is represented in a spiral manner rather than linear to illustrate its recursive nature. As it occurs in time and space, it is located within the context of the researcher in a horizontal line representing the course of time and a vertical line illustrating space. Each movement of creativity is wrapped around the spiral of reflecting-writing dialectic to highlight its dynamism. Finally, as the understanding occurs over time, the reflecting-writing dialectic takes expansion gradually with understanding. It is completed when the researcher feels satisfied with the depth of his understanding. However, he acknowledges, that this hermeneutical process is never finished (Munhall, 2007; van Manen, 1997). He then accepts his interpretation as a trace recorded over time, which recalls his experience in the world. Consequently, by the reflecting-

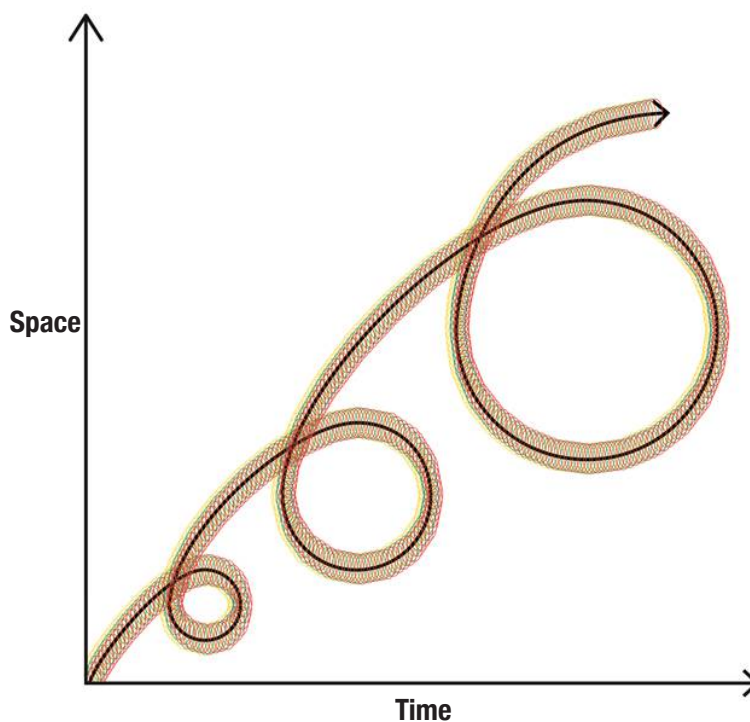


Figure 1. A theoretical model of creativity for the qualitative data analysis experience

writing dialectic, the researcher asks questions and seeks answers in order to discover links between different elements of the corpus data. Meanwhile, the reflecting-writing dialectic will be energized through the creativity movements.

The inspiration movement

Inspiration is the first movement of the reflecting-writing dialectic. It settles in the story of each research participant. It represents the soul that animates the researcher. It is somehow the engine that drives him to action and leads him in one direction but without precise location. This movement is characterized by spontaneity, fantasy and irrationality (Gosselin and al., 1998). It is manifested particularly by fortuitous emergent ideas or images that rise from the unconscious depths and take shape in the researcher mind following reading research participants' stories. Then, inspiration offers lines of thought to emerge meaning of the phenomenon under study. I can compare inspiration to wonder. As van Manen (2014)

mentions, wonder is the antecedent to inquiry. It does not just pose a problem to be solved or a question to be answered. A good qualitative study almost always starts with wonder or passes through a phase of wonder.

Welcoming and living these blurred ideas or images, as they arise, is a special ability emerging from the inspiration movement. Indeed, in those moments, the investigator has only the power to decide to be opened or closed to them. He must therefore demonstrate responsiveness to these ideas or images emerging from the primary thinking processes, on which he has no control, and which requires release of aware mechanisms to operate. For example, the reception of these emergent ideas may result in letting himself be invaded by emotion while reading a text, or remembering a dream (Gosselin & al., 1998). Furthermore, hypnagogic states, these sleep and wakefulness moments where consciousness is half immersed in the subconscious, seem most conducive to creativity. It is not a coincidence that several creators seek to stimulate these hypnagogic states by consuming drugs and alcohol (de la Durantaye, 2012). In short, the inspiration movement could be compared to a call, such as the siren song, in which the researcher is affected in a particular way in his interiority and indulges himself, giving free rein, to emergent ideas. In the reflecting-writing dialectic, the researcher sensitivity becomes a key element for the 'inside-outside dialogue'. Indeed, it requires an experiential and theoretical sensitivity, this ability to use both his personal, subjective and intimate experience as well as his rational ability to refine his interpretation as thoughts go by (Paillé & Muchielli, 2008). In this theoretical model, I illustrated the movements of creativity by borrowing traffic lights colors to mark their pace. Thus, inspiration is characterized by yellow color to highlight the slow pace of this movement. It has 'empty' moments, these more or less long moments where emergent ideas arise to consciousness and where nothing 'seems' to happen, as the iceberg image which goes partially back to the surface. Van Manen (2014) calls these moments, the active passivity. 'Producing insights' in qualitative data analysis is not just a function of active mental processes. Like poetic words, it cannot always be forced. Thus, the researcher must develop patience towards himself and avoid 'blank page anxiety' identifying moments and inspiration-friendly activities (de la Durantaye, 2012).

The working-out movement

While the inspiration seems difficult to control and is a passive state, the working-out movement is characterized by the researcher's conscious and analytical work in order to narrow the inspiration movement implied in the qualitative data analysis. Specifically, the working-out will result in a logbook in which ideas coming from the inspiration movement will be written down. Moreover, the researcher will conduct a more analytical writing and rewriting work in order to clarify his thinking and deepen his understanding (van Manen, 1997). I could compare the working-out movement to a sensor that focuses and directs energy to clarify and concretize the researcher's reflections about data. It is characterized by a willpower, rationality and conscious work, which is oriented towards a goal (Gosselin & al., 1998). In the work of qualitative data analysis, the researcher aims at providing an 'interpretive explanation' of the phenomenon under study. The thematic or conceptual links are clarified and argued in order to present them in a new way. The interpretive explanation therefore represents the farthest interpretive form from data, making it also the most complex interpretive form (Sandelowski & Barroso, 2003).

Several important skills are inherent to the working-out movement. Indeed, the researcher must focus on the dialogue 'inside-outside' in the reflecting-writing dialectic to channel the creative energy towards the development and articulation of the text. He must also involve his analysis and synthesis capacities as well as his ability to treat and to transform them. This movement, which constantly appealed to the decision-making power of the researcher, requires determination and perseverance despite moments of tension and torment that inevitably accompany the reflecting-writing dialectic. In these moments where chaos (Deschamps, 1987) seems to dominate the qualitative data analysis process, the researcher must focus again on his initial interrogation. What was the original question? What was seemed important to discover and to understand? Asking the right questions can often lead to find the right answers (Paillé & Muchielli, 2008). In this theoretical model, I illustrated the working-out movement by the green traffic light to mark the very active pace of this movement in which all researcher's resources are solicited.

The detachment movement

Finally, detachment represents the last movement of the reflecting-writing dialectic. It is defined as a movement of distance and appreciation that uses reflection, assessment, and also some wisdom (Gosselin & al., 1998). Over the course of its reflecting-writing dialectic, the researcher continually stands back and detaches himself from the interpretive explanation that he feels internally in order to facilitate its assessment. Therefore, he appreciates 'resonance' or appropriacy between thoughts that materialize gradually outside, and those inhabiting himself inside.

To begin, this verification will be done in an intuitive way. The researcher will be profoundly touched by his interpretation. Like van Manen (2014) affirms, he will feel that he produced a deeper description of the experience where reflective insights that go beyond the taken-for-granted understandings of everyday life. Then, he will check more rationally this consistency by comparing his personal estimate to the judgment of other people. Submitting an article to a scientific publication is a good example of this form of appreciation. This triangulation may give happy endings but also disappointments when assessments do not match.

Intuition is a fundamental ability of the detachment movement. The researcher must anticipate, among emergent ideas that inspire him, those that are most likely to be fecund. Sometimes, the researcher cannot feel ready to welcome a plaguing idea until he pays attention. In others words, he can feel 'bewitched' by it as the poet in Valery poem entitled *song of the master-idea* in which the creative idea without author begs him to deal with it because it is the only chance to get out of the possible world and exist in the outer reality (Gosselin & al., 1998). Also, he can anticipate the link consistency which is not immediately apparent and which makes account of the studied phenomenon in a more appropriate manner. Consequently, the researcher must create this analytical alchemy by revealing, with his intuition, a link that is already there (Paillé & Muchielli, 2008). To achieve this, the researcher should focus his reflecting-writing activity on this intuition by going back to participants' narratives for example. In these creative moments, the detachment movement requests the researcher's ability to make decisions. He must stand back in order to make good choices.

The 'let it go' ability seems also important during moments of tension that accompany the reflecting-writing dialectic. Indeed, it is sometimes preferable that the researcher moves away from his work, knowing that the latter continues to 'germinate' in his mind. Then, he allows himself moments of rest or he will vary the nature of his work (de la Durantaye, 2012). Moreover, it is often during these moments of remoteness that illuminations or 'clicks' occur, thus creating new ideas to describe the phenomena under study in a better way.

Finally, the detachment movement requires that the researcher develops an ability to reflect on the meaning of his qualitative data analysis experience. Indeed, unexpected revelations emerge throughout this reflecting-writing dialectic offering the researcher opportunities to better understand himself and understand the world in which he lives. I could tell the researcher understands himself because he understands what comes out of himself. The qualitative data analysis is akin to a play that precedes the researcher. Because there is a play, there is a player (Quintin, 2012). In this theoretical model, I illustrated the detachment movement by the red traffic light, to demonstrate 'stopping moments' required for this process.

Conclusion

In short, a theoretical model has been developed to better understand how creativity is involved in the qualitative data analysis experience. This original model includes a reflecting-writing dialectic with three movements of creativity which are inspiration, working-out and detachment. Also, it permits to highlight certain abilities that could be usefully developed among students in order to promote creativity in the context of qualitative data analysis learning. These abilities are responsiveness, sensitivity, patience, focusing, perseverance, intuition as well as the ability to let go. Accompany students to become aware of these skills and implement strategies to improve them seems a promising educational avenue. Finally, it is recognized in the artistic domain that creativity is the expression of a certain 'inner need' (de la Durantaye, 2012). In qualitative research, I believe the discovery of meaning also meets this same need. The reflective-writing dialectic remains the centerpiece by which meaning emerge from movements of creativity.

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Researching online supervision

The need for a “torn” methodology

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Abstract

Online supervision and the use of digital media in supervisory dialogues is a fast increasing practice in higher education today. However, the concepts in our pedagogical repertoire often reflect the digital tools used for supervision purposes as either a prolongation of the face-to-face contact, or a poor substitution of such. This one-sidedness on the conceptual level makes it challenging to empirically study the deeper implications digital tools have for the supervisory dialogue. Drawing on phenomenology and systems theory we argue that we need new concepts in qualitative methodology that allow us to research the digital tools on their own premises as autonomous things in themselves, possessing an ontological creativity of their own. In order for qualitative research to match the ontological nature of digital tools we conclude the article by formulating three criteria of a ‘torn’ methodology that makes room for new approaches to researching online supervision at the university.

Keywords Qualitative research methods, phenomenology, systems theory, educational philosophy, creativity, higher education

Digital tools researched as things in themselves

In higher education today there is a heavy increase in the use of online supervision on student assignments. We argue that we need a new and more creative qualitative research methodology that enables us to get a better grasp on the conditions for supervisory dialogues taking place through digital software, which do not abide the same laws as face-to-face supervision. In online communication supervisors use digital software such as Skype, Google Hangout, Google Docs and Email correspondence often by a review track in attached Word documents. As pointed out in the literature on online counseling the digital platforms or tools used to a large extent determine the conditions and boundaries for the supervisory dialogue (Evans 2009; Goss & Anthony 2003; Jones & Stokes 2009; Suler 2004; Suler 2008). As Suler points out the different modalities of communication related to the particular digital tool “differ in sometimes obvious, sometimes subtle ways that makes each a unique psychological environment.” (Suler 2004: 19). As pointed out by Max van Manen and Catherine Adams (2009) and Norm Friesen (2011; 2002) the digital tools applied not only co-define the conditions for the communication between supervisor and student, they also, so to speak, assume a life of their own and play back at the people using them.

When researching this interplay between persons and digital tools in supervision and counseling contexts there is a strong tradition for using the term “online presence” since what is good etiquette differs in face-to-face and online communication. Online, the presence of the participants, often defined as tone and style of the communication (Evans 2009; Jones & Stokes 2009; Friesen 2011), may be experienced as more frank or even aggressive due to “miscommunication accentuated by the lack of verbal tone and visual clues” (Bellafiore et al 2004: 210). However, in the notion of online presence, the focus is set on how supervisors and students present themselves vicariously through the digital tools applied, and the digital tools themselves can in this way be said to be reduced to handmaids or hired hands for the persons involved in the dialogue. We argue that the digital tools should be researched as things in themselves in order for us to understand more fully the ways online supervisory dialogues make up a pedagogical phenomenon different to face-to-face supervision.

To that purpose we argue that the American philosopher and phenomenologist Graham Harman's concept of "tool-being" (Harman 2002) is useful in this endeavor. Harman's object oriented phenomenology, which studies the intentionality of things, and his notion of a "weird" philosophy (Harman 2010; Harman 2005) can help qualitative method getting a new footing in the study of the conditions for the online supervisory dialogue. Together with Harman we draw on Niklas Luhmann's understanding of autopoiesis (Luhmann 1992; Luhmann; 1995) in systems, which mark out digital tools as autonomous communicative "beings" compared to their human counterparts. Finally, we link Harman and Luhmann's perspectives to the meaning of creativity in qualitative research. Creativity can in this way be understood as the research method's weird or "torn" element; its paradoxical strain to embrace in digital software what it itself does not understand, and to give words to what is essentially otherwise than (human) being (Levinas 2000) and otherwise than face-to-face contact. Hence, in this article we use online supervision as a case of a phenomenon that demands, or calls for, a certain form of creativity in order to be further explored and understood on its own terms. Creativity will conclusively be shown to affect and inform qualitative research methods not because of its aesthetical qualities, but because of its *ontological* qualities. Creativity on an ontological level means that we should take serious the independent being of software programs and their power, as autonomous systems, to surprise us, fascinate us, but also to disturb our own form of being. This form of ontological creativity has central implications for future qualitative research methods.

What is "torn" methodology?

Based on Harman's object-oriented phenomenology it can be argued that each digital platform assumes a life of its own, and that the supervisory dialogue in this way becomes a pedagogical world in itself encapsulated within the communication by means of the specific digital tool. Based on Harman the digital tools used for supervision should be researched not as "the triumph either of practical activity over theoretical abstraction, or of the network of signs over the ever unpopular 'things in themselves'" (Harman 2002: 1), on the contrary the "tool-analysis (...) gives birth to an ontology of *objects themselves*." (ibid.). According to Harman, a digital tool, or an object

as he also would call it, can be described as “a box of surprises, never fully catalogued by the other objects of the world.” (Harman 2005: 78-79), and Harman points out that “What lies behind all events are inscrutable tool-beings or substances lying in some sort of still-undetermined vacuum.” (ibid.). Withdrawing partly into their own dark corridors of existence, tool-beings attain a “weird” character as they always to some degree slip our grasp and comprehension. In Harman’s sense this slipping and sliding away is exactly what gives an object its particular character, which pulls our attention towards it and draws us in. Because digital tools used for communication are not merely a prolongation of the human mind and body, but operate within logic particular to their own forms of being, they stick out and strike back at us. Harman defines this feature as “charm”. Charm, however, is “not some sort of people-pleasing faculty in things, but a sort of magic charm or elixir that we sense in each thing (...). The charm of objects is their innocent absorption in being just what they are, which in each case is something that we ourselves can never be.” (Harman 2005: 137).

We argue that Harman’s notion of ‘charm’ supports our point that all things are ontologically creative: there is always more of the world, and more of the individual thing or form of being, than we as human beings can perceive and unlock about them. Because digital tools and platforms are substituted with new ones ever so often, we are led to think they are less irreplaceable and substantial in themselves. That could explain the amount of relatively surface-like studies of digital tools in use, and the few longitudinal deep-probing studies – as these studies often are completed after the software has been trashed a long time ago. This, we argue, blocks a necessary deep understanding of specific digital tools, a bad habit we should reverse in future qualitative studies of digital software.

Methodologically speaking this has the following consequences. Firstly, if the digital software is understood as otherwise than (merely) human being it is impossible to frame a study beforehand applying only one, or one primarily underlying method. During a singular study of a particular digital tool or platform, the method becomes “torn” (our term), meaning that it is used up and worn down as the study progresses. In this way the digital tools which in Harman’s terms can be described as objects or substances, can in Luhmann’s terms be understood as autopoietic systems, when for instance so-

cial media as facebook facilitate the communication by framing the communication in its own specific way. We may understand psychic and social systems as systems that are operationally closed, self-referential, autonomous, analytically indeterminable, unpredictable and dependent on their previous operations and the concrete context. As a result, the characteristics of trivial systems cannot be applied to the analysis of either students' learning or to approaches to the different social systems, which are offered in an educational setting. In other words every person, every psychic system, observes its environment, e.g. net-based forum, with its unique observation lens; hence every person constructs his or her unique environment.

The knowledge construction remains inside the addressee. Within the theoretical framework of systems theory, utterer and addressee are conceptualized as "black boxes" (Luhmann, 1986). They can observe each other, but do not have access to each other's thoughts. Because of the system's theoretical approach, it is reasonable to conclude that communication might be regarded as impossible in principle. But the specific expectations of specific contexts, help to construct a horizon of expectations over time (Luhmann, 1995). This insight has consequences for the relation between teaching (supervision) and learning (Mathiasen, 2008).

The special form of communication that works to change psychic systems (mental constructions) is conceptualized as teaching, hence supervision. While both social systems and psychic systems are, as mentioned above, operationally closed, they can be coupled structurally through communication and a specific theme for the communication. If the students observe the communication in a conference forum and furthermore participate by contributing, we have a social system: as we see in net-based forums that include the supervisor, students and maybe other active factors in a context such as for instance a weblog, Twitter or Facebook (Mathiasen, 2010). Given that the two types of systems operate in their own distinct modes (mental activities and communication, respectively), psychic systems and social systems are operationally closed in respect to each other. They are, however, structurally coupled, and thus the systems can "disturb" each other, the concept of perturbation (Luhmann, 1995:172). They can focus on each other, so to speak, and let the disturbance affect their system-internal operations.

This means that qualitative method is not about choosing a specific methodology and to stick with it to the bitter end, slowly assimilating the research object more and more into the mindset and vocabulary of the underlying philosophical framework. Nor is it about mindlessly selecting whatever bits and pieces from different methodologies that seem of relevance and merge them into a doubtful, and often highly incongruent, eclectic and contradictory conceptual framework. Instead, we argue that methodologies must be seen as congruent and consistent frameworks that give all they possibly can until they do not seem relevant to the study any longer. Not because they age or become troublesome, but because they are used up, has emptied out all they could give in that particular case. That is what can be called a torn methodology as it is torn apart during the research process. This is the first important meaning of creativity in this context: that the qualitative researcher must think and apply qualitative methods creatively in order to adapt to the changed research environment that is a result of his method(s) of first choice becoming torn or used up.

Researching digital tools from within

The need for a torn methodology becomes especially clear when researching online supervision at the university. In this example we have chosen Skype (communication by video) to illustrate our point. Contrary to the traditional view, we are not interested in how supervisors and students are present through Skype, but how Skype is present through *them*, and what challenges this poses for qualitative methodology.

When researching the use of videoconferences in online counseling and supervision there is a general acknowledgement of the potentials of using video in supplement to face-to-face meetings. Studies mentioned by Suler (2008) and Goss and Anthony (2003) suggest that that use of video can help making the meeting with the counselor or supervisor less intense and intimate, thus giving the supervisee a more free and homely feeling when interacting (Suler 2008: 105; Suler 2004: 28; Simpson 2003: 113). Also, studies point to difficulties when using video in supervision settings. The “screen” interplaying between supervisor and student and the often “disembodied” (our term) body language, when usually only the head is visible, may cause difficulties in catching on to the subtleties and

nuances in the communication with the other person (Suler 2004: 26; Anthony & Nagel 2010: 49; Friesen 2011: 113ff.). This less tangible and corporeal form of contact is by Suler described as a “black hole experience” (Suler 2004: 26) in which the supervisor and student experience the digital tool absorbing important aspects of the communication, which disappear and are lost. Simpson accentuates studies which describe supervision by video as “dehumanizing” and “unsettling” (Simpson 2003: 114) because of the lack of intimacy otherwise found in face-to-face supervision. Communication through the use of digital tools as Skype may cause “higher levels of fatigue” (Simpson 2003: 116) due to the disappearance of vital elements of the interpersonal dialogue, distorted or “disjoined” by the digital tool in play (Simpson 2003: 117). Contrary to the traditional opinion, we find that the interesting thing is the *drama* and trouble these tools arouse.

We suggest researching Skype meetings from within the tool itself, positioning the tool as an autonomous factor in itself, as a subject position. The Spanish philosopher José Ortega Y Gasset claims that to understand communication more fully, we should investigate “each thing as ‘I’” (Ortega 1975: 139), and that “everything, from a point of view within itself, is an ‘I.’” (Ortega 1975: 134), which gives us, as researchers, a challenge to view the digital tool “from the inside.” (ibid.). Ortega argues that phenomenology’s true aim should be not only to study a phenomenon from the observer’s subject point of view, but from the point of view of the phenomenon studied. This follows a logic which ideal is to speak from the *observed* point of view. As a consequence of this, we argue, that qualitative method should have the aim not merely of investigating digital tools in online supervision from the outside; from the perspective of supervisors and students. Qualitative research should, in line with Ortega, “not (...) tell us about things but (...) present them to us in the act of executing themselves.” (Ortega 1975: 138). Ortega underlines the importance of straining our empirical descriptions and ultimately to lodge our perspective within the particular phenomenon’s process of becoming. This opens up the understanding of digital tools as dynamic and transformative forms of being that cannot easily be pinned down ontologically.

As Ian Bogost (2012) describes we should let us be charmed by the digital tools themselves and try to draw out the weird realism

they project (Bogost 2012: 109), understanding communication differently than when dealing with inter-human communication only. The specific digital tool should be researched on its own premises, and this methodological approach calls for, what Bogost terms, an alien phenomenology, in which

Our job is to write the speculative fictions of their processes, of their unit operations. Our job is to get our hands dirty with grease, juice, gunpowder, and gypsum. Our job is to go where *everyone* has gone before, but where few have bothered to linger. I call this practice *alien phenomenology*. (Bogost 2012: 34)

Supervising online means that more factors than just supervisors and students are in play. The digital tool does not merely strike back, it also very much charms us and lures us in with its impressive powers for communicating across vast distances and abilities of recording and storing a great number of conversations with the option of revisiting them if needed. As Levi Bryant (2011) argues, Luhmann is vital in the endeavor of making visible the digital tool as a self-referential system. As Bryant states, what makes "Luhmann (...) so vital to this project (...), is because he ontologizes autopoietic systems, treating them as real entities" (Bryant 2011: 137). In this light the Skype program should not merely be understood as a form of human presence and dialogical "post man" delivering a message from one person to another. Skype is in this sense, and should be researched as such, an autonomous form of being. This is the second important meaning of creativity that we wish to stress: That creativity should not only be understood as aesthetical features of the research phenomenon, but as an *ontological* dimension of the phenomenon in hand. This ontological dimension implies that the epistemological endeavor, which qualitative research can be seen as, must attain creative features in order to meet and to match the ontological dimension of the phenomenon studied.

In line with Bryant we see Harman, Ortega and Luhmann as having often overlooked shared interests in pointing out the 'real-ness' and autonomous character of for example the digitally mediated supervisory dialogue. All three thinkers would claim the importance of not reducing the dialogue to either the student's or the supervi-

sor's experience of it, but to foreground that the dialogue itself is of importance and should not be reduced to an intersubjective event. Traditionally Harman and Ortega would be more interested in things and substances than conversations, and Luhmann would pay little attention to non-human systems. However, we find contemporary philosophers like Bryant interesting because of their strive to argue the relevance of applying object-oriented phenomenology to communication studies and to apply systems theory to the study of 'things'. This article is itself a try to bring two often opposing theories to ally in the project of studying the being of digital software that is half communication and half thing.

Creativity as “nested method”

Because of the nature of digital tools as (partly) independent and, to paraphrase Lévinas (2000), wholly otherwise than human beings, we should not confine the study of online supervision to any one method. As digital tools hide in their own lairs, and reside in their own weird autonomous realms (Bengtsen, Mathiasen & Dalsgaard, 2014), any single method approaching them is exhausted after a given time period; the method becomes torn and used up, so to speak. We wish to link this understanding of creativity to the point about supervision as consisting of different interlocked and “nested contexts” as described by McAlpine and Norton (2006; see also McAlpine & Åkerlind 2010). McAlpine and Norton argue that learning experiences in supervision settings occur “within multiple nested contexts whereby the factors influencing attrition and retention are influenced by different stakeholders.” (McAlpine & Norton 2006: 5). Instead of isolating different institutional and educational contexts, McAlpine and Norton argue that they are intertwined and operate, with a Harmanian term, on the interior of each other as nested within each other's domain of being. This understanding of supervision at the university complies with both Luhmann and Harman, as McAlpine and Norton “remind us to consider contexts not presently in our focal area”, but also “consider contesting changes in contexts beyond our own that we believe will have deleterious effects.” (McAlpine & Norton 2006: 6). Converted to online supervision, we argue that digital tools represent nested contexts within the supervisory dialogue; perspectives operating on the interior of other

perspectives. Tool, supervisor, student, and institution are all contexts, or perspectives, nested on the interior of each other.

Because of the otherness of the digital tool, and the nested character of the perspective they unfold, we argue that to research nested contexts we should comprehend and carry out qualitative method as *nested methods*; different qualitative approaches lodged on the interior of other approaches, ready to engage when others are torn and used up. This demands a new way of conceptualizing creativity in qualitative methodology, where creativity means to lodge one's own perspective deep within, and on the interior of, other forms of communicative being. Nested methods make it possible to research different entangled, but separate, perspectives of the online supervisory dialogue with different methodological approaches. This is not an argument for uncontrolled eclectic anarchy and chaos in the research design, but on the contrary a strive for enhanced precision and relevance in the relation between the digitally mediated supervisory dialogue and research approach. Anything does not go, and on the contrary this form of methodological approach, in some ways, demands more transparency, clarity and management. The form of creativity must be defined in accordance to the following set of conceptual criteria. To be able to function as a nested method, the method should itself contain qualia being:

- Weird
- Torn
- Nested

That the method is weird, or "alien" in Bogost's sense and "otherwise" in Levinas' sense, means that the research applied must be bold and daring, able to match the "otherness" of the digital universe studied. Methodological weirdness does not mean to be performative and self-absorbed, but to warp, bend and stretch the design accordingly to the perspective from within the digital tool itself. That the method should be able to endure being torn during the research process means that the researcher must never see the method as an end in itself, but something which at any given time, when it is used up, can be abandoned. This does not mean that the researcher can allow himself to be careless about the methods he applies, but on the contrary to tailor every step in the research pro-

cess as precise as possible to the phenomenon studied. That the method should be nested within other methods, or methodological layers or strata, means that different methods can be applied at the same time. This is not to repeat the well known understanding of mixed methods, but to point to the fact, the different stages of the research process may be dislocated and happen in different dimensions at the same time, calling for more, maybe several, methodological foci operating on the same phenomenon but from different angles and perspectives.

Concluding remarks

In the article we have shown how the case of online supervision at the university may function as a case to dislodge a new meaning of creativity in qualitative research methods. This has been done by showing that creativity in qualitative research not only should be occupied with aesthetical meanings of the term, but also should give attention to creativity as an ontological dimension of the research object in hand with certain epistemological implications for the qualitative researcher. These implications mean that the qualitative researcher should apply methodological criteria such as weirdness, torn-like qualia, and nested qualia in his research approach.

Creativity as a qualitative research strategy has been shown to mean firstly, that creativity in qualitative research does not connote to eclectic, mixed or otherwise randomly chosen approaches, but instead should be seen as a thorough, deep and scientifically valid phenomenological approach to qualitative research. Secondly, the ontological dimension of creativity implicates that qualitative approaches cannot simply be used, but may also be used up, break, fall apart, and must along the research process risk being wasted, abandoned, discarded and betrayed. Such conditions must be tolerated, and even embraced, in order to research phenomena such as online supervision with its at times utterly strange and alien features. Thirdly, and finally, we suggest that future qualitative research should apply a nested approach – a way of seeing different qualitative approaches, not as opposed to each other, but as possible allies and partners with the shared goal of probing ever more deeply into the world, and unlocking ever new doors of ontological abundance. And maybe also to unite, or at least to rally, many different and diverse research strategies that may seem weird to each

other, but together could wield this weirdness as a future flag to join under when their combined powers are unleashed upon the world.

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Hello, it's Noelle™. I think I am in labour...

The case of creative learning

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Abstract

The use of simulators has become an expectation for the teaching of health students. The ideal is that the student will practice all skills on a simulator before venturing out to real people. Enter Noelle™ created in the image of a pregnant woman who gives birth, talks and can haemorrhage on demand. The teacher is the puppeteer who breathes life into this creation and the student must imagine that this is a real life situation. Obstetrical simulators are also known as phantoms. What is it like to learn from a phantom?

Keywords Midwifery, Simulation, Embodiment

Learning Midwifery from a Phantom

A number of factors, including an emphasis on risk management and a shortage of clinical learning placements, have stimulated a creative movement in healthcare education. Ideally, the student will practice and in some cases perfect skills on simulators before venturing out to real people. The development of high fidelity simulators has accelerated in the past decade with each version appearing to be more human-like in appearance and function. Teachers then

create scenarios in which students must immerse themselves to not only learn discrete skills but to do so in a created healthcare context. While scenarios are likely based on real life practice, they are usually sped up so that the student can work through situations such as a many hours long labour in 20 minutes or less.

Noelle™, a high fidelity mannequin was created in the image of a pregnant woman who gives birth via a spring load mechanism, who talks and can hemorrhage on demand (Gardner & Raemer, 2008). The teacher is the puppeteer who breathes life into this creation and the student must imagine that this is a clinical situation with a human patient. Historically, obstetrical simulation mannequins were called phantoms (Gardner and Raemer, 2008). A phantom is an illusion, something having the form but not the substance of a real thing. The word phantom arises from the Greek phantázein meaning “make visible” or to show. (Ayto, 2000 p. 391) The later Latin phantasma is associated with the notion of an apparition or spectre and has evolved to refer to a dream, illusion, fantasy, or ghost. The same Greek roots have led to other words including diaphanous, emphasis and indeed, phenomenon. No doubt that some of the rationale for using the word phantom was the desire to make visible aspects of pregnancy and the birth process that were invisible to the birth attendant, for example, how the baby turns as it is pushed through the woman’s pelvis. When we think of the glass phantoms or some of those in the Specola museum in Florence, transparency is the goal – bringing to view that which cannot be seen (Gardner and Raemer, 2008). Our question is what is it like to learn from a phantom?

History of the Phantom

The use of simulators to teach or train practitioners has been reported in all fields of medicine and health care. It is likely that obstetrical simulators were among the first to be used in a routine way. Reports of wax and wooden mannequins date to the 9th century. By 1600 phantoms were developed as a way to teach midwives about the management of obstetrical difficulties. In the 1700s father and son physicians Gregoire made a torso of wicker and placed a dead baby in the torso. Dr. Smellie improved on this model by using human bones and covering them in leather for the pelvic torso and made a baby from wood and rubber. Sir Manningham created a torso from

glass so that the manoeuvres of birth could be seen by the learners. One of the more famous phantoms was “La Machine” – an anatomically correct life size mannequin made by a midwife (Madame du Coudray) of the court of King Louis XV. She travelled throughout France teaching midwives using La Machine. In the 20th and now 21st century, the development of simulation models has focused on life-size and anatomical correctness with a wide range of skills that can be practiced and maintained (Gardner & Raemer, 2008).

Enter Noelle™

Noelle™ is a motorized mannequin that can push out a life-size baby. Noelle™ is computerized so that the learner can hear vital signs and Noelle™'s voice. The cost ranges from \$30,000 to \$60,000 and there is an ongoing need to update the computer components and replace certain parts such as the lacerated perineum for suturing. (Gardner & Raemer, 2008). Noelle™'s use is encouraged as a superior teaching approach even though studies comparing the performance of students and practitioners learning on Noelle™ to those learning with uncomplicated models found no difference in skills acquisition (e.g., Monod et al, 2014). Researchers tend to equate confidence or memorization of particular procedural algorithms with skills acquisition. Learning from simulators tends to be about learning how to provide the same care each time rather than regarding labor and birth as an individualized event in a woman's life (Nall, 2012). Perhaps simulation is best used for practices that require repetition and a logical step by step approach such as how to react to an emergency. It may be the practice of a routine as opposed to the sophistication of the simulator that improves confidence or recall of the steps of the routine. Some educators suggest that the least complicated practice models or simulators where students can repeat multiple times or even at home are most effective for teaching skills requiring specific order and manual dexterity (van Wagner & Chu, 2012).

What is it like to learn from a phantom?

Since the 1600s there has been much written about the use of phantoms for teaching and maintaining obstetrical skills. Skill levels improve and are retained – however, the before and after measurements continue to be done with the mannequin upon which the

skill was taught and the actual improvement of skills on live patients is seldom measured. Skill acquisition tends to be limited to a one at a time approach – with a particular skill or event being evaluated such as the manoeuvres for shoulder dystocia. Some researchers use participant self-report for the post-session outcome measures rather than re-measuring performance or evaluating “real life” performance such as changes in intervention rates or outcome measures over time post simulation training. And attempts to measure improvement in other caregiving competencies such as professional-client communication and interdisciplinary teamwork have been fraught with challenges. (Monod et al., 2014, Siassakos et al., 2011; Teteris et al., 2012) The objective of including measures of communication and teamwork is based in the reality that these are vital components to real-life situations. Again, it is not likely the simulator and its qualities would facilitate improvements in these competency areas. Rather the orchestration of a situation, the role play environment and strength of feedback may contribute more to meeting these learning objectives. Indeed, the high fidelity Noelle™ may be somewhat invisible as the student now concentrates on what another student is saying or doing.

Tina's Turn

Tina is a 3rd year midwifery student in a clinical skills lab. It is Tina's turn to practice the management of birth on Noelle™. She is in a room with Noelle™ who is lying on a bed wearing a hospital gown, along with three of her student peers who will play various roles as needed and help move Noelle™, as well as an instructor and a technician. The session starts. A voice comes from a speaker on the wall “Hello, this is Noelle™, I think I am in labor.” In real life, this would likely be a phone call to Tina with Noelle™ likely still at her home. Tina looks around the room for a phone. Her instructor prompts her “talk to Noelle™.” Tina has all sorts of questions in her mind – how did we all end up at the hospital? How did Noelle™ end up already in a hospital bed with a hospital gown on if she only thinks she is in labor? Tina is now trying to sort out the rules of this particular learning experience – the game of birth with Noelle™. Tina starts to ask Noelle™ the usual questions to determine whether Noelle™ is in labor, but Noelle™ does not answer the questions. Random phrases come from the speaker – as if Tina were meant to

ask specific questions in a specific order. Finally the instructor tells Tina that Noelle™ is now in the hospital in labor and she should assess her. She goes about taking Noelle™'s blood pressure and listens to the fetal heart rate; she palpates a contraction and waits for another to time them. All of these assessments are possible on Noelle™. Before the next contraction, Noelle™'s voice says "my back is killing me" – all the while Noelle™'s face is frozen in an insipid grin and she does not move in any way to reflect back pain. Tina asks if Noelle™ would like to have her back rubbed. Tina must get her three colleagues to help move Noelle™ onto her side – she weighs well over 50 kg and cannot move on her own. She has articulating joints and without some well-synchronized turning, she will sprawl with her arms and legs all over the bed.

Tina sets out to rub Noelle™'s back. Noelle™ is constructed of smooth plastic. On her first rub, Tina's hand flies up Noelle™'s back. She does not feel the resistance of flesh, the warmth of the blood circulating. She does not feel Noelle™ sink into the rubbing or flinch at a discomfort of receiving this particular touch. Tina wonders if she should keep rubbing and searches for signs from Noelle™. Next, Noelle™'s voice says "how long is this going to take?" Tina begins to giggle. She thinks – that is exactly what I would like to know – how long is this going to carry on? When will it be someone else's turn? She straightens and prepares an answer for Noelle™, wondering if this is a clue that she should be offering an internal exam or a supportive explanation or perhaps another change in position. She looks to the instructor who seems to roll her eyes and says, "Ok Tina, time to let someone else take over."

What has just happened? Surely Tina knows that Noelle™ is not the real thing. She knows that she is working with a mannequin and not a human. She knows that the overall purpose is for her to learn (or demonstrate) how to do particular skills. At the same time, the like-ness to a human – that specter without substance leaves Tina confused. She is aware of the call to respond – even though she knows in a way that the call comes from the instructor or the technician. Noelle™ has back pain. But Noelle™ does not have human substance. She does not show the presence of pain on her face. Her skin is not skin. She makes no response. Her plastic flesh is cold. If all we want Tina to learn is to rub when the woman says pain, we could see that Tina has done so. But, has Tina learned the nuances

of supportive care in labor? Has she learned that for some women, the need is for a light, fluttering motion – barely touching at all; for others, a put your whole body weight behind it pressing on a particular spot; and for others the sensation of a back rub is just too intense for her? Has Tina learned to have a good look at the woman's back while rubbing? Can she see where Noelle™ or her partner have been pressing already? Can she see the signs of a baby in a posterior position or of descent of the baby? These can be subtle signs difficult to see on human flesh – but impossible on the plastic back of a mannequin.

Can Tina have an embodied experience with Noelle™? Certainly Tina has hands with functioning nerves – she can feel Noelle™ when she touches her. But, she does not have the reciprocal experience of feeling another human. She may as well have been rubbing the bed or a book. What does she learn about herself through the body to body encounter when one of the bodies is not human (La-tour, 1987)? While the instructor and technician may enjoy their creative attempts at designing a situation for Tina to conquer, Tina is struggling to respond creatively.

How do we inspire a relational component to care when working with Noelle™ - a stranger to Tina with no capacity to create a midwifery relationship with her? While in her bigger job of pretending she is engaged in a real life situation that could include a real life woman who has been in her care for months, this could be more of a test of Tina as an actor than of Tina as a competent midwife. Tina has not had the opportunity to talk to Noelle™ at a series of prenatal visits or to see her home, her partner, perhaps her mother or best friend. She has not gained a sense of Noelle™'s goals, fears, dreams – does she want music or aromatherapy, does she want to have an epidural at a point in her labor, does she want her partner to cut the cord? Do Noelle™ and Tina have a comfortable, trusting relationship where they can tease and joke a bit? Or is Tina aware that Noelle™ is very aware of her young age and has not yet developed a trust in Tina that would allow her to be the most responsible care provider for Noelle™. Is Noelle™ more likely to be looking over Tina's shoulder for cues from the midwife that Tina is on track or not?

We interact with non-human objects in all of our day-to-day moments. We wear clothing, sit on chairs, and drive cars. We are rarely confused by these experiences. Or is it a little more complicated

than this? Leder (1990) suggests that we tend to lose our consciousness of our bodies when the actions we perform become “habitual action patterns” (p. 89). If Tina were an experienced midwife, she may perform some of her caregiving actions without a consciousness of her body movements; she may rub Noelle™’s back or hold her hand without a thought that this is a plastic model and not a human body. It is when there is an abrupt or unanticipated change that we become conscious of our bodies and functions. Perhaps Tina experienced an unanticipated change that called her attention to the plastic model. Or has a student experienced enough of the practice world to make her actions unconscious habits? Is there a risk that her unconscious habits will develop in relation to working with the inanimate simulators if role-play with simulators becomes the most common learning experience for healthcare students? Might it then be during human-to-human interactions where there becomes an abrupt consciousness? Some (e.g., Sobchack, 2010) suggest that this abrupt consciousness places the individual’s attention on self and not on self-and-others or in this case, the interactions between midwife and labouring woman. Therefore can the learning from a simulation experience be competently applied to a real-life clinical situation?

Perhaps Young’s (1984) discussion of the discontinuity of the pregnant woman’s embodied experiences helps us with understanding the experience of working with the phantom Noelle™. Discontinuity occurs when an individual has a particular understanding of her body and its relationship with the world. When components change abruptly, as opposed to gradually, actions can become challenging. The lack of feedback from the simulator changes the environment within which the student acts. Tina struggles to understand what is happening when she rubs Noelle™’s back. What might she be learning here?

What is central to these attempts to explain the phantom nature of this experience is the difficulty in capturing the entwined body relationship of caregiving moments. Body-to-body actions involve an engagement – an entwinement where the sense of where one body ends and another begins is both obvious and uncertain. Naturally, the midwife knows that the hand she holds is not her own, but at the same time, contact with the physical flesh of an Other brings about sensations not only of that Other’s hand, but stimu-

lates sensations of one's own body (Merleau-Ponty, 1962). With each improvement to Noelle™, the classification as a high fidelity model pushes us to see her as a human. Fidelity – faith in the model's human nature brings us to expect that her human-ness will be reflected in how she acts, what she feels like, her responses, her morals and ethics. And yet, despite the creativity of her developers, giving her a speaking component, the ability to hemorrhage and recently the ability to birth on hands and knees, she is still a plastic doll. Even high fidelity leaves her facial features, limbs and genitalia lacking. Noelle™ is an object upon which to learn.

One can think of the simulation experience as a game, complete with its rules and limitations, Gadamer (1992) suggests that the game itself becomes the objective and not the interests of the individuals playing the game. The student is still expected to engage creatively in this game of learning but the technology of the simulator limits her ability to immerse herself in the wonder of birth. Indeed, Noelle™ replicates a technocratic pathological position on labor and birth with a passive woman who lies on her back and lets others speak for her (Nall, 2012).

Can the student develop compassion in the simulation situation? Tina giggled at a moment when Noelle™ was calling for compassion. Leder (1990) suggests that compassion requires that we "act as if we were one functioning body" (p. 163) in order to suffer together. The student in the simulation context can carry out all the required tasks but miss the point of connection as her concentration is on self. "It is this embracing of relation as much as the specific actions I perform, that brings about the relief of suffering." (Leder, 1990, p.163).

Learning clinical skills can often be facilitated by seeing with one's eyes the processes and body parts that are normally invisible. There are many helpful devices to assist students to learn to assess cervical dilation – an assessment in real life that is accomplished by palpation only. The student can "train" her fingers to locate the cervix and then measure the size and depth of the opening, training her spatial perception through repeated assessments. However, as good as the student becomes at doing this with visual aids, she will eventually have to gain the courage to insert her fingers into the woman's vagina and consider the discomfort experienced by the woman; she must find the cervix and determine its dilation. The training models, whether on a piece of board or a model like Noe-

lle™ do not have the human “feel” – the resistance of real flesh, the sense of invasion, the discomfort, shame, embarrassment. And the student does not experience the anxiety of performing an intimate and invasive assessment on an actual human.

Let's return to the reason why these models are developed. Risk managers have put much pressure on educators to have students master skills using simulators so that they do not need to practice on real people until they have the competence to not put the patient at risk. (Bradley & Postlethwaite, 2003; van Wagner & Chu, 2012). This sounds like an excellent plan. At one time there was a saying in the education of doctors: “see one, do one, teach one” as if one observation opportunity was enough to be ready to do the skill and doing it once was enough to teach it to another student (Rodrigues-Paz, et al., 2009). In medicine, the learning of more intimate procedures was done on cadavers or anesthetized patients. While no longer considered acceptable to have students perform pelvic examinations on every anesthetized female patient without consent, there is still a policy of the Society of Obstetricians and Gynecologists of Canada regarding appropriate conduct of pelvic exams on anesthetized women for the purpose of teaching. The wording of the policy still allows for some non-consent examinations (Chamberlain et al., 2010). Perhaps the use of simulation can make learning safer, more comfortable and acceptable to patients.

The fullness of practice – not just skills

As important as the mastery of particular skills or tasks might be, these are only a small part of care giving. Indeed, the WHO estimates that 80-95% of babies could be born with little or no intervention (Gibbons et al, 2010). But in teaching the skills of birth, we spend much time on where one ought to place one's hands. There are now a number of studies comparing hands on versus hands off care with little or no difference found for outcomes like condition of the baby, length of the delivery and condition of the woman's perineum (da Costa & Reisco, 2006; Nilsen & Reinar, 2012). At the same time, there are many intertwined observations and interventions that the midwife may perform during the birth that improve the overall experience for the woman. For example, there is evidence that the presence of a supportive person can improve all the same outcomes as were unchanged with hands on or hands off

care (Hodnett et al., 2012). These observations and interventions represent the fullness of practice, the attention to the individual, full-bodied human-to-human relational care.

Noelle™ and other forms of simulation mannequins may be a helpful starting point for students to learn clinical skills. Concerns about harming the person can deeply affect the student's actions. She may be able to perfect some of the fine motor skills on the simulation model that can feel extremely awkward in real life situations for example obtaining a sample for cervical cancer screening. But, there is still the significant emotional transition of going from interacting with an inanimate object to the complexities involved with interacting with a live human being. Is that transition eased through the use of a high-fidelity simulation model? It seems that despite the human like appearance, the student is constantly explicitly aware that the model is simply that – an inanimate model. There is a need to come to terms with actually invading the person's skin, muscles, blood vessels, and orifices. There is a need to learn the feel of human flesh – what should a breast, belly, vagina or cervix look like, feel like? Should it feel this warm or this smooth or this hard? Is this particular odour ok or a sign something is going terribly wrong? There is a need to attend to the reactions of the human who is the subject of this care – is this painful, comforting, too long, not enough? How might further phenomenological exploration help us to use the phantoms well and then to find ways to help students to transition to human care?

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A Student Project as an 'Extra Group Member'

A Metaphor for the Development of Creativity in Problem-Based Learning (PBL)

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Abstract

This article focuses on a research question: how can we understand a metaphor describing a student project as an 'extra group member' in creativity development in the particular context of Problem-Based Learning (PBL)? This metaphor takes its theoretical departure from social approaches to learning, creativity, and PBL. It is empirically based upon a Ph.D. study (2008-2012) which aims to explore the influence of the PBL environment on the development of university students' creativity. The empirical data was collected using multiple methods, such as interviews and observation, with 65 students from Electronic Systems, Medialogy, Architecture and Design, and Computer Science at Aalborg University (AAU), Denmark. By focusing on the illustration and discussion of the metaphor, this article contributes to an understanding of the role of student projects in building a situated creative learning community that has practical, theoretical, and methodological significance.

Keywords Creativity, Student Project, Group Learning, Problem-Based Learning (PBL)

Introduction

All innovation begins with creative ideas. The successful implementation of new services, new programs, or new product introductions depends on a person or a team having a good idea – and developing that idea beyond its initial state (Amabile, Conti, & Coon, 1996). Therefore, numerous commentators have argued that enhancing the creative performance of employees is a necessary step if organizations are to achieve competitive advantages (Oldham & Cummings, 1996). The increasing need for creativity has also changed educational strategies – so that creativity becomes one of the key elements emphasized in the curriculum across domains such as engineering, science, economics, business, art (Jackson, Oliver, Shaw, & Wisdom, 2006), and design (Li, 2011), etc.

Recent studies (Tan, 2009) have suggested that Problem-Based Learning (PBL) can be a potential strategy for fostering creativity in university students. According to the literature (De Graaff & Kolmos, 2007), Don Woods, who worked with chemistry students in McMaster University in the 1960s, originally coined the term 'PBL'. However, the popularity and subsequent worldwide spread of PBL is mostly linked to the introduction of this educational method at the medical school of McMaster University. PBL has since been introduced into many educational fields and appears to be of growing interest to various countries. Although PBL has diverse models, its core philosophy is 'student-centered learning' (Tan, 2009). In practice, students' learning centers on complex problems that do not have a single answer or on solving real-life projects. Students work in collaborative groups to identify what they need to learn in order to solve problems. The teacher acts to facilitate the learning process rather than to provide knowledge (Dolmans et al., 2005). Since using student projects is a popular way of organizing learning activities in PBL, the links between creativity and the influence of project contexts have been mainly built on theories of social approaches (Tan, 2009). As the literature (Amabile, Conti, & Coon, 1996) argued, departing from the earlier traditional psychological approach to creativity, which focuses on the characteristics of creative persons, the social environment becomes the focus in later studies which see creativity as a context-based activity. Relating this point to social theories of learning that understand learning as changing the form

of participation in social practice (Wenger, 1998), creative learning is located in the situated model (Tanggaard, 2014).

In light of the above, this article particularly pays attention to the role of the student project in creativity development in a PBL environment. A metaphor is proposed describing a student project as an 'extra group member.' In a broader sense, such a metaphor is inspired by previous studies on relationships between actors, practical context, and their dialogues from diverse approaches such as phenomenology and hermeneutics (Ricoeur, 1975). For example, Gadamer (2004) emphasizes that understanding and interpretation are related to verbal tradition in a specific way. But at the same time they transcend this relationship not only because all the creations of human culture, including the nonverbal ones, can be understood in this way, but more fundamentally because everything that is intelligible must be accessible to understanding and to interpretation. Van Manen (2007) suggests a phenomenology of practice operates in the space of the formative relations between who we are and who we may become, between how we think or feel and how we act. Halling (2012) emphasizes teaching students about phenomenology by highlighting experience. However, the 'experience' refers not only to what the research students do to get experience, but also the collective reflection on experience as a source of understanding. However, the metaphor to be discussed in this paper is empirically based on a Ph.D. study (2008-2012) in a particular context of PBL. As mentioned, most discussions on the link between PBL and creativity have been explored within the framework of teaching and learning (Tan, 2009), which is greatly influenced by theories such as situated learning in community of practice (Lave, 1996; Wenger, 1998), social constructivism and social culture, etc. (Zhou, 2012). Thus, this paper takes the social approaches to creativity, learning, and PBL as the theoretical departure of the metaphor. It not only contributes to how to better develop creativity in PBL, but also to deepen understanding on the interaction between the creators and their practice in a group learning context.

Theoretical Departure: Social Approaches to Creativity, Learning, and PBL

Creativity as Shaping New Knowledge in Learning Context

Creativity is typically defined as the ability to produce work that is novel (i.e., original, unexpected), high in quality, and appropriate (i.e., it is useful, meets task constraints) (Beghetto & Kaufman, 2007). Although any creative ideas are generated from personal minds, creativity does not occur in a vacuum. This means that when we examine a creative person, a creative product, or a creative process, the environmental milieu cannot be ignored (Lubart, 1999). Thus, creativity is a context-based activity. It cannot be dissociated from its social, cultural, or evolutionary contexts (Mayer, 1999). These are the core points of the social approach to creativity. When something is social, it is automatically interconnected and has reference to other people and to its environment (Zhou, 2012). Similarly, social theories of learning emphasize that learning is a process that takes place in a participatory framework, not just in an individual's mind (Wenger, 1998). Learning is a search for meaning rather than just a matter of memorizing the 'right' answers and repeating someone else's meaning. Thus, social approaches to education call for learning by doing, hands-on problem solving and the construction of interactive understanding (Zhou, Kolmos, & Nielsen, 2012).

Therefore, learning is a fundamentally social and everyday phenomenon and the changes in social practice which it involves are likely to require creativity on behalf of the participants to come through and this can sometimes also cause innovative changes in the practices involved. As such, creativity is a necessary ingredient in learning processes which involve the handling of situations, tasks, and practices in new ways (Tanggaard, 2014). Moreover, we can see creativity as, effectively, offering students opportunities to shape new knowledge. When students learn something new, they are making new connections between ideas and making sense of them for themselves and are thus constructing knowledge. In this sense, we could perhaps describe what the students are doing as 'being creative' (Craft, 2005). In this way, learning and creativity can go hand in hand, especially in collaborative contexts (Eteläpelto & Lahti, 2008).

PBL as a Learning Model for Creativity Development

Previous studies (Zhou, 2012) have discussed that there are at least three aspects of PBL that satisfy the conditions of creativity development: 1) problem orientation and project work: the point of departure in open and real life problems; 2) group learning context: the process of group collaboration in searching for solutions; and 3) the shift from teaching to facilitation: the idea of facilitating student directed learning rather than teaching. So the researchers (Tan, 2009) also discussed how to better develop creativity and group dynamics in PBL. For example, Gerhardt and Gerhardt (2009) emphasize the group context affords opportunities to enhance creative output. Groups involve general participants, implying increased resources, ideas, and energy. Groups have the potential to generate their own synergy, ideally allowing the group to go beyond the capacities of individuals working by themselves. However, attention to group structure, group management, and conflict resolution, as well as knowledge of common group-related difficulties, can help the facilitator in making PBL a success.

Regarding the role of the student project in creativity development in PBL, the literature has emphasized how project tasks can help to increase motivation, stimulate interplay between individual and group creativity (Zhou, 2012), and construct a learning community (Porath & Jordan, 2009). There are also discussions in relation to learning and games (Gee, 2008) and play-based PBL (Kiib, 2004). However, most of the previous studies have not paid special attention to that in order to build a successful PBL environment, the student project should be integrated into parts of group learning life in creativity development. This calls for this paper to fill this research gap both theoretically and empirically.

Empirical Resource: Selected Work from a Ph.D. Study

This article draws its selected research resource from a Ph.D. study (2008-2012) (Zhou, 2012) which focuses on the influences of PBL on the development of creativity in higher education. Aalborg University (AAU) in Denmark, which has a long tradition of PBL, was the main site for the research. Students at AAU are required to complete approximately 50% course work and 50% project work in groups in each semester (Larsen, Nielsen, & Zhou, 2013). The selected empirical work was carried out with students from Electron-

ic Systems, Computer Science, Architecture and Design, and Medialogy (Table 1).

Table 1. Selected Empirical Work from a Ph.D. Study

Topic	Group creativity development in a Problem and Project-Based Learning (PBL) environment in engineering education
Research Context	Aalborg University, Denmark
Research Time	2008-2012
Research Questions	How do engineering students develop group creativity in a PBL environment (in Denmark) and how can the use of PBL contribute to the development of group creativity in engineering education?
Research Methods	Qualitative methods
Data Resource	<p>53 interviews with students from Computer Science, Architecture and Design, Electronic Systems, and Medialogy at AAU. The students were in their third, fifth, and seventh semesters. The interviews were focused on the interplay between individual and group creativity in a PBL context.</p> <p>12 interviews with students and observation (across three semesters) in a student project AAUSAT3*. The interviews focused on the motivation for creativity in project groups. The observation focused on the students' group meetings and the processes being used for solving problems.</p> <p>*AAUSAT3 is the third student satellite; the project began in 2007 and it was launched late in 2010. The mission of the satellite project was to carry out and operate the Automatic Identification System (AIS) payloads which are intended to be used by ships to communicate with each other. AAUSAT3 is a joint venture with several departments including Electronic Systems, Mechanical Engineering, Computer Science, and Energy Technology. Students from the 1st to the 10th semesters were encouraged to participate in AAUSAT3 according to the different rates of the task.</p>

As Table 1 shows, a total of 65 students were involved in selected empirical work. The data was collected by multiple methods such as interviews and observation. As the collection of the data has led to valuable findings in the Ph.D. study (Zhou, 2012), this article builds upon those findings that further contribute to theoretically forming the metaphor.

A Metaphor: Student Project as an 'Extra Group Member' What Does the 'Extra Group Member' Mean?

The Ph.D. study (Zhou, 2012) involved interviewing students about topics such as the interplay between individual and group creativity and the motivation for group creativity. The data showed that most of the students in one group were not only learning partners but also friends. They had shared leadership – every member is responsible for different parts of the project tasks. Peer learning and group facilitation can improve motivation. Thus, findings which underpin group learning provide the conditions for the development of creativity. This provides a means for students to share and examine others' interpretations and perspectives as they work through a problem. Another feature of group learning is that it can be facilitated by reflection from practice. For example, in AAUSAT3, students can make sense of their project experience and assess its meaningfulness by means of reflective practices. Based on these observations, when a group has a particular problem, members tend to collect data or look for different solutions first, and then identify the best one through discussions with each other. Finally, they examine ideas in practice. If the ideas do not work, they will reflect on and discuss the situation further until the problem is solved (Zhou, Kolmos, Du, & Nielsen, 2011).

As all students' learning activities center on project work, progressing through projects leads to the achievement of both individual and group learning goals. So the metaphor is inspired by the above points that regard a student project as an 'extra group member' in the creativity development of student groups in a PBL environment. This means that students' creativity can develop out of 'conversations' between students and an 'extra group member.' The conversations are 'back and forth' processes – the 'extra group member' 'asks' students to meet task challenges, 'calls for' group discussions, 'speeds up' group decision making, and 'gives reminders' of

the deadline of project reports; the students react in collaborative ways in order to 'answer' the 'extra group member.' The creative group ideas are the results of such 'conversations.' During such processes, individual motivation is stimulated and the group dynamic is strengthened, thereby facilitating deeper learning in the process of converting tacit experience into explicit knowledge (Zhou & Kolmos, 2013). Accordingly, the 'extra group member' contributes to setting students in a situated creative learning community.

Setting a Situated Creative Learning Community

Broadly, the concept of community refers to a group of people working together with a common set of goals and interests. So the learning community emphasizes its support of the building of 'intellectual camaraderie' – people constructing knowledge based on their personal understanding and shared experiences, and explaining how meaning is made out of the similarities and differences between their own understandings and their new insights (Porath & Jordan, 2002). The Ph.D. study (Zhou, 2012) shows that, by solving real-life problems, student projects provide opportunities for students and teachers to become partners within a creative learning community. Social support groups or networks are vital for creativity to flourish. Interpersonal relationships within a creative learning community promote a sense of group loyalty, a willingness to help each other, a sense of inclusiveness that respects diversity as well as personal and social growth, high levels of participation, greater quality of discussion and questioning, the use of diverse strategies for problem solving, and increased risk taking in forming points of view or opinions (Porath & Jordan, 2009).

In such a creative learning community, students engage themselves in interdisciplinary learning (Savin-Baden, 2000). Interdisciplinary projects require the contributions of multiple disciplines. For example, in AAUSAT3, students should learn knowledge related to communication, electronics, mechanics, physics, and energy technology, etc. Creativity usually happens when the boundaries between disciplines are broken. As Wenger (1998) suggests, participating in interdisciplinary projects exposes practitioners to others in the context of specific tasks that go beyond the purview of any view of any practice. People confront problems that are outside the realm of their competence but this forces them to negotiate their

own competences with regard to the competences of others. Competence and experience have different relationships at the core and at the boundaries of practices, at the encounters between generations and in the relationships of power among participants. The innovation potential lies in the combination of strong practices – people who can engage across boundaries, but have enough depth in their own practice so that they can recognize when something is really significantly new.

However, students can gain more than knowledge in a situated learning context. Students involve themselves in self-directed learning, group coordination, and project management. So they can improve themselves by dealing with complexity and uncertainty in learning processes. As well as a series of creativity-related skills such as critical thinking, openness, and leadership which can be mastered, collaboration over the situated learning can lead to outcomes that could not be predicted solely from the student groups. This is what Sawyer (2003) suggests – that creativity is an emergent process that involves a social group of individuals engaged in complex, unpredictable interactions. However, solving real-life problems in project work can meet the conditions of the emergence of creativity.

Why the Metaphor? Practical, Theoretical and Methodological Significance

Situating creativity as emerging from systems implies that it has something to do with 'being in a relationship.' But can we also understand creativity in a more holistic, connected, and perhaps even constructive sense of relationship? By regarding a student project as an 'extra group member,' the metaphor contributes to the response to the question asked in the particular context of PBL. This 'relationship' can be seen as a form of dynamic interaction, including that between learner and learner, learner and teacher, teacher or learner and themselves. It also includes the relationship between the learner and the discipline itself. Creativity is social-constructed as dialogic and not as unitary (Craft, 2006).

In PBL practice, the metaphor implies being more aware of the complex interactions and interdependencies between teacher, learner, and project task. As Jackson and Sinclair (2006) suggest, in order to have a maximum impact, every teacher must be deliberately aware of the ways in which they are likely to impact on any kind of

provision and any learner response. This could be of particular interest in the context of innovation in general, where, for example, students may not be motivated to try out new ways of working, where they may not have adapted appropriate cognitive and metacognitive strategies, and may find this difficult without support, and hence may lose their perceptions of efficacy – again impacting on motivation. In PBL, the metaphor calls on the supervisors to give greater attention to group dynamics and to the relations between project and group dynamics. As the 'extra group member,' the student project paves the way for student groups to step into the situated creative learning community.

A recent study (Tanggaard, 2014) has suggested a situated model for creative learning, by emphasizing three learning principles: (1) immersion in the topic of interest, (2) experimentation and inquiry learning, and (3) resistance to the material of interest. The three principles are coherent with each other and underline different aspects of supporting creativity such as domain and knowledge, experience of experimentation, and relations between materiality and creators. In a PBL context, the student project helps the student groups to cross all three learning principles involved in developing creativity. In this sense, the metaphor in the article deepens the situated conceptualization of creativity. Meanwhile, as the metaphor is given with the subject matter of meaning, it brings lively descriptions about how creative ideas are generated through the learner's participation, collaboration, and engagement in social practice. It underpins the previous points including 'creativity is constructive,' 'creativity comes from dialogue,' and 'creativity is in relationship,' etc. (Craft, 2005) which have been argued from social approaches.

The theoretical significance of the above may lead to some methodological rethinking. As Craft (2005) states, since the 1990s the predominant methodologies for investigating creativity in education have shifted from large-scale studies aiming to measure creativity towards ethnographic, qualitative approaches to research focusing on the actual site of operations and practice, again situating creativity in the specifics of the underlying disciplines, and in the social and cultural values and practices of the particular setting. Therefore, the metaphor discussed in this article is the epitome of such a shift. Although many studies have attempted to explain the relationship between creativity and the social environment, this metaphor particu-

larly emphasizes the systematic view of creativity and creative co-construction. This firstly avoids there being an unnecessary focus on the creators' behavior and secondly allows for a consideration of the context the creators are operating in. In short, the metaphor indicates, using the research language of creativity, 'who is creative,' 'where creativity happens,' and 'how creativity comes into being'; questions which cannot be isolated from each other. Thus, in future studies, it may be necessary to break the codes of the dialogue in creative co-construction, and to take notes of the relationships that exist with regard to creative interaction. So the 'extra group member' should 'speak' with other members in the student group in a way that requires more effort to re-write the research language of creativity for a situated learning context in the future.

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The Dispositif of Creativity & The Subjectification of the Creative Individual

What the Creative Human Being can/cannot be

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Abstract

Based on the work of primarily Michel Foucault, this article explores how the late-modern human being is incited to be a creative individual; which attitudes, actions, behavior and discourses the individual is inscribed with, and governed by. With reference to contemporary research on creativity, the article's focus will be on the discourse of creative learning, described in its contemporary appearance. Thus, the article scrutinizes the regularities of statements, which form the creative learning discourse, and discloses (some of) the norms and attitudes that shape and form the behavior of both the learning student and the lifelong learner and also, how they frame our ability to perceive, talk and understand ourselves in the context of a late-modern, and innovative society that emphasizes lifelong learning.

Keywords Foucault, Discourse, Dispositif, Power, Subjectification.

Introduction

In this article I will apply an analytical-strategic approach to the description of the discourse on creative teaching and learning. Ac-

Accordingly the basic question is, under which conditions a particular 'meaningfulness' regarding creative learning and teaching for creativity (e.g., a specific discourse) has been formed, how various and different perceptions has shaped our understanding of creativity, and under which conditions these constructions have come about (Åkerstrøm Andersen 1999, 13ff). Based on Foucault's concept of the dispositif¹, I will describe how the European Commissions Joint Research Center (ECJRC) as a political, trans-governmental research-institution, the British Think-Tank 'Demos' and the Danish Professor Lene Tanggaard Pedersen, at different times and from different positions, participate in the formation of the discourse on creative teaching and learning/teaching for creativity. The article will describe in what particular direction the creative individuals are being inscribed - subjectified - with principles that come to work as their own subjection (Foucault 1975, p. 203). How their gestures, opinions, behavior, self-understanding and everyday talk is being oriented, modeled and controlled.

Foucault - discourse, power and subjectification

Foucault defines genealogy as a "form of history, which can account for the constitution of knowledges, discourses, domains of objects, etc." (Foucault 1977, p. 117). It is a description of the procedures and mechanisms of power (Foucault 1978, pp. 7-8) that "produces things, (it) induces pleasure, forms knowledge (and) produces discourse" (Foucault 1977, p. 119). While genealogy is thus the temporal-longitudinal description of the constitution of knowledge and discourses, Foucault's archaeology is the temporal-latitudinal description of the rules, which at a given time and place define and regulate, what he calls the discursive formation: Its objects, enunciative modalities, concepts and strategies (Foucault 1968, 59ff; Foucault 1969, 34ff). It is a 'mapping' of the mechanisms and procedures: The dialectic relation between the regularity between a number of statements on one side and on the other side the rules regulating the formation of discourses² and that condition the existence of the regularity of statements.

By consistently referring to rules, mechanisms and procedures, Foucault manages to 'displace' the individual human being as the subject of the statements. Instead the subject is "a particular function [...]; an empty function, that can be filled by virtually any indi-

vidual when he formulates the statement" (Foucault 1969, p. 105), speaking from "a particular, vacant place that may in fact be filled by different individuals" (Ibid, p. 107). Furthermore, the function being particular emphasize, that the position is locked to a specific domain of knowledge, with mechanisms, rules and procedures that regulate and govern what the individual can say, when and where (Foucault 1969, p. 49 and 106; Foucault 1971, p. 13; Foucault 1976, p. 16). By using the term 'govern' Foucault distances himself from a deterministic understanding of power. Governing is the *direction*, not the determination of the conduct of the individual; it is the "action upon the actions of others" (Foucault 1982, p. 790) requiring free individuals who may, or may not, act accordingly (Ibid).

Once formatted, the knowledge and discourses engage in the formation of the heterogeneous ensemble that Foucault calls a dispositif which, besides discourses, consists of "institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions - in short, the said as much as the unsaid" (Foucault 1977A, p. 194). Supported by, and supporting, specific types of knowledge, it responds to an urgent need and plays a strategic function, with a capacity to "capture, orient, determine, intercept, model, control or secure the gestures, behaviors, opinions or discourses of living beings" (Agamben 2006, p. 14). Therefore one of the main questions to answer is what the necessities are that link the various types of knowledge and statements together.

As elements - statements and conceptual formations - in the discourse on creative teaching and learning and/or teaching for creativity, scientific articles on the subject matter are de facto, at the same time elements in the dispositif on creativity. They form parts of the dispositif ensemble, and enter into this strategic 'ménage-a-infinité' with other elements, between which a "certain manipulation of relations of forces" (Foucault 1977A, p. 196) takes place and either develop them in a particular direction, or block, stabilize or utilize them. They are elements that at a given point in time, from a specific position, play a strategic role in the constitution of the dispositif which orient and determine, control and secure the attitudes, behavior, opinions and the everyday talk and self-understanding of living human beings - in this particular case, as *creative* and *learning* individuals.

Methodology and data selection

An endless number of publications on creative teaching and teaching for creativity have been published. Thus, the selection of data is selective. Yet it is neither random nor accidental. By selecting texts from a national, policy-influencing think tank, from an independent, EU in-house scientific institution and a leading Danish and international researcher³ (spanning the years from 1999 – 2013), I have chosen texts produced by individuals that take up a particular vacant place, and play a particular function, due to the institutional sites and settings, from where they speak (Foucault 1969, pp. 55 - 57).

Furthermore, these texts are of particular interest due to the fact that they format a discourse on creative teaching and teaching for creativity that has direct impact on the political decisions on education and learning and thus the subjectification of children in not only the Danish School System, but across the entire European Community. How our children come to think of and understand themselves and each other will significantly impact the way that our schools, workplaces and families are established and organized in the future; which behavior and attitudes will be regarded as valuable and acceptable, and which not; which statements are considered to be reasonable and meaningful, and which are “considered null and void” (Foucault 1971, p. 14). The discursive-dispositional analysis can be illustrated as follows:

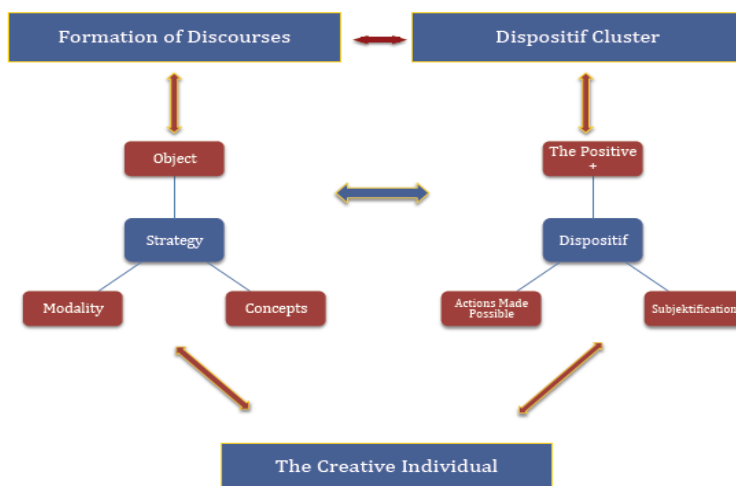


Figure 1. The Discursive-Dispositional Analytical-Strategic Model (Mølholm 2013, p. 228).

Identifying the strategy (see above diagram) is the cornerstone of the analysis. In the present article, the strategy of globalization is the urgent need to which the strategy of teaching for creativity and creative teaching is the response. A number of statements from the articles and the book analyzed in this article are then linked together in order to show how they together format the discourse on the creative human being and how these discourses are subjectifying the late-modern human being to be creative. This is done by pointing to various attitudes, perceptions, understandings and ways of behaving as positive and desirable (the Positive+), and others and opposite as undesirable (the Negative-), thereby rendering certain actions possible and likely.

An urgent need for creativity

In my research I have substantiated the globalization-discourse as the driving force, urging the Danish workers to become lifelong learners, developing both their personal and their vocational skills and competencies, by describing globalization as both a threat and an opportunity (Mølholm 2013, pp. 245-282. See also Fairclough, 2009). As a consequence of the globalization of society, Danish (as well as European) citizens are to an increasing degree urged to become lifelong learners (EU-Commission 2000A, EU-Commission 2000B, EU-Commission 2001, European Parliament 2006), in order to contribute to the “development of the community as an advanced knowledge-based society, with sustainable economic development, more and better jobs and greater social cohesion” (European Parliament 2006, Chapter 1, Article 1.2). Knowledge is the ‘new’ cornerstone and “primary resource of the new economy” (Bentley & Seltzer 1999, p. 1) in a world that is “constantly ‘in the making’” (Tinggaard 2013, p. 23), and the lifelong learning individuals have to be able to apply what they learn, in new and creative ways (Tinggaard 2011, p. 219), whereby they become “less vulnerable in the global economy” (EU-Commission 2000B, p. 11). The ECJRC sums it all up by concluding, that creativity is essential, both to the enhancement of innovation, as well as the development of personal and occupational competences and the well-being of the individual (Cachia, Ferrari, Ala-Mutka & Punie 2010, p. 14).

The Positive+ (plus) of the Globalization- and the Creative Learning Discourses come to function as landmarks, with *action markers*

- creativity, innovation and development - inciting the individual to hold a specific set of attitudes and opinions, perform certain actions and adhere to a specific discourse. They hold out the prospects that Europe will (once again) become an advanced, knowledge-based society, with more and better jobs, greater social cohesion and a sustainable economic development. Creativity is highlighted as a primary skill in order to ensure innovation, which is a key component in economic growth and a sustainable economy. Furthermore creativity is essential in the pursuit of an enhanced productivity and the ensuring of social welfare.

At the same time, these positive landmarks allow us the possibility to sense and determine the Negative- (minus): what they at the same time make impossible (Foucault 1966, p. 342). If individuals fail to obtain creative skills and the ability to use what they learn, in new and creative ways, they will first and foremost be more vulnerable in the new, global economy and risk "marginalization, (being) among those who lack the means or motivation to acquire marketable knowledge" (Bentley & Seltzer 1999, p. 2). The new and better jobs will be beyond their reach, they will lose their competitiveness and the prospect of maintaining their employability will diminish accordingly. To the society, failing to teach for creativity will result in the loss of competitiveness and a sustainable, economic development. The social consequences of such a development are diminished social cohesion and social welfare, and ultimately negative effects on the well being of the individuals.

Thus individual citizens as well as the political decision-makers, teachers, educators and employers are subjectified to permanent learning, and to apply what they learn in new and creative ways. They are subjectified to perceive and understand creative teaching and teaching for creativity as a source to further and future prosperity, and as a vehicle for social development, greater social cohesion and social welfare.

Teaching for creativity

Whilst the globalization puts pressure on the welfare-society, as we know it today and threatens the jobs of thousands, it simultaneously implies an opportunity for growth: in the quantity and quality of jobs, in the economy and in society as a whole. The lever to realize these opportunities is, as mentioned above, creativity. And

the means to make creativity a reality is to teach for creativity and creative teaching. Thus the lifelong learning individual, the teachers and educators, business managers and political decision-makers are incited with norms, attitudes, opinions and discourses, subjectifying them to be creative and apply what they know and learn, in new and creative ways, which again is considered to be one of the main sources for innovation.

Tanggaard, as well as Cachia et al., perceive creativity as an almost innate ability (Cachia, Ferrari, Ala-Mutka & Punie 2010, p. 9; Tanggaard 2013, p. 23 and 29). With the Positive+ being constant and continuous development, change, modification, transformation and renewing, the Negative- is everything representing a repetition or retaining of something 'old': The familiar, the known and the things we consider being obvious or that we take for granted. It is the disposition - incitement - of a creative, lifelong learning individual who "crosses divides, discovers new countries and moves through unknown terrain" (Tanggaard 2013, p. 29) and makes us appreciate and value what is new and different (Ibid, p. 27). As such, the creative learner is subjectified with an 'entrepreneurial' attitude, to life as well as to learning, the two being un-separable.

In addition, the creative individual is capable of discovering "new problems when others may not even be asking any questions at all" (Bentley & Seltzer 1999, p. 19), and he is able to formulate new problems, transfer learning between different contexts, and understands that learning involves making mistakes and being focused on the pursuit of a specific goal (Ibid; Tanggaard 2011, p. 221).

The disposition of the creative human being is not only a subjectification of creativity but as it turns out, also a subjectification of *how* to be creative. The question is not, *if* every human being is creative or has a creative potential, but *how* this potential is realized. This underlying understanding seems for example to be the case in the article 'Stories about creative teaching and productive learning', where the overall theme is, how "teachers teach for creativity" and ask the teachers to "specify, how they recognize creativity among pupils" (Tanggaard 2011, p. 223). The assumption (not the question) seems to be *that* (not *if*) the teachers teach for creativity, and *that* (not *if*) they are focused on detecting the students' creative potential.

These questions incite the teachers to be teaching for creativity, and to look for signs of creativity, so as to be able to unfold it in the

pupils' learning-process. In order to do so they must themselves be creative and be sympathetic to the idea of experimenting with their own teaching, so as to create the best conditions for the students' development of their creative skills (Ibid, p. 220). Through dialogue, the students will find their own ways to address and solve problems in innovative manners (Ibid, p. 230). Likewise, the heads of the schools must be able to inspire and convince the students and teachers to pursue their ideas (Tanggaard 2013, p. 27).

As a result, both the student and the teacher are subjectified with a willingness to take risks, to be curious and adventurous, to hold an open mind, experiment with new ideas and to pursue new solutions. The creative, learning individual is subjectified with the courage to challenge the existing order, as a precondition to be able to come up with new ideas and ways of handling the situation he is facing, in a world that is "constantly in the making, requiring numerous adjustments, improvisations and innovations, both exceptional and mundane" (Tanggaard 2013, p. 23). Furthermore the creative individual is expected to be a "complete human-being" (Graversen & Larsen 2004, p. 344) subjectified as socially engaged, committed, persuasive and full of initiative.

The disposition of the students, teachers and head of schools rest though, on the choices made by the political decision-makers, who must make it a political priority. They must come to understand the

distinction between the creative teacher [...] and the teacher who is obliged to teach according to a manual. [...]. When teaching according to the manual, following specified tasks, obligations and rules, it is possible to raise pupils' scores. Nevertheless, it becomes less likely that the teaching will challenge pupils who are able to go beyond the framework of the test. [...], such teaching methods become a barrier to creativity [...] (Tanggaard 2011, pp. 220 - 221).

Not only do the decision-makers have to learn to distinguish between the creative teacher and the conformist teacher. They must also learn to see the differences as insurmountable: that the conformist teaching is the Negative-, representing an obstacle to creativity that can only be overcome if national tests control and sur-

veillance is replaced with a higher degree of trust (as the implicit, Positive+) (Tanggaard 2011, p. 221). It is a subjectification of the political decision-makers to be courageous enough to trust the teachers and learners, and to hold an open mind, valuing confrontation and critique as necessary sources to innovations, which again are indispensable in the endeavor to preserve and develop our welfare-society.

Ramifications

The understanding and depicting of creativity as an everyday phenomenon and an ability that every human being possesses implies that the absence of creativity in the learning-process (individually or socially) is a result of insufficient conditions due to a lack of understanding and priority with the political decision-makers, rather than a deficiency in the individual learner. Tanggaard distances herself from the otherwise common understanding of creativity as exceptional and a demonstration of an unusual and particular high order thinking, praising the few at the expense of the many who lack imagination (Tanggaard 2013, p. 28). In line with Cachia et al., Tanggaard maintains the point of view that it is ultimately a matter of how teachers and decision-makers facilitate the learning-processes and conditions to learn that decides, whether the learning individual develops his or her creative potential (Tanggaard 2011, p. 220), while organizing the learning-process in thematic- and project-oriented work gives the pupils an opportunity to “gain access to an experience of creative learning” (Ibid, p. 228). Thereby she represents a different approach to, and understanding of, the risk of marginalization that Bentley and Seltzer who claim that it is ultimately a matter of means and motivation, whether the creative potential is unfolded.

Nevertheless, the end result seems to be the same: *if* sufficient conditions and opportunities are provided, and the proper means and motivation is given, it is, by and large, up to the learning individuals themselves whether they decide to pursue and realize their potential and get one of the many and better jobs, obtain economic and social prosperity, etc. In other words, success or failure is ultimately their own achievement and responsibility. When it is “just as creative for someone to find a new means of baking bread as it is for a professor of mathematics to discover a new algebra” (Tang-

gaard 2013, p. 29), there is no excuse not to be creative. Thus it becomes a norm, attitude and action we are all expected to adopt and conduct, in whatever situation and field we are situated, whether it be a bakery or a university. In this kind of individualized society, where everyone is disposed to unleash their creative potential, the individual's biography becomes their own responsibility (Beck 1986, p. 216). They must "learn to understand themselves (himself) as the center of events; [...]" (Beck 1986, p. 217, author's translation. See also Korsgaard 1999, p. 195ff). They can either adapt or perish. The message seems to be: if creativity is 'the new black', wear it and adapt, or refuse it and be inapt.

The consequences are substantial. First and foremost the attitudes, understandings, behavior and values that are not coinciding with 'the new black', have a tendency to be held null and void, and a person who does not comply with the norms and values of the creative life, to be perceived as a fool (Foucault 1971, p. 14). By celebrating the individual who is bold and adventurous and not afraid of confronting and criticizing the established systems and institutions and who is persuasive and comfortable when presenting something new, the society risks marginalizing or excluding those who are not like this individual.

Conclusion

The selection and installation of a difference between 'this' (the Positive+, the solid, positive and full forms) and 'all the other' (the Negative-), is necessary for a society to make decisions and move forward (Luhmann 1997, p. 92). But at the same time, these selections of differences make us blind: "blind to ourselves as observers, blind to the unit of difference with which we observe, blind to other differences, that we *could* have observed with, and blind to the world as a whole" (Thyssen 2000, pp. 13-14, author's translation). With a strong focus on the development of creative and innovative competencies, we become weak-sighted and less able to realize the potential consequences of the decisions we make: The marginalization and exclusion of those who are *not* adventurous, who are *not* bold and comfortable in a big crowd, and performing his or her best in the midst of a group, who appreciates continuity and stability, and to whom constant development and renewing is *not* associated with 'the meaning of life'.

The consideration for the well-being of each and every child, as stated by the Department of Education in the introduction to the Danish School Reform (www.uvm.dk, 2014), not to say “the well-being of all individuals in society” (Cachia et al 2010, p. 14) suggest an ethical imperative to treat every citizen not just as a means to an end, but as a purpose in itself (Kant 1785, pp. 76-77). But based on the analysis of this article it rather seems as if economic growth and development are the imperative suggesting that we as society silently accept the utilitarian premise of “the greatest amount of happiness altogether” (Mill 1861, p. 19), and the well-being for as many as possible, but not necessarily for all. We are yet to have this debate regarding our school system in particular and our society - not least the places where we work - in general. Failure does not seem to be an option in the world of today, but it is nonetheless a painful reality to many.

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Notes

- 1 I use the term of French origin *dispositif*, instead of the English translation of the term, *apparatus*. The reason for this is, that the term apparatus recur in a number of various, scientific theories which are in many ways both incompatible and incommensurable with Foucault's term *dispositif*, i.e. Karen Barad's Agential Realism.
- 2 For an elaborate discussion of whether to describe the regularity of statements as a discursive formation or a formation of discourses, see Mølholm, Martin (2013), p. *What we talk about, when we talk about work*, pp. 220-222.
- 3 In 1997 The British Think Tank 'Demos' was labeled "the most influential think tank in Britain" (The Economist 1997, October 23rd), with one of its co-funders being a leading member of the then British PM Tony Blair's policy units and with research and ideas carried out and laid forward by Demos "cropping up in the speeches of Mr. Blair" (ibid). The European Commissions Joint Research Center function as "the commissions in-house science service", with a mission to "provide EU policies with independent, evidence-based scientific and technical support throughout the whole policy cycle" (<https://ec.europa.eu/jrc/en/about>). And the Danish Professor Lene Tanggaard is one of the leading Danish researchers in creative teaching/teaching for creativity.

Words Within

Creativity, Flow, and Body

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Abstract

This work discusses embodiment and creativity through use of the body engaged in movement. Although there is a tradition of writers and thinkers who use embodied movement meditation to find inspiration and flow in thinking and writing, this flow is seemingly missing in school writing practices. How, then, is creative flow connected to movement? What implications arise for the relationship between body and creativity for writing teachers? Turning toward these questions, this paper explores the lived experience of movement meditation and creativity, particularly for teachers of writing. First is a description of the phenomenon, followed by a brief review of some of the literature. Then follows an explication of the method and discussion of emergent themes related to creativity as rendered in a phenomenological study of movement meditation and teachers of writing. Finally, the paper considers implications for pedagogy and future research.

Keywords creativity, teaching, writing, moving meditation, embodiment, phenomenology

Words Within Me

On an early fall morning, paralyzed by writer's block, I lace up my running shoes and head to the river trail for an easy jog. Fog rests above the water, not yet burned off by the late September sun. I start slowly. My footfalls create a rhythm in the soft gravel as I find my stride. I startle a fishing heron, and it flies away, squawking. Deer bound down the path ahead of me, and squirrels rustle in the leaves. My breath deepens and muscles relax as I begin to settle into the space of my body in motion, path unfolding before me. My pace quickens, and I run, both focused and unfocused. I think about this article, on which I have been working. My chattering mind grows silent, and then the block clears. New thoughts surface, bubbling up like water from a spring. Ideas emerge. Words form and become ordered. I am revising, re-seeing, as the block dissipates. This is writing that does not look like writing, a moving meditation that unblocks my stuck thinking. Thoughts churning, I finish my run and head homeward, returning to my desk and computer. My fingers move across the keyboard, words pouring through me urgently. I do not even bother to take off my shoes.

As a writer and runner, I have come to know this phenomenon of body motion connected to writing flow intimately. When I am blocked, I can find release through movement. When I speak to others about this phenomenon, some of them indicate that movement is connected to flow for them as well: "I write when I swim," one tells me. "I go for a bike ride when I'm stuck," says another. Walking brings relief for yet another writer. I wonder: how does body movement release stuck thinking? What connections exist between creativity and body flow?

I find movement, especially running, to be a reliable way to release stuck thinking. After a run during which I experience flow, I scramble for my notebook and pour out words, filling pages in near effortless surge. Intentional movement, or movement meditation, such as running, walking, or yoga, may open creativity for me as writer, thinker, and researcher: first, body motion causes stillness, creating clarity and emptiness. Once this happens, I am filled, or fill myself, with insight. When the movement session finishes, I empty my thinking upon the page, clearing the way for new thoughts, understandings, or revisions. Through body flow, I find creative flow; this phenomenon, based in my interest and practice, leads me

to phenomenological wondering, as van Manen (1997) suggests. I wonder: in what ways may a body in motion open a flow of thinking for a writer as she walks?

In contrast, however, as a high school teacher, I taught writing to big boys in small desks who, in spite of their ability to move fluently through cross-country courses or between plays on fields, were utterly stuck when it came to writing. "I can't," they might say, "I don't know how." Or worse yet, "I have nothing to write about." Now, as a college composition instructor, I find my students face similar ways of being stuck. They tell me they do not know where to start, or that they do not know what to say. My work with preservice teachers, too, reveals this same stuck-ness; my students, future teachers of writing, also find themselves blankly facing the blank page. I know that, for me, the best way to write is to set myself in motion: body flow opens a thinking flow. However, the standard classroom environment may not permit the kind of meditative motion I need to write; my less experienced students are body bound to wordless anxiety. From this dilemma more questions surface: how does movement stimulate the flow of thoughts and words? What happens and what insights are gained when teachers of writing move? What can teachers do to help students move and, in doing so, write more freely? *What is the lived experience of moving meditation for finding creative flow in thinking, writing, and teaching?*

Turning toward these questions, this article, based in my dissertation work (Morris, 2013), explores the lived experience of movement meditation and creativity, particularly for writing teachers in secondary classrooms, like those who participated in this study, and for other writers and teachers of writing seeking to understand embodiment as connected to writing.

Moving Toward Creative Flow

When I begin to explore the literature, I find parts of the path I wish to walk. According to Csikszentmihalyi (1996) creative flow involves immersion in activity, producing feelings of success and competence; flow is characterized by engaged awareness, lack of distraction, time distortion, loss of self-consciousness. Flow is what I experience when I run; writing inspired in a session of movement also produces the characteristics of flow. How, then, is body movement for flow represented in the literature?

Various works connect movement and inspiration, touching upon the role of the body in stimulating creativity, finding that movement leads to increased reflective thinking, self-awareness, and introspective analysis: as a meditative tool, movement facilitates self-knowledge, deep thinking, and problem-solving (Andrews, 1978; Brown, 2009; Lynch & Scott, 1999; Perry & Sacks, 1981; Solomon & Bumpus, 1981). Recent experimental research connects walking and higher scores on creativity tests (Oppezo & Schwartz, 2014). Popular magazine articles and general interest texts explore this phenomenon of movement for connecting to thinking, as well (Fleming, 2010; Jabr, 2014; Kay, 2007; Ratey, 2008).

Some posit that humans' first creative stirrings came out of the capacity for movement. McDougall (2010) describes movement as tied to inspiration, stating, "Running was mankind's first fine art, our original act of inspired creation. Way before we were scratching pictures on caves or beating rhythms on hollow trees, we were perfecting the art of combining our breath and mind and muscles into fluid self-propulsion over wild terrain" (p.92). Perry and Sacks (1981) connect movement and imagination in their work with runners. Brown (2009) links body movement to play, which generates wonder and stimulates the imagination. Solomon & Bumpus (1981) discuss the clearing away of mental chaos that can be found through running, allowing new insight to emerge. Berger and Mackenzie (1981) find movement "conducive to introspection as well as to thinking in general" (p. 104). The clearing effect of movement, as characterized in these works, allows new insight to emerge, helping thinkers to turn inward, to reflect in patient practice, to tap into the current of their own understanding. This notion may be familiar to many of us: we may take walks to clear our minds, we may pace in difficult situations, we may stretch to relieve tension and refocus. These actions, though intentional, may not take on same qualities as the practice of movement meditation: regularity, intentionality, and purpose. How, then, is meditative movement different from other movement?

More than a series of actions, movement meditation is a way of knowing, a bodily process for engaging with and understanding the world and self, fostering "modes of being in the world, a synthesis of mind and body" (Schilbrack, 2004, p.13). Certain writers assert that moving meditation brings people closer to themselves and pro-

vides a sense of wholeness (Lynch & Scott, 1989; Rohe, 1978; Sher, 2006). Artress (2006) discusses meditative labyrinth walking as being a three-part process, in which mental clearing away gives way to insight, which then is carried back out into the world. Movement meditation can call one back into oneself, center one's awareness in body, mind, and the surrounding world. Moving meditation can merge reason and creativity, igniting senses and imagination, providing an inrush of insight. This connection between intentional moving, thinking, and inspiration is relevant to my questions, but leaves an incomplete impression. What does the literature reveal about the relationship between movement, creativity, and writing?

Body movement has long been tied to thought. The Peripatetic philosophers walked a colonnade, thinking and lecturing: "In English the word peripatetic means 'one who walks habitually and extensively.' Thus their name links thinking with walking" (Solnit, 2001, p.45). Ancient Greek thinkers moved to "translate order into action," and "it is reported that Socrates, when asked how he kept his mental faculties so acute, replied, 'I dance every morning'" (Andrews, 1978, p.134). Researchers have discussed writing as connected to flow of ideas (Gendlin, 1996), of inspiration (Emig, 1983), and of body (Sher, 2006). With "body as a touchstone," writers move toward meaning in the flow of thought (Perl, 2004, p.4). The notion of creativity born in intentional body motion leads me to the notion of a tradition of writers immersing themselves through body motion to find their words.

The novelist Joyce Carol Oates (1999) discusses the tradition of walking writers in an essay on writing and running, citing Thoreau's, Dickens's, and Wordsworth's writerly walks. Solnit (2001), lists a history of walking thinkers, writers, and philosophers, including Hegel, Kant, Hobbes, Nietzsche, Rousseau, Bertrand Russell, John Stuart Mill, Coleridge, Thoreau, Kierkegaard, Husserl, and others. Lynch and Scott state "Thoreau, Plato, Einstein, Wordsworth, and Lao-Tzu sauntered through woods and over the hills to achieve mental clarity, fresh, original thoughts, and epiphanies to help replenish their souls and sustain their imaginations" (1999, pp. 177-178). When drafting *Being and Time*, Heidegger "retreated to the Black Forest," thinking and writing "on long walks along its wooded paths, in glades and clearings, skiing down its slopes..." (De la Durantaye, 2007). Like me, these writers moved for the purpose of

writing, they listened, and the words came. It makes sense, then, to wonder: how can this tradition translate in teaching and learning to write? What happens and what insights are gained when teachers of writing move?

Moving Toward Meaning in Writing and in Teaching

On a different morning, I meet with four high school English and writing teachers, from the same high school, who self-selected to participate in this phenomenological study exploring the lived experience of moving meditation for finding a flow in thinking and writing. Alyx, Annalee, Holly, and Traci (self-chosen pseudonyms) arrive in a shady gravel lot near the top of CaCapon Mountain. The sky is bright blue, and the leaves are beginning to turn into autumn shades of red, gold, and brown. Crickets chirp in the high grass. Summer is ending, and a new school year is beginning. Journals in hand, we set out, each of us moving across wooded park paths and through her own thoughts.

Together, we engage in thoughtful walking, an “intentional act closest to the unwilling rhythms of the body, to breathing and the beating of the heart [...] a delicate balance between working and idling, being and doing. It is a bodily labor that produces nothing but thoughts, experiences, arrivals” (Solnit, 2001, pp. 23-24). These thoughts, experiences, and arrivals are meaning-making, born in the body, generated from the energy of steady motion and deep, easy breath. As Alyx walks steadily across the ridgeline, Annalee jogs gingerly along the steepest path toward the mountaintop. Holly and Traci move down a different trail toward the center of the park, and I head upward into the laurel thickets. We pace our progress with the soles of our shoes and stop to write as words emerge. When I arrive back at our meeting place, about an hour later, I see three teachers in and around the pavilion where we will talk: Holly reclining on a rock in a patch of sunlight, writing, Alyx and Traci at a picnic table, both writing. I perch on a bench and open my journal. As I begin writing, Annalee bounds into the clearing, journal in hand, finds a comfortable seat, and also puts pen to paper. We stay this way for some time and then reconvene to talk, as has become our practice.

Alyx, Annalee, Holly, and Traci write for and with their students, providing models, making connections, and using their own writ-

ing as exemplars. They enjoy writing for pleasure, professional, and pedagogical reasons: they write with their students and teach writing for creative as well as evaluative purposes. In addition to writing and teaching together, these teachers socialize together, and, perhaps more significantly for this work, they exercise together. They walk on the track near their school, or they run and train together, providing motivation and support. Their shared awareness as writers, teachers, and engaged bodies provides apt conversation for exploration of related lived experience. As co-conversants, I have enlisted them to explore the question: *What is the lived experience of moving meditation for finding creative flow in thinking and writing?*

Over several months, these conversants and I engage in sessions of approximately 45 minutes to 1 hour of quiet walking meditation in wooded settings, followed by or including 30-45 minutes of solitary journal writing followed by open-ended (and recorded) conversation. I have generated thematic renderings of life-texts gathered from these journals and conversations. I have identified shared perceptions and allowed questions to grow from commonalities and intersubjective understandings; these have led to phenomenological interpretation. Thematizing allows me to “get at the notion” of the meaning of the experience of movement meditation for finding a flow in thinking and writing and give shape to this phenomenon, even in its shapelessness; thematizing “fixes or expresses the ineffable essence” and “describe[s] the content of the notion” of what is there in a phenomenon (van Manen, 1997, p. 88). Although many themes (including nature, wholeness, solitude, practice, and others) have emerged from phenomenological thematizing in this work as a whole (Morris, 2013), this article explores creativity interpreted through the lived experiences of walking, wondering, talking, and writing with teachers engaged in moving meditation.

Creative Flow: Teachers Moving Toward Meaning

Creative flow emerged in practice and interpretive rendering over the months of this study. We have wandered wooded paths, surrounded by birdsong and the sounds of rustling leaves. In tune to the rhythm of our walking, words have surfaced, and journal pages have filled. Time has stilled, engagement has deepened, and self-consciousness has diminished, much as Csikszentmihalyi (1996) describes in his work on flow.

Losing Self and Time

Writers in flow, we become “lost in the process of writing,” and feel “merging action and awareness through the image of the flowing ink and the flowing of ideas” (Csikszentmihalyi, 1996, p.119). Flow arises through interaction with the environment and surfaces in our bodies, so understanding “speaks in us rather than [we speak] it” (Merleau-Ponty, 1995, p.212). In this way, creativity emerges bodily, as “We never come to thoughts. They come to us” (Heidegger, 1971, p.6). Thought bubbles up from inside, a physical sensation of “drawing, as of water from a spring” (Heidegger, p.73). We walk, we think, we write in a state of flow experience, part of which involves lifeworld shifts in sense of time and self.

These teacher-conversants feel lived senses of time and self specifically. Holly in particular addresses lived time (rather than clock time): “sometimes the change in light is our only indication that we’ve been walking for a while and should head back. I think there’s definitely a connection between the relaxing, calming effect that walking has on me and losing time.” While walking, Holly gets lost to find herself, transcends time to unwind words. Annalee, too, finds herself losing sense of time and self while walking, expressing that she tends to “focus in” when running.

With this feeling of distorted time comes intense focus, as Csikszentmihalyi (1996) suggests. Traci comments that every thing seems amplified and vivid, “even the noises. [...] you hear the birds, you hear the bugs, you hear all those things. [...] Out here you see the... the lily pads, and the way they’re arranged. [...] just stuff that you don’t see elsewhere...” Traci observes colors, too: water lilies “pink, pink and purple, and bright like that.” Holly notices that “our steps ended up synchronized,” and she points out that “nature actually is quite loud—bugs, frogs, footsteps—it’s never totally silent. It’s almost like you don’t notice the separate sounds until you really stop and listen, though.” Walking enables slow, deep listening: unravelling sounds, differentiating details, we may find ourselves in synch with the lifeworld and other creatures in it.

Alyx discusses deep engagement, immersion in activity, stating “I was creating something and I lost myself in it.” Intentional movement allows Alyx to lose time and self in creativity. She reminds, however, “I want to be clear that there’s two different [senses of] ‘losing yourself’ at play here. There’s losing yourself

in the moment, and then losing yourself as a person, as an individual.” The creative loss of self-consciousness Alyx describes is not losing one’s-self. Rather, she is lost and found, disengaging to engage. Participants speak about the lived experience of creative flow and its perception of time and self. Their writing reveals another layer of meaning, however, in terms of the creative flow meditative walking generates for these teachers: a poetizing of experience.

Finding Poetry

Focusing while walking, the teachers in this study notice more, relax into movement and meaning-making, writing, and observation. Although I do not prompt them to do so, each writes poetry. For these teachers, as for the transcendentalist walking poets, the movement of the body “makes composing poetry into physical labor” (Solnit, 2001, p.272). An impact of walking outdoors can be intensified creativity, according to Louv (2005), who provides a list of people who found inspiration in nature, including Joan of Arc, Jane Goodall, John Muir, Mark Twain, T.S. Eliot, E.O. Wilson, Thomas Edison, Eleanor Roosevelt, and Beatrix Potter (pp.91-92). In these teachers’ journals, the rhythm of walking opens a parallel rhythm of words, producing poems.

Holly reflects on a toad, wondering whether it

...is simply
content
to sit in the cool shade
of the autumn leaves and
enjoy life.

Annalee and Traci write “found poems” in which they noticed vibrant colors, sights, and sounds. A found poem arises from collections of words, images, or impressions to create a cohesive impression of a moment. Alyx, too, experiences creative, poetic flow, describing, inspired, the colors of a relationship:

Our moments, memories,
shine bright pinks,
vivid blues,

exuberant oranges...
like beams of light
they call to me.

The world calls, and these walking writers respond with poetry.

Poetry, according to Heidegger, projects us deeply into surroundings and connects us with others. As such, "Projective saying is poetry: the saying of the world and earth, the saying of the arena of their conflict and thus of the place of all nearness and remoteness of the gods. Poetry is the saying of the unconcealment of what is" (Heidegger, 1971, p.71). Poems, for these teachers, reveal the world in authenticity and creativity, in intersubjective truth, brought about through body flow.

The simple act of moving meditation – walking with intention, journals in hand – seemingly opens a creative flow that allowed these teachers to write poetically and reflectively. They have thought and have written about teaching, too, considering implications for learning and engaging their students in creative movement, allowing deeper consideration of our question: *What is the lived experience of moving meditation for finding creative flow in thinking, writing, and, perhaps most importantly, teaching?*

Creative Wholeness: Pedagogical Implications

Being a teacher, for these participants in these moments, means seeing students in wholeness, being themselves in wholeness, and looking at the world in wholeness. Their journals are products of intentional, reflective movement, and they reveal the noticing that shows this connection-making. Movement meditation is one way to take care of oneself, to become silent, centered, and whole in a busy, chaotic world; the "me time" of body practice connects them to themselves and enables them to care for students in wholeness. Alyx expressed this well, saying:

... So we take grammar out of instruction, and we look at the writer holistically and look at all the kid is doing. [...] Physical health versus mental health, and you as a teacher, you as a person. I think it's all interconnected and we need to pull back and look at the big picture and sort of go from there. [...] So first we have to take care of

our physical self, and after that I think things just kind of fall in place.

Alyx cares for herself to serve others; she teaches grammar in context to better teach writing. She steps back, looks around. She addresses the world as a whole, students in wholeness, cares for herself in mind-body wholeness in order to better care for others. She stops teaching lessons and starts teaching students.

In order for students to be successful, grow, and learn, teachers must not just inform them, but care for them in safe spaces, fostering confidence and creativity. One way to do this may be through time spent moving in nature, using all their senses, learning by doing. Louv (2005) cites studies showing the kind of trial and error and unstructured time possible through bodily play in nature helps us overcome fear, build confidence, and problem-solve in ways that involve “making and collecting meaning” (p.87). Physical and mental self-awareness can allow creative meaning-making. In response to this notion, Traci takes students outside to walk the cross-country course when studying transcendentalism, Holly allows students to read and write on the lawn, Annalee encourages walking for thinking and writing.

Education, Leonard explains, “provides not just cognitive meaning but a way of walking, sitting, standing, and relating to the world,” a “guidance in being, rather than merely doing” (2001, p.249). By being writers embodied, as models for their students, Traci, Holly, Annalee, and Alyx show students how to be writers. Likewise, “learning isn’t something we can do for (or to) our students. Learning requires an act of initiative on their part. We can only create conditions in which learning can happen. Reflective practice that produces writing can help those conditions by encouraging students to ask questions, to notice and wonder and connect and inspire,” and also “to stay wide awake in life (Calkins, 1994, p.484).

Writing is a kind of thinking, one that allows us to discover what we know and who we are. Similarly, intentional movement practice is a kind of thinking, one that more deeply connects us to who we are, so that we are more fully able to see our place in space and mediate our relationships with others: family, colleagues, students, teachers. As Alyx suggests, taking care of one’s physical self better enables all other kinds of care. When things “fall into place” and

teaching becomes “guidance in being,” as well as “condition creating,” then teachers may experience a sense of wholeness and alertness—of person and of practice.

This movement through self-consciousness, past being stuck, “the ability to get past our social personas” according to Reid (2002), is “an important component of flow—the mental state associated with peak athletic performance. By liberating ourselves from concern about what others expect of us, we are better able to focus on what we are actually doing, and to be who we really are” (p.29). Not only is a flow state associated with athleticism, but also it manifests in moments of peak creativity, as Csikszentmihalyi (1996) shows. Teachers who creatively honor students in wholeness help them move through frozen fear and become creative agents.

Teaching as embodied beings is creative, too. Van Manen asserts “Researchers and theorists tend to forget that pedagogy is an embodied practice and that pedagogical research and theorizing, too, are pedagogic forms of life” (1997, p.139). Teachers are bodies who teach student bodies. Likewise, because we cannot separate researcher from research, teachers who are also researchers see through the lens of pedagogical need.

Moving Beyond: Future Directions

I have begun this work by wondering about the connections between my mind and body when I move to find creative flow; I have continued this work through a brief review of the literature on movement and flow, and I have collaborated with teachers of writing in movement practice to explore the question: *What is the lived experience of moving meditation for finding creative flow in thinking, writing, and teaching?* Still, I do not have a clear answer, but I am moving toward richer description.

Bradley calls for descriptive research to investigate the power of movement for learning because it “takes place in a multi-modal, highly sensory, creative, and generative context for learning, and it also requires practice, reflection, and refinement of skill. Dance education research can, should, and must demonstrate that when children move, they learn. We know this; we see it every day. We can’t prove it except by living it, reflecting on it, and writing about it in depth” (Bradley, 2001, p. 35). As a practitioner of movement for my own learning, I know that when I move, I learn, I compose. In my

research writing as well as in creative writing, I draw from my physicality as a source. To maintain focus, I must live, embody, and be grounded by my questions. Merleau-Ponty asserts “We ourselves are one sole continued question, a perpetual enterprise of taking our bearings on the constellations of the world, and of taking the bearings of the things on our dimensions” (1964b, p.103).

Phenomenology places me directly in a process of myself, lived experience, philosophical inquiry, and the world, in that “First an idea interests me. Then I put it in my head and allow it to germinate for a while. [...] Next, I try to organize this raw material. Attempt to discover its essence, its true meaning, what it is all about” (Sheehan, 1998, p. 14). I must live in my questions, since “If you would write the truth, you must first become the truth” (Sheehan, p. 14). I must also recognize the incompleteness of my interpretation because “writing is never easy. And no matter how well done, never to one’s satisfaction” (Sheehan, p. 15). I live, reflect, exchange ideas with others, and write about this lived experience, not only to enhance my own understanding and practice, but to expand the understanding of others: those teachers who explore these questions with me, and perhaps my readers, as well.

Interpretive phenomenological knowledge “is not subjective; it is intersubjective” (Merleau-Ponty, 1964a, p.10). As such, the teachers with whom I explored these questions and I generated an intersubjective awareness of movement as a source for writing together – as teachers and writers. I have endeavored to describe this phenomenon as reflective lived experience – this includes the lived experience of the philosopher-researcher and that of others. Phenomenological research work fixes, contextualizes, and represents *Dasein* – Being, or more accurately translated, “being there” – in a way that engages us, reader and researcher alike. It is open to interpretation, and serves to “awaken a sense of wonder about the order of what is ordinary” (van Manen, 2005, p. 49). This sense of Being, *Dasein*, acknowledges the past, present, and future; it is contextual and relational. It is life as it is experienced; it is knowledge situated and contextualized in the particular: in this case, four teachers of writing and myself, walking and writing together. Like body motion and practice, inquiry, teaching, thinking, and writing are always open to revision and refinement. There is still more to learn.

Given this, it is important to acknowledge that this work is always already incomplete and leaves me with more questions rather than answers. Future directions may move toward the lived experience of other particulars: of student writers, other teachers, with other kinds of movement practice, in other settings, with other pedagogical tools. Even as the question frames the research, it also shapes the researcher. As such, I continue to dwell in my question and continue to wonder: *What is the lived experience of moving meditation for finding creative flow in thinking, writing, and teaching writing?*

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Creation between two minded-bodies

Intercorporeality and social cognition

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Abstract

My aim here is to describe how meaningful communication is generated from embodied interactions between the self and the other. In order to do so, first, I revisit and clarify Merleau-Ponty's notion of intercorporeality based on his texts. Intercorporeality is formulated as the reciprocal perception-action loop between the self and the other. Perceiving the other's action prompts the same action in the self (e.g., contagious yawning), or its possibility (e.g., smiling), and vice versa. It is the process underlying the understanding of intentions in another's actions. Then, I extend the notion of intercorporeality from the enactive perspective. Since we immediately grasp the intention of another's action through perceiving it, that action appears as such that affords us to react naturally in response. Thus, intercorporeality unfolds as the embodied interaction of action-reaction, which at a certain moment overrides the individual's intentions and gains its own autonomy. It is through this process that intersubjectively meaningful communications are created.

Keywords Intercorporeality, Social cognition, Embodied interaction, Behavior matching, Interactional synchrony

Introduction

My aim in this paper is to revisit Maurice Merleau-Ponty's notion of intercorporeality (*intercorporéité*) and reconsider it in the context of current research on social cognition. It is well known that the theory of mind (ToM) has long been a central issue in the field of social cognition, and within the theory itself there has been debate between proponents of the theory theory (TT) and those supporting the simulation theory (ST), regarding the nature of our ability to understand the other person's mind (Davies and Stone, 1995; Doherty, 2009).

From the phenomenological perspective, the subject of social cognition belongs to the realm of intersubjectivity. However, before discussing social cognition as a problem of intersubjectivity it should be reconfirmed that current theories of social cognition lack the perspective of embodiment (Gallagher, 2005; Gallagher and Zahavi, 2008; Fuchs and De Jaegher, 2009). Both TT and ST perceive the other person's mind as something private and beyond observable bodily behaviors; therefore, one must employ theory or simulation to approach it. As Gallagher appropriately points out, "both theory theory and simulation theory conceive of communicative interaction between two people as a process that takes place between two Cartesian minds" (Gallagher, 2005, p. 211).

Long before ToM, Merleau-Ponty (1964/1951) clearly indicated that this point would be a stumbling block in the field of social cognition. Examining an infant's relationships with other people, he questions how social understanding becomes possible for an infant if the others' minds are invisible from the outside and accessible only to themselves, as presumed in classical psychology. Moreover, he refers to the notion of intercorporeality and attempts to give an alternative account of the problem of the other mind. In this paper, first, I clarify the notion of intercorporeality based on Merleau-Ponty's text. Then, I will develop the notion in line with two key ideas – "behavior matching" and "interactional synchrony" (Bernieri and Rosenthal, 1991). My basic attempt is to re-describe the social cognition as a creative process between two lived bodies.

Merleau-Ponty's notion of intercorporeality

Considering the problem of social understanding, Merleau-Ponty urges us to change our view of the mind—"We must abandon the fundamental prejudice according to which the psyche is that which

is accessible only to myself and cannot be seen from outside" (Merleau-Ponty, 1964/1951, p. 116). Then, he focuses on the relation between one's own body and that of the other to illuminate intersubjectivity in an alternative way. Here I quote three related passages.

- 1) In perceiving the other, my body and his are coupled, resulting in a sort of action which pairs them. This conduct which I am able only to see, I live somehow from a distance. I make it mine; I recover it or comprehend it. Reciprocally I know that the gestures I make myself can be the objects of another's intention. (Merleau-Ponty, 1964/1951, p. 118)

To understand this passage, it might be helpful to consider the example of yawning. It is a common experience that we cannot help yawning when we see someone else yawn. The self perceives the other yawn and "live somehow from a distance," resulting in the same action of yawning, which pairs "my body and his." In other words, the self lives another's action through its own body by perceiving it. In *Phenomenology of Perception*, Merleau-Ponty gives an example of a baby to describe what one lives through the body in perceiving another's action.

- 2) A fifteen-month-old baby opens his mouth when I playfully take one of his fingers in my mouth and pretend to bite it. ... "Biting" immediately has an intersubjective signification for him. He perceives his intentions in his body, perceives my body with his own, and thereby perceives my intention in his body. (Merleau-Ponty, 2012/1945, p. 368)

A fifteen-month-old baby, as soon as he perceives the adult's action of biting, echoes the same action even though he does not know whether his face structurally corresponds to that of the adult in front of him. The baby pre-reflectively acknowledges through his body (that is, through his motor capacity) the adult's intention of biting, and as such the intention to bite is shared intersubjectively between the baby and the adult. The following passage refers to this point.

- 3) Communication or the understanding of gestures is achieved through the reciprocity between my intentions and the other person's gestures, and between my gestures and the intentions which can be read in the other person's behavior. Everything happens as if the other person's intention inhabited my body, or as if my intentions inhabited his body. (Merleau-Ponty, 2012/1945, pp. 190–191)

The word “gestures” in this passage could also be read as “actions.” There is reciprocity between my intentions and another's actions, and between another's intentions and my actions. Consider again the baby's case: after perceiving my action of biting, the baby carries out his own intention to bite. The action occurs as if my intention inhabited the baby's body. And conversely, as seen in the case of my contagious yawning, the action occurred as if another's intention inhabited my body. Here, an example of smiling can also be considered. Generally, smiling is not as contagious as yawning. However, when I come upon someone's innocently smiling face, I may feel that the muscles around my mouth are about to mimic the same facial expression, even though I do not actually smile (Schilbach Eickhoff, Mojzisch and Vogeley, 2008).

Thus, now it is possible to understand the notion of intercorporeality, as shown in Figure 1 (Tanaka, 2013, p. 103). Intercorporeality contains a perception-action loop between the self and the other. The self's perception of the other's action prompts the same action in the self (like yawning) or the action's possibility (like smiling). Conversely, the self's action prompts the same action, or its possibility, in the other's body. Merleau-Ponty expresses this type of relation between the self's body and that of the other by stating, “each one of us [is] pregnant with the others and confirmed by them in his body” (Merleau-Ponty, 1964/1960, p. 181). Therefore, it is understandable that intercorporeality is also referred to as “carnal intersubjectivity” (*intersubjectivité charnelle*). Merleau-Ponty aimed to reformulate intersubjectivity not as a problem of communication between two *minds*, but between two *minded-bodies*.

In terms of social cognition, through this reciprocity between bodies, one can directly grasp the intention of another's action. For the self, to perceive another's action is potentially to perform the same

action. Thus, it is through one's motor capacity that one understands the meanings of the other's action (Kono, 2005). Our basic

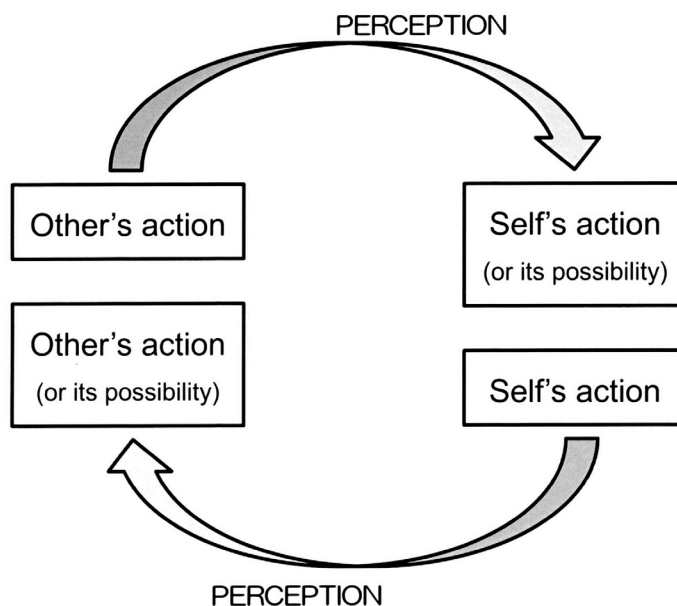


Figure 1. The structure of intercorporeality

ability to understand others is perceptual, sensorimotor, and non-conceptual (Tanaka, 2013). The most primary form of social understanding is to grasp directly another's actions through one's own body, and to find one's own possibility of actions in another's body. This understanding precedes the theoretical inferences or inner simulations put forward in the theories of mind.

Intercorporeality as behavior matching

Since Merleau-Ponty's death in 1961, many empirical cases have been reported in the fields of social and developmental psychology that support the notion of intercorporeality. The following cases are well known in these fields:

- Reflexive crying (Simner, 1971): Newborn infants have a strong tendency to cry in response to another newborn's crying. It is said to be the earliest stage of empathy.

- Neonate imitation (Meltzoff & Moore, 1977): Newborn infants imitate an adult's facial expressions, such as opening and closing the mouth or sticking out the tongue.
- Matching in vocalization (Capella, 1981): In dyadic interactions, infants consistently match their vocalization in timing and duration to those of the mother.
- Postural congruence (Schefflen, 1964; LaFrance & Broadbent, 1976): During communication in pairs or in a group, a similarity in participants' postures is often observed (e.g., crossing the legs, propping one's head, and leaning back).
- Motor mimicry (Bavelas, Black, Lemery & Mullett, 1986): When one occasionally comes across another's emotional expression (e.g., wincing for pain), he or she mimics the same movements, including facial expressions.

Similar to contagious yawning, these cases involve our natural tendency to imitate the others' actions. This tendency is observed not only in newborns but also in adults, and it includes a broad range of nonverbal behavior such as facial expressions, paralanguage, postures, gestures, movements, and mannerisms, most of which are unintended and non-conscious (see Nagaoka, 2006, for a review). In all cases, more than two people show a similarity in nonverbal behavior, especially in bodily actions, which Bernieri and Rosenthal (1991) comprehensively conceptualize as "behavior matching."

It would be appropriate to refer to the mirror neuron system in this context (Murata, 2005; Rizzolatti and Craighero, 2004). As is well known, mirror neurons are a special type of neuron that are activated when one performs a specific movement and observes someone else performing the same movement. Neurons in the brain of an observer reflect the action of another, as if the observer were acting in the same way. In fact, it is considered that the primary function of these neurons is to understand the meaning of another's action (see also Rizzolatti and Sinigaglia, 2008). As seen above, perceiving another's action does not necessarily provoke the same action (like smiling); however, it draws out the possibility of the action in the self's body, that is, "potential behavior matching." The activation of mirror neurons primarily appears to correspond to this latent behavioral process. From my viewpoint, the mirror neuron

system is one of the neural correlates of intercorporeality: the neural basis for the perception-action loop between the self and the other.

As the mirror neuron system is considered to be the basis of empathy (Gallese, 2001), it is reasonable to think that the aspect of intercorporeality that appears as behavior matching forms the underlying process of empathy. Empathy is generally defined as understanding the other person on the basis of the vicarious experience of that person's feelings, perceptions, and cognitions (American Psychological Association, 2007). Behavior matching, whether it remains potential at the neural level or becomes actual at the behavioral level, offers an opportunity for a person to live the same intentionality of the other by experiencing the same action or its possibility: *at what* the other laughs, *for what* the other distorts the face, *to whom* the other speaks in a cheerful tone, and so on. Shared intentionality between two minded-bodies makes empathy between the self and the other possible.

However, it is necessary to add that the empathy which we discuss here along the notion of intercorporeality also includes a more profound aspect. When the perception-action loop between the self and the other appears as behavior matching, especially as unintended and non-conscious mimicry, the accompanying feelings or emotions might not belong to the independent mind in a strict sense. For example, consider the case of reflexive crying. It is clear that crying newborns may share a certain emotion, but it would be difficult to know whose emotion it derives from originally. There is a sort of empathy that does not derive from one particular individual but from the "between" of the self and the other.

This phenomenon might be beyond what can be described through the notion of "empathy," since it is difficult to trace whose feelings belong to whom. For the same reason, "emotional contagion" (Hatfield, Cacioppo, and Rapson, 1993) is not a suitable term either because the concept of contagion implies that something is transferred from one person to the other. For example, consider the audience members in a concert hall listening to the music in identical poses as if mirroring each other. They certainly share a similar emotional state and intentionality of consciousness toward the music. In this case, both the self and the other appear to merge into the same impersonal emotional state. Here I would like to add that Merleau-Ponty also stated, "He and I are like organs of one single inter-

corporeality” (Merleau-Ponty, 1964/1960, p. 168). Intercorporeality includes an emotional state that belongs to “we.”

Intercorporeality as interactional synchrony

With a focus on the nonverbal behaviors of interpersonal communication, intercorporeality appears not only as behavior matching but also as a meshing of each other’s actions, which is formally termed “interactional synchrony” (Bernieri & Rosenthal, 1991). Synchrony is the concept that “describes the coordination and timing of movements and includes simultaneous movement, tempo similarity, and coordination or smoothness” (Trees, 2009, p. 257). In communication research, behavior matching and interactional synchrony (simply, matching and meshing) are generally considered to be two basic types of interpersonal coordination that occur in social encounters with others (Knapp and Hall, 2010).

Similar to the case of behavior matching, various cases of synchrony are also reported in the fields of social and developmental psychology. According to the classical findings, two-week-old infants are also able to synchronize movements of their hands, head, and legs to an adult’s speech patterns (Condon and Sander, 1974). A similar coordination is also seen between adults: the flow of movements in the listener rhythmically corresponds to the speaker’s vocalization (Kendon, 1970). Thus, from the very early stage of development before ToM is established, the other’s action is perceived as something meaningful that provokes a related reaction in the self. Social perception requires us to understand it in relation to action.

Synchrony constitutes another phenomenal aspect of intercorporeality because the perception-action loop between the self and the other does not always appear as mirroring behavior. Rather, it appears in much larger part as embodied interactions of action and reaction. Perceiving the other’s action, we immediately grasp the intention through our motor capacity and react in response to that intention. In our daily interactions with others, we more often show a meaningful reaction than take a similar action. For instance, if a speaker lowers the voice and starts to whisper, the listener will naturally lean closer toward the speaker to identify what is being said. If an interaction partner hands a note to the other, the other will hold out the hand to receive it without deliberation. The reaction to the previous action then induces a subsequent reaction, and thus,

the process continues. In other words, we mesh the flow of embodied actions with one another in communication, as if we were playing music or dancing together. Interactional synchrony is this type of well-timed and meaningful interpersonal coordination, the basis of which is the rhythmical circulation of action and reaction between the self and the other.

It is important to add that this circulation is based on the perception of each other's action. From the enactive point of view, perception is not a process of passively receiving stimuli from the environment. On the contrary, it is a process of exploring possible action toward the environment based on embodied skills (Noë, 2004). Perception itself is a potential action. In the context of interpersonal communication, therefore, the other's action is perceived as one that affords the self to react in a certain manner. Conversely and in turn, the self's action is perceived as one that affords the other to react in response to it. The self and the other reciprocally seek the potential action through each one's perception, as a result of which the "interaction" is created. This view coincides with the idea of "enactive intersubjectivity" proposed by Fuchs and De Jaegher (2009), who also try to develop the notion of intercorporeality.

Embodied interaction that is experienced as interactional synchrony is in itself intersubjectively meaningful. Consider the case of an improvisation of jazz music. At a certain moment during the performance, the synchronized interaction between players gains an autonomy as if it has a life of its own, outside of which each player would perform differently. As a result of this moment of emergence, they create a new and one-time-only tune through which the players comprehend each other. Thus, through the process of interactional synchrony, the other and the self co-experience the emergence of meaning, which does not necessarily take concrete forms. It often appears as various implicit moods of the interpersonal field, such as convivial, collaborative, cohesive, confrontational, and competitive. These moods comprise the context of social understanding, in which the self and the other come to understand each other mutually in an explicit way. As was shown in the case of newborns who synchronize their movements to adults' speech pattern, embodied interaction of action-reaction precedes our ability of social understanding based on social norms and rules, and also underpins it. The notion of intercorporeality opens up the possibility of reconsidering our so-

cial understanding, not as a communication between two Cartesian minds, but as a creation between two minded-bodies.

Concluding remarks

Thus far, I revisited Merleau-Ponty's notion of intercorporeality and tried to lay the foundation for social cognition through it. Unlike current theories of social cognition that assume the other person's mind to be private and hidden, Merleau-Ponty stressed the primal bodily resonance between the self's body and that of the other. The self and the other can directly perceive intentions involved in each other's actions, and thus can understand the meaning of them. As is discussed above, intercorporeality contains a perception-action loop between the self and the other. It appears as embodied interactions in two closely connected but different manners, that is, behavior matching and interactional synchrony. The former serves as the basis of empathy, and the latter produces various implicit moods of the interpersonal field. Providing descriptions of both patterns of intercorporeality, it is suggested that the most basic process of social understanding is a creation of meaning through embodied interactions. The self's body and that of the other are engaged through perception and action, and both begin to participate in "between", outside of which the self and the other would feel and think differently. The impersonal emotions, moods, atmospheres and ambiances that are created in "between" may offer implicit contexts, within which the self and the other construct explicit mutual understanding through verbal communications. As is implied in the etymological sense of the word "communication", the possible range of social understanding would be what can be made common between the self and the other. Intercorporeality that appears as embodied interactions is the most fundamental condition for such commonality.

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A creative designerly touch

Nurturing transformation through creativity in the meaning-mattering of design processes

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Abstract

Creative methods can nurture meaning-making and reframing activities during a design process by supporting designers in externalizing and sharing their experiences and observations from field studies and transforming them into new insights. In this article we demonstrate how the method, Object theatre, can be applied as a meaning-making activity and we coin the term 'meaning-mattering' based on the theories of Heron & Reason (2006) and Barad (2007). The meaning-mattering merge the designerly way of thinking and working with creativity to bridges the gap between the experiential knowing obtained through field study observations and the propositional knowing of conceptual reflection as the onto-semantic configuration of Object theatre allows direct verbal and tactile references to be made during the dialogue among designers. This meaning-mattering practice can in a creative manner effectively support the novel development and refinement of both the problem formulation and the future solution.

Keywords Creativity, field observation, meaning mattering, designerly ways of thinking and working

Introduction:

In this article we focus on the capacity of creative methods to nurture meaning-making and reframing during design processes. Meaning-making and reframing of the existing conceptual comprehension is important in a design process as it concerns “the transformation of existing conditions into preferred ones” (Simon 1996, p. 4) and focusing on the meaning of things supports the creation of value (Krippendorff, 2006), while developing and refining both the formulation of a problem and ideas for a solution iteratively (Dorst & Cross 2001). Similarly, but within creativity research, George (2007) argues that creativity is a fundamental driving force of positive change. This is supported by Amabile et al. (2005) who argue that it is the novelty within the ideas, which distinguishes creative ideas from basically well-completed ideas. We address the nurturing and facilitating capacity of creativity from a theoretical perspective with Heron & Reason’s extended epistemology of *four ways of knowing* (2006). This will lead to concentrating empirically on the transformation that occurs in the meaning-making process from ethnographic observations into new insight within a design process. We will illustrate and discuss this point in regard to specifically how one creative method, Object Theatre (Strand 2014b), can be applied as an involving, rich and effective method to enact a placement (Buchanan 1992) in the design process, which in effect makes the reframing possible. Our claim is that designers can, based on ethnographical data, embrace the complexity of wicked problems (Rittel 1972, Rittel & Horst 1984) and develop great insights during a meaning-making process, if the process consciously is supported and nurtured by creative methods drawing on other ways of knowing. We point out that the novelty of transformation in developing new conceptual comprehensions must be nurtured by the affordances of creative methods to embrace the designerly way of working and thinking and to interweave analysis into synthesis.

The reflexive practice of design

Designers designerly way of working and thinking is a term or phrase, which describes how designers are reasoning in the process of design (Lawson, 1980; Cross, 2006). Both Lawson and Cross build on Schön’s theory of a reflexive practice (Johansson-Sköldberg et al. 2013). According to Schön designers engage as *reflective practitioners*

as they listen and respond to the situation (Schön 1983, p. 78-79). This is in line with Barad (2007), who argues that any construct of meaning is an onto-semantic construct and that any process or practice - whether it being a design practice, a learning process, a cooking practice for that matter is a *material-discursive practice*. The ontic (material) and the semantic (meaning) and the material and the discursive are not separate aspects of a meaning-making process: "The relationship between the material and the discursive is one of mutual entailment." (Barad, 2007: 152). Therefore meaning-making processes are always also *meaning-mattering* processes.

Ethnography in design

The implementation of ethnography into design became very popular in the late 1990s (Wasson 2000), due to its methodological approach (Blomberg, J. et al. 2003). Barth elaborates on this in an interview on the essence of ethnography: "You want to go there with your mind as open as possible. You want to be surprised and you want to let yourself be surprised... wonder what it is like." (Barth in Sperschneider & Bagger, 2000 p. 68) The wondering here presented of *what is it like* is closely related to the practice of designers in their effort of understanding *how could it be*. We would like to argue that part of the found similarities in the disciplines of ethnography and design is rooted in the use of creative approaches. However, the traditional ethnographical account was descriptive with a high level of detail (for instance as thick description) by elaborating on the conducted observations. The ability to observe these naturally occurring situations and practices are widely credited with helping manufacturers identify new and important product directions (Wasson 2000), though the format was challenging for the creative process of design. The thick descriptions should be replaced with alternatives, which fit the conditions of design, while remaining the richness of the observations. This challenge was addressed in a workshop, U-CrAc, with theoretical inspiration from Heron & Reason (2006) and their extended epistemology of *four ways of knowing* (2006: 183-184).

Four ways of knowing

Heron and Reason (2006) acknowledge the challenge, described above, of grounding worthwhile actions (and designs) in rich ex-

periential data like those obtained from ethnographic fieldwork. They point out that common understandings of knowledge practices are missing crucial links to ensure this bridging. As a manner of affording this they introduce an extended epistemology of *four ways of knowing* (2006: 183-184). 'Extended' because the epistemology here reaches beyond the primary theoretical propositional knowledge of academia (2006: 149) and encompasses experiential and aesthetic forms of knowing. The four ways of knowing are (Heron & Reason, 2006: 189):

Experiential knowing – which is “knowing through the immediacy of perceiving through empathy and resonance”.

Presentational knowing – which provides “the first form of expressing meaning and significance through drawing on expressive forms of imagery through movement, dance, sound, music, drawing, painting, sculpture, poetry, story, drama, and so on”.

Propositional knowing – which is “knowing through ideas and theories, expressed in informative statements”.

Practical knowing – which is “knowing expressed in skill, knack or competence”. This is thus knowing ‘how to’ do something. Practical know-how consummates the other three kinds of knowing and they are four phases in an emergent process.

To include the phase of presentational knowing in the design process is crucial because it enables an emphatic and immediate understanding of the observations. Throughout the extended span of the material-discursive practice of design the embracing of these four ways of knowing is an important part to nurture and facilitate creativity. Next, we turn to engage with one creative method, Object theatre, to illustrate how experiential and presentational knowledge can be included in the cycle of the design process.

Object theatre - a creative meaning-mattering mode of articulation

Object theatre¹ (Strand 2014b) is an articulation form belonging to the methodology of Material Storytelling (Strand 2012). The prac-

tice of Object theatre is inspired by the therapeutic method of Sand-play (Kalff, 2003) by applying a material storyboard; a 3D sandbox and a large collection of artifacts to articulate or *configure* meaningful stories - or meaning-mattering-practices – of professional practices of any sort (Strand, 2014a: 325).

The term (re)configuration comes from Haraway's (2008) notion of the presence of figures; "Figures collect the people through their invitation to inhabit the corporal stories told in their lineaments". (Haraway, 2008: 4). Figures are onto-semantic knots, which means that they are material-discursive constructs of articulation.

The meaning-matter reconfigurations of an Object theatre process bridge the gap of experiential knowing and propositional knowing in the cycle of the four ways of knowing from above. In that bridging the onto-semantic configurations affords tacit knowing – comprehended as the 'not yet embodied knowing' (Thorsted 2013) - to be embodied aka materialized and placed in a manner that secures the richness of the ethnographic observations (the experiential knowing). In doing so, further, Object theatre facilitates the reframing of the initial comprehension of the given problem.

Object theatre was employed in a collaborative design process at Aalborg University and next we turn to take a closer look at this process to empirically underpin why such endeavours are crucial part of design processes and designerly ways of thinking and working.

U-CrAc – configuration of field observations

Empirical observations were conducted in 2013 during a three weeks workshop named U-CrAc - the abbreviation of User-driven Creative Academy (Poulsen & Rosenstand 2009). Seven educations (Experience Design, Interactive Digital Media, Industrial Design, Entrepreneurial Engineering, Cultural Communication, Occupational Therapy and Nursing) with a total of 142 students were divided into 22 interdisciplinary groups, which each were given an individual assignment. These assignments had a combination of IT, experience and health dimensions and were provided by both local companies and public organizations, which in the following will be entitled clients.

An Object theatre workshop was initiated after 2 days of field-work for the groups to embody the field observations.



Figure 1: A photo of the practice of selecting and placing artifacts during the Object theatre process at U-CrAc 2012.

In the following we focus on the selected case study by first presenting the client's design brief before focusing on the meaning-mattering situation within the particular group.

The brief of the client

The client is a private medium-sized company, which offers way-finding systems for public institutions (hospitals & educations), large companies and housing associations. The client asks the students to focus on a specific solution within their portfolio – a way-finding / directional service system, which consists of both material components and a digital service. The use-case of the way-finding system is: a visitor arrives at a large building, which he / she is unfamiliar with. At the entrance the visitor meets with a cartoon figure representing the service. Here the visitor can scan a QR code with any QR scanner App at the smartphone. This provides the visitor with way-finding instructions for the desired location. The way-finding system would tell the visitor where to go according to the position of the scanned QR code. The visitor must strictly follow the given directions to the desired destination, but if the person makes a wrong turn, then the visitor has to go back to a previous point or even back to the cartoon figure to restart the journey.

The company registers that the majority of the people passing the cartoon figure do not notice it even though it is the size of humans. This implies that only a few of the potential users see the available service and fewer actually take it into use. The company presents the

the client defined it, is challenged as the students (S1, S2) create a more nuanced representation and understanding of the problem.

1. S1: Or this telescope [*representing the client's perspective*] looks past him as he [*the frog, which represents the user*] is looking for direction.
2. T.: uhhmm
3. S2: It could be the user [*holding hand over the front of the telescope and the frog*] who doesn't see what ... from back here [*pointing towards the back of the telescope and waves hand forward in the viewing direction of the telescope*].
4. T: Ahhh, [*placing finger at rear end of telescope*] so this person here should actually be moved back here. [*picking up the figure and moving him behind the telescope*] He should have his eyes split, so that he could look into the both [*points at the left and right part of the telescope*].
5. S2: [*picks up the figure and places it at the original location*] If you have...the producing company. [*placing hand over the rear end of the telescope*] then they are looking out here [*spreading fingers and moving slowly towards the front*] with a certain viewpoint,



Figure 3. Student 2 picks up the frog figure and places it at the original location

6. T.: one viewpoint, jaarhh
7. S2: ...but the person here [*pointing at the frog figure*] has a different viewpoint.

8. S1: [*adjusts the figure to sit up straight in front of the telescope and waves the hand with spread out fingers in the opposite direction as before; across the telescope in the viewing direction of the frog figure*]
9. T: oohhh of course, seeing something completely different...it is interesting, very interesting point whether it is user-oriented or it is seen from the viewpoint of the producer, right?

Here the students together with the teacher and the artifacts reframe this initial understanding through realizing that there are opposite viewpoints at stake (line 7-9). They realize that the client has a perspective on the application of his product, which hinders him in seeing the true need of the users, as they are not in need of a way-finding application before they are actually lost. To take advantage of the location-based technology in the existing system the user has to be at a certain and predefined locations to scan the QR code. The students (re)orient themselves towards getting the design right - before getting the right design (Buxton 2007) - by questioning the original solution and questioning the role of the product in relation to the users' needs. The new and alternative suggestion from the students, developed with the onto-semantic configuration, calls for a more fundamental change in the design.

We claim that the creative approach, Object theatre, in the design process supported the reframing of the problem through the specificities of the mode of meaning-matter articulation and we would like to draw out three central qualities of Object theatre.

1. Externalizing through configuration

Designers have traditionally externalized their thoughts and ideas through mock-ups, sketches and models. This is an innate part of designing, because "once externalized, the ideas become 'real'. They become something that can be discussed, defined, embraced, or rejected by any number of people, and the ideas become part of a larger process of synthesis." (Kolko 2011: 16). This allows them to engage in a reflexive interaction with the situation that they externalize by letting the material "talk back" (Schön 1992) to them. Through the onto-semantic configuration of the sandbox the participants were able to externalize their observations, and both explicit and tacit ob-

servations (through the multiplex of ways of knowing afforded by the method) are canalized into the shared configuration of the observations in the process. Here the novelty that reframes the brief grows out of the affordances of the Object theatre practice of getting the participants playfully engaged.

Having the onto-semantic configuration allows direct verbal and tactile references to be made during the dialogue where rich interaction occurs in the handling of the two artifacts. The telescope illustrates with its metaphor an appeal to look outwards and engage in interaction with the users; however, the location of the green frog shows that this fails as the company 'overlooks' the actual need of the user. This is illustrated by placing the green frog right in front of the telescope, which is too close to be observed by the telescope as it is prearranged in a slightly different direction (upwards). This was articulated in the configuration of the sandbox, which enables presentational knowing to emerge into propositional knowing - the reflective reframing of the brief.

2. Maneuvering the configuration

The creative and enacted situation with hand-gestures and a material configuration turns a complex problem into something concrete, as described above, which also invites to the participants to collaboratively interact with the matter in a tactile way. The participants can simply touch the material configuration. It becomes a creative and dynamic configuration and through non-verbal negotiation also a re-configuration. The a moveable - and therefore maneuverable - artifacts (as for instance the green frog) not only enables a rich interaction, but it specifically allows different perspectives to be illustrated and negotiated, which in great detail informs the participants of the different perspectives and enable them to embody the not yet embodied experiential knowing through the engagement of the presentational knowing of moving the artifact.

3. Sharing through configuration

The collaborative meaning-mattering activity facilitated potential conflicts within the interdisciplinary group in a way that maintained the focus on the problem at hand and not on the participants with divergent views. Because of the different disciplines represented in the groups, participants got into arguments and articulated the

problem in language that came from their own discipline rather than in a shared language. However, through the process they are creating a shared understanding of both the problem at hand and hereby also the direction of the project. In this way the creative process of reframing unites the group and enables them to develop a shared goal towards which they can utilize their different competences. Object theatre enabled a tactile and nonverbal articulation of the observations and the configuration of the artifacts hold great richness as statements in the dialogue. We argue that the creative method provided the interdisciplinary team with an arena within which a shared and intuitive language emerged to overcome the language barrier as well as the differences of perceptions and perspectives. It is not a matter of democratizing the process, because conflicts can be constructive (Buur & Larsen 2010), but it is a matter of utilizing the different perspectives in a beneficial way.

Conclusion

The focus of this article was on how the crucial reframing during processes of design can be nurtured by creative meaning-mattering activities involving other ways of knowing. Insights and shared understanding can emerge from ethnographic field studies through creative methods like Object theatre and bridge the gap from experiential knowing to propositional knowing as the onto-semantic configuration of the presentational knowing allows direct verbal and tactile references to be made during the dialogue. This creative meaning-mattering practice can effectively support the novel development and refinement of the problem formulation and the future solution.

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287

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Note

- 1 The name 'Object theatre' was coined in 2011 as part of 'Material Story Lab', which is the common term coining the use of the three material story modes of the Apparatus of Material Storytelling; stories of spaces, stories of bodies and stories of artifacts. The latter was used as the workshop-platform for one of Academy of Managements 2011 conference PDW's, which was held by our

Danish colleagues Kenneth Mølberg Jørgensen and Nikolaj Klee as well as our American colleague Stephen Fitzgerald, who came up with the name 'Object theatre'.

Explore, Understand, Share and Show How

Four creative ways to use hermeneutic phenomenology to inspire human-centred creativity in engineering design

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Abstract

At our engineering research centre we have been applying hermeneutic phenomenology in a broad spectrum of projects for understanding everyday human experience. Through our work, we have experimented with and explored creative ways to 'get into' the lives of participants within the health, pharmaceuticals, education, manufacturing and local government sectors. Some of our ideas are a little unorthodox but we are discovering that they work and can provide powerful insights into the everyday 'natural' worlds of ordinary people. Finding new ways to capture lived experiences (as best we can), understanding hidden 'meaning structures' contained within them at the most primordial level, and communicating these insights *experientially* are the goals that drive us. In this paper we will share some examples of how we have combined design thinking with hermeneutic phenomenology in a four stage framework (Exploring, Sharing, Understanding and Showing How); constantly referring back to philosophical first principles to inspire new approaches and 'ways into' the life-world of real people.

Keywords Experience-based Designing; hermeneutic phenomenology; Human-centered design

Introduction

In this paper we describe the way a human science approach inspired by a hermeneutic phenomenological methodology has been incorporated into a structured program of research and teaching practices at the Experience-based Designing Centre (XbDC), within the University of Southern Denmark engineering faculty. We consider the search for meaning in things and in everyday life events to be fundamental to what it means to be human and as designers we are constantly struggling to design products, services, systems and environments that add meaning to people's lives. The internal 'processing' of experience as a rich and valuable source of information and particularly meaning, is an area of interest which design and engineering have pursued for many years (Anolli, 2005), but how to reliably access this strata of meaning has been elusive. The importance of the goal of making things more meaningful and therefore more desirable can be clearly seen in the role that 'ownership' or engendering a stronger bond to an interaction with a product or service has in designing for longevity or customer loyalty (Bate, 2007b; Fuad-Luke, 2002; Schmitt, 1999). This is the central goal that guides all of our activities at the XbDC especially within projects aimed at understanding everyday human experience for design and engineering purposes. A key theme within this paper is the manner in which we are experimenting with ways to more deeply understand the meaning contained in others experiences. In the pages that follow, we will present some of the ways we have 'captured' lived experiences (as best we can); how we make sense of or understand the hidden 'meaning structures' contained within experiences at a primordial level, and how we design ways to communicate our insights 'artistically' and experientially for designing.

The paper is structured around four 'pillars' of Experience-based Designing (XbD) (described below). This is the methodological framework (and design process) guiding our approach to research and teaching within the XbD Centre. Throughout this structure we have woven a discussion of the philosophical/theoretical material relevant to each stage of the process along with supporting empirical material and lessons from the field.

Our four 'pillars'

The Four Pillars of XbD refers to four (non-linear) stages of a methodological process of Experience-based designing that are very focused on the explication and application of *meaning* within a specified experiential field. There is an exploring and data gathering stage (*Explore*); an analysis, synthesis and understanding stage (*Understand*); a validation, collaboration and communication stage (*Share*) and a concept, prototyping, design development stage (*Show How*). These may sound as if they are discrete processes but they are in fact all non-linear, iterative and dynamic processes for developing meaning.

In each of these stages we have developed and are continually refining techniques and methods that enable us to maximize the richness contained in the information that guides our taking action (designing). We are following a clearly articulated agenda – to understand the experience of those for whom we wish to design possible mediations before we act. This means that we are always searching for new ways to get back to the fundamental experiential question – what is it like?

Applying the Four Pillars approach; what we have learned ...so far

Exploring

The *Explore* stage really starts with 'finding a way in' but even before that, as Van Manen (1997) has suggested, we need to clearly designate which experience we really want to understand, 'What is the experience of [...] like?' For example, some of the projects we have worked on include the experience of rehabilitation after stroke; visual impairment in the home; disability and sexuality; gaining a university education with severe physical disability; and others. Defining the scope of the experience is important in that its 'unity'¹ as an-experience needs to be understood by the researcher otherwise it can become an unclear mixture of different experiences. Any singularity in experience is already highly complex by its very nature so that restricting its beginning and end to an understandable scale is vital. Later in the analysis stages we will also be asking questions like, how is this fragment of data important to the experience? Without a clear idea of what the experiential focus is,

we would not be able to answer this kind of question nor the substantive question i.e. what is *it* [the experience] like?

The second key aspect of our way of ‘finding a way in’ involves the researcher undertaking an embodiment exercise. This is not a new concept² we realise but perhaps the way we utilise has some new twists. We start by designing an embodiment that will be as productive and authentic as we can manage. Firstly the researcher has an initial conversation with a *lead user* (an ‘experiencer’) who represents a group of people whose experiences in a particular setting we wish to understand (i.e. the experience of [...]). They glean from this initial contact a rudimentary understanding of the key factors (times of day, events, situations, relationships etc.) that most powerfully influence the nature of the experience being studied. The researcher uses this information to structure (design) their embodiment so that they can begin to experience for themselves the experiential world they wish to research. We refer to this as ‘priming’ the researcher’s subjectivity. Figure 1 below shows images from a number of researcher embodiments.



Figure 1: Embodiment exercises L-R: Visual impairment; Disability and sexuality; Cervical radiculopathy

Some researchers are able to undertake their embodiment for a few hours sometimes days however it inevitably leaves an indelible impression³ on their subjective view of the experience which they can then use in a number of ways. Firstly, when the researcher approaches subsequent interviews they report that interviewees seem to more readily accept them as ‘semi-equals’ – in Gadamerian terms they have begun to ‘learn the language’ of the experience (Gadamer, 1975) and participants are very appreciative of the extra effort that they have put into this work. It helps to more quickly establish rapport and empathy within interviews and observations, with partici-

pants seeing the researcher now as a collaborator who wants to understand them and not simply observe them from a distance.

After completing an embodiment the researcher needs to 'write-up' their experience in a rich phenomenological description (Walcott, 1994) which includes aspects of senses, affect, cognition and context (Coxon, 2005). The subsequent auto-ethnographic 'story' of their experience is then treated as data and included along with participant's narratives, transcripts and other textualisations of the field research. This naturally generates a significant volume of data and again emphasises the importance of the embodiment exercise as a source of 'embodied knowledge' (Varela, 1996; Gallagher, 2005). This way of 'priming' the researchers intersubjective understanding provides a strong foundation for the interpretive decisions that are an essential part of the hermeneutic analysis process that follows as well as within the remaining stages of the XbD process. The process of preparing (priming) our subjectivity, mirrors Gallagher's suggestions for achieving intersubjectivity [sic] (Ibid).

“ Prior to the possibility of knowing another person's mind in either a theoretical or simulation mode, one already requires ...an understanding of what it means to be an experiencing subject” (Gallagher, 2005, p.224)

Once the embodiment is completed and the researcher is ready to further explore the life-world of his participants, there are many ways this can be done and most of the techniques used are very familiar to ethnographic researchers. We are particularly interested in seeing how close we can get to understanding the *natural* experience through the eyes of the participants. Of course this form of direct access to the mind of another can never be fully achieved however our credo in XbD is, 'how close can we get?'

With this in mind we have been experimenting with various devices that enable participants to record aspects of their own world view without us being present. Reducing the mediation of an experience due to the presence of a researcher is always an aim that is difficult to achieve. In some projects we have asked participants to record a section of their day that is of particular interest to us – say the morning routine of bathing and getting dressed (this can be a difficult process for people with many different physical impair-

ments). Because this is a quite private event, many people are reluctant to discuss it or share with a researcher. By wearing and simply turning on the recording glasses (These are clear glasses with a very small unobtrusive video camera built into the frame: Fig 2 Left) they can capture the everydayness of the event as it happens. This recording has a number of benefits. Participants are very often reluctant to discuss private matters and tend to gloss over them in interviews as being mundane or not important. When participants re-view a video of their previous events it helps them recall details more clearly and to a certain extent, re-live the event and not simply reflect back on their mediated memory of it. The information gained in the embodiment exercise also allows the researcher to participate in a conversation about the event to tease out more depth in the re-viewing than would have otherwise been possible.



Figure 2: L-R: Video recording glasses and video playback glasses

In situations where a participant is reluctant to share the video with a researcher or there are additional privacy issues (such as toileting, sexual activities) we can employ video playback glasses (Figure 2 Right). These glasses allow the participant to view and describe the event but do not allow the researcher to participate and probe deeper. It is an interesting tool that can allow us to get closer to socially taboo topics that might otherwise be too difficult to access.

Understanding

After any ethnographic field work large quantities of data need to be analysed and there are many methods of qualitative analysis that might be considered (Creswell, 2007). The essence of the task i.e. to 'make sense' of the material and more importantly, to try to answer the question, *what does it mean?* Often because of time constraints, fine grained detail and 'hidden' material can be overlooked in the pressure to quickly reduce the amount of material and start designing activities. We have attempted to slow this process down and have adapted an approach based on Ricoeur and others foundational notion of *multiplicity* in the meaning in the texts of life (Gadamer, 1975; Geanellos, 2000; Ricoeur, 1978). After gathering field data and turning it into text we then set about exploring the meaning that is contained within them. In the sections that follow, we will present a very concise description of the analysis process we call *SEEing*⁴. Again for brevity's sake, we will begin this discussion at step 4. Steps 1-3 form part of the *Exploring* stage described above and these comprised;

- Step 1. Finding a way in (discovery) and embodiment (bodystorming)
- Step 2. Gathering field material in the form of audio, video, images, notes and observations
- Step 3. Preparing that material (sifting, sorting, turning various media into textual form) for analysis

So, in order to more deeply understand (make sense of) the experiential meaning contained within the field data (now in textual form) we begin at step 4 in the process.

Step 4: Meaning

This step is about explicating meaning; exploring the denoted; what was meant from what was said. This is one of the key moments when the embodiment exercise finds its greatest value. Each line of text, each encapsulated thought or idea is repeatedly asked, what does and could this mean? We are not forcing or looking for meaning that is not there but rather the meaning that is hidden or buried within the metaphors presented in the text. These layers of hidden⁵ meaning can only be explicated by someone who knows how to recognise these meanings and that must be either the researcher or the original author. If it is possible for both to be present and to

conduct the analysis together that is optimal however this does not happen often and so the researcher is left to draw on the experiential understanding gained in their embodiment and during interviews/observations as a basis for their interpretive decisions.

Step 4 is an inductive process and the volume of field data becomes multiplied by a factor of four or more through this process. This is a very important step within the *SEEing* process. It is where the real and deeper meanings within the experience can begin to be seen both literally in the meaning text that is generated and hermeneutically within the researcher, who in their wrestling (iterative interactions) with interpretation of the data becomes more open to other meanings as they begin to emerge. It can be (as some researchers have reported) a quite transcendent moment, where strong insights into the nature of the experience begin to emerge.

The remainder of the steps from 4 to 9 are essentially reductive processes and we will discuss these only briefly and mostly in terms of their relationship to phenomenological principles.

Step 5: Importance

This question is answered from a phenomenological perspective in terms of ‘the things themselves’ – in this case the ‘thing’ is the experience we wish to understand. So we ask – is this fragment of meaning *essential* to understanding the experience of say, visual impairment in the home? This elevates the stronger fragments of meaning that will ultimately constitute the ‘essence’ of the experience

Step 6: Physical or Meta-physical

In this step we separate meanings within the experience that were considered *essential* (in step 5) into physical (P) or meta-physical (MP) groupings. This step draws on a denoted separation between those meanings by considering parcels of meaning (words, sentences, paragraphs) that describe a physical characteristic (form, function, materiality) from those which have a meta-physical (meaning *beyond* the physical) flavour. This separation between the physical and meta-physical is useful firstly in the traditional sense of understanding issues related to usability and usage. By addressing the meaning attached to these activities however we are starting to understand aspects of embodied understanding and meaning developing out of the physical engagement. Meta-physical

meaning on the other hand has often been difficult to illuminate and in many cases can be confused with terms such as emotion or affect but can also encompass subtle cognitions such as *sense of* or *feelings about* a situation (Bishop and Scudder, 2009, p.90). In some instances a meaning statement might appear to have both characteristics – in this case it is recorded as a 'both' (B) and becomes a part of both groupings but carries with it the two different denotations described above.

Step 7: Weight

Some of our universe of meaning statements will be much more powerful aspects of the experience than others, so we apply a Likert scale of 1 to 7 (1 is low) that qualifies each piece of essential meaning in terms of its level of intensity in the experience. The scaling for physicality relates to its practical value, usability in form or function, ergonomics or aesthetics of use etc. Again we draw on the researchers embodied understanding of the experience to support their subjective judgements.

Step 8: Categories

This is a classic 'open coding' *categorisation* step where each of the meaning fragments is assigned a category name or theme name (Kelle, 2005). It is a way to cluster similar meanings together and conforms with accepted qualitative data analysis theory relating to categorization and thematisation (Boyatzis, 1998; van Manen, 1997).

Step 9: Summary narratives

Drawing on the phenomenological tradition of writing as giving form to understanding (Willis, nd; Van Manen, 1997), in step 9 we bring the (now clustered) essential and most intense elements of the experience from step 8 and turn them (writing) into expressive narratives - essentially, summaries or stories that we can use to communicate our understanding of the essences of the experience to others.

Sharing

At this point in the XbD process the interpretation phase is largely over and the researcher (and others if available) has developed insights which need to be advanced into action; in designing. The Share stage is a performative process that begins the reification of

experiential understanding. It enables collaboration with participants in a form of sharing 'backwards' - a feedback process for validating the understandings developed via workshops or other participatory methods. It allows for a sharing forwards' with clients or other stakeholders in the research using similar collaborative approaches. And it also allows for a sharing 'sideways' between concurrent projects looking at experiences that come together at a point i.e. the experience of providing therapy and a patients experience of receiving therapy. These usually take place in more extensive workshop formats

(Bate, 2007a; 2007b; Grönvall, 2013). Sharing is also performative in the sense that up until now the earlier processes of exploration and understanding have been largely internalized or phenomenal to the individuals involved, either the researchers or the participants. In this stage we move to an explicatory process where the learning from the earlier stages needs to be shared and given form. The form that this takes can be varied but may include participation in the Explore and Understanding processes as described earlier as well as the Show How stage described below.

In sharing backwards (with our participants – a form of validation process) we are revisiting the original question of 'what is it like?' by now asking participants 'is this what the experience is like ...for you?' Assuming we have achieved a close approximation and/or some adjustment is necessary (right, wrong, missing) we have the basis for moving on to sharing forward. This is about working with partners to move the understanding we have developed forward into a doing-something-about-it stage.

Showing how

Showing how begins the product, service or system development cycle. It can involve collaboration between various stakeholders such as original research participants, fellow researchers or external collaborators in workshop and various well documented generative interactions designed to bring experiential understandings to life in new forms (Sanders, 2008; Kaplan, 1998). The nature and success of these interactions is always strongly influenced by the meaning structures developed in the first three stages. From an engineering standpoint we focus our Show How process on productively linking research understandings with industry, government or other 'client'

needs that will enable the products, services or systems to be realised (in humanly sensitive ways) for the benefit of the people 'explored' in the very first stage of the XbD process.

One of the biggest hurdles we face at this stage lies in that experiential understanding is not a directly quantifiable or transferable concept. The qualitative understandings (meanings) uncovered in the EXPLORE and UNDERSTAND stages need to be shared and acted upon with an audience of stakeholders who in many instances may not have taken part in developing the experiential understanding that the researchers (and other sharer's) now know something about. We have been working on ways to accomplish this in line with phenomenological (writing, poetizing) and communications (negotiated meaning) principles. For instance, in realising that we cannot transfer our (as researchers) phenomenal understanding of an experience directly to others we need to develop ways to enable our audience to experience 'something' of what we know that is powerful enough for them to 'get it'; to gain a sense of familiarity⁶ that helps them to understand the experience in their own phenomenal way. In order to do that we firstly developed our own understanding of the experience from 'the others' life-world perspective, and now we need to *reconstitute* that understanding in the life-world of another set of *others*. When endeavouring to communicate 'an experience' we duly understand that technically this is not possible. As in the first stage of our project we understood that we could not ever fully 'know' the experience of another - so it is that we now also acknowledge that in the last step of our process, we cannot 'give' a prescribed experience to another. We can however, provide them with an empathic poetization of the experience as we now understand it and from which they might develop their own understanding – ideally, one that is in harmony with ours.

This needs to be done carefully in an inclusive, experiential manner such that the power of what has been uncovered is not lost in translating it for a non-research audience. This process of collaboration and form of communicating (Experiential presentation) is an emerging field of study and practice with many new and exciting development possibilities (Erwin, 2012, 2013) - one that is crucial to the practical success of the research outcomes. At the XbDC we are experimenting with 2D, 3D and 4D communication technologies, forms and media in order to achieve the goals described above.



Figure 3: An audience participating in an experiential presentation

Most of us will be familiar with static 2D and 3D presentation materials in the form of mock-ups, prototypes (low and high fidelity), and various 3D printed ideations. For us the excitement starts when we enter the 4D world (moving beyond the purely visual to the interactive) – this is where the audience becomes engaged or involved in the presentation so that there is a physical embodiment⁷ of the experience they encounter during the presentation. This allows an audience to develop individual phenomenal interpretations of the research findings and simultaneously bounce these against their own past experiences. This will be an easier process if they have recently ‘shared’ in the understanding developed earlier in the research project. We can then ask them to co-participate in developing design solutions that answer the design question; ‘based on our new understanding of the experience; how can we improve this experience?’. Experiential presentation is essentially about replacing a passive non-experiential research presentation with one that *speaks the world not of the world* as Van Manen suggests (1997, p.13).

Very briefly, some examples of the techniques we have used in this kind of 4D performance are; asking an audience to stand on one leg with their eyes closed to experience the sense of uncertainty that spasmodic paralysis brings; playing a loud and discordant beeping noise to randomly interrupt the presentation that simulates the intrusiveness of monitoring machine noise, blurring the presentations

imagery to replicate visual impairment, re-enacting the moment of a stroke using an animation sequence with the actual patient's emotive voice over. These are a few of the ways we have employed somewhat 'theatrical' methods to add power to the experience of understanding the experience of others. All of these methods and techniques are primarily focussed on maximising the 'buy-in' from our audience, particularly those who we would like to work with in going forward into designing things that will improve the experience of a new generation of experiencers.

Conclusion: Learning and future direction

Throughout this paper we have presented some of the lessons we have learned in applying hermeneutic phenomenological thinking in the projects we have undertaken as part of the XbD research framework. We have learned that a human science inspired approach to engineering and designing for the benefit of people is not only possible but a very powerful tool in envisioning new design opportunities. The design and industrial worlds are beginning to recognise the importance of designing for people and the role that experiences play in shaping their worlds. The work of the Experience-based Designing Centre is exploring new ways in which the experiences of people can be factored into the design process early in the product development cycle. We believe that the examples that we create and the experiential experiments we undertake are an opportunity for us to generate renewed interest in the human sciences and the role that phenomenology might play in improving our various human life-worlds.

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NOTES

- 1 We take unity to mean the identification of differentiating factors that help to define an experience's uniqueness. Husserl, Heidegger and many and others referred to focussing attention on the 'things themselves' and so we draw parameters around an experience (its unity) from the nature of the experience itself – what factors make the experience what it is? – How do we frame the experience (in time and space) so it becomes manageable?
- 2 Jones 2013 describes various body storming techniques that help researchers to embody an understanding of the other.
- 3 This reflects Gallagher's views on the neurophysiology of inter-subjectivity including the way that neural links produced in performing an activity create embodied memory of the activity as well as the debatable effects on embodied memory that mirror neurons can produce in having observed the activity.
- 4 *SEEing* is a proprietary process of qualitative data analysis developed through empirical trials by the author. A full demonstration can be seen at <http://youtu.be/Bm1HOxabgG0>
- 5 The concept of 'hidden' meaning has been much debated by a number of authors both in terms of its semiotic and psychological value (Aniulli, 2005; Gallagher, 2005; Geanellos, 1998; Searle, 1979) . Coyne (2004) balances these arguments with Deleuze and Guattari's objection, that there is no meaning greater than the parts, no higher or deeper level of meaning in the structures of language.
- 6 Having the appearance of truth. Willis (nd) refers to the 'phenomenological aha' - the moment when a researcher says to himself 'yes that is what it is really like'

- 7 This form of embodiment is referred to by Gallagher in regard to its effect on mirror neurons and the neurons governing shared representations “Such neural activations correspond to meaning that is intersubjective in the literal sense” (Gallagher, 2005, p.127).

Abductive sensemaking through sketching

A categorization of the dimensions
in sketching capacities in design

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Abstract

This paper proposes design sketching as a way to make abductive reasoning manifest and concrete. Through sketching, the abductive sensemaking leaves the domain of abstract logics and becomes part of the researchers or practitioner's reflective practice. This practice is especially evident through incorporating sketching as more than a specific technique, but also as ways of applying design thinking through acting upon the world. The paper presents sketching as an integral part of the design epistemology. Furthermore, a categorization of different dimensions in which sketching can be represented is presented. The main contribution is a discussion of whether this broader view on sketching capacities in design leaves room for further exploration into extended sketching capacities for design.

Keywords sketching, design, visualization, knowledge generation, visual thinking, abductive, sensemaking

Introduction

In recent years, the academic field of design research has had an increasing interest in the role of sensemaking in the creative and con-

structive process of scientific inquiry (Krippendorff 2006, Koskinen et al 2011,). Klein et al. define sensemaking as “*a motivated, continuous effort to understand connections in order to anticipate their trajectories and get detailed inquiries into the nature of human culture*” (Klein et al. 2006). The methods and techniques of design-oriented sensemaking varies. However, most seem to be based upon the abductive logic of reasoning (Kolko 2010, Martin 2009). Unlike most other schools of thought, the field of design research applies methods which approach the abductive sensemaking process of adopting new hypotheses as pursuing ‘what if’ and ‘why’ questions to a given problem space (Brown 2009, Nelson & Stolterman 2012 Markussen & Knutz 2013). The designerly epistemology sees the act of ‘doing’ as the foundation for acquiring knowledge and meaning. This echoes Maitlis and Hernes (2010) perspective on sensemaking as a way of reasoning about the future when confronting, confusing or surprising situations in an organizational praxis.

This paper aims to discuss and categorize the ways designers use sketching to test and challenge assumptions about both current and possible future states of the world. The categorization positions sketching as being broader than a mere set of techniques. The paper examines different expressive dimensions in which designers use sketching to think about and explore problem spaces. Finally it will be argued that the exploration of both existing as well as extended capacities of design sketching can be seen as an integral element for the epistemology of design thinking.

Designerly ways of thinking

In regards to the studies of design Nigel Cross states “*there are things to know, ways of knowing them, and ways of finding out about them, that are specific to the area of design*” (Cross 2007¹). Cross frames design thinking as a specific way of knowing about- and finding out about matters, creating one of the first framings of design as a specific epistemology. Furthermore, this is supported by an emphasis on Herbert Simon’s work on how the ontological domain of design is centered on the artificial ‘built environment’ (1969). Adding to this framing of design Richard Buchanan made an interpretation of Rittel and Weber’s concept of ‘wicked problems’ into the field of design thinking (Buchanan 1996). Buchanan showed how designers has a special way of approaching the ill-defined, contradicting, and ever-changing problems of design, by embracing the fact that the subject

matter of design is by itself designed and framed by the designer. Given its performative nature of its epistemology, design also carries a sort of ‘ontological politics’ concerning what is being made (Gaver 2012).

With Cross and Buchanan’s examinations, design thinking emerges as a distinctive epistemology for creative and solution-focused ways of exploring Simon’s ‘preferred future states’ (Simon 1969). It initiates its inquiry by framing a (often fuzzy) goal for the preferred state, creating a space to be explored instead of a clearly defined problem to be solved.

Jon Kolko (2010) emphasizes the abductive logic as being directly linked to how designers work. The abductive logic relates to Klein et al’s (2006) notion of sensemaking as an action oriented process that people automatically go through in order to integrate experiences into their understanding of the world around them. Kolko uses the notion of abductive reasoning to describe how the designer adds new sets of disparate knowledge into the existing parameters of a problem space. Through experimentation with the conditions, the designer explores the basis for claiming that a given idea ‘might’ be a feasible path to a solution. Unlike deduction or induction, abductive logic allows for the creation of new knowledge and insight through qualified guesses that are not part of the original set of premises, but are added through past experiences with related or intertwined situations.

The abductive logic’s role in design thinking sums up the designer’s sensemaking process as a phenomenological approach to use past experiences and seemingly unrelated knowledge to ask ‘what if?’ questions. Kolko describes these experiences as the marks left by the individual designers lived experience in everything designed (Kolko 2010). Furthermore, abductive sensemaking is done only through actually acting upon the world - by making some sort of expression of the ‘what if’ when we abductively add new set of data to the existing parameters of the problem.

As Cross already noted in 1982, the process of design thinking often happens in the built artificial environment - based upon the creation of artifacts (Cross 2007). However, modern design discourse does not limit itself to the view of design as aimed towards artifacts as an end-goal. With the emergence of disciplines such as interaction design (Moggridge 2007), experience design (Hassenzahl & Tractinsky 2006) and service design (Stickdorn 2011),

modern views of design thinking aim at using the processes of abductive sensemaking in areas where the end-result is not necessarily a 'product'.

But if sensemaking through design thinking is driven by abductive reasoning initiated by exploring and experimenting with the given parameters and constraints of the problem space, it seems reasonable to claim that the multitude of design fields also might adhere to a common way of, in Cross' words, *finding out* about possible solutions to the design problem. This calls for a broader definition of what the role of creating artifacts or expressions has for inferring the best explanations for the preferred future states.

The following section will seek to discuss some of the foundations for using the concept of 'sketching' as this common definition of how the designer applies design thinking in various contexts of doing.

Design thinking through sketching

Traditionally in design, the concept of 'sketching' has been approached and described as either a specific stage in the design process (Simon 1969) or as a specific set of techniques used throughout the design process - mostly represented by pen and paper sketching (Jones 1992). In a more broad perspective Goldschmidt's (1991) studies indicated that we might see sketching as a more integral and inseparable part of design thinking. Goldschmidt argues that sketching is broader than a technique or phase, since it represents the way designers reflect through the act of actually doing concrete visual exploration of a material. Donald Schön (1986) made similar claims in his studies of reflective practice, and lately Bill Buxton (2007) popularized this way of interpreting sketching within the HCI community. Buxton argues for a strategic value in adopting sketching as a mindset for design through both examining what the *right design* might be and *the right way* of designing a solution. Contrary to other approaches like prototyping (ibid) the point of sketching is to make non-committal explorations of both the problem itself, and the possible ways of dealing with this problem, in order to deal with the wickedness of the design problem.

Sketching takes cues from both the pragmatic perspectives of learning through practice (Dewey 1909), and constructivist perspectives of reflective conversation with materials (Schön 1992). Sketch-

ing is not concerned with abstractions over the world, but with concrete manifestations of ‘what future possible states might be’. This effort of creating manifestations of what might be is what makes design thinking, and sketching as an act of ‘doing’ in particular, a pragmatic discipline. This is further supported by the constructivist act of iterative reflection-in-action when sketching. If these principles are accepted as part of broadening the concept of sketching, it allows for sketching to be described as being more than a mere technique or phase. Buxton presents eight criteria for sketching that may act as our focal point: *evocative, suggestive, explorative, questioning, proposing, provoking, tentative* and *non-committal* (Buxton 2007). Derived from these criteria I propose that we might interpret sketching as a mindset through which we apply different techniques, more than being a specific set of techniques by itself. Thus, sketching becomes one of the clearest manifestations of how to think and communicate design. By emphasizing the acts of proposing, provoking, and not committing to one idea, sketching explicitly manifest a speculative sensemaking. Through sketching, sensemaking becomes an abductive inquiry, in which we do not explore what must be or what is, but rather create a reflective practice of speculating, pruning and manipulating the conditions for what might be. Again, this implicates that we must broaden our view of what we actually ‘do’ when we apply the mindset behind sketching in our inquiry into a problem space.

Here sketching is both the processual way of doing design thinking from Buxton’s criteria, but is also the communicative output from which our understanding of the problem evolves and becomes refined. Thus, sketching is a way of both expressing and reading ideas, and through this dialectic relationship, the abductive sensemaking takes place.

We now have the foundation to categorize how sketching manifests itself as an act of applying the abductive logic in practice through a variety of approaches. Thus, in Cross’ words, we are able to categorize the “...ways of finding out” when applying the epistemology of design through a sketching mindset.

Dimensions of designerly sketching

Buxton’s set of criteria indicates that sketching cannot be described as a single technique. Instead, it must be considered in a broader

sense as a way of acting upon the world. Through a reflective conversation with both the material at hand, and the context of the design space itself - sketching both has a reflective and communicative output. In order to categorize the ways of which sketching represents abductive sensemaking we need a new typology for sketching. One that considers the space in which the sketching is applied as well as the enabling mediums or technological praxis. In this regard inspiration has been taken from Gillian Smith's attempts to describe and categorize the essence of interaction design according to its 'dimensions': 1-D, 2-D, 3-D and 4D (Smith in Moggridge 2007). The original typology is oriented towards deconstructing designed products, but the categories are also suitable in a more general view of ways of doing design. In the following, the typology is adapted to the domain of sketching, in order to generate a framework for a more broad view on design sketching.

1-Dimensional Sketching

In the adaption of Smith's original typology, we must first consider how sketching can be considered from a 1-dimensional perspective. In Smith's original typology, 1-D includes the spoken words of language. Applied in the context of sketching this dimension can be used to express the 'what if' questions that characterize the abductive logic, and thus in a sense 'sketch through language'. Not hereby saying that the spoken word is always characterized by the criteria of sketching, just that it can be applied this way. The important thing to consider is that the expressive capacity of words is intrinsically an indirect representation as opposed to a more direct depiction when using spatial dimensions to express an idea. Words are articulated, but has no other expressive capacities than how we might interpret the semantics of the chosen words. Lerdahl (2001) uses the indirectness of language as way to sketch early ideas by proposing 'principal sentences' which drive the fuzzy front end of creative processes as a base sketch of the design space. This base can then be explored further through other sketching capacities. Lerdahl's approach and other attempts to adopt a sketching epistemology through words alone shows that words can in fact be used in a way that fits Buxton's criteria of sketching. Moreover, the lack of depictive qualities does not justify leaping to the conclusion that 1-dimensional sketching is inferior to depictive representations.

The abstractions of language, the multitude of meanings, and the sense of wonder and imagination are often better expressed through the indirectness of language. Moreover, in the early stages of design this ambiguity is often exactly what we need to expand the boundaries of the problem space. However, it also seems fair to assume that for the purpose of more concrete and inter-subjective purposes of sketching, a need for more spatial and temporal depictive qualities are needed.

2-Dimensional Sketching

The ambiguity of 1-dimensional sketching is countered by adding a spatial dimension, and move into the 2-dimensional category of sketching. 2-dimensional sketching is the easiest to identify as sketching because it is the space where many of our existing prepositions about sketching as a depictive technique exists. The 2-dimensional space includes the use of typography, diagrams, pictures, icons, and the general ability to visualize what was initially just a word or thought, which enables the feedback loop of reading sketches to be clearer and more concrete. With a 2-dimensional sketch, it is difficult not to interpret and add our own visual experiences of different tropes and metaphors into the reading of the expressed idea (McKim 1973). Furthermore, the enabling mediums of pen and paper, paint and canvas, and later screen-based electronic medias has been well explored and mastered for sketching purposes. This ranges from creating (abductive) synthesis' of form (Alexander 1964), rapid prototyping (Wasserman & Shewmake 1982) or visualizations of information too abstract to capture in 1-dimensional words (Tufte 1997). Thus, 2-dimensional sketching can fittingly be seen as the archetype of sketching, being above the abstract thoughts expressed by words alone, but are also limited to one spatial dimension. This sketching capacity reaches its limits for expressiveness when more complex experiential and dynamic aspects are needed, in order to reflect upon the proposed idea. Thus, we need to add another dimension to the categorization of sketching capacities.

3-Dimensional Sketching

An extra spatial dimension is added when we consider 3-dimensional sketching capacities. In this dimension, the mindset of sketching is applied to manipulating physical form or sketching within a

physical space. This type of sketching is composed by situations where the designer applies abductive sensemaking into creating a certain form of expression - a model for an example - as a physical manifestation of the 'what if' question that drives the synthesis. Again the technological practice has enabled us to sketch back and forth between e.g. 1-D and 2-D sketching capacities. As when we imagine and discuss a new concept for a physical product, which we sketch in multiple iterations of paper and digital sketches, and afterwards rapid prototype through technologies like Computer Numerical Control manufacturing (Reintjes 1991) and 3D printing (Hopkinson & Dickens 2006). Other more low fidelity capacities of 3-dimensional include quick mockups of objects or contexts in order to explore the possibilities or consequences of the 'what if' speculation (Ehn & Kyng 1992). This sketching capacity seems quite broad, but the categorization hits a barrier when we consider new forms of 3-dimensional sketching via physical elements such as 'material storytelling' (Jørgensen & Strand 2013). In these cases, the sketching is not just concerned with the output sketch as a static 3-dimensional representation, but is also concerned with the *sequence* as an element of the sketch.

4-Dimensional Sketching

The above is an example of 4-dimensional sketching capacities - where the temporal aspects are considered, manipulated or captured as a transitional part of the design inquiry. This consist of actively sketching aspects of the time through which a given phenomenon is experienced - such as bodily enactments (Oulasvitra et al 2003), sound (Ekman & Rinot 2010), and video (Ylirsku & Buur 2007). Video has had an exceptionally strong influence in this category as a 4-D language for sketching. In twenty seconds, a video clip can tell a complex story understood by almost everyone. Filmmakers have been developing the language of film for more than a century, and with very limited resources, they can express plot, emotion, anticipation, and action over the course of a certain timeframe. These same qualities are shared when the video language is used for video sketching (ibid) - making a visualization over time, speculating how a certain problem space might be handled through the addition of a new set for premises. The 4-D capacity has its strength in not just capturing the different states of an idea, concept or problem

space, but also expressing the transition between the different states - the in-between which we might claim is where we actually express the experiential qualities in design.

However, video as a sketching capacity is also somewhat limited in terms of the number of parameters the designer is able to modify. This is due to the limits of video to the spatial conditions of the context of the problem space as it was when it was recorded. Through editing and movie language, we may reach a higher level of expressiveness but we seem to hit a wall in terms of simulating more complex phenomenon that would radically change the existing parameters. Löwgren et al (2010) proposes that we look in the direction of the digital domain and consider exploring design problems via interactive code, enabling a feedback loop in which we may sketch real interactions over time. While this technique is both novel and expressive, sketching via interactive code limits itself to problem spaces, where digital technology is front and center, and does thereby not enable us to apply 4-dimensional sketching beyond either digital problem spaces or the experiential limits of the current context.

Room for extended sketching capacities?

Based on the discussion of the abductive sensemaking through sketching, and the categorization it is suitable to take the adaptation of Smith's description of the 4-dimensional category a bit further. This category has room for expanding the range of approaches to design that we might categorize as 'sketching'.

I propose that we further expand the dimensions of which sketching enables sensemaking by adding 'animation' as the most current extension of the 4-dimensional sketching space. While still in the 4-dimensional sketching space, like bodystorming, video sketching etc., animation differentiates itself by adding more depth to the temporal, spatial and experiential aspects of sketching (Jacob et al. 2008). Stephenson (1973) differentiates animation from classic video with the ability the producer / designer has to claim 'full control' of the transitional material of which the animation consist of. From this point of view, we may frame animation as an extended 4-dimensional sketching capacity, able to simulate and manipulate both the spatial and temporal parameters of the problem space. Adding an animated dimension to sketches can then be seen as a way to

express richer transitions in the sketching process, and thus potentially enabling a more clear feedback loop of the sketching process. Thus, animation in sketching is more capable to express the never-thought-depictions that new and novel ideas often require to be understood. This happens while still adhering to the core characteristics of sketching from Buxton.

Since animation remains a largely unexplored area as a sketching capacity in the 4-dimensional category, the question for further research is; *in what ways can animation be appropriated from the traditional animation film to fit the criteria of sketching?* The first criteria to investigate is how to apply 'animation based sketching' without abandoning the rapid and iterative nature that characterizes the criteria of sketching from Buxton. As we have discussed, various sketching approaches can cycle back and forth between the four sketching dimensions - creating hybrid formats. The same might be the case for an extended sketching capacity as animation. The next step would then be to initiate a more elaborate analysis of which capacities from animation we might use to catalyze the sketching processes in different problem spaces, and compare these insights to the more well-described capacities of the 1-D, 2-D, 3-D and 4D sketching capacities. In the end these insights will help further develop the notion of how sketching can be seen as an integral centerpiece of applying the epistemology of design thinking to praxis. This would in turn broaden our insight into how abductive sensemaking can be used to make inquiries by representing and depicting ideas throughout design process.

Perspectives

This paper has discussed abductive reasoning in relation to sensemaking in design. Furthermore, it has proposed that this type of sensemaking is driven mostly by reflective acting upon the world, which can be broadly characterized as different ways of adopting sketching as the centerpiece of a design epistemology. By taking Smith's original typology for interaction, and adapting it to a 1-4D typology for sketching capacities a new frame of reference has been established for further studies into approaches for conducting design sketching. When exercising the sort of speculative sensemaking that design enables, we are faced with multiple choices of which capacities of sketching to apply, and how to combine the languages

of each dimension. The typology of sketching dimensions provides a way to compare aspects of these different approaches in regard to which actions the approach actually enables. This is important since few design processes leaves time or budget to explore all sketching capacities when pursuing an idea. Thus, we must facilitate a more clear way of discussing af evaluating which dimensions we need to operate in to explore a given design idea in the most feasible way. Therefore, for further studies we must collaborate and engage with new previously disparate fields into our own abductive inquiry of how design sketching 'might be'. This paper has proposed the capacity of animation as the most apparent and still largely unexplored capacity of sketching to be explored, and thus also a potential field to be included into the broader research into sensemaking in design sketching.

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Note

- 1 The cited text is the newest edition from 2007, however the original seminal work was first published in 1982

Looking at a Photograph – André Kertész's 1928 Meudon

Interpreting Aesthetic Experience Phenomenologically

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Abstract

Focusing on André Kertész's 1928 photograph of the Paris suburb, Meudon, I consider a phenomenological means for exploring aesthetic encounter with a photograph. Drawing on my own interpretive work with this image as well as student responses, I delineate a continuum of encounter ranging from partial seeing to deeper aesthetic insight. Making use of the hermeneutic designations suggested by philosopher Henri Bortoft (2012), I identify a lived continuum of aesthetic experience that extends from limited assimilation through a more involved appropriation to an engaged participatory understanding.

Keywords aesthetics, aesthetic experience, André Kertész, Henri Bortoft, , hermeneutics, hermeneutics of aesthetics, Meudon, phenomenology, phenomenology of aesthetics, visual studies

Introduction

In this article, I draw on a photograph by the eminent Hungarian-American photographer André Kertész (1894–1985) to point toward a phenomenology of aesthetic encounter. Shown in figure 1, this



Figure 1. André Kertész,
Meudon, 1928.

photograph is Kertész's frequently published 1928 image of *Meudon*, a Paris suburb¹. Drawing on my own interpretive experience of the photograph as well as student responses, I delineate a continuum of lived encounter that ranges from partial seeing to deeper aesthetic insight. Making use of the progressively-intensive designations of philosopher Henri Bortoft (2012), I highlight a spectrum of aesthetic experience that extends from limited *assimilation* to a more comprehensive and engaged *participatory understanding*.

The key question I address here relates to the range of aesthetic experience that Kertész's photograph evokes. What modes of encounter and understanding does *Meudon* afford, and do those modes point to any broader phenomenological themes or patterns? This question points toward a hermeneutic phenomenology of the aesthetic encounter, and the complex matter of how and in what lived ways this photograph (and other art works) are experienced and understood (Davey 1999). From the very first moment I saw *Meudon* almost thirty years ago, I was struck by how Kertész was able to portray visually a gathering of individual lifeworlds coalescing in the single lifeworld of this one stretch of nondescript street in a Parisian suburb. Shortly, I return to a lifeworld interpretation of the photograph but, first, I examine student responses to *Meudon*. What do others "see" the first time they encounter the *Meudon* photograph?

Student Responses to *Meudon*

Devising means to get at individuals' aesthetic and emotional reactions to an artwork is a difficult undertaking (Csikszentmihalyi and Robinson, 1990; Elkins, 2001). One simple device is a seeing exercise I use to introduce students to phenomenological looking and describing. I provide a series of distinguished photographers' images for which I ask the students to look at and generate (as quickly and as viscerally as possible) a list of single words and short phrases that describe their experience of looking at and seeing. I provide the students only about thirty seconds per image so that they will more likely record immediate "sightings" of what they see. My instructions run as follows: "Don't think about the photograph – just jot

<p>one descriptor (4)</p> <ol style="list-style-type: none"> street industrial forlorn train <p>two descriptors (8)</p> <ol style="list-style-type: none"> dirty, old tense, dramatic industrial, poor train, old town shadowy, industrial rundown, industry factories, industrialization clustered, broken <p>three descriptors (10)</p> <ol style="list-style-type: none"> wet, road, train busy, old, dirty urban, rundown, industrial industrial, busy, depression arcade, aqueduct, dissolution activity, people, old misplaced, destruction, dismal wreckage, construction, industrial terrible, hope, pit, despair industrialism, modernism, industry 	<p>four descriptors (20)</p> <ol style="list-style-type: none"> train, people, destroyed, dirty messy, empty, tall, old busy, town, historic, gray active, growing, lively, dirty hardship, work, industrial, dirty loud, dirty, hectic, unsafe hat, chimney, bridge, store arches, village, people, train chaos, arch, contrast, war zone dump, depressed, motion, grey train, bridge, industrial, poverty train, town, construction, journey old, congested, dirty, unproportional damaged, smoke, ruins, displacement houses, construction, alleyways, bridge sprawl, chaotic, downtown, urbanization arch, left building, train, man with package ghetto, slums, war zone, pollution, depression industrial, bricks, train, progress bridge, train, man, newspaper 	<p>five descriptors (15)</p> <ol style="list-style-type: none"> ruins, hat, train, people, building chaos, madness, confused, hurt, anger overseas, old, building, bearing, people busy, fast, work, winter, neighbors broken, narrow, tall, weight, scale ruins, dead, disintegrating, chaos, dirty train, arch, building, construction, hat grungy, smoke, invention, progress, hope train, industry, depleted, dirty, factory arch, train, people, men, chimney dismal, train, dirty, movement, humanity busy, rundown, hazy, hustle, bustle, train, smoke, man and package, olden, shabby city, busy, train, dirty, mismatched cityscape, train, buildings, man, package, friends walking <p>six descriptors (8)</p> <ol style="list-style-type: none"> bridge, arch, street, bustle, train, top hat industrial, dirty, smoke, package, city, railway train, dirty, man in hat, old, bridge, windows urban, steam, industrial, man-made, hard, rough destruction, pieces, tall, narrow, weight, heavy train, smoke, buildings, people, bridge, destruction industry, dirt, old, workforce, construct, development rundown, industrial, dirty, old, historic, working class <p>seven descriptors (6)</p> <ol style="list-style-type: none"> train, danger, chaos, building, dirty, dark, smoke train, bridge, smoke, city, buildings, people, construction arch, people, window, brick, train, smoke, bundle harsh, imposing, towering, enclosing, dirty, dark, deprived urban, ruin, wrong, train, pollution, project, discrepancies old, train, city, raised path, aqueduct, train, package <p>eight descriptors (1)</p> <ol style="list-style-type: none"> bridge, construction, train, business, alley, top hats, steam, brick buildings <p>nine descriptors (1)</p> <ol style="list-style-type: none"> industry, bridge, urban, confused, short, small, waste, gray, dirty <p>ten descriptors (1)</p> <ol style="list-style-type: none"> old, smoke, road, men, buildings, windows, train, arch, brick, dirt
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Table 1. Descriptors of *Meudon* provided by 74 Kansas State University Architecture students, January 2013; arranged by number of words and phrases provided in students' descriptions.

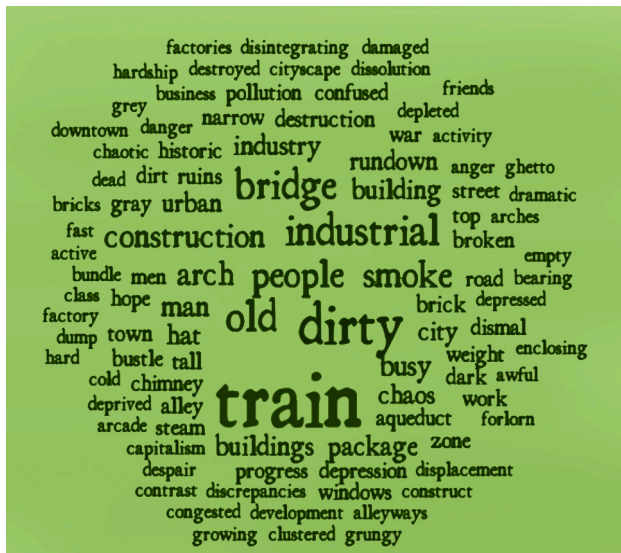


Figure 2. Word cloud of students’ single-word descriptors of Kertész’s Meudon.

down what comes. And don’t worry about whether what you’re seeing or saying is ‘right’ or ‘wrong’. There are no correct or incorrect sightings – what you see is as correct as what anyone else sees.” From a phenomenological perspective, the aim of the exercise is to facilitate what phenomenologist Herbert Spiegelberg (1982, p. 680) described as “the pristine innocence of first seeing.”

Table 1 presents 74 student responses to the *Meudon* photograph. These descriptions were provided in January, 2013, by second-year Kansas State University Architecture students taking my required lecture course, “The Designed Environment and Society.”

Most of these students were nineteen or twenty years old and about half male and half female. In considering aggregate counts of the photographic descriptions, one notes that the 74 students provided a total of 322 words or short phrases to describe the photograph for an average of 4.35 descriptors and a median of 4 descriptors per student. Four students provided only one descriptor, and seventeen students provided six or more. Of the 322 descriptors, there were 135 unique words and phrases, a count indicating that many students drew on the same descriptors. As indicated by the word cloud of figure 2, the most frequent descriptor was “train” (used 29 times), followed by “industry” or “industrial” (19 times) “dirty” (18 times), “old” (14 times), “bridge” (11 times), and “people,” “smoke,” and “building” or “buildings” (10 times each).

In consolidating the descriptions indicated by the 74 student responses, I identified three major categories:

- Descriptors relating to material and environmental qualities (e.g., “brick,” “train,” “bridge,” “street,” “industrial”);
- Descriptors relating to human and place activity (e.g., “people,” “activity,” “busy,” “hustle and bustle,” “friends walking in distance”);

- Descriptors relating to an evaluation of the scene and situation (e.g., "dirty," "old," "dramatic," "forlorn," "rundown," "messy," "war zone," "depressed," "hope among pit of despair," "chaotic," "hurt," "falling apart").

These three descriptive categories are revealing in two ways. First, one is struck by the many evaluative descriptors that picture the Meudon scene in a negative light. "Dirty" and "old" are most often used (18 and 14 times, respectively), but there are many other depictions ranging from environmental unpleasantness, on one hand ("forlorn," "terrible," "unsafe," "depressed," "war zone"); to environmental disorder, on the other hand ("chaotic," "broken," "falling apart," "dead," "depleted," "rundown"). Second, and perhaps more striking, is the finding that few of the descriptions relate to the experience of the photograph itself. Some of the responses are probably evoked by the aesthetic power of the image ("dramatic," "contrast," "cityscape," "hope," "humanity" "front and back mismatched," "imposing," "discrepancies"). Most entries, however, immediately move to the place scene itself and delineate either physical and environmental features of Meudon, or reactive descriptors, mostly negative or entropic.

In shifting attention from single descriptors to each student's descriptive cluster, one notes a related pattern. Some of the descriptive chains focus entirely on material and environmental qualities – e.g., "train, arch, building, construction, hat" (no. 49) or "old, smoke, road, men, buildings, windows, train, arch, brick, dirt" (no. 74). Other descriptors incorporate only evaluative qualities – e.g., "dirty, old" (no. 5) or "misplaced, destruction, dismal" (no. 19). A third group of descriptors incorporate both material and evaluative qualities – e.g., "train, people, destroyed, dirty" (no. 23): or "dismal, train, dirty, movement, humanity" (no. 53). In terms of evocative imagery, five of the most expressive descriptions include:

- no. 21 – "terrible, hope, pit, despair";
- no. 35 – "old, congested, dirty, unproportional" [sic];
- no. 44 – "chaos, madness, confused, hurt, anger";
- no. 48 – "ruins, dead, disintegrating, chaos, dirty";
- no. 69 – "harsh, imposing, towering, enclosing, dirty, dark, deprived."

Most strikingly, of the 74 responses, there is only one that seems fully relatable to the aesthetic aspect of the photograph itself rather than to the physical or expressive qualities of *Meudon*. This description is no. 6, in which the student succinctly describes the photograph as “tense, dramatic,” a depiction intimating the mysterious ordinariness of the *Meudon* scene. Other than this one response, however, the student descriptions give much more attention to Meudon as a place rather than to the aesthetic experience of *Meudon* as an artistic photograph. Does this emphasis on situational context rather than on aesthetic experience indicate that these students are insensitive or uneducated aesthetically? That the photograph itself is to blame and without aesthetic power or presence? That delineating in words the non-verbal quality of aesthetic encounter is inappropriate to art works? I think there is another way to understand the findings here but, before I bring that understanding forward, I highlight my responses to the *Meudon* photograph.

***Meudon* and Lifeworld**

Table 2 presents my two encounters with *Meudon*. I first discovered this photograph in 1986 when I began studying Kertész's *oeuvre* (Seamon, 1990). As a way to familiarize myself with his photographs, I set myself to write visceral reactions to pictures from throughout his professional career. Coincidentally, one of the photographs I wrote about was *Meudon*. As preparation for writing this article, I produced the second description in table 2, though I had forgotten I had written the earlier account and only ran across it accidentally when I decided to review my old files relating to Kertész.

In contrast to the student descriptions of the photograph, what strikes me about my two accounts is that they mostly ignore the specific physical and evaluative aspects of Meudon as a place and instead emphasize the photograph's power in portraying lifeworlds visually. Immediately, *Meudon* reminded me of Alfred Schutz's description of lifeworld: “that province of reality which the wide-awake and normal adult simply takes for granted in the attitude of common sense” (Schutz and Luckmann, 1973, p. 3). To me, *Meudon* is a visual introduction to phenomenology in that one not only encounters a world's lived moment but also senses the habitual unfolding of this world in moments before and after. One recognizes

Table 2. Author's two descriptions of *Meudon*

1. Written summer, 1986

The critics give this photograph much attention, though it might at first glance be considered ordinary – even uninteresting and pedestrian. The key to the photograph's power for me is *many worlds*. Kertész manages to show in one time and place how so many worlds can be going on: the world of the train passing over the trestle; the world of the man in the foreground, carrying some sort of painting or parcel; he seems the most alone of the people in the photograph. There are other worlds: Three men walking at the far end of the street; a woman and girl on the left sidewalk; three women walking behind the man. I wish I could capture the sense of world here. It has to do with time passing: something like that T. S. Elliot poem about people just doing their daily routines as the world suddenly comes to an end. It is that: multiple worlds in time, daily passing – a series of events and lives and people-in-place – their lives unfolding but not necessarily related or connected. Just present in time and place in a unique moment that Kertész literally "captures."

2. Written summer, 2013

If I am asked to generate a list of words and phrases for *Meudon*, I write "life, people, train, trestle, coming, going, together, a moment of life, a moment in time, a lifeworld of place and lifeworlds of people."

Why does this photo remain so alluring to me? I think because it draws one into this world and these worlds. We have one world but multiple worlds: (1) man with package; (2) three men walking at far end of street; (3) woman and girl on sidewalk, left; (4) three women behind man with package; (5) train headed elsewhere.

Perhaps the photo says that we are all apart and a part of? There is a wholeness to the scene in spite of the separated people and lifeworlds. In spite of the physical apartness among all these people, there seems to be a spatial collapse in that the train seems as much a part of this place as the people actually there. There is the sense that the lived quality of all these different worlds coalesces into a moment that captures the unfolding of each personal life and the history of Meudon as a place. There is also the quality of lived space whereby the materially separable parts of the place all cohere and are whole existentially. The lifeworld as time / place taken-for-grantedness is portrayed photographically. *We see "lifeworld."*

Table 2. Author's two descriptions (1986 and 2013) of André Kertész's 1928 photograph *Meudon*.

the lifeworld of this stretch of street and the lifeworlds of the several people carrying out typical lives (or atypical lives—we can't know just from this one image).

Though he knew nothing directly about phenomenology or the notion of lifeworld, Kertész offers in *Meudon* a photographic rendition of what phenomenologist Edward Casey (2009, p. 327) referred to when he wrote that “lived bodies belong to places and help to constitute them” just as, simultaneously, “places belong to lived bodies and depend on them.” Through picturing an instant in the mundane history of a place, Kertész illustrates the phenomenological principle whereby individual bodily actions and encounters contribute to the particular constitution of a place as, at the same time, those actions and encounters contribute to the person or group's sense of lived involvement and identification with that place. As Casey (ibid.) explained, lived bodies and places “interanimate each other.” This *interanimation* is significant because it suggests that habitual, unself-conscious corporeal familiarity is one way by which individuals and groups actualize a taken-for-granted involvement with place (Seamon, 2013b, 2014).

Reconciling Encounters?

At least for me, much of the artistic power of *Meudon* is its photographic and visual portrayal of Casey's interanimation of lived bodies and lived places. Clearly, there are other ways to express the aesthetic force of the photograph but, however one provides an explication, one can agree with critics who recognize *Meudon* as one of the great images in 20th-century photography (e.g., Greenough, Gurbo, and Kennel, 2005, pp. 75–76; Westerbeck and Meyerowitz, 1994, pp. 174–75). The question I end with is how my interpretation of the photograph can be so different from my students'. Is there some way to place this difference phenomenologically so that both modes of “seeing and describing” can be placed experientially and hermeneutically?

There are a number of phenomenological pathways for interpreting these contrasting accounts (e.g., Berleant, 1971; Cloonan, 1979; Csikszentmihalyi and Robinson, 1990; Davey, 1999; Dufrenne, 1953/1973; Elkins, 2001; van Manen, 2014). One possibility is phenomenologist Maurice Merleau-Ponty's differentiating between two contrasting modes of perception and awareness of the world:

On one hand, what he called “habitual perception”—i.e., taken-for-granted everyday looking and seeing grounded in corporeal inertia and the lifeworld’s taken-for-grantedness; and, on the other hand, “aesthetic perception”—i.e., a mode of seeing related to an artistic attitude and incorporating a degree of attentiveness and selectiveness (Cloonan, 1979, pp. 250–54). Here, I draw on another phenomenological pathway for interpreting the contrasting accounts: philosopher Henri Bortoft’s continuum of seeing and understanding marked out progressively by *assimilation*, *appropriation*, and *participatory understanding* (Bortoft, 2012, pp. 106–07). Each of these modes of seeing and interpreting generates and responds to contrasting modes of understanding. I argue here that the student descriptions of *Meudon* relate more to Bortoft’s mode of assimilation, whereas my descriptions relate more to participatory understanding.

How does Bortoft describe these modes? In an *assimilation* mode, one encounters an unfamiliar text (like the *Meudon* photograph) and interprets it in terms familiar to the interpreter. In other words, the interpreter understands the text via things and thematics that he or she already knows. This mode of seeing is present in the majority of the student descriptions of *Meudon*: The students see an old, decrepit streetscape having little to do with today’s world. Words like “industry,” “smoke,” “forlorn” and so forth suggest that the students relate the image to a past historical time that has few significant connections with their own present-day lives or experiences. For most of the students, the photograph appears to work more as a historical vignette than as an independent artwork with aesthetic and artistic force.

In contrast, Bortoft speaks of *participatory understanding*, whereby we accept that we may not know what the text is about, but we make an effort to be open and allow its potential meanings to work on us. We seek to be receptive to unsuspected sightings and understandings – Spiegelberg’s “pristine innocence of first seeing.” As Bortoft (2012, p. 106) explains,

We find ourselves being addressed by the text and experience a reversal in the direction of meaning over which we have no control. This is no longer a subject-centred experience, but one in which the subject is transformed by the

encounter with meaning instead of using it for her own purposes. This usually begins with a failure to understand. We are “pulled up short by the text,” as [hermeneutic philosopher Hans-Georg] Gadamer [1989, p. 168] puts it, when we feel that we cannot understand it, or that it seems to be saying something unexpected....

For me, working with Kertész's photographs has involved a deepening recognition of their visual and aesthetic insights. In this sense, I have worked to hold contact with Bortoft's participatory understanding. When I first discovered Kertész's work in the early 1980s, I felt there was something profoundly significant in the way his photographs somehow spoke phenomenologically. At first, I could not see what this significance was, but I worked, mostly through carefully looking at and writing about specific images, to encounter their presence. Over time, I concluded that Kertész can be labeled a “photographer of the lifeworld” because so many of his images powerfully present unique moments whereby ordinary (and occasionally extra-ordinary) worlds come forth (Seamon, 1990).

I realize this is only my interpretation, and I hope it has been guided by a progressively strengthening participatory understanding of which Bortoft speaks. In this regard, he quotes hermeneuticist Richard Palmer's definition of phenomenology, which emphasizes a way of looking whereby the phenomenologist is gently engaged by the phenomenon, the reality of which can gradually come to reveal itself:

[Phenomenology entails] letting things become manifest as what they are, without forcing our own categories on them... [T]he very essence of true understanding is that of being led by the power of the thing to manifest itself... Phenomenology is a means of being led by the phenomenon through a way of access genuinely belonging to it... Such a method... is not grounded in human consciousness and human categories but in the manifestness of the thing encountered, the reality that comes to meet us (quoted in Bortoft, 2012, p. 105; originally in Palmer, 1969, p. 128)

Widening and Deepening Interpretation

In the interpretation of *Meudon* offered here, I have not discussed Bortoft's third mode of encountering the text, which he labels as *appropriation* and defines as a way of interpreting whereby the interpreter recognizes the freshness or unusualness of the text but converts that uniqueness into an understanding that only arises from and serves his or her own personal concerns. These concerns may or may not appropriately relate to the author's original aims or to the potential meanings of the text. As Bortoft (2012, p. 106) explains:

We make [the text] our own, so that it is no longer just something left over from the past which is to be reconstructed in the present, but which is used by being accommodated to the present in order to enlarge our understanding of our own interests.... In appropriation, the subject makes the meaning her own, without reducing it to what she already understands (which would be assimilation), but she does so only in a way that expands rather than transforms her understanding. In other words, in appropriation, the self-centred subject controls use to which the meaning is put, and hence understanding is under the control of the subject.

In relation to the interpretation of *Meudon* I have proposed here, one might argue that my understanding involves appropriation rather than participatory understanding, since I've described the photograph largely in the phenomenological terms of lifeworld. In responding to this concern, I would first make the point that Bortoft's modes of textual encounter involve a lived continuum – that none of the three are "pure" but, experientially, overlap and shift as the interpreter practices and matures in his or her interpretive sensibility. In addition, different interpreters will discover different meanings that are "the work's own possibilities of being that emerge as the work explicates itself, as it were, in the variety of its aspects" (Gadamer, 1989, p. 118; quoted in Bortoft, 2012, p. 109). In this sense, there is not one legitimate interpretation but many. Over time, the same interpreter may interpret the same text in much different ways. Over time, the same text may be interpreted by different interpreters in much different, even contradictory, ways.

In this article, I have contrasted my interpretation of Kertész's *Meudon* with those of my students because this contrast offers a real-world context in which to illustrate Bortoft's assimilation, appropriation, and participatory understanding. His identification of these three modes is useful because it helps one to understand how seeing and interpretation can vary so much from interpreter to interpreter, and why some interpretations seem more attuned to the text than others. A major aim in my teaching is to introduce new ways of looking and seeing and to provoke students to realize that one's intensity of seeing, interpreting, and understanding can always be widened and deepened. I introduce students to looking and seeing via the "short-descriptor" exercise used for *Meudon* because it provides a helpful start for students' becoming more engaged with what they see and understand. Aesthetic experience is difficult to describe directly, and this exercise offers one simple, accessible means to begin to articulate what one encounters².

This looking-and-seeing exercise is one of several that I introduce in my courses. Once students gain facility with describing photographs via words and phrases, I then introduce a second exercise in which students look at other photographs with the aim of describing what they see and experience, first, in full sentences; and, later, in full paragraphs. Once they have practice with this more comprehensive explication, I then have them explore specific phenomena and texts – for example, the appearance of colors as seen through a prism (Bortoft, 1996; Goethe, 1970; Seamon and Zajonc, 1998); or the way that a building evokes particular expressions of motion, weight, and substance via its floors, walls, and roofs (Thiis-Evensen, 1989). My broadest aim is to introduce phenomenological and hermeneutical understanding via experiential exercises that evoke looking, seeing, and understanding in ways whereby there is a progressive movement from Bortoft's assimilation, through appropriation, toward a more deeply engaged participatory understanding.

By contrasting my understanding of Kertész's *Meudon* with my students', I have sought to indicate the lived nature of these three modes of encounter as Bortoft presents them. The interpretations offered here involve only one text and, therefore, my claims regarding these modes of encounter are limited and open to additional interpretive evidence. In spite of these limitations, I hope my discussion here offers some insight into why looking, seeing, and un-

derstanding can involve such a wide range of interpretive possibilities. Ultimately, the aim of phenomenological and hermeneutic study is to find ways whereby the phenomenon or text can be given space to be as fully present as possible. Bortoft perspicaciously describes this potential clarity and depth of encounter with the text as an interpretive reversal in which, rather than our participating in and appropriating the text's meaning, that meaning participates in and appropriates us. He calls this experience an "event of understanding," which both sustains and is sustained by a "hermeneutic reversal." He writes:

Understanding which participates in meaning clearly goes beyond both assimilation and appropriation.... We do not understand in a vacuum. We always already understand, and it is this already-understanding that is "pulled up short" by the text and found to be inadequate. The text calls our already-understanding into question, with the effect that, when the meaning of the work participates us [sic], our understanding is transformed – not consolidated or expanded – so that we understand differently.... In the event of understanding... it is not so much we who appropriate the meaning, but we ourselves who are appropriated by the meaning of the work. So we are participated by the meaning that we participate in – this is the hermeneutic reversal (Bortoft, 2012, pp. 106–07).

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Endnotes

1. Scholarly discussions and interpretations of Kertész's work include: Borhan, 1994; Frizot and Wanaverbecq, 2010; Greenough, Gurbo, and Kennel, 2005; Phillips, Travis, and Naef, 1985; Scott, 2007; Seamon, 1990; Westerbeck and Meyerowitz, 1994.
2. I was introduced to this "short-descriptor" exercise in a seminar taught by Henri Bortoft, who explored a wide range of practical means for intensifying the encounter with phenomena, including the remarkable phenomenological methods of Goethean science (Bortoft, 1996; Seamon, 2013a; Seamon and Zajonc, 1998). The aim of the short-descriptor exercise is to lay out the terrain of the phenomenon as it is as a whole. The assumption is that single words and short phrases provide an interpretive means for "sighting" and understanding the particular phenomenon – in the present case, Kertész's *Meudon*. One useful variation on this exercise is to envision the phenomenon or text (e.g., *Meudon*) as a spiral on which one places – closer to and farther away from the spiral's center – each word and phrase. This spiral exercise is useful in that it provides an interpretive means to "sight" the more and less central aspects of the phenomenon's constitution or the text's meanings.

Narratives and communication in health care practice

What competences are relevant for tomorrow's health care professionals to communicate about illness, life and death?

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Abstract

The article concerns the issue: How to deal with the increasing challenges of communication in the health care sector? On the one hand, it focuses on how to include the patient's and relatives' perspectives. On the other hand, it focuses on the existential/spiritual perspective which is now included in various official visions papers and recommendations. The main question is pedagogical: How do practitioners in the health sector i.e. in nursing deal with these perspectives? The materials are the Danish Health Board's program of rehabilitation and palliative care, data from a focus group study, and data from published autobiographies. The analysis shows that challenges are centered on communication about existential and spiritual matters. The relationship between being professional, personal and private is focused on in the light of the concepts of empathy and epoché as well as in a discussion of a phenomenological approach. Finally, a teaching practice dealing with the challenges is outlined seeing education as an existential and relational activity.

Keywords health care, narratives, phenomenology, existential, communication

Introduction

A wave is currently washing across the world. Qualitative health research is discussed in books, in journals and at conferences. The discussion is part of both an international and various national agendas, focusing on the political, the scientific, and the ethical and practical challenges within contemporary health care services. In the years to come a global challenge is to reorganize the health care service with the purpose of engaging the population in health promotion and the purpose of making individuals and groups co-constructors of health and well-being (Aldridge, 2004). This article is based on impressions gained by attending conferences in the U.S., Canada, Europe and Denmark in 2012-14². In Denmark in 2012, a local challenge came up as the National Health Board presented a new program for rehabilitation and palliative care as part of a general cancer treatment plan³. In this program the bio-psycho-social model includes an existential/spiritual perspective, and the program focuses on the resources of patients and relatives. The Health Board estimates that counseling and support should be part of ordinary communication and dialogue between patients, professionals and relatives for 70% of patients living with a cancer-diagnosis; 25% of patients will need a professionally led effort, and 5% will need a special effort. It is stated that counseling can also be provided as part of educating patients individually or in groups. This means that communication on these topics is to be part of practice for health care professionals dealing with cancer treatment, not only for “experts” such as priests or psychologists as has been the practice.

Multiple perspectives are to be considered and multiple voices are to be heard, resulting in challenges for health care practice as well as for qualitative health research. Research and published narratives about illness, especially narratives about being a cancer patient, indicate that a cancer diagnosis often incites questions of an existential nature. Existential and spiritual topics may not be new in a health care context, but the official requirement that professionals are able to communicate about these matters is new. To elucidate challenges related to this kind of communication as well as the challenges concerning multivoicedness I want to illustrate how narratives (i.e. autobiographies) and creative approaches (i.e. arts) can be part of future practice in educating health care professionals. This means a practical focus concerning commu-

nication and a theoretical focus concerning a renewed phenomenological approach.

Since 2000 a veritable wave of autobiographies of illness experiences swept across the entire Western world. In *Läkertidningen*, the Swedish equivalent of the *American Journal of Clinical Medicine*, the development of this genre is described as a result of the development of a more independent patient role and a focus on the patient's perspective. The perspective now includes relatives, which leads to an examination of how to deal with multivoicedness. The genre fulfills an important function in modern man's search for answers to what remains unanswered in the case of illness: "Why was I struck by illness? Do my illness and my suffering make any sense? How do I live with a chronic illness?" (Hägglom and Mattsson, 2007, my translation). Apparently, people want to share narratives about illness and these reports seem to have an audience. What might explain the interest is that some experiences are not articulated or processed adequately within the health care system together with the fact that the publishing boom happened at the same time as a considerable activity in various patient organizations was going on. Experiences about being ill are also shared as e-communication and the number of private blogs on the internet increases day by day.

In the period from 2000 until now there has been an intensive focus on developing communication skills within the community of health care professionals. The Calgary-Cambridge guide has become a widespread model all over Europe for developing skills for communicating with patients in medicine (Silverman, 2005). Books using the model were published in Denmark (Carlsson and Ege, 2010; Christensen et al., 2011), and since 2010 a communication program based on the guide was conducted at a large regional hospital involving all employees with patient contact (Ammentorp et al., 2014). The model consists of 71 topics that may be supportive for the doctor conducting a consultation, and students are trained in labs often with actors simulating being patients. The model guides the medical interview, and some focus is on the human side of medicine, i.e. the patient's perspective as well as on the doctor showing empathy. Yet, I shall argue why this model is not adequate for what we are dealing with here: communication about existential and spiritual matters. First of all, the medical interview aims at providing strategies for intervention based on a diagnosis; here our aim is

understanding or examining narratives expressing the experience of illness (or of dying).

Communication in medical education is often detached from the medical content, and students do not perceive communication as a key part of their clinical learning; they rather perceive communication lessons as an add-on. This is the problem the Calgary-Cambridge guide is meant to solve, but this change may take years (Silverman, 2009). This is probably also the case in the learning practice of the nursing profession. I want to zoom in on practice and training, to show how autobiographies and arts can be put into play in teaching concerning communication. The lack of a precise language concerning existential and spiritual matters is a barrier to developing the dialogue; we are at the very beginning of developing a language suitable for this purpose. I return to this theme later, but first I introduce voices of professionals and voices of patients.

Voices of professionals

Teaching communication on a special course for nurses working with cancer patients, I asked these professionals (newly qualified as well as experienced nurses) about problems concerning communication with patients and their relatives. They listed these issues:

How can I perceive the unspoken, tacit knowledge which is often the most important information on how patients and caregivers perceive the distressing experiences of being ill?

What do I do when the conversation takes an unexpected turn?

How do I communicate about hope?

How can I become aware of what I am actually doing in a difficult situation or conversation?

How can I use the theory of narratives in practice?

No existing models of communication strategy seem to neither solve these challenges nor give adequate answers to these questions. As this was a special course and some of the participants were experi-

enced nurses, they referred to a number of communication techniques that they had met during their training. It was almost a tour de force through various models – as if models constantly change as fashions do – and it seemed as if professionals constantly are seeking for a new recipe, a new tool or technique to solve the problems. Nowadays the word “skill” seems to be the keyword to what is asked for (Silverman, 2005; Deurzen and Adams, 2011). When asked what the nurses need to acquire the necessary skills, they stated:

I need more theory to give my answers a safe basis

I need more “techniques” to communicate with the patient and understand his/her life world

I need specific tools or skills for practical use in conversations about being ill and in conversations about life and death

Let us have a closer look into some of these statements, first, about tacit knowledge and about using the theory of narratives in practice; later, about more theory and techniques for practical use. Embedded in tacit knowledge as well as in expressing experiences through narratives is the concept of empathy. Usually empathy is described by the statement: ‘being able to put oneself in someone else’s shoes and be able to feel what they feel’. Though, we know it is not possible to do so. We know from neuroscience about mirror neurons as neural basis for the capacity of developing emotions such as empathy (Hart, 2007) and we know from psychology about developing the ability for mentalization, which involves both a self-reflective component as well as an interpersonal component (Fonagy et al., 2002). This serves as a basis for working with refining the capability of empathy together with the capability of reflecting on and communicating about the needs related to existential and spiritual matters.

Voices of patients

I focus on the genre autobiography for several reasons. First, the genre has a similarity to the interview, a well-known method in qualitative inquiry, and yet it is different because the author is presenting a lived experience description that the reader can reflect on

and engage in. Second, the fact that the patient is situated in a cultural, historical and relational context and is focusing on the influence of illness in everyday life qualifies the autobiography as research data and as training material. Third, autobiographies telling stories about illness have been published all over the Western world which opens up the discussion of a cultural perspective. Here I concentrate on three autobiographies published in Denmark⁴, selected by their significant titles illustrating the point: the usefulness as material in a training setting by putting into words extremely difficult situations and emotions. *No Man's Land* (2009) is narrated by a mother who lost her daughter to leukemia – describing the time at the hospital as being in a no man's land and later on describing the process of grieving. *The Waiting Room* (2011) is a dialogue between a nurse and a man in his thirties, dying of cancer, leaving behind a young wife and a small child. The dialogue focuses on existential and spiritual issues concerning life and death. In *The Taboo Breaker* (2011) two sisters both diagnosed with breast cancer comment on various taboos related to being ill. During the period of illness they showed their bald heads and they ask: Why is a cancer patient supposed to wear a wig? A possible answer is that perhaps it for the sake of the healthy, not to be confronted with illness.

In all three narratives the experience of being in a special area is described, although we know many people have experienced illness. Also situations difficult to handle both as a patient and as a relative are described, and they all comment on the role of health care professionals. Most patients have had positive experiences with professionals as individuals, but the health care system as such seems to be lacking the 'ability' for empathy and adequate communication. This means there is a challenge at an institutional level as well as at an individual level. As mentioned, custom has been to call the expert, i.e. the priest or the psychologist, if a patient or relative wants to talk about spiritual or existential issues. That is, these issues are understood in a religious or a therapeutic context, but as nurses are also expected to communicate about and take into consideration an existential/spiritual perspective, it is necessary to develop ways to work with these issues in a secular world, not automatically using or referring to neither a religious language nor a therapeutic one. Let us turn to contemporary theory of phenomenology to see if there is any help to answer the questions asked by the professionals above.

A renewed discussion of a phenomenological approach

Amongst a variety of phenomenology I focus on a pedagogical approach. Max van Manen emphasizes in *Phenomenology of Practice* (2014) that a phenomenological approach is not a method, not a technique nor a tool. A phenomenological approach is a path or a way to understanding. To get to the heart of an experience, van Manen focuses on wonder, openness, concreteness and approach as part of the process of epoché and reduction. The goal is to gain access to the pre-reflective experience and “The “way” to knowledge and understanding begins in wonder” (van Manen, 2014, p. 223). In this process the most important act – epoché - is to put into brackets assumptions, presumptions, common understandings, and scientific explanations. To do proper analysis of experiences, the participants have to overcome subjective or private feelings, but as stated, this is an impossible act to fulfill. Qualitative research is often conducted by doing interviews. Interviewing people who are seriously ill or people who are dying involves ethical issues and therefore they are rarely conducted. In this section I outline the contours of teaching communication using autobiographies built on the assumption that data are not necessarily to be collected by interviewing, data is everywhere in our everyday life (Brinkmann, 2012). It is important to point out that an interpretation of an interview is not automatically equal to a phenomenological analysis: to do this kind of analysis requires focusing on a special ‘moment’.

Contemporary theory of phenomenology represented by Patricia Benner in nursing research – together with Max van Manen in education offers ways to solve some of the problems outlined above. Benner and van Manen both do phenomenological interpretation by working with descriptions of lived experiences as texts. As stated by van Manen we cannot overcome our subjective or private feelings. Neither is it possible to “escape” our pre-understandings and assumptions – this material needs to be explicated and examined. Benner suggest paradigm cases, exemplars and thematic analysis as interpretive strategies (Benner, 2010). These strategies are all useful when analyzing the autobiographies. These texts represent the individual stories but can also function as paradigm cases and exemplars discussed in groups involving a variety of perspectives and focusing on the existential challenges as subject for thematic analysis, that is, the autobiographies are seen as examples of possi-

ble human experiences. The question is: How does illness interrupt human life as well as the question: How to live the everyday life including existential/ spirituals matters? I suggest that health practitioners read and discuss autobiographies in order to explicate first, what is the ordinary embedded in the extraordinary in these narratives and vice versa; second, what is contained within the bracket of assumptions, presumptions, common understandings and scientific explanations. In other words: What “knowledge” belongs to the professional, the personal and the private sphere? When I presented a list of autobiographies published since 2000 at my course many of the nurses were familiar with the autobiographies but the reading was seen as a personal or private activity. It is necessary to work with the capacity for reflexivity and here the autobiographies and arts come into play.

As we saw in the titles and in the themes of the three autobiographies the task is how to be aware of views, judgments and assumptions, when we first of all lack a proper language to talk about existential/spiritual matters. What to say and what to do being in No Man’s Land, being in The Waiting Room waiting for death, and finally how to deal with Taboos about being ill? What makes me wonder is the fact that related to narrative of illness or of dying is almost for certain a narrative about life. It is described how illness disrupts human life, and the authors are reflecting on the theme, how one ought to live. It seems as if meaning, being and time become clear in the light of death or illness. However, what we can do is pointed out by Deurzen and Adams, existential therapists: “While we can never feel what the client is feeling, what we can do is to take their experience into ourselves and engage and resonate with it” (Deurzen and Adams, 2011, p. 31). Before exemplifying how to take experience into ourselves and engage and resonate with it, let us have a closer look what is important in a pedagogical setting concerning communication.

Communication in the learning practice of the nursing profession

The statement concerning theory and techniques mentioned by the nurses above points to a key point showing that we are dealing with a complex task. No technique is capable of delivering what is asked for here: to understand the world of other people, their be-

liefs, their attitudes, their responses to illness, and the path each person is to take in order to overcome distressing experiences in life. Concerning the spiritual 'part' of the perspective, the question about beliefs is even more problematic as it in general belongs to the personal and private sphere and language is missing.

Finally, how are various genres to be used as learning spaces for healthcare providers in practice? By examining examples it is possible for nurses to refine their individual capabilities in collaboration with one another in a way which reduces the sense of vulnerability, anxiety and helplessness related to spontaneous and unprepared conversations about life and death. A statement mentioned by a professional in the beginning of the article was: I need more theory to give my answers a safe basis. Probably, the solution is not more theory but an integration of theory with lived experience descriptions, one's own together with descriptions of others. In difficult communication dilemmas are often at stake; there are no simple questions and no simple answers. Empowerment by discussing dilemmas (Jacobsen, 2008), establishing a 'knowledge-lab' (Erstad and Hansen, 2013) or a 'practicum' (Schön, 1987) or working with a problem based learning model are paths to follow. Establishing a lab where healthcare professionals by using autobiographies as well as other art products can work with not only the narratives of others, but also with their own narratives – self-reflection - in a non-therapeutic setting. Bringing together novices as well as experienced nurses opens up for the possibility to wonder and learn from this from different angles and from a variety of perspectives. Van Manen asks the question: Is it possible to bring others to wonder? He illustrates the answer with an anecdote⁵: One night when driving home by car in in the Canadian woods together with his two children, he stopped the car and looking into the dark sky he wondered about life, meaning and the universe. Asked, the children also wondered, but they were more concrete; they wondered about danger, wolves and being afraid of the dark. Children, adults, young and elderly people do wonder, but you never can tell their perspective. This is this kind of different perspectives I have in mind when working with autobiographies and arts in a lab, where professional, personal and private experiences are brought into play. I take for granted that our consciousness do not consists of

three boxes labeled professional, personal and private, experience is a much more complex phenomenon.

The goal is to enable professionals to listen to narratives and to hear the unspoken, to be able to take several perspectives into consideration, and to enable them to be counselors for patients and relatives concerning existential matters related to overcoming the distressing experiences of being ill. That is: to motivate, inspire and guide behavior of patients and relatives in the present – being ill - and in the future living with a lifelong disease or living as a survivor. Furthermore, the goal is that participants should be able to engage in the contemporary existential-phenomenological debate, to identify and describe the important concepts and to apply an existential and phenomenological approach to their professional life.

If we are to take narratives and the perspective of patients and relatives seriously in the effort to make people co-constructors of health and wellbeing, the communication must be formed as a conversation, a dialogue, a meeting, a real talk – not as information transmission from an expert to a non-expert. If communication training is to become an important part of health care service, it will be expedient to make a connection to concrete contents and build a bridge between medicine and nursing, for example through common training including doctors and nurses. As stated by Nerheim, professor in philosophy, who is working with science and communication: “To communicate is to share the world of the other” (Nerheim, 1995, p. 274, my translation). That is, communication is no add-on activity, and health care professionals, patients and relatives are all to communicate. Further challenges to discuss are: how to engage patients and relatives, how to handle informed medical decisions and shared decision making – all including bio-psycho-social as well as existential / spiritual perspectives. These perspectives could perhaps be part of developing the field of narrative medicine in the 21st century within the frame of human science.

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Notes

- 1 The titels in Danish: *Dødens psykologi* in K.M. Dalsgaard og M.H. Jacobsen (red.)(2011) *Humanistisk palliation*, Hans Reitzels Forlag og *At skabe rum for kommunikation: Narrativ terapi og musikterapi som form og forum i familier med et kræftsygt barn* in A. Horsbøl og M.B. Sørensen (red.)(2010) *Sundhedskommunikation på sygehuset*, Aalborg Universitetsforlag
- 2 Congress of Qualitative Inquiry, U.S. 2012 and 2013; Engaging people in health promotion & well-being, Italy 2012 and The 32nd International Human Science Research Conference, Denmark 2013, The Art of Communication, Denmark 2014 and The 33rd International Human Science Research Conference, Canada 2014
- 3 Sundhedsstyrelsen. (2012). *Forløbsprogram for rehabilitering og palliation i forbindelse med kræft - del af samlet forløbsprogram for kræft*. København: Sundhedsstyrelsen
- 4 The titels in Danish: *Ingenmandsland*, *Venteværelset* og *Tabuknuseren*
- 5 The anecdote is described in total in Van Manen, 2014, p. 361

Transformative Wonder

An Ex-Con Talking about Heidegger to a Class of Graduate Students

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Abstract

This paper is part of an on-going project where we bring formerly incarcerated adults into the classroom to share their experiences of incarceration and illness with graduate nursing and public health students. We present the experience of one formerly incarcerated adult, Earthy, as we consider his transformative process from participant to teacher of Heideggerian concepts of a person. Via a restructuring into poetic lines and stanzas, we creatively present Earthy's narrative from post class focus groups conducted over sequential semesters. The co-creation of this innovative and evolving class afforded Earthy the safe space to push into the unknown re-

sulting in an ontological journey of practical wisdom and a deeper self understanding that drew him back to a sense of what felt right – the wonder of shared dialogical interaction with others. We view this as a creativity of personhood born from a dialectical and dialogical practice within a ‘community of wonder.’

Keywords previously incarcerated, classroom, phronesis, dialectic, wonder, transformative learning

Introduction

Hansen (2009) speaks of a ‘community of wonder’ in higher education as a foundation for deeper and self-transforming learning. He also emphasizes that *to be* in a wonder is beyond the control of a facilitator; it cannot be manipulated nor forced to emerge (Hansen, 2009). However, what can be done “is to bring the visitor(s) to the doorstep of the state of wonder” (Hansen 2009, p. 309). The following story is about a visitor to the community of a university classroom, and how an open door of creative dialogue, reflection, and interconnectedness afforded him the creation of authentic personhood and ontological transcendence through, and in, wonder.

For multiple semesters, we have organized a single class within either a health promotion course for graduate nursing students or a health behavior theory course for masters in public health students where formerly incarcerated adults come into the class to share their experiences of incarceration, illness, and health. Previously, we have reported how this class, conducted in an open and dialectic manner, has evinced opportunities for phronetic experience for both the students and the parolees (Marlow, et.al, 2014). In this paper, we focus on the creative and transformative process of one parolee, Earthy as he journeyed from guest participant to lecturer of Heideggerian concepts and then to co-creator of the class. We aim to answer the questions: How did involvement in the class contribute to his creation of personhood? How has he been ‘in wonder’ and how does that interrelate to his phronetic knowing¹ and sense of Being? We also consider how can we as faculty, step aside, and allow creative wonder to occur in a classroom? How can this ‘allowing’ create the space for *all involved* to create authentic selves, dialectical intentions, and ethical knowhow? Finally, we invite the reader to gain a more ‘felt sense’ or ‘emotional understanding’ of the narrator through the inclusion of

verbatim excerpts creatively retranscribed into poetic structures (Todres & Gavin, 2008).

Presenting the narrative as poetry is an aesthetic approach for the researchers and readers alike to 'dwell with' the words and experiences of the narrator. Poetic restructuring of text creatively captures the manner in which a narrator tells a story, including the iterations, intonation, pauses, and fluctuations in volume and rate of speech, that exert meaning and become part of the narrative itself (Riessman, 1993). Gadamer (2007), on aesthetics and hermeneutics, wrote that a work of art "possesses a mysterious intimacy that grips our entire being," and it is this bridging between self and other that we aimed to achieve with retranscribing text into poetic structures (p. 124). Hansen (2012) speaks of an ontological understanding of the investigated phenomenon in which the researcher is taken up by the phenomenon in such a way that it becomes real to her. She "sees and hears" the phenomenon experientially rather than analytically (Hansen, 2012, p.5). This experiential involvement allows the researcher to connect more profoundly with the phenomenon and know something about its existential being that was previously unseen. Our narrator did not write or speak poetry per se; however, we argue that his words and experience retranscribed as poetry reflect a more ontological approach to phenomenological research and affords a 'felt' understanding of the phenomenon. Through the evocative and creative poetic lines and stanzas, researcher and reader have an opportunity to more fully participate in the narrator's reality, and therein, gain a deeper understanding of his lived experience.

The Project

Previously incarcerated persons (or Street Scholars as they now refer to themselves) who are part of a community based reintegration program (See The Gamble Institute [TGI]) co-founded by two of the authors are invited to come to the classroom situated in a northern California Catholic university and engage with the students in various formats. Over time, changes in how the class was conducted were made based on the readjustment of objectives, student and Street Scholar feedback, and, more important to this paper, Earthy's input. How some of these changes occurred will be revealed in Earthy's narrative below.

Narratives presented below were gathered from Earthy's participation in digitally audio recorded pre and post class focus groups and one video recording of an actual class. All recordings had been transcribed verbatim by a professional transcriptionist. University IRB approval and informed written consent had been obtained prior to participation. To guide our analysis and discussion, we draw on the works of Gadamer, Arendt, Heidegger, Wieman, and Hansen.

Earthy's Story of Transformative and Creative Wonder

Earthy is a 52-year old African American who only 3 years ago was released from prison after spending 26 years behind walls for homicide. His fortunate discharge led him to the Gamble Institute (See TGI), where he has become a co-founder and an active core member, participating in community based research and a leader in peer mentoring (Marlow et al. 2012 ; Marlow et al., 2014). Earthy has also been one of the key players and guests participants for this ongoing classroom project for multiple semesters and is one of the authors of this paper. We present his story in four sections: I. Earthy: The Ex Con; II. Earthy: The Group Member; III. Earthy on Heidegger; and IV. Earthy as Earthy.

I. Earthy: The Ex-Con

This first excerpt is taken from an interview after one of Earthy's participation in an earlier class where he shared some of his life story, including his experiences in prison. He was asked, "What was it like during the class for you?"

I remember...
they was alert.
I thought maybe they might have been
in awe, like "wow!"

And I kept
wondering to myself,
"what is it exactly
that they're going to get from me?"

And I felt a sense of shame
come over me for a minute,

just playing my whole life over
in my head.
At the same time
I felt grateful to be in a position
to be where I'm at
and knowing that this is where
the changes start coming about.

We see Earthy working through some conflicting sentiments: he moves from shame to gratitude, but overall uncertainty – the dialectic in action, seeking some understanding or sense of purpose as he finds himself in this unfamiliar situation. There is a sense of 'practical knowing' that being there is the 'right' thing to do, to be able to help others. Phronetic awareness is generally developed in situations that are not necessarily consciously chosen, but rather while remaining open and listening to what the situation is telling us is the ethical action to take (Risser, 1997). Earthy continues:

I think I was wondering about that inside deeply.
And how would they take me?
And how much of my story
would I have to give to them
for them to really truly understand me?
And could they truly understand me?

Earthy's questioning of the unknown reveals a sincere and deep desire to be understood, and yet in lieu of fear or angst, he expressed it an open wondrous manner. He continued:

And afterwards we were sitting there
and then all of a sudden
I just got a whole crowd around me.
Then somebody broke the ice
and started asking me more questions.
And I just kept on smiling,
answered it the best way I could.

And I felt like it was a dialogue being shared.
I felt like I was a part of them now.

I walked in there feeling belittled
but actually I felt strong as the process went on
and I felt on their level.

A shift here moves us to see the exigent joy of connecting through dialogue demonstrated by the barrage of questions by students who care, in what Hansen (2009) would refer to as the 'community of wonder.' Earthy moves from feeling shame and 'less than' to feeling equal, an experience bursting with acceptance and human dignity.

II. Earthy: The Group Member

The next class was conducted differently to accommodate the structure and objectives of the course that semester. The director of the Gamble Institute, and co-author of this paper lectured on Heidegger's concept of a person as the philosophical foundation of their peer mentoring project. The parolees gave no life stories and together the students and parolees created and acted out vignettes. In the post class focus group, Earthy shared that this structure did not work for him. The following excerpts reveal his dissatisfaction as well as his suggestions for how he would like to participate in the next one.

[When]Dr. Marlow did a PowerPoint presentation
and we was kind of sitting on the side,
I didn't vibe it right.
It didn't touch me right.

It just made me feel belittled.
It just made me feel like
we was guinea pigs like
"Look. Here go the bad guys. Feed off him.
Get this information."

One of the things
that I actually missed overall [was]
being able to present myself
and give them a different oversight
of what I, consist of,
and what I'm about.

Earthy experienced something very different in this class than the one prior. Being on the sidelines left him feeling objectified. There was very little time for dialogue with the students, and this lack made him feel nonexistent, even animal like.

Earthy decided next time, he wanted to give the lecture on Heidegger, but not as Earthy, the ex con.

We go in there
and be introduced as doctors.
But at the end of the class
bring the reality of the dialogue
to what we truly are.

I'm sure there are lot of jaws
going to drop, like,
"Wow, I never knew."

Earthy's plan was to come in disguised and reveal who he really was later in the class. He also suggested to create vignettes that profile socially common held beliefs of black boys, men, and women, previously incarcerated or not. This was his idea for the vignette:

This individual [is dressed]
in his baggies, his Jordan's,
and just his 'get out,' right?

But he get hit by a car.

When they bring him in the hospital,
they like, "you look like a gangbanger,"
but he's not.

There is a thread between both of these suggestions and yet they differ. In the first, Earthy desires to give the lecture as a doctor and in the end reveal that he is actually the client that the students will be dealing with. In the second scenario, he wants to lead the students into thinking a patient who comes into an ER dressed up in his "get out" is a gang member but in reality he is just an innocent

youth. It is as if Earthy is like Socrates' 'gadfly' character who aims to awaken or arouse those who will, as Arendt states, "sleep on undisturbed..." (Arendt, 1971, p. 432). In a Gadamerian sense, he aims to uncover the students' prejudices to allow them to come to the foreground and through this dialogue these potentially revealed prejudices would play a crucial role in 'opening up' what is to be understood (Gadamer, 2007).

III. Earthy on Heidegger

This section portrays Earthy as the 'academic' (Earthy's word) giving the lecture on Heidegger that he himself requested to give. Later he reveals his true identity as envisioned but the response he received did not match what he was expecting. The following excerpts are from transcripts of a video recording of the class itself. This first piece is from his lecture on *Sorge*.

It means the things
that matter to us.
What really matters to you?
What are our concerns?

I don't have the answers to this question.

When we're doing these interviews,
when we're doing this research,
when we're dealing with these individuals, and
when we have this shared dialogue,

these are things that are
awakened in my head,
and I'm listening,
and I'm changed.

Earthy seems content with not having the answers and what may be 'awakened' is a new sense of Being, of personhood, standing in the openness of listening to another. *This* is what matters to him. Earthy continues his lecture, speaking now on personhood:

They said,
“What does it mean
to be a person?”

I wonder,
was I an abyss,
just floating somewhere,
or really did I exist?

Did I have creativity?
Was I able to say I am a person?
Not just a human carcass,
walking through life,
but am I
a person?
The answer was,
“yes.”

The pauses, silence, spacelessness and timelessness were most salient in this presentation, and aimed to be captured in the poetic stanzas. What he questioned about personhood as well as the very fact that he responded by questioning draws us in to his quest for knowledge of, or rekindling a recognized, loving, and warm state of wonder. Heidegger (1984) claimed that in wonder the most usual “steps forth in its unusualness” and compels us into primordial questioning, that is, the acknowledgment of “beings as beings” (pp. 150-151). Earthy, *displaced* in ontological wonder, acknowledges that what it means to *be* a person, is simply, that he *is* a person.

Despite Earthy’s profound lecture on Heidegger, he relayed a dislike of his role as lecturer. Moreover, his plan to ‘drop jaws’ when he revealed his true identity was unfulfilled and instead he was met with a complete non response and an unrelated question posed to another speaker. In this last section, Earthy shares his lived experience of ‘Earthy on Heidegger.’

IV. Earthy as Earthy

Earthy tells us how his ideas to run the previous class finds him longing for the rich dialogical experience that drew him in during the first class. The narrative reflects an ontological journey through

concrete experience of pushing into the unknown, creating the space to experience a practical wisdom, a deeper self understanding, and a clear 'knowing' that draws him back to a sense of what feels right – the wonder of shared dialogical interaction with others. In Earthy's words:

I wanted to walk in there and
"I'm a Doctor So-and-So."
and then later on
hit them with the reality of,
"That's not what I am."

And, it was some point in the class
where they actually started
talking about individuals
being incarcerated and everything.

And I spoke up on it.
I'm like "I have experienced that!"

[they] didn't even notice it.
[they] didn't even know.
[they] didn't even notice it.
[they] thought it was just like nonchalant like it was just –
went right through them.
I don't know it actually had any effect.

The restructured text highlights the repetitious manner of his expressed disappointment. The lived experience of twenty-six years in prison - a huge piece of Earthy's historical being - was completely missed by the students and he lets us feel the pain of that. Yet later he makes it clear that he does not want to be put in that box exclusively either. Perhaps Earthy's failed intention to astonish or 'surprise' the students in order to spark wonder in them supports what Heidegger (1984) speaks of when he argues that astonishment, awe, and admiration are different than wonder as they are all a "turning away from the usual thereby leaving it alone and bypassing it in its usualness" (p. 144). What Earthy missed here is that which truly sparks wonder in the students is purely *being with*

Earthy's *being with* them, in dialogue, being open and transformed alongside him.

In this next passage Earthy comes full circle but more as a spiral weaving his experiences together in an acknowledgement of how Being rises from dialogue. It is through this dialogue that brings others along on the path of discovery and new understandings.

And the way I'm looking at it from here on out,
I like for the students
to be able to actually ask me a question
and create that room
where *I can have my own* creativity.

And let that individual
start asking me questions
then I can speak from my experiences,
what's inside of me,
what I feel,
how I live, how I embrace life.
The energy of the life -- it just goes on and on with me.
You know?

And I think every time that we do this --
it's bringing us closer;
it's bringing us to a better understanding
and it gives me something to make me just say,
"Wow, I'm glad to be a part of it."

How can I make it better?
And I'm looking forward to the next time
we come into the class.

I'm coming in as Earthy.

Earthy here proclaims the joy of being part of what could be viewed as a 'usual' process, one of guest speaker in a university classroom. Yet, given a string of interconnected and dialogical experiences, he acknowledges the unusualness in his own being, as he plans to return to the next class as 'Earthy.' We see the unfolding of his

beingness, and the joy that stems from sharing that with others, and being a part of a whole. Hansen (2010) speaks of the joy and cheerfulness of wonder, and citing Arendt and Heidegger, states, “in wonder you experience a stepping out of your own Ego” and step into a “homecoming – or ontological familiarity” (p. 172). Earthy returns to Earthy, gratefully and enthusiastically – a valued and meaningful homecoming.

Discussion/Conclusion

We have shared with you a story of Earthy’s transformative wonder experienced through, and in, dialogue with others in a university classroom. His journey began as a guest participant, moved through the role of lecturer of philosophy and co-creator of the class, and now, continues with Earthy as ‘Earthy’. After each class Earthy was left with many questions and uncertainties. Conducting the class in such an open fashion afforded him the space for more seeking and longing for ‘knowing’ and wisdom of the truth. From the beginning he showed us how the dialectical process - his deliberation about what was the right action even when he felt conflicting sentiments such as shame and uncertainty - opened him up to the development of an ethical, practical know how, that is, *phronesis*. Gadamer (1974/2006), in discussing how ambiguity in a situation drives the dialectical process, purported that questions make things indeterminate and we can only arrive at answers or understandings that open up to more questions. Part of our role as teachers is to create space for questions and create indeterminacy for those engaged in the learning process.

We have also attempted to bring to the attention the impact of wonder on Earthy’s creative transformation. Throughout his narrative, he gave us glimpses of a wonder embedded in gratitude. Hansen (2012) draws attention to the phenomenology of a wonder that is “connected to a deep experience of gratitude” which Earthy so eloquently embodied (p. 14). Most clear though was Earthy’s portrayal of his journey that brought him back to a newfound gratitude of his own ‘being *as* being’ which Heidegger (1984) emphasized as “what alone is wondrous” (p. 145). We would further argue that what facilitated the arrival of this wonder was the tapestry of dialectical and dialogical experiences in the presence of open and receptive ‘others,’ in what Hansen (2009) refers to as a ‘community of wonder.’

This arrival to an acknowledged sense of being *as* being may be viewed as the development of an ethical authenticity born from dialogical interconnectedness (Nosek, 2012; Taylor, 1991) or as a 'creation' of personhood through creative events suggested by Wieman (1945). Wieman (1945) describes how a series of four subevents of meaningful quality progressively create intrinsic versus instrumental good in persons. Earthy's participation in multiple classes over multiple semesters afforded him a transformative opportunity which could easily be understood as the crucial sub events necessary for an intrinsic creative event that Wieman suggested. The first sub event is the development of an awareness of qualitative meanings born from communication with others (Wieman, 1945). Earthy spoke often of the joy of dialogue with the students demonstrating an awareness of new meaning to his presence in the class. Wieman further believed that an integration of new meanings with those already acquired was necessary and warranted time to pause and assimilate the new understandings. Via Earthy's progressive interactions with each class, new meaning was built upon the prior and together formed the building block for the subsequent classes. Earthy's ability to reflect between classes and during focus groups facilitated the assimilation of each experience and its newly acquired valued meaning. The third sub event, a new felt "richness of quality in the appreciable world" naturally follows the first two (Wieman, 1945, p. 62). If, through intercommunication, new meanings have been woven together, the "individual sees what he could not see before" (p.62). This appreciation is clearly portrayed throughout Earthy's narrative but especially when he spoke of his need to bring back the class structure where there was more dialogue. Moreover, his profound statement that the next class he plans to come as *Earthy* tells us that this Earthy will be one with an increased intrinsic value of his newfound appreciable self and world.

The "widening and deepening community" that occurs amongst the actors who play a role in the total creative event completes the creation (Wieman, 1945, p. 64). Not only is the individual who experiences the creative event transformed but also those who participate with him in the process. Meanings communicated to him from others have become a part of him and vice versa. An increase of empathy occurs where now all who have participated in the creative event are better able to feel, see, and think as the other. Through

this empathic process, understanding and community are created (Wieman, 1945). This clearly and accurately describes what has transpired during this ongoing classroom project. Students reported a widening of horizons and transformed judgments about the parolees and increased intrapersonal insight (Marlow et al., 2014). Furthermore, the professors of the course and Earthy's peers have grown together through the process of participation and reflection.

We would add to Wieman (1945), that the creative event manifested through interconnectedness most likely occurs when participants have tapped into the 'wonder' that Arendt, Heidegger, and Hansen speak of. However, it could also be possible that a state of wonder occurs when the elements of the creative event transpire given the welcoming and open opportunity in community. When a classroom is conducted in such a manner that aims, like the arch of the arrow, to foster wonder and phronetic awareness, these sub-events and their wholeness of a creative event naturally flow from this. It is as if the 'wonder' is the opening or the fodder for the creative good to occur. Nonetheless, they appear to co-exist while 'standing in the openness' creating readiness at the doorstep to wonder (Arendt, 1978).

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Notes

- 1 *Phronesis* is defined as practical wisdom, practical reasonableness, and ethical knowing or know-how. Gadamer described *phronesis* as "moral knowledge", meaning a kind of knowledge in which we make a choice about what to do in a given situation. We come to this choice through both thinking and acting. When the choice is made, the knowledge we possess about it is a deeper understanding about the situation. It is not a factual or final truth. Rather, this knowledge is a different interpretive awareness about the situation and the choice itself that we carry forward into our next experience. For Gadamer, moral knowledge or *phronesis* is an ethically imbued kind of knowing that is grounded in both practical and reflective actions and informed by our socio-cultural, historical contexts.

Art Therapy

Psychological Creativity in the healing of mild depression

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Abstract

Based on a Jungian approach, this article will introduce an integrative model to therapeutic change using art therapy methods as practical tools, with the aim of improving quality of life and in the prevention of depression.

In a research study involving six participants, painting, clay work and drumming were used together with imagination and personal dialogues linked to the artwork. These art therapy processes attempted to combine the participant's experience of inner and outer reality. The effect of gaining more knowledge about their inner reality using dreams and symbols, was that participants gained a new understanding about their personal life. In addition, some participants were able to continue to use art therapy experiences as self-developmental tools after the research study terminated.

Jung's description of the interactive relationship between the two living parts of the psyche: the conscious ego and the unconscious self; was used as a condition for and a core understanding of a good quality of life experience.

We applied a bricolage research methodology consisting of a phenomenological, a hermeneutic and a heuristic approach.

To reduce the collection of data about therapeutic change, four different perspectives/ attitudes were used: a) description of the therapeutic processes, b) therapeutic developments c) theoretical triangulation and d) therapeutic changes.

An integrative art therapy model emerged from the experimental part of the study as a suggestion for a future clinical model of Art Therapy with this population.

This article focuses on the psychological aspect of creativity related to mild depression with an emphasis on the interaction between the conscious and the unconscious part of the psyche.

Keywords Art therapy, Creativity, Psychological creativity, Art psychotherapy, Therapeutic change

Introduction

The art therapy research study for people suffering from mild to moderate depression was carried out in a group setting. The main question in the study was: Can art therapy improve quality of life through a conscious interaction (the ego) with unconscious content (the self) in the living parts of the psyche, thereby improving the connection between the conscious ego and the unconscious self? Art therapy directives were developed in order to activate the unconscious part and to stimulate the creative expressive process. A lack of connection in the ego-self relationship is considered to inhibit creative processing and solutions in everyday living (Edinger, 2000).

In our analysis of the first case, we discovered a transformative pattern and classified this in accordance with Rosen's (2002) model of inner change, where the person goes through the stages he refers to as egocide, initiation and return (Rosen, 2002). These stages were also found in our analysis of the following 5 cases.

Our subsequent analytical procedures were based on Abt's model (2005) where he differentiates between sensation, feeling, thinking and intuition as different psychological attitudes and ways of understanding the participant's artwork.

The findings from the study suggest a relationship between art therapy methods and improvement of the ego-self relationship

based on case analysis, comparison analysis and self-evaluation reports. These findings also pointed towards an understanding of the process of therapeutic change and of the conditions that need to be present for the creative process to operate within the human mind and beneath the surface of consciousness.

The analysis of the processes of the six participants showed that one participant did not seem to improve according to the post and follow-up tests. She expressed that she just wanted to feel better and to move on in her life, without confronting her deep grief of having lost her husband and son. Her artwork became more *compensative* to life than was found in the other five cases and positive change in quality of life could not be registered in the post and follow-up tests. Three participants had emotional problems that they needed to express and understand and they were motivated to move forward at a *psychological* level. Another participant felt lonely in *social* life and the most transforming experience for her during the therapy was to be part of a group at a social level, where she felt included and accepted. Finally one participant had a longing for a *spiritual* connectedness to her inner self, and she related deeply to the images in her artwork.

This new understanding of the therapeutic processes can add to knowledge for future art therapy practitioners. The research suggests that different clients' needs can be met through different working levels and methodological choices made by the therapist in an art therapy setting.

The depressed state

Many people vulnerable to depression are undetected, ignoring the beginning symptoms of depression such as lack of physical energy, emotional vulnerability and self-critical patterns of thinking. They often wait too long before they seek help.

This fact suggests that many more people are susceptible to depression than is generally believed. Also, mild depression often predisposes a person to the development of major depression (Rowe & Rapaport, 2006), and this is another argument for an early intervention.

Using expressive art modalities with emotional conditions differs from more traditional therapy methods applied within the field of depression, such as medical treatment and cognitive therapy (Coop-

er, 2008). These traditional offerings have as their main purpose to reduce the person's contact with emotions as a way to increase quality of life. (Sloman & Gilbert, 2000). The limitation in using these approaches is that the emotional condition in the depressive state is not transformed into more creative ways of living.

Psychological creativity

In the art therapy approach described in this paper, emotional and cognitive processes are brought into dialogue and this is considered necessary for psychological creativity and change (Siegel, 2010).

An art therapy procedure, as applied in this study, unfolds through the following steps, a) a creative and expressive process, b) an imaginative and verbal dialogue between the client and therapist based on the artwork and c) associations discussed in relation to personal life issues.

We consider that the condition for psychological creativity in art therapy practice is a conscious willingness to explore the unconscious parts of the psyche through the artwork. In order to do so, the creative process is needed as a process that transfers contents from the unconscious part of the psyche into the artwork.

We consider both the creative process and the verbal exploration of the artwork as necessary for therapeutic change. The non-verbal process of creating the artwork is regarded as compensation to the conscious experience of living, thereby creating a belief that a change has taken place. Here, the expressive process is not considered to have any transformative effect in itself, unless the unconscious content manifested in the artwork is integrated into consciousness through a felt understanding of its personal meaning.

From a Jungian perspective the expressive process can be explained as a process of self-regulation controlled by the unconscious self and not by the ego (Sullivan, 2010). Psychological creativity therefore includes both unconscious and conscious processing, and this may account for the fact that the originality in the work may lead to therapeutic change.

The concept of ego-self in Jungian psychology

In Jungian psychology, the concept of self is described as a center in the psyche that regulates the conscious ego from living a one-sided life through compensative creative processes. Sullivan emphasizes

that it is an “energetic force that strives for much more than instinctual satisfaction... It is trying to balance and complete the person” (Sullivan 2010, p.50). The self is also understood as an “objective” part of the individual psyche because of its archetypal nature and lifelong attempt to become part of living, which Jung named “the process of individuation” (Bertelsen, 1975).

In this paper psychological creativity rests on the two-folded understanding of the self as both having a compensative function and a drive towards wholeness. When the self is unable to reach the conscious ego with suggestions for corrections (through dreams and symbols), the ego becomes alienated from the self and from intuitive knowledge of what to do in life. Everyday creativity, as described by Richards (2010), is a necessity for our survival both as individuals and species and is connected to an attitude of openness to experience. Trusting the creative process during the phase where it does not make rational sense seems to be an essential `working-through` attitude in psychological creativity.

Since the self is only reachable through the symbol, we think the use of imaginative ways of approaching the symbol is an important part of the dialogue between the participant and the artwork facilitated by the art therapist in order to discover *new* connections between the conscious and the unconscious part of the psyche.

Research procedure

Sampling procedure

Seven people were chosen to participate in an art therapy group during a six-month intervention with a total of thirteen meetings, each lasting five hours.

The inclusion criterion was identification of mild to moderate depression based on test results from the WHOQoL-Bref and Depression MDI (Bowling, 2005).

There were no dropouts during the six-month intervention, but one participant was absent three times and was therefore not included in the analysis.

Methodology

In the search for a research methodology we were looking for a paradigm that could combine the subjective reality of the conscious parts of the psyche - the ego - with the objective reality of the

(unconscious) self; according to Jung's concept of the self. This process is often experienced as inner figures and unknown persons in the artwork.

A bricolage methodology was chosen and defined as, a) a phenomenological approach with a focus on the inner development of the participant, b) a hermeneutic approach with a focus on the relationship between participant and researcher/ therapist, and c) a heuristic approach with a focus on the inner development of the researcher/ therapist.

Using this methodology it was possible to include the reality of both parts of the psyche - the ego and the self - in the analysis.

The setting

The procedure during the workshops was:

1. Group drumming for ten minutes
2. Relaxation/ meditation for fifteen minutes
3. An expressive process (painting or clay work based on a directive or a dream)
4. Art therapy dialogue between participant and researcher/ therapist
5. Group discussion and reflections

These guidelines were based on Jung's concepts of shadow, inner masculine/ feminine and self, thereby attempting to guide consciousness towards the archetypal self (Edinger, 2000).

The purpose of using guidelines was to guide the participants to follow the creative process through patterns, which they might not get into themselves, and then to pay attention to the dream response. This combination of inner and outer stimulation was intended to create a symbolical dialogue between the conscious ego and the unconscious self, but the combination was also suggested as a self-developmental tool that the participants could use on their own.

Data collection

The data collection consisted of test results from questionnaires, pre, post, follow-up 1 and follow-up 2, video recordings of all work-

shops, video transcription of therapeutic dialogues, dreams, artwork and the participants' self-evaluative reports.

Analytical procedure

The analytical procedure was based on Abt's model (2005) of picture interpretation where he approaches the artwork using four different perspectives in order to find the psychological meaning of the artwork. This method is contrary to a reductive way of understanding the artwork, where meaning is found by translating/reducing the image to content that is already defined independent of the associations made by the person who created the artwork.

Steps in analytical procedure

The following steps were used as a meaning-making process related to the artwork.

Step 1. Descriptive presentation

A presentation of the artwork and the dialogue between the participant and the therapist exploring the artwork together (based on video transcripts). These selected parts contained the participant's own words and can thus be called a descriptive presentation. All descriptions were exported to a computer program (NVivo) and coded, searching for themes and patterns.

Step 2. Therapeutic process

The second level of the analysis had an emphasis on the *emotional* content from the images and the participant's life situation. Themes were recognized as patterns of therapeutic interchange between conscious and unconscious content and related to Rosen's transformative model that consists of 3 phases; egocide, initiation and return, (Rosen, 2002).

Step 3. Theoretical triangulation

The third level of the analysis consisted of developing a *theoretical* understanding of the participants' emotional development. There was a change from using a participant's perspective to having a focus on using different theoretical approaches as a way to further understand therapeutic change.

Step 4. Therapeutic change

The fourth level of the analysis focused on the overall *transformation* in the participant's development as an indication of therapeutic change. One important aspect was to see if and how the regulative function of the self, was active during the process. Part of this process included a triangulation of qualitative data with pre-post and follow-up tests results.

Summary of analytical procedure

Implementing the four analytical steps as different perspectives related to the data became a way to include the participants' own associations in the meaning-making process, thereby consciously attempting to avoid reductionism (Shepherd, 1993). This method also suggested a way to combine the subjective experience of the artwork with more objective understanding of the therapeutic process based on different psychological theories.

Findings were categorized as a) therapeutic process b) theory, and c) art therapy methods. This is presented in the following.

Findings related to the therapeutic process

In the coding procedure, we found themes and organized them according to Rosen's (2002) description of egocide, initiation and return. They showed a connection between conscious and unconscious processes as illustrated in fig.1 as they moved from the point of activation to the point of change.

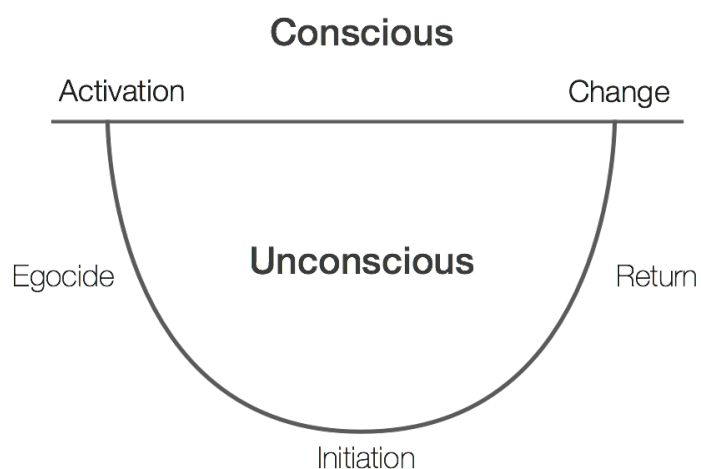


Fig.1

The process in the unconscious part of the psyche was found to *prepare* a change in consciousness that only became meaningful to the conscious mind at a later time.

Egocide

Egocide relates to the process of sacrificing a part of the ego identity that connects to a low quality of life experience.

In all cases the inner judge appeared in the artwork as inner critical voices preventing the creative process to unfold. In one image made by A (fig.2), the expressive process started with the yellow figure followed by black lines and dots covering the figure. The participant later explained *"it was as if my father's voice came up confusing me with all his comments about right and wrong"*.

The egocide for this participant became the sacrifice of her attachment to her father's voice inside and appeared as the core theme preventing her from a more creative life. Prior to this discovery, A had identified with the inner judge as if that voice was part of her own self.



Fig.2. Confusion

Initiation

In the following stage of initiation, a deeper imaginative exploration of new possibilities emerged, suggesting a different approach and attitude in life. Comparing the first and last artwork made by A. the symbol of a spiral appeared in her last painting and was experienced as the creative new solution to the dissociation between the front and the back in the first clay figure (see directives in table 1).



Fig. 3. First artwork.
Inside and outside are not connected



Fig. 4. Last artwork.
Inside and outside come together through the spiral

Return

The stage of return was identified in her daily life through her new work as a drama teacher, where she felt she could be herself in a more integrated way than when she was performing on stage as an actor. The spiral was recognized as a transforming image moving between the inner and outer reality in her new attitude to work and life.

Originality

For all participants the creative product to some extent mirrored experiences that were once conscious, but then repressed. Nothing *original* was found in these memories. For something original to appear, the image must be recognized as something unknown to the subject. This is what Jung referred to as the archetypal level in the psyche, which can only become known through the symbol (Kugler, 2008). From a Jungian perspective working with symbols therefore means working with the original part of the psyche. In order to initiate this process, the inner judge was confronted in the therapeutic process and sacrificed as part of the participant's self-understanding.

Recognition of personal repressed memories and of ways of being that were not allowed in childhood became an important part of the opening to more original parts in the psyche.

Findings related to theory

In this study a strong connection between theory and clinical work was found to be useful as long as the art therapist/ researcher used theoretical models *before* and *after* the therapeutic dialogue with the participant. Thus theoretical models were not applied to reduce or replace the verbal exploration of the artwork but instead widened the psychological knowledge of the creative process and product.

A new paradigm has not yet developed from Freud's reductive stance to the unconscious parts in the psyche and to images (Skov, 2015). If imaginative exploration is not included in the meaning-making process, interpretations from theoretical models are too easily based on reductive assumptions more than on individual originality.

Our view is that psychological creativity is *more* than creative expressions. It includes a conscious interaction with the creative product by the participant in order to facilitate a therapeutic change (see p. 7). The imaginative dialogue with the image as a representation of the self then becomes the bridge *between* ego and self. This interaction was found to be most active during the stage of initiation (See p. 16). We suggest that a transformative depth is not possible through a reductive method because this is mostly concerned with what is already known by the conscious mind and therefore does not support the development of the ego-*self* relationship.

Jungian concepts were found to be most useful having a guiding function during clinical preparation and interaction with symbols in the initiation stage leading to more focus and trust in the therapeutic process. Other orientations such as transformative learning (Heron, 1992) and cognitive methods (Siegel, 2010) were found to be more helpful for our psychological understanding of the therapeutic process during the analysis of the egocide stage and the return stage.

Findings related to art therapy methods

The art directives in this study were meant to create a raised interaction in the relationship of the ego and self-axis through a practical activation of different structures in the psyche. Table 1 shows the goal of each directive.

Table 1. Goal and directives

Goal	Art directive
Activation of ego-state	Present yourself as a clay figure
Activation of inner voices	Make a family portrait in a painting
Activation of shadow	Make a painting of the person you were <i>not</i> allowed to be as a child
Activation of Anima and Animus	Make the inner couple in clay
Social interaction	Group painting versus individual painting
Activation of self	Using both the masculine and feminine in a painting

The participants were invited to use the guidelines in their own individual ways by following their own impulses in the creative process more than what they might think was expected from the therapist. The therapeutic dialogue with the art therapist that followed this expressive process supported the participants' imaginative

experience of the artwork. Using this relational mode, it was found that the participants were able to project the images needed for self-regulation into the artwork.

The participants in this research study all thought that the blend of therapeutic dialogues and art expression was equally important for the therapeutic outcome.

Summary and conclusion

The findings showed that as a result of a developmental process working through stages understood as egocide, initiation and return, the participant's experience of an individual self as a part of their living psyche became stronger. This was expressed by some of the participants as a better connection to inner needs and more confidence in actively fulfilling these needs. We think these findings suggest that imaginative methods are beneficial for people who are living with a vulnerability to depression because the imaginative exploration of symbols also stimulates novel resources beyond the existential problems in life.

Using a Jungian concept of the self can add a potential to art therapy, which we think is helpful in order to bring about a transformative rather than just a compensative therapeutic effect. This does not exclude other theoretical perspectives of creativity, therapy and learning processes. We found that such theories supplemented Jung's focus on the inner life.

Some of the activities in this study, such as painting and drumming, have activated the unconscious parts of the psyche, while others have been more cognitive in orientation, such as putting words to images.

A final conclusion, related to psychological creativity and therapeutic change, was that the biological (expressive), social (group) and spiritual (symbolic) aspects and levels were beneficial to help psychological creativity operate in a practical and transformative way.

We are aware that this study included a small sample size, and thus cannot be readily generalized. Yet we hope the findings can serve as guidelines for future art therapy practice and research.

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Air Hunger

The Sublime In Nursing Practice

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Abstract:

In sublime moments in practice we may be brought close, incredibly close, to what normally remains at a distance. Or we may momentarily discern what has always been before us and so close to us that it has never before been truly noticed. Two different nursing situations show how meaningful, yet ineffable the sublime in practice can be when it is evoked and how difficult it is to articulate aesthetic dimensions of nursing practices without covering them over with theory and theoretical knowledge. We consider the experience of taken for granted breathing when suddenly severe breathlessness appears. What is it to be present to those in extremis, to be close to the inside workings of human bodies? Using Jean-Luc Nancy's (1993) understanding of the sublime, we consider how the experience of a patient's breath can be existentially revelatory of nursing practice.

Keywords sublime, nursing, nursing practice, phenomenology, Jean Luc Nancy

Introduction

What does it mean to breathe? Breathing is something we do daily, continuously, yet rarely is it brought to our attention. Although we might cough from the force of our inhalation as we run up a hill or, like children, test how long we can hold our breath, feeling our lungs burn, only to gasp when we finally cannot hold our breath any longer, these moments pass quickly as the ebb and flow of our breath returns and once again slips from our notice. Indeed, we cannot stop our breathing for longer than a few minutes, unless it is stopped by something else. And even then, the body's rhythms reappear, now with a forcefulness, desperately trying to pull in the much-needed oxygen.

Breathing, quite simply, is a primal human activity. We must breathe to live. What, then, does it mean? And what does it mean to care for another in their breathing, to someone who cannot breathe? In this essay, we consider the power of the breath as it can appear in the nurse-patient relationship. The accounts presented are drawn from previous hermeneutic phenomenological research according to Max van Manen (1993/2007) on the aesthetic dimension of nursing practice (Cameron, 1998; Goble 2009). Using Jean-Luc Nancy's (1993) understanding of the sublime, we consider how the experience of a patient's breath can be existentially revelatory of nursing practice.

Below an experience of severe breathlessness is presented. Here, as the possibility of death and mortality erupts into this particular world, so too does nursing. We see qualities of nursing expressed in the practices of this nurse as well as the incredible life-force of the person, the *élan vital*, come to the fore. Later in the paper, we see the response of a young nurse when faced with an internal organ during a surgical procedure. Being present to a functioning internal organ draws a response from her that is both unexpected and revealing.

The nurse's specific practices evoked in response to the episode of severe breathlessness, hold sway over theory and theoretical notions often prevalent in the discourses of health professions. The young student nurse, well aware of physiological processes, discovers there is more to anatomy and physiology than objective knowledge alone. The breathless woman reaches new dimensions of living through a mortal episode. Here human science inquiry yields insight into the lifeworld of nursing, a student's response to

a health situation, and a person's experience of lost breath. For the researchers here, as well as the reader, as Vangie Bergum (1989) writes, phenomenological studies may take on the notion of a "research drama" (p. 48) as we stand in the presence of mortality inserting itself into the world.

Air Hunger

Gwen cannot breathe. Her attempts to suck in gasps of air are audible. Her color is poor. A pale circle surrounds her mouth. Her lips are not pink anymore. Her chest heaves and retracts with the effort of breathing. I know as a nurse recently cum researcher that Gwen is perilously close to a respiratory arrest. Her nurse immediately moves to her side, speaks to her while reaching for and replacing her nasal oxygen prongs with a mask and increasing the oxygen flow. Because I am new to this agency I scan the room for the equipment and other elements for dealing with respiratory and cardiac arrests. I look for a suction apparatus in the room; the location of the crash cart and emergency medications. I check how large the vein is that currently has an IV running in it. I look out the window for other staff on the unit. I look back at Gwen and her nurse. I move in close to the other side of the bed.

The nurse bends over to Gwen. She seeks eye contact. She speaks softly but firmly and tells Gwen how to breathe with simple directions. As she speaks she places her hand over Gwen's diaphragm to give emphasis to her words. Her other hand supports Gwen on her back and upper shoulders, gently pushes her forward to a more upright position. She alternately strokes and supports the spine. Her hand goes to Gwen's legs, which reflexively jerk up and down in her anxiousness; flexed knee, extended leg, flexed again to her chest. The nurse strokes and gently guides these limbs to stillness. Gwen allows the nurse to do this and begins to follow the nurse's instructions.

This goes on for a seemingly endless time. The nurse coaches, supports Gwen sitting upright, encourages her to breathe from where her hand is placed. "Breathe down here Gwen, push my hand out, that's it, really good, now another one." I stand across the bed from the nurse. I look for signs of muscle flaccidity and fatigue to indicate a worsening condition. I see

them. The arrest is near yet Gwen's nurse continues. I stand in readiness to invoke the code.

The soothing tones of the nurse's voice, her stroking, and her utter calmness envelops nurse and patient. There are only two in this universe. Yet as, and even before Gwen's breathing slowly returns to slightly approximating normal, I feel a calmness envelop me too. There will not be a respiratory arrest here. Gwen breathes.

I know as clear as the dawn that a less experienced nurse would have called an arrest. Gwen would have been intubated, and would now be on a respirator. I know too that this nurse brought her through with her finely tuned nursing judgment. At coffee break I tell my nurse what I observed during the 'near arrest.' She replies:

"You know if she had progressed to respiratory arrest and I know she was at that point, the fine moment where it could go either way, I would have acted then as per the protocol for respiratory arrests. But to worry about that before it happened would have taken me away from the actual moment. Getting her through it was my foremost thought not treating what might happen. I didn't want her 'tubed' (intubated) with everything else that is going on for her."

Later I ask the nurse, "what were you thinking when I saw you assessing her, what made you hesitate to call the arrest? What made you able to act in this way?" She speaks of theory and of research and breathlessness; no new material here to me. But then she says:

"Gwen has metastases to her lungs, she has fluid on her lungs, her haemoglobin is very low right now, so severe breathlessness is to be expected. Mind you that was more than severe breathlessness I know. But I also knew she had the ability to overcome it and I wanted to give her a chance. She was a ballet dancer you know, she knew about breath control and bodily relaxation techniques all her life."

Later I ask Gwen about this. She tells me: "I knew what she was asking me to do but with little breath and panic, it was too hard and I wondered if maybe this just might finally be it, the dying. Her hand was rubbing my back, I remember that. It's hard to explain. It's just something I felt. She helped me grab

my ballet body, I couldn't have done it by myself, I was past helping myself. Afterwards she taught me a few things too so I can recognize it coming on and control it better. She knows me better than I know myself sometimes."

The Sensible Presentation

How is it that it takes a moment like Gwen's severe breathlessness to remind ourselves that human beings live in a state of fragility? Why is it that we must fight so hard to stay in the present yet the breath takes us there immediately? How is it that rather than attending to the experience happening before our eyes, we in nursing would rather embrace a discourse that valorizes a represented discourse of preplanned concepts and theories to apply (Cameron, 2006). Nancy (1993) writes that aesthetics, when understood as *sensible presentation*, is really the question of presence. He warns that if an experience is covered over by representation, a modality that originates and operates mainly in thought, this is indeed nonsensible.

It is difficult to escape representational modes of thought; they have been prevalent in many practice disciplines over several decades now. When moments in practice come to be, as seen in the anecdote above, momentarily rising up and then fading away, we come up against the question of how to show this event? We can think of many ways that this could be approached through covering over the whole episode with representational constructs. But nursing and the strength of the human being would be lost. Van Manen (2007) helps us understand this further. He writes that understanding what happens in practice is mainly an issue of intelligibility. "Constructionist approaches to practice too easily involve reifying what escapes reification, thematizing what cannot be thematized, and bringing practice within the reach of objectivistic technological thought" (van Manen, 2007, p. 18).

With these thoughts in mind, is it possible to understand what was happening between Gwen and her nurse? It is a strange situation really even to the experienced nurse-researcher witnessing the event. And perhaps most strange is how long it takes the nurse-researcher to get out of the comfortable safety of the standard protocol. We are steeped in the hegemonic safety and risk discourse so prevalent in health care today. Yet we also recognize how this falls short in the face of those in extremis, those suffering.

In this account, what we see is a situated expression of nursing practice that forms in response to severe breathlessness. It is not unexpected given that Gwen is very ill. Indeed, she is dying. Protocol would suggest a highly invasive intervention involving intubation. And yet her nurse very much wants Gwen to be able to have time to continue her movement toward death in as fully a conscious way as possible. Intubation would prevent this and, in the nurse's view, Gwen and her family are not yet ready for the final breath.

At the beginning of the episode we see the nurse's attentiveness to Gwen, standing near, and exuding a calmness that is difficult to achieve if you have ever experienced severe breathlessness. Inter-linked bodies, eerie high and low pitched sounds as breathing out becomes as impossible as breathing in, both silent and audible coaching fill the room. Things progress and suddenly deteriorate to no breath. The nurse-researcher sees the limit approaching; from now on things will progress until death unless some action is taken.

The nurse too knows the limit is incredibly near but does not alter the act that has formed and is now fully present in the room. Rationality insists she call a code. But she does not. She waits.

As the nurse-researcher moves beyond her frenetic representational modality, calmness comes over her. She finally sees what is presenting itself in the moment. She turns her full attention to serving as witness to what is happening. It is a moment of the sublime.

According to Jean-Luc Nancy (1993), the sublime is not

a particular kind of presentation, [such as] the presentation of the infinite. ... It is not a matter of the presentation or nonpresentation of the infinite, placed beside the presentation of the finite and construed in accordance with an analogous model. Rather, it is a matter – and this is something completely different – of the movement of the unlimited, or more exactly of “the unlimitation” (*die Unbegrenztheit*) that takes place on the border of the limit, and thus on the border of presentation. (original italics, p. 35)

Nancy (1993) writes that the apprehension of the sublime arises like a figure against a ground. In this way, a nursing practice moment forms; it is not mandated by a prescribed care map to be done in a certain way, but rises up in response to what is at hand. The beauti-

ful, he writes, “reveals itself in extreme fragility” (p. 32). The beautiful appears in the nurse’s gesture and is immediately understood by Gwen. The meaning of it “is intermingled with the structure of the world” (Merleau-Ponty (1962, p. 186) that has arrived in the room. But eventually, the limit of the beautiful arrives. It appears with the nearing border between life and death. According to Nancy (1993), if we try to capture this limit, it fades from view. The limit of the beautiful is simply what it is, the nurse’s gesture of sustained attentiveness to extreme fragility, the border at which ‘safe practice,’ according to protocol, is breached.

But where in this is the sublime? We might say that the beautiful gesture becomes sublime at a decisive moment the nurse-researcher recognizes that this ‘breach’ is in fact exquisite care. It is the liberation of nursing from the bounds of representational forms. Nursing shows itself as a fluid and generous practice. It withdraws from what it is in representation. The sustained nursing gesture moves itself beyond its limits into the sublime; the presentation of the gesture’s movement beyond its limits (Nancy, 1993).

And what of Gwen in this final moment of recovering some breath? In daring to approach the limit, the nurse seems to open up the possibility of Gwen’s own unlimitation. Gwen comes alongside the nurse in this exquisite movement. Her cancer-riddled body gives way to her beautiful dancer body wherein Gwen breathes.

Breath and the Movement Towards Unlimitation

Breathing is our most fundamental openness to life. In free and effortless breathing, we create our communicative space with no fixed and rigid structures. The lungs are expansive, contractive, full of space as the rhythm of corporeality takes place. The lungs are also a communal space. We breathe in the air that others have breathed out. We often synchronize our breath to that of others; bodies working together in synchronicity.

But too, the breath collects what is going on in the world around us. The lungs are the only internal organ open to the outside world. If one breathes in tension or noxious odors sometimes breathing these out becomes difficult. The air becomes entrapped. If no air can be gathered around one, or air cannot be breathed out, then no atmosphere of living, of possibilities, exist. Life too becomes rigid and fixed.

Breath and breathing can serve as a meditative focus in nursing practice. They can draw us back into the nursing moment that the routine of our work may cause us to forget. As we see in the above anecdote, breath can invite us to attend to the *sensible presentation* of practice. And yet, there is a danger in this appearance: it can be powerful, overwhelming, and all consuming. Andrea tells of an incident that occurred years ago while she was still a student nurse:

One morning, I was assigned to the neuro-thoracic theatre. I am told to scrub up for the first surgery of the day, but I am not really certain what will be required of me. I watch as the patient is put under anesthetic, his chest area prepped, and the surgeon makes the first incision. When the primary scrub nurse hands me a basket retractor that is when I discover what my role is to be. With the hands of the surgeon guiding mine, I place the retractor around one of the patient's lungs. All I am to do is gently keep the lung out of the way while the surgery is performed.

It is extraordinary. The lung, captured in the basket of the instrument, moves in and out with each breath of the patient, while I am holding the other end. There I am, holding the breath of life in my hands.

Without even knowing it, I begin to breathe in time with the lung. Deeply, we breathe in... out... in... out... Until the doctor interrupts, "Don't breathe with him [the patient]. You'll pass out." I force myself to look away, now acutely conscious of the unconscious rhythms of my body. I try to focus on the retractor and technicalities of what I am supposed to be doing, but I cannot forget how this moment has taken my own breath away.

There are moments in practice that can catch us unexpectedly. These moments bring to our awareness the extraordinariness of what we do. While they may happen during extreme circumstances, in crises or instances when we are attending at birth or death, they may also arise in more common everyday moments. They may occur, as it did for Andrea, in the middle of attending a surgery where she is simply doing what she is told: carefully holding an organ aside so that it does not impede the surgeon's actions. In that

moment, she is struck abruptly by the miraculousness and incomprehensibility of that to which she is a witness.

With this recognition, the body that she touches and attends to with nursing hands seems to change. No longer does it appear as a lung to be held aside so that the rest of the body can be operated on (the sick body) or as a body to be treated and cured (the medical body). It may even cease to appear as the body of her patient requiring care and comfort. Instead, she finds herself holding within her hands something alive.

We often assert that we are more than our bodies, implying the importance of the person we are within and beyond that body. But in truth our bodies are much more than the viscera, blood, and bones that we suppose them to be. The body is not a collection of parts joined together through an animating force that some call the soul. It is more than even “[its] glances, [its] gestures, [its] speech” that serves to reveal one person to another (Merleau-Ponty, 2002, p.62). Our bodies have a pre-existence, an incarnation, that we rarely ever fully grasp. But when we do – if only momentarily – we may be amazed, awed, and even shaken by it. It may appear unlike anything we have ever encountered despite our daily encounters with bodies. It may show itself in its incomprehensible aliveness.

This is both the most banal and most miraculous of realizations. We all know that living human beings are alive. And we know that if we are not alive, we are dead, even though we may debate the exact boundary between life and death. We know that we are alive when we go to the store, when we tuck our children into bed at night, and when we talk to colleagues. We know that all of these instances combined are what we commonly call ‘living’ and make up that which we refer to as ‘life.’

And yet, the aliveness that shows itself slowly pulsating with each expansion and contraction of the lung seems very much unlike life as we know it and as we live in and through it. It is not the life we refer to when we ask our friends, “How is life?” Or the life we exuberantly feel surge through us when we have succeeded or that stops us short when we have failed. It is not even the life we know when we see a group of children joyfully and artlessly playing. Rather it is that which makes all these things possible. It is the life that is always present to us, infusing every moment of our existence

and yet nearly always overlooked because of how close it is, how enmeshed it is in us.

Most everyday, we are both the closest to this aliveness and the furthest from it. When whole and hearty, our aliveness is the most given to us and yet often the least attended to aspect of our existence. Paradoxically, it may be only when confronted with a broken body – a body cut open, the interior exposed and partitioned, with face covered, a body so unlike our normal body, so inhuman, so other – that we may break through the everydayness of life to being present to our aliveness, itself. It may be the body that no longer appears as a body that can momentarily disclose the body's sublimity: that it exists. From out of the vital organ, the fact of the body beyond the everyday body is momentarily apprehended.

And yet, what is Andrea encountering? She sees the body and the lung. She apprehends that it is alive. But she may be also grasping that its aliveness is contingent; it is given but not necessitated. To use Nancy's (1993) own phrase, she may be witnessing that which traces "the border of the limit" (p. 35) of the living body. In its movement of unlimitation that simultaneously arises with the lung's appearance, she may be intuiting that it need not have been alive, and that may be what makes its aliveness so remarkable and incomprehensible. What is sublime is "the fact *that* it presents itself and *as* it presents itself..." (Nancy, 1993, p. 37). In this instance, Andrea sees existence.

However, this apprehension of the mystery of being alive is brief. Fleeting and fragile, it can be easily overlooked – it is overlooked by each of us nearly every day. And in those rare instances when it is noticed, we can readily habituate to it. We may wonder if Andrea's wonder would wane if she spent her career in neuro-thoracic surgery? Would those lungs simply become yet another body part to be effectively and efficiently managed? Flusser (2002) writes that: "habit rises like a flood of slime along the scale of values and ... it swallows all values" (p. 53). With ongoing exposure, Andrea would not only gain practical competence but may also experience a fading away of her wonder. Such appears the nature and paradox of existence: it is both remarkable yet far too given to be noticed.

Yet, in those rare instances when the sublime does break through, it can be *breath-taking*. The body of Andrea's patient may be a broken body for the moment but it is a living, *breathing* body, pulling in and

expelling out the air of this world, her world, our world. Even in reading her anecdote, this breathing body seems to call to ours. Its aliveness calls for our response. As Andrea stands in the flesh before another's flesh, we too are there. Such a recognition can take our own breath away. The breath of the body may become our breath. We touch it and are simultaneously touched by it; hold it and are held by it. Its existence may become our existence. As we see this body living, somehow we know – recognizing with our own body – the mystery that we share with this body. As if in some bodily balancing, its life draws forth our own. Breath matches breath, partaking of the same air, the same world. Bodily rhythms converge. In its aliveness, our aliveness is poignantly revealed.

We may be so drawn to the body before us that, like Andrea, we may unknowingly begin to mimic its movements. As if lulled into the deepest of sleeps, it may cause us to lose the sense that we are separate. And in that moment, we may no longer be conscientious practitioners. The sublime may interrupt and quietly brush aside that mode of existence, a mode that we could not have maintained even if we wanted. We are briefly nothing but being, feeling, alive. Until we are called back to awareness, called back to what we should be doing and who we should be at that moment: an attending nurse.

The Ineffability of Nursing Practice

In sublime moments in practice, we may be brought close, incredibly close, to what normally remains at a distance. Or, rather, we may momentarily discern what is always been before us and so close to us that it has never before been truly noticed. It is as if the everyday undergoes a process of *sublimation*, wherein it is purified by exposure to an extreme element (sublimation, v. *Online Etymology Dictionary*, 2014), “lifted up” and “delivered” to us in its purest of state.

Such knowledge, however, can come at a cost – sometimes a prohibitively high one. It can interrupt our practical relation to the world and may cause us to momentarily cease to be practitioners. We should not forget that Andrea is a novice nurse and loses her nursing-ness to the breathing lung before her. She must be called back by the more experienced practitioner. This is worrying in the middle of surgery. On the other hand, Gwen's nurse fosters the arrival of the sublime to extend Gwen's life. She also acknowledges that, in an instant, the situation could have shifted and called for a

code and she would go there. Gwen's nurse demonstrates a responsive attentiveness to the happenings in practice that Andrea had not yet developed.

In health care, any given situation can go a myriad of ways. The two vastly different nursing situations presented above show how meaningful, yet ineffable the sublime in practice can be. Moreover, when we try to capture it, it escapes us—as it should. Nursing in its practices is always incomplete; understanding and interpretive judgments are always 'on the way.' Understanding and accepting this prevents us from falling into what Bollnow (1979) describes as "restricting ourselves to those objects in which a certainty of understanding is guaranteed by their very nature, but (rather) by venturing out into the uncertain, trying to grasp what is meant and intended... even if it has not been yet brought to full expression" (p. 25). Only in this way will we begin to understand how practice both conceals and reveals itself.

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