BI Norwegian Business School – Master Thesis

Tummelplatz: Exploring playgrounds for creative collaborations

A qualitative study of generative dynamics within temporary work contexts

Emily Moren Aanes
Dragana Trifunović

Supervisor:
Arne Carlsen

Hand-in date:
02.09.2013

Campus:
BI Oslo

Examination code and name:
GRA 1903 Master thesis

Programme:
Master of Science in Leadership and Organizational Psychology

Content

Summary

This paper presents the idea that temporary, creative collaborations within knowledge-intense industries can be understood through the tummelplatz – metaphor. 'Tummelplatz' was first introduced by Sigmund Freud (1856 -1959) as a metaphor for viewing optimal relations between patient and therapist. In our data, we find empirical evidence pointing towards the fact that Freud's analogy has transfer value into the modern day workforce.

We propose the concept of tummelplatz as a framework for understanding how collaborative work can result in extraordinary outcomes through considering both structural and relational enablers within temporary work contexts. Respectively, four structural enablers are derived from our analysis – particular aspects of time, goal, space and competence. These we label as *infrastructure,* defining the underlying features of the collaborative system. Relational enablers, labelled as a*rchitecture*, are manifested through two categories –curiosity and trust. Our data suggest that when these life-giving enablers converge, the "between" is activated, opening up for generative dynamics on the tummelplatz.

1.0. Introduction

The notion of the "creative economy", or even the "creative class", is changing our view on what the most competitive resources of an organization consist of. This shift can be understood as a shift not only in how we view society, but how we view ourselves. The most valuable currency for the future is not money, but ideas. Who owns a patent, a factory, an organization – is not what matters anymore. Rather, in the words of Florida (2012), - " what we have to stay focused on individually, and collectively – is how we keep the creative furnaces that burn inside each and every human being fully stocked" (p. 25). How can we better grasp what unites individuals and increases collaborative creativity in knowledge intense organizations? In this paper we present the idea that the relation between patient and therapist as described by Sigmund Freud (1856 -1959) offer an important lens for how to better seize the collaborative dynamics within temporary constellations among knowledge workers. This collaborative realm is termed as "tummelplatz", and has connotations to a playground as an arena for free unfolding of ideas.

The importance of working in temporary teams crossing competencies is at the heart of a knowledge-intense economy, as the pace of progress may only be seized through collaborative effort. Break-through innovations depend on ordinary people, bridging their expertise and building communities around their insight (Hargadon & Bechky, 2006). However, there is still a great need for research that brings creativity into daily work and that suggests practical schemes for enabling collective creativity. As implied by Sawyer & DeZutter (2009), previous studies have not given sufficient attention to the interactional processes that occur within the groups, and these authors stress the importance of revealing mechanisms and dynamics underlying complex collaborations that produce significant creations. Communities of practice (CoP) offer an influential theoretical framework for understanding how knowledge and innovation is emerging in groups of collaborators, and how the inherent dynamics contribute to develop and sustain valuable insight (Lave & Wenger, 1991). However, there are varieties of knowing in action and the homogenous lexicon inherent in CoP may not be suitable to capture different types of situated practice. As suggested by Amin and Roberts, the notion of CoP is "folded together into one undifferentiated form" (2008, p.

355). They distinguish between four modes craft or task-based knowing, professional knowing, virtual knowing, and epistemic or high creative knowing. We choose to put the spotlight on the latter, something that is not necessarily seized through the standing definitions of collaborations involving such knowing; communities where there is an absence of an obvious social dynamic of cohesion and mutuality, and where instead, autonomy, improvisation, individual expertise, and object-orientation are prevalent (Amin & Roberts, 2008, p. 362). Our contribution is building further on the understanding of collaborations concerned with epistemic/creative knowing, aiming to shed light on some of the inherent social dynamics and the incentives that lead members of the collaboration to contribute. Of special interest is the nature of social interaction within such collaborations, that Amin and Roberts (2008) suggest is structured around common projects and problem driven cooperation. In this concern, we introduce the metaphor of *tummelplatz*, a term introduced by Sigmund Freud used to describe the arena for the ideal relation between therapist and patient, where the inherent dynamics facilitate for an unrestricted unfolding of thoughts and ideas. It is our belief that this concept has a transfer value in to the context of creative collaborations. The realm between the patient and the therapist function best under certain conditions; in this paper we investigate these in an organizational setting. We believe that the conditions under which the patient and therapist realm functions optimally applies also to organisational settings.

Being inherently interested in the dynamics influencing creative outcomes, our focus falls on investigating social interaction within collaborations of creative workers. Following the problematization of the usage of an umbrella term to encompass various forms of situated practice (e.g. in Lindkvist, 2005, Amin & Roberts, 2008), we recognize the need for a more nuanced view focusing on the prevalent project-work practices. It has come to our attention that more insight is needed regarding the coordination and cohesion of high-creativity collaborations, and that additional research is needed to explore both social and technical mechanisms that facilitate generative engagement of the ones involved in such constellations (Garud, Tuertscher & Van de Ven, 2013). The need for consideration of a relational complexity become even more salient when taking into account the various competencies and agendas entering the project arena. The unfolding dynamics thus provide an interesting avenue for research.

In this paper, we wish to address the following two research questions: *'Does Sigmund Freud's tummelplatz metaphor convey meaning in an organizational setting?'* and *'What are the characteristics of the tummelplatz that enable creativity in temporal constellations among knowledge workers?'* Our starting point is the comprehension of a theoretical term used in psychotherapy that we were intrigued to investigate empirically in an organizational setting. Hence, the thesis applies theoretical understandings and seeks to confirm/modify these through empirical evidence. This is not to modify Freud's initial application of the term; rather we borrow it and call the generative collaborative dynamics in temporary organizational settings for the tummelplatz. We have conducted a qualitative study that primarily rely on research on collective creativity, research on the concept of communities of practice, Freud's original writings, as well as some of his interpreter's. Through twenty in-depth interviews, we have been searching for interviewees' reflections on their best experiences with collaborations. Through their reflections we have tried to seize the generative collaborative dynamics that we label as "tummelplatz", viewing it in light of the initial term, searching for similarities in our own findings.

Following, we have three objectives in writing this paper –explaining what the tummelplatz represents and why it is important in the context of creative collaborations, empirically justify its characteristics and point to generative collaborative dynamics through our analysis, and finally consider implications of our findings. The paper is organized in the following way: First the tummelplatz concept is situated in the two above-mentioned streams of research, and accordingly justified as a response to the current lack of understanding of the dynamics within temporal creative collaborations. In the second part of the paper, we present our research setting and method followed by the presentations of our findings through the analysis of our data. We end this paper with a discussion of the findings, implications of the study and limitations as well as directions for future research.

2.0: Theory

2.1. Collective creativity

Research has primarily centred on two main aspects of employee creativity – individual differences as antecedents for creativity, and contextual factors that affect creativity (Zhou & Shalley, 2003). Whereas there has been much research on examining the contextual factors (such as goals, feedback, social influence etc.), overall there is a need for more insight on the underlying or intervening psychological processes, in individuals and groups. The social side of creativity important when considering interactions across work groups and units, for instance emphasizing the role of network position and role of weak-ties in relationships (Perry-Smith & Shalley, 2003). Other scholars explore the connection of ideas as a result of both a company's network position, and internal behaviors that are aimed at stimulating the thriving of ideas (e.g. Hargadon & Sutton, 1997). The locus on creativity changes form individual to collective and from constant to fluctuating (Hargadon & Bechky, 2006) within levels of culture, subculture, and group (Woodman, Sawyer & Griffin, 1993). Within and between those levels, social dynamics may function as facilitators for creativity (Giuffre, 2009). Hence, creativity is a process that is facilitated by social interaction. In light of this, we are interested in creativity as the fundament for innovation as a social phenomenon. As stated by Kurtzberg and Amabile (2001) the majority of previous approaches to creativity have highlighted the individual and the effects of the external factors on the individual, whereas relatively little attention has been given to synergies resulting from team level creativity.

Guided by a belief in the complex and relational aspect of creativity, we pay special attention to scholars emphasizing such aspects of collective creativity. Kurtzberg and Amabile (2001) point to the importance of investigating how creativity occurs in natural settings, suggesting that researchers should explore various manifestations of creativity, spanning from the individual to large and complex groups. Hargadon and Bechky (2006) choose to embrace and explore those insights that emerge in the *interactions* between people. Hence, collective creativity becomes preconditioned by action and interaction at the collective level. Social interactions could further be perceived as the engine responsible for the creation of collective meanings, requiring the participating individuals to

converge, diverge or remain unchanged (Ickes & Gonzalez, 1994). Tummelplatz provides an image of how playing with others can function at its best. Another word for play will in this context be c*ollaboration*. Freud describes collaboration in his tummelplatz as the following:

> The first step in overcoming the resistance is made, as we know, by the analyst's uncovering the resistance, which is never recognized by the patient, and acquainting him with it (…) One must allow the patient time to become more conversant with the resistance with which he has now become acquainted, to work through it, to overcome it, by continuing, in defiance of it, the analytic work according to the fundamental rule of analysis. (1914, p. 155)

The truly collaborative nature thus resides in the circumstances that one actor may potentially not know the meaning of own contribution until the other has responded. Also, comprehending and being aquatinted with the problem (or idea) makes it possible to work with it further, to build and expand. Collective creativity, has in Hargadon and Bechky's words occurred *"when social interactions between individuals trigger new interpretations and new discoveries of distant analogies that the individuals involved, thinking alone, could not have generated "*(2006, p. 489). Following, the tummelplatz is dependent on the added value that emanates from interaction. Drawing from these perspectives, the tummelplatz is something enabled within the boundaries of our relations – it is no magic trick or utopist reality, but rather something we all can enable inn each other on a daily basis. The heart of interaction comes from communication.

Rather than seeing communication as a transfer, it can more fruitfully be seen as an arena. Shotter and Cunliffe (2003), describes responsive relational expressions, where partners try to make a shared landscape of possibilities for action when discussing ideas (in Sen, 2011). The conversation thus functions as a guideline of where we are now, and maybe even more important –where we go next. In such a dialogue, when one person communicates something, the other person does not, in general, respond with exactly the same meaning as that seen by the first person. The meanings are only similar, but not identical. Through considering this difference (the "between") the participant may be able to see something new, which is relevant both to his own views and to those of the other person. This difference in meaning, labeled as "the between", is what might enable the participants to see something new. This process can go back and forth,

with the continual emergence of a new content that is common to both participants. Thus, in a dialogue, each person does not attempt to make common certain ideas or items of information that are already known to him. Rather, it may be said that two people are making something in common, creating something new together – setting to life the "between" in their relation. Social interactions between individuals can therefore trigger new interpretations and new discoveries of distant analogies that the individual alone cannot discover (Sen, 2011). Conversations are not merely a tool for talking about ideas, but rather a mean for them to expand, be evaluated and potentially rejected. Additionally, communication is situated, both in actual spaces but also in mental images and metaphors. In order to get a deeper understanding of creativity, we should understand it as the collective realization of ideas in meaningful ways within social practices (Tanggaard, 2013). If we want to understand the complexities associated with fruitful interactions in collaborations, we should cultivate a sensitivity to observe this in particular settings. Or, in the words of Garud, Tuertscher and Van De Ven (2013), *"how social and technical mechanisms facilitate the generative engagement of actors with diverse backgrounds in communities"* (p. 33). In this regard, we turn to the notion of communities of practice, to better grasp the meaning of situated practice.

2.2. Communities of practice

Epistemic/creative knowing could be understood as specialist and expert knowledge, existing to extend the knowledge base, and where the knowledge is changing rapidly. These high-creativity collaborations involving epistemic knowing have distinct characteristics emerging from the knowledge that is used and produces, the nature of the social interaction, the kind of innovation produced, and the organizational dynamic of interaction (Amin & Roberts, 2008, p. 356). The use of the overarching term 'communities of practice' does not sufficiently capture the intimate dynamics that creative work consists of. The high creativity collaborations are not communitarian in nature, or in practice, and although distinctive features of such collaborations have been discussed one can sense the absence of an obvious social dynamic of cohesion and mutuality. What follows is an elaboration on how the notion of tummelplatz challenge the existing literature

on communities of practice, particularly considering *the temporal aspect, social interaction* and *network cohesion*.

2.2.1. Varieties of knowing in action: Why the tummelplatz (better) seize the novel.

The tummelplatz, as an alternative framework, may be more sensible to the project ecologies that complexly "interweave inter-organizational relations with a range of personal networks that adhere to diverse social logics and that unfold different relational architectures" (Grabher & Ibert, 2006, p. 266). The perspective taken on communities of practice is beneficial, as it offers a potential for creativity and innovation, similar to our tummelplatz. However in light of new work practices some of the basic assumptions in the CoP may be challenged.

In the pioneering definitions of the concept (Lave & Wenger 1991), communities of practice are described as dynamic learning environments that through collaborative effort contribute to learning formation, which in turn serve as a driver for organizations, and society as a whole. The collaborative unit thus becomes the locus of progress, and as such may be perceived as the central unit of analysis in understanding innovating practice (Brown & Duguid, 1991, p. 51). Communities of practice are defined as an entity made up of people who interact on a regular basis, connected by a joint enterprise, mutual engagement, and shared repertoire of communal resources (Wenger, 1998). The inherent dynamics of the communities are outside the formal agenda of the organization, and may thus not be institutionalized due to its changing character. They emerge around things that matter to people, and thus the practices reflect the members' own understanding of what is important. Interestingly, even when the communities conform to an external mandate, it is the community, not the mandate, that produces the practices (Wenger, 1998, p. 2). Similarly, we perceive the tummelplatz as a self-organized system in terms of conforming to an external mandate, however allowing for a free and unrestricted unfolding within to choose the path to the novel. We believe that the communitarian nature of CoP might not seize and explain the dynamics in temporary constellations that produce creative work.

The high creativity collaborations are not communitarian in nature, may involve a variety of practices, and have a different temporal aspect as they often dissolve and evolve around a project. Hence these epistemic communities are not dependent on strong interpersonal ties, but rather marked by strong loyalty to a

shared problem (Amin & Roberts, 2008). Lave and Wenger (1991) stress the importance of relationships and common skills, and how these are essential for learning, and how a *continuous interaction* among members facilitates for this. The activities in the tummelplatz are tied to a limited temporal aspect, pointing to a sealed off collaboration often connected to a mission or a goal, hence "failing" to function as a facilitator for the development of practice over time –which is at the heart of CoP.

The benefits of practice may flourish after a certain amount of time spent within the context where these practices emerge. Focusing on the health-care industry, Huckman and Pisano (2006) discovered that surgeons that left their team were losing the benefits of practice. The continuous interaction may account for some of the benefits of performance, and are not fully portable across context, which in turn may affect the individual's contribution within a new context. In order to exploit the value of practices one would expect that *familiarity* might serve as a drive; by providing team members with a common base of experience, familiarity is fostering future learning (Weick & Roberts, 1993).

Let us again consider the nature of social interaction in knowledge work and temporary collaborations. How is the social interaction facilitated and motivated for in these contexts? And moreover, what is at the heart of tummelplatz if not a shared practice?

2.2.2. Network cohesion and the nature of social interaction

As mentioned earlier, the nature of social interaction is of particular interest to us as it could be understood as strengthening ties of the collaborators around common projects and problem-driven cooperation (Amin & Roberts, 2006). The strong connections in CoP (i.e. the ones communitarian in nature) are assumed to be formed as a result of interaction over a longer period of time, common work histories and high levels of trust. Access to these kind of networks is rather limited if we consider that communality is rooted in common history rather than in professional identity (Grabher & Ibert, 2006). However, allowing for practices that are *more distributed*, encompassing a variety of *different and sophisticated skills*, *less routinized* and *more fluctuating* in terms of temporality, we should strive for a framework being sensitive to this.

We need concepts that can incorporate different temporalities of practice, and where the temporal aspect is not a defining hallmark of fruitful connections in an interaction. The notion of high-quality connections (HCQ) develops sensitivity towards the limited encounter of peers in an organizational setting (as opposed to ongoing relationships), and are defined as short-term, dyadic, positive interactions at work (Dutton & Heaphy, 2003). One of the subjective experiences of being in a HQC is connected to felt mutuality, which is marked by the feeling of both participants being engaged and connected (Stephens, Heaphy & Dutton, 2011), even in the absence of hallmarks of developed groups (Weick & Roberts, 1993). Therefore even short moments of human interaction might result in feelings of being energized, which in turn trigger benefits spanning organizational boarders. They can be created in a matter of minutes, still having a significant impact. The notion of tummelplatz is defined by a strange form of intimacy, emerging in a limited encounter. As such, the tummelplatz is allowing for a "contra-intuitive" tie between the collaborators, balancing the familiar and unfamiliar within its dynamic borders. In Freud's word, this is done by understanding *projections*: *"The main tool that allows us to overcome the drive of the enforced actions of the patient (…) lies in the understanding of the projection"* (Freud, 1914, p. 134). By presenting the projection as harmless and valuable, the limited encounter rather motivates the existence of the arena seen through the purpose of unleashing pathogenic impulses, or in our context –the useful and novel. Shared values and common understandings that develop over a certain time may be balanced with other dynamics, inherent in the type of work temporary project groups. Tie strength can be understood as the amount of time spent together, emotional intensity and intimacy (mutual confiding), where it is suggested that each of these is somewhat independent of the other, though highly intracorrelated (Granovetter, 1973). The type of collaborations with a limited amount of time to establish these strong ties could be understood as what Weick and Roberts (1993) refer to as *undeveloped groups with developed minds*. Members may be well connected regardless of the absence of the hallmarks of developed groups, where other actions may be interpreted as contributing to a well-developed collective mind. In the words of Weick and Roberts; *"If heedful interrelating can occur in an undeveloped group, this changes the way we think about the well-known stages of group development"* (1993, p. 375). Moreover, it is found that cognitive frictions and weak ties might be "held in place" by the force of professional ethic, peer

recognition, calculated loyalty and project orientation (Grabher, 2004, in Amin & Roberts, 2008, p.361).

Going back to epistemic communities, these are characterized by high levels of interdependence of the participants, and together with their distributed networks they contribute to collaborative practices that spill over organizational boundaries (Amin & Roberts, 2008). Creativity in such collaborations is a result of fusing elements not connected before, drawing on heteronymous interactions (Lindkvist, 2005). Moreover, network cohesion might not be too good in a creative context. The social pressure on the recipient resulting from the pressure to come to a quick solution that is acceptable to the group, might limit an extensive search (that could potentially result in something novel). Hence, one might fall in the trap of favouring group consensus rather than diverge form it, something that is detrimental to creativity (Sosa, 2011).

The challenge in learning is closely related to ties and network cohesion. Due to the limited encounter, the members of the project often split ways after task completion, and also the *context* for learning might potentially dissolve. However, knowledge might be activated in a more spontaneous manner, for instance through an informal "network memory" infrastructure (Lindkvist, 2004). Interestingly, the distinction between memory *of* the group and memory *within* the group, as coined by Bartlett (1961, in Paoli & Prencipe, 2003), may be more closely understood by involving the concept of organizational context. The context could thus serve as explaining both individual and group learning processes, and the main features of the context seen through physical, motivational, relational, and cognitive facets, may provide a more precise understanding of the dynamics within various contexts (Paoli & Prencipe, 2003). Maybe closer to memory *within* the group, the temporal and fluctuating character of project-teams does not allow to the same extent for memory (and knowledge) to emerge as a feature of the organization. However, the complex notion of context opens up for investigating the dynamics characterizing project-based arrangements. Moreover, not only how learning occurs, but also how the members sail the ship into the harbour, together.

Prone to high-creativity projects is "learning by switching" between teams and agencies, "driven by the canonical compulsion of freshness, mobility, and flexibility" (Grabher & Ibert, 2006, p. 261). Similar, the tummelplatz is imagined as an arena with a simple structure, where the dynamic framework allows for an

unrestricted unfolding and mobility. The creative momentum might reside somewhere in between the known and unknown. For an individual in project work being 'betwixt and between' (Garsten, 1999) ambiguity might increase risks, but also create opportunities. In these opportunities, lies creativity.

In the following section, we devote space to Freud, setting the fundament for a new lens that can be applied in the context of creative collaborations.

2.3. Why 'Tummelplatz'?

In its regulated nature, therapy is characterized by a strange form of intimacy, were one out of rational concerns connect to a person one hardly know in the most private sense. Similar, in order to create something novel one need to open up for creative waves, feel unrestricted to share, acknowledge that one need each other, and rely on something collectively negotiated. We often enter temporary work constellations without having previously established relationships with the participants, making it potentially harder to play with open cards.

The 'therapeutic working alliance' is built upon the understanding that there is room for a submerging of the patients' reasonable side with a therapist's analysing side (Brodin, 1979). To Freud the tummelplatz is an arena where both players know the elements, and where they can feel both safe and challenged enough to explore and participate in play (Skårderud, 2012). In his paper "*Erinnern, Wiederholen und Durcharbeiten*", Freud (1914) describes features of the psychoanalytic transference:

> We render (the compulsion to repeat) harmless, and even make use of it, by according it the right to assert itself within certain limits. We admit it into the transference as to playground (tummelplatz) in which it is allowed to let itself go in almost complete freedom and is required to display before us all the pathogenic impulses hidden in the depths of the patient's mind…the transference thus forms a kind of intermediary realm (zwischenreich) between illness and real life, through which the journey (übergang) from the one to the other must be made" (p. 134)

Pathogenic impulses can be released in the realm of the tummelplatz, a safe place, as a mean to re-establish balance. It is through therapy, that the patient is enabled to explore, and later make sense of his or hers challenges. Freud stresses the need

to act these impulses *out*, confront them and see them met. Only then, the patient can let them go into the abyss. Similar, we imagine that in our tummelplatz, the participants may unleash their wildest, unfinished and vulnerable ideas. Ideas are personal, vulnerable – and like our pathologies, needs to be met. In the intermediary realm, through mutual negotiation, they might be further developed before implemented in the real life. We alter the notion of tummelplatz from describing a therapeutic relationship, and rather use the metaphor for better understanding the dynamics inherent in creative collaboration. We move away from the term's inherent psychoanalytical connotations. This paper is not about Freud – it is about those dynamics that are claimed to nourish the "between people", the intersections where we uncover new ideas and find drive to pursuit our mission. Based on theory, we view the tummelplatz-metaphor as consisting of two dimensions, that both add to what we perceive as Freud's (1914) and Skårderud (2012) understanding of the concept, but conceptualized into a different framework.

The first dimension, we view as the *structural*, as there clearly are structural preconditions that enable the tummelplatz. The tummelplatz is distinguished from other collaborations by its temporal nature; it is sealed off, often connected to a mission or a goal. The processes within the tummelplatz have a start and end point, framing the interaction to a limited encounter - it is for the purpose of the novel to occur that the arena is established. Also, the tummelplatz is not merely an inner space, but an external one as well, e.g. a therapy room, a child's security blanket, the artist's atelier, a project room, and is thus both a solid object and symbolic imaginative construct.

The communication in the therapeutic context is a very sensitive issue for the patient as it relates to his most private thoughts and feeling, things he tries to conceal even from himself (Freud, 2001, p.18). As in psychotherapy, trust is an essential aspect in collaborations and is deeply connected to creativity. The disclosure of wildest and unfinished ideas needs to be made harmless and beneficial, given the opportunity to unfold in complete freedom. Thus trust is the cornerstone of the second dimension, *the relational*. In the relational dimension, the intention is stern, but we use play as a mean. When encountering a therapist, it is easy to assume that the therapist that holds all the answers and the competence regarding the mental life of the patient. In reality, it is the patient self that is the true expert in his own pathology, as he or she has lived with it over a longer

period. During therapy, this apparently asymmetrical relation may unfold when both learns the value of seeing each other *through* their relation. Their practice (and the nature of their relation) creates the opportunity for trust, and hence for reaching their common goal –to cure the client. Some rules are present in the encounter, but the road that leads to recovery is far from set. Creativity is thus deeply embedded in the therapeutic practice. Taken together, we believe that the two dimensions we see in the "tummelplatz" (i.e. structural and relational) might illuminate how the creative processes evolve within collaborations by incorporating aspects that we believe explains the flourishing of creative work.

As we are abandoning the term's inherent psychoanalytical connotations, we are aware of the differences between a therapeutic and an organizational collaborative context. First, the tummelplatz metaphor is applied in the context of psychoanalysis, which is a medical treatment for those suffering from nervous disorders. In psychoanalytic treatments, nothing happens but an exchange of words between the patient and the physician (Freud, 2001). The ultimate goal of the therapeutic alliance is uncovering and understanding the pathology with the aim to release the patient from it. In this context an asymmetric relation between patient and therapist prevails as the expertise knowledge is reserved for the latter. In the organizational context, the goal is not discovering an illness, but rather an idea that nourish further work efforts. In addition, the relations between the individuals in collaboration are to a much higher degree symmetrical, allowing for different social dynamics to unfold. Inspired by exploring such dynamics, we continue this paper.

4.0. Research setting and method

Following our research questions, *'Do Sigmund Freud's tummelplatz-metaphor convey meaning in an organizational setting*?' and '*What triggers a tummelplatz in temporal constellations among knowledge workers?'* this section is provided to a discussion of how this may be answered scientifically.

Our bottom line for this thesis is that we understand collective creativity as processes that create novel and useful results within the realm of socially shared behaviour. That is, how dyads, groups, and larger collectives create and utilize interpersonal understanding in order to be creative. Since socially shared behaviour is best described as an orientation or perspective, rather than as a theory, model, or hypothesis (Thompson & Fine, 1999), we chose to investigate our research question qualitatively, through an interpretive design (Walsham, 2006). As implied by Hargadon and Bechky (2006), researchers that focus on the social aspects of creative solutions through the lens of a collective perspective, should give attention to the essential aspects of particular interactions. In this case, we wish to look at these interactions by capturing the individual experiences through in-depth interviews, where the focus of the inquiry is the individual (Marshall & Rossman, 2006, p. 56). The research design centres in on the interactional mechanisms within collaborations, by allowing the interviewee to elaborate on own perceptions of these. Our main quest was thus to dig deeper into the everyday of our interviewees, encouraging them to share *their* stories and *their* reflections on their best experiences in collaborating with others. By making systematic comparison of patterns within and between four different knowledge-intense settings, we have been looking for signs of positive deviances in everyday activities and interactions, conveyed as practical examples or stories.

The sampling has been guided by the search for knowledge-workers in organizations that in one way or another would be dependent on multidisciplinary collaboration within temporary constellations; a sampling we can argue is purposive (Marshall & Rossman, 2006, p. 71) seen through temporality, type of work performed, and multidisciplinary tasks. Additionally the cases were sampled as within-case positive deviance sampling (Dutton, 2003, Lavine, 2011), as our search was aimed at creativity-rich practices. This is not to say that we regard all practices within the case organizations as highly creative, but rather that we systematically have been searching for the practices that has been recollected as

generative – and hence what can be learned from them. All our interviewees are involved in highly creative work that in one way or another is dependent on collaboration (see 4.1). Our supervisor suggested the first sample as an example of a positive deviant organization based on achievement in its field. The later samples were chosen out of a theoretical sampling to look further into the mechanism we observed in the first case. Although all interviewees contributed to the study by sharing their personal experiences with successful collaborations, not all of them mentioned processes that took place in the organization they officially represent in our sample. Hence, the results of the analysis should be read as a more general approach to collaborations within various knowledge-intense organizations, and not as explicit case analyses.

4.1. Case organizations

The organizations in question all have aspects in common that attracts them to our focus of study . All are specialist in their particular field, and can thus be characterized as knowledge-workers. Knowledge-intensive work is characterized by its resource base –the workforce in possession of specialized knowledge (Blackler, 1995). As knowledge-workers, it is how (well) they manage to combine their expertise's that in the end will determine whether or not they manage to reach their desired states.

Statoil is one of the most important actors in the Norwegian oil field, and has made discoveries that have shaped the Norwegian economy for decades. Our interviewees in Statoil work within exploration. They are all geologists or geophysicists, and uphold masters or doctoral degrees within their chosen field. In 2011, Statoil found more oil than any other oil company, particularly connected to the Johan Sverdrup finding, that some of our geologist participated in.

The Arts Council carries the responsibility for the nurturing of our cultural heritage and development of the new, by being the main governmental operator for the implementation of Norwegian cultural policy. Their aptitude is weighted with a duty vital for the progress of the field, and overall society. The sampling in this organization is diverse individuals that have worked within or contributed to the project "Kunstløftet". The interviewees all have extensive experience from the arts associations in Norway and abroad, some practical and others more academically.

Our last group of interviewees come from Lund Hagem Architects. They are shaping the image of our city; their newest project of the new public library in the city centre will stand as a landmark and locus for human interaction in the years to come. Our interviewees are all architects, one is partner in the firm, and the others architects with different level of experience. To provide another angle of reasoning, we additionally chose to perform similar interviews with two professional jazz musicians. They deal with a language different from any of the other samples, but are in the same way dependent on collaborations in order to create the expression they seek.

Even if the final outcomes of their practices are different, these organizations share a total dependence on the ability to think ahead and create novel solutions to new challenges. As a consequence, work within these organizations often evolves around temporary projects, where working in a multidisciplinary environment is vital in order to meet complex requirements.

4.2. Data collection and analysis

The 4 cases have been investigated by performing in-depth open-ended interviews. In total, we conducted twenty interviews, within three organizations, including two interviews with jazz musicians (see Table 1, Appendix 1). Initially, our ambition was to perform observations to add richness to our data, but out of practical reasons and time scarcity we did not have the opportunity. The data from one organization was shared with two other master of science - students at the *leadership and organizational psychology* master program, as well as our supervisor and his team in their on-going research project. Prior to all interviews, we prepared certain questions/ line of thoughts we wanted to investigate, but encouraged the interviewees to dwell upon their own experiences and feelings towards the questions asked (see Table 2). All interviews was done on the residence of the interviewees, except 3 interviews that out of convenience for the interviewees was performed at Bergen train station, Bristol Hotel and the Botanic garden in Oslo. Questions were participant recollected memories of their best experiences with collaborations turned out to be particularly useful. It stimulated interviewees to provide detailed accounts of rewarding episodes and functioned as a door opener in revealing patterns in how people experience collaborations as most meaningful. As all interviews with the consent of the interviewees were

taped, this left us with about twenty-five hours of raw data, which in turn were transcribed and analysed.

Inspired by the constant comparative method and grounded theory, we have during the analysis continuously been going back and forth from data to theory, to data (Glaser & Strauss, 1967) within and in-between cases. We started out by systematically comparing data by first performing open coding in the first 2 cases, namely with the geologist and later the jazz musicians. Here we applied the data software MAXQDA as a tool. This enabled us early on in the process to recognize patterns in the data, to find preliminary categories and later in the process verify these categories, adding richness to them from various theoretical approaches and perspectives that adhered along the way. We later shifted to selective coding where the themes of the data was matched more directly to the preliminary findings and existing theory. More specifically, we found different characteristics of how the tummelplatz takes shape in the different cases, and found similarities across the various collaborations. The result is not a given size or shape to the tummelplatz, but rather an outline of what we perceive as prevailing mechanisms in facilitating a collaborative arena.

The analytical efforts just presented have been aided by two practices that are worth mentioning. First, we have during the process (both pre- and post interviews) sought information about the practices and fields our interviewees are genuinely involved in. Seeking to understand their professional world, we started reading basic geology before entering Statoil, visited known building sites before talking to the architects at Lund Hagem, read about the development of projects supported by our interviewees in the Arts Council, as well as attending jazz performances, experiencing our jazz musicians in action. In this way we familiarized ourselves with how these individuals operate by learning more about their daily practices, and hence opening up for a common ground for discussing this. Second, we have been careful to test preliminary interpretations with some of the interviewees. Testing has taken place at the end of interviews, were we have been discussing preliminary interpretations and asked for reactions.

Table 2. Types of questions asked in interviews

Question themes	Specifics
Q 1. Background of interviewees	Questions about professional and personal background, e.g. '*can you start to tell us something about yourself and what you work with?*'
Q 2. Reflections on productive collaborations	Questions about when collaborations functioned at its best, e.g. *'Remember a time when you were a part of a group that worked together really well and the team achieved great results'* and *'What is the difference between a mediocre performing team, and an excellent performing team, as you see it?'* and *'Picture a person you collaborate well with. How would you describe your relation? Why do you work well together?'*
Q 3. Sources of meaning in work	Questions about aspects of work one finds most pleasure and meaning in, e.g. *'What is most fun in your work? What inspires you? What couldn't you be without?'*
Q 4. Desired futures	Questions about what one would desire in a work context, e.g. *'One day you wake up and realize that all you dreams have been realized. How does the best work day look like?'*

4.3. Aim of study & limitations

We base our findings on particular characteristics of what the participants perceive as necessary qualities of extraordinary collaborations resulting in novelty. We see these finding in light of the tummelplatz, mapping the characteristics and dynamics within the collaborative framework (i.e. the structural and relational), with the aim to discover whether "tummelplatz" can transcend the inherent psychoanalytical connotation. While the credibility of quantitative research depends on the instrument construction, in qualitative research – "the researcher is the instrument" (Patton, 2001, p.14). These are *our* reflections on *our* data. Following, the aim in this paper is not to provide a general

model of creative collaborations, rather at issue is pointing to some emergent behaviours and drivers in such collaborations that allows for a coordinated effort towards the novel. Hence, this paper should be read as an attempt to understand collaborations in a new framework. The goal of this inquiry was never to add an empirical generalization, but rather expand theoretical lenses for better understanding how creative collaborations live and breathe. For further investigation of the empirical generalizability of the tummelplatz-concept, it should be investigated in other samples.

4.4. Ethical considerations

Working on this paper we have met with many inspirational persons. Their reflections and stories have made us laugh, think, and reflect about our own lives. Our aim has been to give them a voice of their own and at the same time conceal their identities, which is why we use pseudonyms in the paper. All participants were given information about the study in general, and not given any instructions to prepare apart from thinking back at collaborations they remembered as particularly successful. In addition they were informed about confidentiality and made aware that the interviews are only for the purpose of the paper. Member check of quotes in context was provided for the participants that required this.

As we are interested in what characterizes extraordinary collaborations we found it suitable to base our exploration upon principles found in positive psychology, by portraying the situations and circumstances where collaboration functioned at its best. Interviewees told stories about their professional development and encouraged to look back on situations that they found particularly productive and engaging. Thus, sensitive issues do not color our data. We have rather experienced that the participants in the study found our conversations interesting and rewarding themselves.

What follows is the insight gained from the interviews, conveyed through our analysis.

5.0. Analysis and findings

The main findings from the empirical analysis of the cases are distinct characteristics of collaborative activities involving epistemic knowing, proposed as a framework for comprehension of the inherent dynamics of such collaborations. The observed features of successful collaborations involving creative outcomes we refer to as the *tummelplatz*, (thus suggesting a new terminology for this type of situated practice). The proposed framework - summarized in Table 3- emerged in the course of performing, transcribing and analyzing twenty interviews. Our data supports two main dimensions of the tummelplatz suggested by Freud and others of his interpreters, as we chose to investigate the initial idea that successful collaborations need both structural and relational characteristics. These we hereby refer to as the *infrastructure* and the *architecture of the tummelplatz.* The infrastructure implies more objective categories that to some extent can be facilitated, whereas the architecture opens up for categories that are more tacit in nature. The first can thus be understood as defying the *action arena* of the tummelplatz, whereas the latter provide insight about dynamics *within* the arena. Together they breathe life into the notion of tummelplatz and serve to provide a deeper understanding about collaborative dynamics within creative constellations. However, we do not assume a strict linear link between the dimensions where the infrastructure is conditioning the architecture; rather we see patterns in our data suggesting that the generative forces of our tummelplatz are to a degree conditioned by the infrastructure.

What follows are our findings, more specifically how the dimensions (i.e. infrastructural and architectural) are manifested empirically, and how they contribute to collective creativity processes that have resulted in extraordinary outcomes (see Table 4). Next, we continue with our findings, and follow up with a discussion.

Table 3. Characteristics of the tummelplatz enabling creative collaboration

Tummelplatz the playground for creative collaboration	Infrastructure shapes of the collaborative platform	Goals Mobilizing through setting direction
		Time Navigating and energizing collective effort
		Competence sharing understanding and inspiring communication
		Space allowing for visualizing and communicating ideas
	Architecture relational dynamics	Curiosity activating collective engagement
		Trust facilitating unrestricted sharing of thoughts and crafting of ideas

Table 4. Six generative dimensions that enable collective creativity

Dimension	Definition	Link to Freud	Enablers of collective creativity	Quote from data	Support from data *weak **moderate ***strong			
					Stat	LH	AC	Jazz
Managing space and visualizing	Tummelplatz is supported by the physical nature of social interaction in everyday work, through increased proximity between collaborators, and available proximity tools that allow for materializing and visualizing ideas.	A (therapeutic) room as a safe arena for the patient to unfold in complete freedom.	Allow rooms devoted to a specific project and increase communication frequency, acknowledging coordination as an essential part of progress. Creativity might emerge more serendipitous, as an interrupted flow of communication is enabled due to proximity over a period of time. Acknowledging materiality of creative processes by facilitating for visual/physical manifestations of unfinished ideas.	"That's where the good things happen, for development and learning". "There is something really basic such as moving from one room to another, just at the end of the corridor, really affected the collaboration in the group". "(...) It's easier with these smaller rooms, then it's easier to make people stay (...) to invite people inn and brainstorm together".	***	***	**	***
Recruiting competence and sharing understanding	Tummelplatz is enabled by recruitment of and bridging multidisciplinary competence, as knowledge drives the collaboration, provides a shared understanding, and inspires communication between participants.	The patient is the expert in his view of the world, but needs the therapist's competence in order to understand. Thus the interaction is complementary – "we need each other", and is the hallmark of the alliance.	Continuous dialogue and exchange of knowledge, motivating help seeking and help giving. Seeing own competence in light of others; competence as a source of trust and respect for others as well as for oneself (links to identity).	"(...) I bring things to the table, I ask a lot of questions (...) and to be a little humble and to have that understanding that I can't know everything. It would take me years to be on the top of my field [geology]". "What I think is most meaningful is when I have something that I can contribute with, and help, where I'm a bit better than the others, right? And that is what I think is fun."	***	***	***	**
Navigating and energizing collective effort through time framing	Tummelplatz is triggered by time framing, because it navigates and energizes the processes, by aligning collaborative effort in the purpose of reaching the goal.	The goal in therapy is ending it – release the patient from agony / enable new learning and insight. As in therapy, the tummelplatz has a limited time frame, symbolizing the fulfillment of the task, hence containing a liberating momentum.	Navigating collective effort, e.g. deadlines, priorities, make progress more visible. In the light of reaching the deadline there is an increase in communication frequency, as interpersonal contact is speeded up due to time scarcity and the need for knowledge input from others in order to solve the task.	"(...) it gives you a sort of drive, I think it's even motivating, like you feel we have to make this happen." "(...) it does something to the collaboration. In a [temporary] project you can give everything, because you know it will end (...) It is the repetition that is tiring".	***	**	***	**
Mobilizing through setting direction	Tummelplatz is triggered by providing participants with open and challenging goals that engage the collaborators through utilization of their knowledge and skills. The open character of the goal allows for the involvement of self and charges the goal with personal ambitions.	In psychotherapy the goal is clear, but how to achieve it is always a unique experience. In addition, the therapeutic expertise interweaves with the therapists identity, making no gross separation from the personal and professional.	Mobilizing collective effort, e.g. clear goals, not too narrow, giving room for collective interpretations and more opportunities for developing new ideas. Enables the participants to see the higher purpose, and connect daily activities to this.	"Keeping focus, but at the same time being open for ideas". "It is not for your own pleasure that you are doing this, it has to be tied to something bigger" "It's my baby, it's like it is starting to walk alone".	***	***	***	**

Dimension				Quote					
Using curiosity as driving force	Curiosity is not just an individual driving force but also a mean for utilizing collective efforts. As such curiosity unifies the collaborators for a common quest and activates engagement on the tummelplatz.	Curiosity is tied to expertise as the therapist set out on a quest about "solving" the patient's pathology while at the same time discovering himself in light of new enlightenments.	Serves as a common reference for the collaborators that drives them to cooperate, hence increasing the possibility to challenge established truths and engage in an extensive search for novel solutions. Acknowledging curiosity as a unifying force is important to see that engagement might steam from the temporary group regardless of disciplines and organizations.	*"I guess it is in my nature that I am a hunter, striving to improve".* *"(...) In exploration I think curiosity is the first thing. If you are not curious you will hit a wall, and you will never improve".*	•••	•••	•••	•••	••
Crafting trust through intention and action	The activities on the tummelplatz are facilitated by a common ground between the collaborators that is established through trust as a mean for enabling unrestricted communication.	Without trust, there can be no safety, and hence no possibility for the therapeutic practice.	A fundamental precondition for sharing ideas; enables an action space that would not have existed in the case of mistrust. Broadens the thought repertoire, as one is open for others ideas and comments, allowing for inter-subjective convergence.	*"(...) it would never have worked out had we not trusted each other..."* *"(...) without trust there will be no clear communication. I mean you can do your part, but without trust you can never get some inputs from other people which you might get if you would trust them, and vice versa."*	•••	•••	•••	•••	

Table 4. The six generative dimensions of tummelplatz that enable collective creativity.

5.1. The infrastructure of tummelplatz

In order to facilitate collaborative dynamics in the tummelplatz there are some underlying features that set the stage for collaborative effort. These essential features can be seen through aspects of *time, goal, space and competence,* and imply objective categories that can to some extent be facilitated for. These elements enable the tummelplatz as an arena for collaboration, as they inherently contribute to the collective effort of the participants through establishing frames and giving guidance for the temporal encounter. In our data the tummelplatz is often disguised as a project. What is it about projects that seem to make collaborations come alive? We continue with some reflections from one of our interviewees, followed by the elaboration on the four above-mentioned categories that represent the first part of our findings.

Karina agreed to meet us at Hotel Bristol in between speeches in a confirmation she was attending in Oslo. Dressed in her national costume, her confident voice overshadowed the piano playing in the background –"Well, I've been working in the arts field for *many many* years. On institutional basis, through art associations –thirty years maybe". When asked about what she perceives as the most fruitful moments in her long professional experience her eyes lightens up as she elaborates on working within projects. Although working within institutions is something she values, Karina regards her competence as more fitted for project work, as it is continuously formed through praxis. As she states –"when all is said and done, only the routines remain…and you can work a lot with those (…) but it's better to create something new." When something is new, she needs to update her knowledge and find out how the new encounters can add to the project and her own competence. She continues -"…and also to be able to formulate for myself good enough arguments for why things should be as they are –especially if others think something different." When entering a new project, you encounter new goals, new people, and different perceptions. The dynamics of the temporary encounters lies somewhere in a frequent renegotiation of aim and meaning between the participants.

Karina's story is not unique. Across our data, we observe that people desire to work *within* something; something that is framed by a start and an end, and tied to an explicit goal. This something *within* where we pursue our activities

is determined in terms of a time frame, but at the same time free within these frames. Our geologist Matt reflects:

> Yes, a good collaboration…I can imagine. In those projects that I have been involved in, we have a good plan, the plan is relatively open, not too many deadlines, but that the last deadline is quite strict. Then you have both the feeling of freedom, and the feeling of urgency. Then people get motivated.

 Projects can serve as catalysts for organizing value-creating activities in many professional service firms, and it is through projects the organizational members switch locus from individual to collective effort, towards reaching a goal (Carlsen, Klev & Von Krogh, 2011). As in our tummelplatz – projects has the potential to tie the individual member to a higher reference. This is not saying that all projects are tummeplatzes – rather we intend to exemplify that certain kinds of projects potentially can turn into tummeplatzes. For Karina, this is about being a visionary, but at the same time have a meaning on how this vision is connected to reality.

> It's a fascinating thing, really, that you cannot be creative, without frames to work within. If everything hangs loose, you can have creative thoughts and visions – but it will never go somewhere. If you don't have these frames -the time, economy, personal qualities, competence- then it turns out to be nothing. You have a dream – and that's very nice indeed – but it never gets to evolve into something (...), at least not something we can allocate.

5.1.1. Navigating and energizing collective effort through time framing

The tummelplatz is triggered by time limits because collaborative effort is aligned in purpose of reaching the goal within the set time frame. The following story points to the energizing moment of deadlines.

In order to catch our train back to Oslo, Kristina suggested meeting us at Bergen Train station, which gave us an interesting (yet short and intense) conversation with this inspiring cultural worker. When asking about an extraordinary collaboration, she mentions her colleague on a project, thinks for a second, and then burst into laughter:

> This could be fun! In our setting, the most important aspect was that we were
> thrown into the project, and we didn't have much time (…) so you can say we
> really had "wind in our sails" from day one. It was a time limit, and it was *far*
> from optimal. We were behind. But still the energy you bring inn when entering a
> project –it is so much stronger! Adrenalin levels are *so* much higher!

It is said that when humans are faced with a threatening situation, they either react with an impulse to freeze, flee or fight. In this case, although the pressure was tough, it activated an energy that was brought into the project, enabling the participants to take on the challenge and get to work. When we met Karina, Kristina's partner in this very project, she agrees, "Ideally, we should have had much more time (…) it was extreme sport, to put it lightly. But it was *exciting*." Later in the interview she reveals that they in fact were joking around with calling themselves *The Kamikaze Curators*.

The tummelplatz is manifested as a temporary constellation; hence the limited time is a central feature. Among our knowledge workers, we sense the absence of the inherent "constraining" aspect when talking about time frames in projects. Moreover, it seems that the time frame is to some extent a necessary facilitator, in the words of Zola:

> I would not say that time pressure is a challenge for me, I quite like to be under
> time pressure, 'cause it gives you a sort of drive. I think it's even motivating, like
> you feel *we have to make this happen.*

Across our data there is similar perceptions regarding the function of deadlines –it serves as a navigation engine. It defines the pace of progress, varying intensity of the processes as the deadline reaches its' peak. The project can thus be defined as the *dramatic engine,* where the notion of time structure is defying the level of dramatization (Carlsen, Klev & Von Krogh, 2011, p.46). Or as one of the partners at Lund Hagem Architects responds when asked about the importance of time pressure –"I think it is absolutely necessary. If we didn't have the time frame –we are navigating according to these principles". One jumps into a project and have a final deadline that guides the activities towards the goal. Adrenalin, the focus is sharpened. Nevertheless, we should keep in mind a constructive implementation of the deadline, in terms of *framing* the project, rather than imposing the time structure on a micro level. Across our data it is not the deadline in itself that

creates a drive, but rather the symbols tied to it; getting things done, checking of boxes, reach goals. The motivation to act quickly is activated. Time is similarly perceived by Pablo in Statoil. He reflects on how the pace of progress is affected when encountering a time limit, and how it demands more from the collaboration: "So if people have a task to do, with a deadline, then they do what is required to meet it. So if that means getting help from other people, then they are motivated to do it." With the imposed time frame, there is an increase in each other's dependence, hence switching from individual to collective more frequent. Using Karina's metaphor, when the wind is blowing stronger, the ship needs all hands on deck. In relation to collective creativity, the deadlines that the majority of our interviewees mention, can serve as navigating the collective effort in the same direction. One makes more out of the collaboration, and tries to put aside doubts and increase mutual trust in the purpose of reaching the deadline. If the time horizon requires more of the collaboration (in terms of interaction frequency in order to fulfill the task), then the potential for collective creativity increases.

The architects reflect upon the need for collaboration in competitions, when time is scarce and stakes are high –then the collaboration is more demanding. Priority is clear, task orientation prevails, and is in another realm than the more daily administrative activities of the firm that can typically tolerate delays. The project on the other hand, is dependent on avoiding delays, as the very success of the project depends on respecting the deadline. So not only does the success depend on delivering on time, but also the *dedication* to the project is enhanced as the temporal aspect anticipates the achievement of the project goal (Lundin and Söderholm, 1995). In other words, the temporality is one of the mechanisms motivating and navigating the collective effort. This relation seems contra-intuitive, as time pressure per se often is associated with taking away freedom. However, in our data, we also find that there is a *liberating* element of time, potentially explaining the thrill of working within temporary constellations. Our interviewee from the Arts Council, Irene, reflects upon the liberation of endings:

> Another thing that is good about working on a [temporary] project is that it does something to the collaboration. In another working context, you know that those people you are surrounded by are the ones you have to interact with, day after day. In a project you can give everything, because you know it will end. You

have more options when you are giving something just once. It is *repetition* that is exhausting.

The value of temporary collaborations lies in starting from scratch, enabling participants to give all, not keeping anything for the next round, but unselfishly invest all current capabilities. However, the new beginning should not be understood as a *tabula rasa* in terms of the knowledge and experience gained, rather the opportunity to start a new cycle of interactions and goals. Like a restart; fueled with new questions and different scenery, the eye (and mind) of the observer never gets bored. You can investigate a new playground.

If the individual is fueled by the thirst to find an answer or solution, then the time may be perceived as liberating the feeling of curiosity. In the context of the relation between therapist and patient in psychotherapy, both strive to move to the point where therapy is no longer needed. The limited existing arena exists until the ambition is fulfilled, releasing both patient and therapist from their mission. Understanding how *time* functions in these collaborations, the therapeutic relationship between therapist and patient could be described through some qualities of friendship; the therapist can comfort, understand, tolerate and advise. If we give the therapeutic relationship characteristics of friendship, then we might understand that the goal of friendship (and love) is to an extent to keep that person as he or she *is* (because we chose this person to be a friend based on some relational qualities that we want to keep). However, "the therapist (and also the parent and teacher) seeks in part the fulfillment of his needs through the facilitation of another's growth, the achievement of which leads to change and separation" (Will, 1971, p. 18). Similar, through an interaction on the tummelplatz, the constellation of the collaborators exists with the aim of a higher goal, one that perhaps is tied to self-fulfillment. The collaborators seek to invest knowledge, devotedness, and ideas into a temporary arena, where the dissolvent of the same indicates that a mission is successfully fulfilled. Thus *the separation becomes the goal*, as it symbolizes the progress from start to end.

Similarly, the collaborators operate within the frames of time; this may be a liberating momentum, also because it is always known that the process will, sooner or later, end. That is why there sometimes is nothing as liberating as starting with nothing. We made an interesting observation regarding this when we interviewed Lukas. He tells us about how the peak of collaborations is reached

somewhere in the last days before final delivery. Even though the time limit may allow for not working the last minutes before it runs out, the architects choose to give all these last hours. Our architect, Lukas, explains:

> There is always something more that can be done. If I think right before a delivery…even if I could get more time I would still use it to the last second (…) then I know I gave all, I can blame the deadline (laughs).

 The last minute is thus a challenge and a relief –after the deadline you no longer have control over the result. The deadline, as an imposed mechanism, is refraining you from further action, thus you are free. To explain the dynamics in the tummelplatz, we have considered more than a tight time limit that gives the wind in the sails –there is the aim (goal), as well as the "between" the collaborators that decides whether the wind (time) will drown them, or lead them to the harbour.

5.1.2. Mobilizing through setting direction

Our Tummelplatz is activated by open and challenging goals (i.e. the ones with unspecified means). As such the goals engage the collaborators through utilization of their knowledge and skills. Like a lodestar, the open character of the goal allows for the involvement of self, and ties the goal to personal ambitions of improvement. The following story says something about goals that make space for collective interpretations:

With an evident passion for her work, our architect Cathy remembers the beginning of the Astrup Fearnley adventure, the contemporary art museum close to the harbor in Oslo city center:

> I really like my job. Because, I told you…some people will tell you it's only the creative part, I will not. For me, what thrills me… is everything together. So that's why I like my work. I like to build, I like the project from the beginning and then I finish it. That I like, to see it and to touch it. Like that building there (points to Astrup Fearnley), and every time I see it I say 'Ah fantastic, I love it, you are so pretty!'

This building was going to be the ornament of Aker Brygge; exposing the cultural heritage as well as being an architectonic pearl. Absorbed with the idea, Cathy and

her boss found a mutual language for talking about what had not yet come to be. From the initial idea was formulated in their heads, until the day the scaffolding was taken down, the goal was mobilizing and catalyzing their effort as well as ambitions. Until the last days there was no real comprehension of the magnificence of this monument. When the first beam was placed on the roof, Cathy started crying –"it's my baby, it's like it's starting to walk alone!" Comparing the building to a child says something about responsibility; the realization of the goal is charged with ownership –it is separated from the creator, but it still belongs to him. The personal and professional story of the architect is forever engraved in the building. This story points to an important quality of the tummelplatz: the goal that is guiding and mobilizing the effort, but at the same time not constraining the creative aspirations, rather connecting them to the sentiments of what might be in the future. The tummelplatz is emerging and evolves around a worthy goal for (all) the collaborators.

Knowledge workers are profoundly involved in the reconstruction of own work, and across our data we notice the tendency of internal negotiation on how to reach a goal. The goals provided to the knowledge-workers are open in character; we make a distinction between pre-specified and pre-defined goal, where the latter is less guiding in terms of progress within the project (i.e. the underlying process). Similar, Hackman (2002) shows that the most beneficial way to engage the employees is through specifying ends, however not means by which the collaborators are to pursue those ends. An approach like this could further deepen their understanding of the collective purpose through negotiation on how to accomplish the task. With regard to creativity, the processes that allow for a collective interpretation on how to reach the goal give more opportunities for developing new ideas. One has more freedom in deciding procedures, hence increasing the chance for novel and useful solutions along the way (Shalley & Gilson, 2004). The destination may be set, but the journey unfolds as we go; it becomes *la raison d' être.* On the tummelplatz there is a balance between desired ends and own (and often innovating) interpretations on how to reach them. This equilibrium serves the collective creativity –the goal directs your efforts towards realization, while the freedom *within* the boundaries opens up for exploration. Although this balance is an advantage for creativity, it is a constant challenge; Peter the architect explains: "Staying focused. That's what's hard. Staying focused, but at the same time being open for ideas."

By providing knowledge workers with a mission to fulfill, organizations catalyzes the effort of the employees towards fulfilling the goal, and the time frame in confluence with the goal will serve as a reinforcement of the activities within the collaboration. Our interviewees are on a mission. Through a challenging goal the person is energized and hence motivated (Hackman, 2002). The fascinating task mobilizes commitment far beyond the dedication to routine work (Lindgren & Packendorff, 2003, in Grabher & Ibert, 2006). This means that our knowledge workers are far more prone to develop a professional identification from practice, hence deriving the drive for the fulfillment of the goal within the set time frame. Time urgency and goals thus function as triggering another dimension that can be seen through an identity lens. A tummelplatz is a place for development. It is linked to the person in a crucial, perhaps intimate, way, transcending the given mandate. The tummelplatz is a site for authoring of identities (Carlsen, 2006, 2008) where one can question what is really at stake, as well as seeking transformation, meaning and engagement. In the case of our jazz musician Max, he understands the impact of his learning best when he looks back on what he has been playing: "

> I realize it in retrospect, that I… really figured something out. Often you sort of sense it, but you don't have the capacity to really define it. You can think and feel a lot, but you are not really bringing out the essence. I find it helpful to really force myself, asking; what is there to lose? And then it's really just up to you to start, and you have to trust that after you have taken one step – you will know where to put the next, and…it's not only about learning – it's something I reach, I enter a new level.

When reaching a new level, you take with you what you have learned from the process in itself. Then it is not only the learning from the actual process that in the end allows you to reach a goal, but also the spillover from the process in itself. In this sense, having a goal, is not restricted to the actual goal, it also involves being aware of what it takes from both yourself and the people you collaborate with. In that sense, goals are mobilizing efforts on many levels: If you focus your attention only on the action-taking to reach a goal, you might just miss the essential properties of the process that in the end will be the learning outcome that enables you to get where you want to go. When la raison d'être is open in character, it allows you to tie your personal ambitions to it. This leads also to the

responsibility and ownership; it becomes something more – something worth fighting for.

In a therapeutic context, the goal of the encounters should be pretty clear. From the start both client and therapist should be certain of their relation and what they can expect from each other. In a perfect world, those journeys that unfold in therapy should be able to be predicted, controlled and measured for. Yet, this journey is bound to be shaped not only by the patient, but also by the therapists mind. His experience, training, and technique become a part of himself, there then being no clear cut separation of the personal from the professional. It is this combination of self, experience, and indoctrination that is presented to the patient for his investigation, manipulation, and contemplation –the transactions through which his own self-knowledge and growth can be furthered (Will, 1971, p. 18). On the tummelplatz, you are not only playing with your professional identity, rather your entire identity is at odds.

Across our participants, we notice a tendency to connect the goal of a project to a higher purpose. Interestingly, we further notice that these purposes are communicated and shared internally in some collaborations. This pertains not only to having a shared understanding of what the goal is and how to reach it; rather, what your actions mean in a bigger context. For our geologists it is important to sense the enthusiasm for the field among his collaborators. The architects reflect upon the durability of their efforts manifested in concrete structures, whereas the cultural workers are painted with a prosocial motive - concerned for the "meeting" between culture and audience. In the words of Karina when talking about the thrill of having goals: "It's the path from the vision, to the moment when someone is experiencing this vision. That's what's interesting."

5.1.3. Making space and vizualizing

In our data we find that the tummelplatz is supported by the physical nature of social interaction in everyday work, through increased proximity between collaborators, and the available tools that allow for materializing and visualizing ideas. Ironically, a room can tear down the walls between collaborators, because the room provides the possibility to create a *shared* landscape that bring the participants closer to each other and to the given task.

When imagining her best collaboration, Zola, a young geologist in Statoil, put emphasis on the physical surroundings:

> We were sitting next to each other so we had the backs to each other and that was really good because then we always talked, and if we saw something on the seismic we just turned around and said 'ah look at this' and 'what do you think of this?'

Working within close proximity, she argues, is of high importance, because none of the collaborators felt they would disturb the other; "We were just blurred out ideas, we made posters, and noted down ideas". The group had access to one particular room where they were free to hang maps, so that they could just stand around them and discuss.

> When you do seismic interpretation it's always hard to visualize things if you don't have the maps, and you say, 'do you remember this blob up in the north?' and they say, 'of course I don't remember'. So you need to map it, and then you can point to it quickly.

Like Zola explains, the room you work within frames how you think about your own practice. The proximity allowed for the girls to blur out ideas in high intensity and facilitated a loop of continuous information that resulted in success. The possibility to visualize and map ideas gave the collaborators a common reference that could be built into by many. This was their tummelplatz, a playground Zola recalls as one of her best collaborations.

Just as an architect is unable to build a house without considering the landscape surrounding it, collaborators need the common ground within the tummelplatz. They need the base from where they can build further. In our data, we see that this base, physically and metaphysically, affects how the practices of our collaborators unfold. To them, the room can be labeled many things –a bubble, a laboratory, an oasis, an atelier, a project room, a rehearsal room – a shared space. The notion of space is highly complex in the context of high creativity collaborations. These draw upon a combination of temporally local coalitions, virtual interaction, and institutional and professional ties that are not reducible to local space (Amin & Roberts, 2008, p. 365). Karina explains;

(…) to have an actual room [when collaborating], yes, it's so much more creative. You get to see the possibilities within the room, and also the limits, and how you can exceed these limits. Maybe you have to step out of the room sometimes, expand these boarders. Having this room, whether it's an actual room, or a structure in your head, it's very important. Extremely. At least for me. I can't work without it.

Is the tummelplatz reduced to geographical proximity? Not necessarily. The common ground lies in the communication frequency and the possibility to discuss ideas "off the top of your head". Freud portrayed the ideal relation with his clients as a physical arena, a playground. On a playground you are free to explore, play and investigate, because the physical aspects of the playground encourage it. The same goes for our tummelplatz; the space is setting the ground for relaxed and spontaneous interactions, by bringing collaborators closer together, and by providing participants with tools that enable them to materialize their ideas. The space where a tummelplatz occurs is not tied to a specific agenda, and there are no immediate expectations tied to the happenings within this room, rather the room is facilitating the ongoing collaborative process; a room that allows them to focus on the task, but also a room that does not keep them locked. Here, collaborators can stay within a continuous loop, where communication travels fast: "(…) if you have this room where you have daily input, you don't need to reach this point where you extinguish fire. Because this is being matured daily."

"You can't force creativity", Tom says, instead he suggests lowering the barriers, have a *less tight filter* for ideas, and further explains:

> Everything should supposedly hang on a knob, that's called for instance 'Utsira seminar' (…) but it is so much simpler, much easier. The best ideas emerge in the morning, hanging out, having coffee, and maybe you throw out an idea –'maybe we should take a look at this'?

This adds to the fact that *creativity* is often unplanned, and might often emerge from an unpredictable agenda. A shared space devoted to these types of interactions seems to be of importance for our interviewees. One of the Kamikaze curators, Kristina, describes the lack of a room that can be used for the matters that occur outside the agenda: "I wish I had another room (…) we have the

lunchroom and the meeting rooms, but they are often occupied, because they are often used for concrete stuff." Instead she calls for a 'small oasis' where she and her colleagues can spend time when working together. When we ask her what would happen in such an oasis, she replies –"That's where the good stuff happens! For development and learning. That's where you resolve conflict; pick up discussions, where you improve (…) in the oasis you are entirely equal…it's the place where you can talk". In our opinion, Kristina is describing a tummelplatz. It is not a place where you hang out with coworkers, sharing your personal experiences or simply chat. On the other side, it is not a meeting room, a conference room or an office. It is a place tied to progress, ambitions and resolving mysteries. In this place we are all equal.

Tummelplatz is not just a structure supported by walls. It is allowing for privacy, where the shared ideas, often physically manifested, are shielded from the eyes of outsiders. Ideas are often meant to be shared exclusively between the collaborators on the project. Remembering Freud (1914), through the transference in the tummelplatz, the illness of the patient is accessible to the therapist's intervention –it becomes a piece of real experience that is facilitated through especially favourable conditions (p.154). This piece of real experience can be understood as a prototype, half-worked ideas manifested into physical objects, that can be shared and bolstered at an early stage of development among collaborators (Carlsen, Clegg & Gjersvik, 2013, p. 139), or merely a blackboard for drawing a well, a roof construction, or the positioning of artworks in an exhibition. It is all about grounding the imagination in the specific. The geologist and architects need the room as their own workshop where ideas are being crafted through physical manifestations of the thought. Ideas are often material. In order to share an idea it is often necessary to bring it out of the corridors of own mind and into the collective realm. Words can perhaps be understood as abstractions, whereas the manifestation of the idea in a material object may better enable the sharing of the idea. Hence materiality in the creative process might serve as a necessity and explains the spatial and physical nature of social interactions (Carlsen, Clegg & Gjersvik, 2013).

At Statoil, the notion of tools, shared space, and collocation, appears to be inevitable elements in the collaborative process. The physical space creates an actual arena where these interactions may occur – and the space in itself may affect these interactions. The complexity of the sophisticated knowledge seems to

expose some of its secrets by being visualized. In the words of Brad, one of our geologists:

> So you need to collaborate in the right way in order to be creative. Because it is all about coming up with ideas, and maturing those ideas. So we like to sit in environments where we have magnetic walls. So we can stick posters on. We like mac tables. We like big desks, two large screens.

All of this in the purpose of conveying ideas to the collective so they can become the raw material for further polishing.

Apparent among the geologists and architects, the dynamics on the tummelplatz are reinforced by increased physical proximity, opening up for a more "intuitive" collaboration –the one in which you could just turn around and ask a question, or show your sketch, as in the case with Zola. However, we do not notice the explicit need for a shared space in all our data. Very often, it is desired, but when reflecting upon a variety of collaborations that have been regarded as successful, the communication frequency and density are the significant factors. In the case of the Kamikaze Curators, who spent much of their time working from different cities, the lack of a shared location led to hours of phone conversations, visits, and around 1100 e-mail back and forth in the period from mid July to December. Hence, the tummelplatz is more visible when it is manifested in a physical room, but for some collaborators also present as a metaphysical construct.

5.1.4. Recruiting competence and sharing understanding

Across our data, the need for each other's competence is the hallmark of the tummelplatz. It is obvious –the merging of knowledge and competencies that are needed to reach a goal. The knowledge is what drives the collaboration, provides a shared understanding, and inspires communication between participants. Our interviewees are a sample of knowledge workers that are high in competence, skill and ambition. They come together, share ideas, and involve in learning. Without competence on a tummelplatz, you might as well quit. For the true sparks to fly there should be some balance in the knowledge complexity with which one enters the collaborative arena. A similar competence level is important in terms of the

potential to reach a higher level –above the obvious. As an example, Cathy remembers the change in her relationship with her boss:

> (…) it developed in something different, it was more like the same (level of competence), I learned as much as I could so it could now be something as shared opinions, think about solutions together, it was not only about me having to catch up with him. It was more like very much brainstorm when we were together, it was very good how this collaboration developed and how two different figures with different backgrounds came up to meet together.

She further elaborates –"When I started to be more or less competent, full architect in a way, it started to get...working really together 'shall we do this, shall we do that?' working really together". As Cathy developed professionally, her boss perceived her part in a bigger adventure –they could now strive for excellence, together.

The competence on the tummelplatz function at its best by providing an argument for the acceptance of the collaborators (i.e. "we need each others competence"), and by providing the necessary knowledge for realization of goals. Whereas the latter provide building blocks from which a creative outcome might occur, the first is important in relation to collective creativity by motivating the interaction and intensifying sharing of knowledge. You can only extract value from the knowledge of the others by getting familiar with it, trying to understand it. Through communication and asking questions, our collaborators make the best out of the merged competencies. Some of our interviewees tie this to respect; the link between competence and respect appears relatively clear –the knowledge workers collaborate best with others that they perceive as working hard. They respect the work of the other, and the passion they bring to it. On the contrary, as our architect Cathy explains: "If I see people who work less than me, then I don't have any respect." The notion of respect is an important factor for facilitating the collaboration and seeing each other as valuable resources in the purpose of exchanging viewpoints. On the tummelplatz you trust the competence of the other and see it as an integral part of the collaboration and the final outcome. This internal reciprocity of acknowledging one another's competence is an important feedback mechanism. Keeping in mind the ambiguous and fluid world the knowledge workers interact within, their self-esteem is a sensitive subject as their competence potentially is less worth today than tomorrow (Alvesson, 2001).

Hence, in the tummelplatz, the mutual appreciation of each other's competence may serve in the function of boosting the self-esteem.

Let us consider the therapeutic context. The patient is encountered with a professional, a psychiatrist that seemingly has all the answers. However, the patient has lived side by side with his pathology, perhaps for years. He knows it, he feels it, but is not necessarily grasping it. Here the therapeutic encounter plays an important role -the potential lies in realizing that one needs each other in order to make sense of the "collaboration". This acknowledgment implies saying "I can't do this on my own". It is a compromise with ones ego, acknowledging that one needs the other. That is when one can finally understand one owns competence, and where it meets the others (competence).

However, competencies are not objective, and are highly affected by whom we interact with. One of our jazz musicians elaborates:

> Something that can be very damaging when working together is if you feel that you are analyzed and judged by those you play with… Then it's really hard. And that feeling is so strong! It has to do with others, but it also has to do with you… Or, how you perceive yourself, and your own competence. A lot of musicians, among the professionals, are so secure in their own expression, their repertoire, their material – that you can't shot at them from any angle. And if you did, it wouldn't shake them at all.

Being confident about your competence is important on the tummelplatz. In that way you protect yourself from the fear of being misjudged, hence catalyzing your efforts fully on the task, and also evoke trust in your collaborators. Among our interviewees we sense the importance of being perceived as a resource. In the word of one of our interviewees from Statoil –"What I think is most meaningful is when I have something that I can contribute with, and help, where I'm a bit better than the others, right? And that is what I think is fun." In collaboration these acknowledgments of competence becomes more frequent as the exchange of viewpoints culminate through work.

This can be linked to something more fundamental, as knowledge is closely tied to aspects of identity. The actors on the tummelplatz are not only workers, but also individuals, with opinions, motives agendas reaching out from their job description and into their real lives. The importance is not only to keep the company happy, but also to keep one's own integrity and personal opinions

along the way. When Zola tells us about her best imagined collaboration, she does not flinch while explaining us what her company decided to do after months of hard-work with long extra hours: "Actually it was dropped (laughs), but that's just the way it goes, Statoil decided they didn't like the area, so it didn't have anything to do with us in the end. I got paid I had fun (laughs). (…) I like to do my geology and keep out of the politics". Passionately engaged in their subject areas, the knowledge and competence, becomes the defining elements of the knowledge worker's identity. On the tummelplatz, expert competencies will hence play a substantial part of the individuals' lives –competence is *built into* the professionals that carry them. As competences become an integrated part of our identity, it also serves as a motivator in times of distress and uncertainty. Keeping in mind the increasing change of knowledge required for meeting the complexities of tomorrow, the need to collaborate becomes even more salient.

Experts are made, not born; even the most gifted performers need a minimum of ten years of intense training before they win international competitions (Ericsson, Prietula & Cokely, 2007). Our data reflects the strong need for input from others as the complexity of tasks increase. On the tummelplatz you can get this. As Kristina from Statoil reflects upon a conversation with an expert (on geo pressure) –"suddenly I got totally new information I was not aware of. There are constantly introductions to new aspects in oil discovery." The insight from that encounter she takes into new collaborative settings through asking critical questions. Help-giving and help-seeking (Hargadon & Bechky, 2006) thus become mutually reinforcing activities. In the light of enhancing ones own knowledge, one engages in asking questions and sharing knowledge. Discussing with others becomes an extended line from discussing with yourself. Social interactions can thus be perceived as the engine responsible for the creation of collective meanings, requiring the participating individuals to converge, diverge or remain unchanged (Ickes & Gonzalez, 1994).

As such, the tummelplatz can be viewed as an arena of exchange; enabling sharing of subjective insights. The aspect of reflective reframing seems particularly interesting in the context of the tummelplatz, and is described as "the moments when participants make sense of what they already know through a social interaction" and further as "the core of the collective creativity moment as this activity is vital to draw our prior experience and combining it in a novel way" (Hargadon & Bechky, 2006, p. 289). In therapy, often the patient has the answers,

without being able to make sense of them. In light of the therapeutic intervention the answers becomes clearer as the elements of thought are being combined in a way that makes sense to the patient.

5.2. The architecture of tummelplatz

Together, the structural conditions enable the tummelplatz as an arena for collaboration. For the arena to become the locus of something extraordinary, it needs to be fuelled with life, meanings and motives. As we have seen, *the infrastructure of collaboration* sets the stage for collaborative effort, and touches upon how goals and competence carry connotations linked to identity formation. Labeled as infrastructure, the characteristics imply objective categories, which organizations can, to some extent, enable and organize for. The following categories are tacit in nature, and thus need to grow and develop in unpredictable ways. This makes up for the fact that the tummelplatz is difficult to institutionalize, control, measure, predict, or to reduce to objective categories, such as the characteristics of the tummelplatz highlighted within the infrastructural part of this text. The fact that the following categories are difficult to institutionalize does not make them less important. On the contrary, we believe that the following mechanisms we have discovered in our data are some of the fundamental elements activated on the tummelplatz. These are *curiosity, trust* and the intersection between these, which give the possibility to engage in the shared human endowment of play. If play is the expression of tummelplatz, what are the life giving factors that create the sparks? The following sections discuss the second part of our findings.

5.2.1. Using curiosity as driving force

Curiosity is not just an individual driving force but also a means for utilizing collective efforts. As such, curiosity unifies the collaborators towards a common quest and activates engagement on the tummelplatz.

"I was curious, and so was Tom", Christin explains, with her eyes wide open in enthusiasm. It started out as a possibility; the well could potentially be longer. After the prior success with Johan Sverdrup, the company wanted to look for grave wells, searching for the possibilities of deeper targets. Tom explains;

"The thing about this project, was that it was *high risk*, and we were thinking, it's not most likely, at least it's not impossible." Tom was assigned to the project, and later his coworker Christin was brought on board;

> We had no idea what could be down there (...) but when we got down there, and got to see it, it was a very nice grave, people had been there before (...) but not that deep, and that's madness! So, all off a sudden we figure this out, and it's a great possibility! High risk, but a *great* possibility! So, he starts interpret, and I throw myself around, start producing GEOX volumes, set up the power point, and finally the whole thing was done within 3-4 weeks.

Christin is the kind of person that brings energy into a room when entering it. So, when asking her about her passion, the "kind of experiences we want more of", really gets her going. Highly enthusiastic, she gesticulates, draws, and talks a lot about the value of bringing in Matt, a search advisor, that in Christin's view really knows what he is doing: "He is such a good person to have around, good and safe person (...) he asks all these "why questions", and it's so good when someone asks you". When confronting Matt with this, it prompts him to elaborate: "I've learned a bit when it comes to posing open-ended questions. People have to own their answers. It's more important that they figure it out on their own, than me having to ask them..." The driving force in this collaboration seems to be something more than just finding oil. It's about wonder – about learning something new – about curiosity. This also becomes evident when digging a little deeper into the understanding of why this very finding was interesting. Tom explains:

> It often goes like this; you look at the possibilities [for interpretation] that you have, choose the one you like the most, and go for that one accordingly. So, in 1 out of 20 cases, this work, but most likely it will not, right? (…) but if you don't' find anything, that is also a finding, because it proves your model was correct.

Their excitement is not only related to hitting the jackpot, but also the fact that if they were to find oil from the new interpretation of the migration, then the model they would be basing this finding on could further be applied in other settings. The result may be that you find oil, but the quest must be linked to something else – something that carries us much longer. This also includes having ownership of

your curiosity, in the words of Matt: *"It's like a puzzle; you must put all the pieces together, creating your understanding, of your geology"*.

Curiosity, the drive to discover new mountain tops or grave wells, is deeply connected to another search, a quest that is often harder, and probably the longest you will ever take – into the depth of your own being. As Matt points out, your understanding of something is *personal* – the work you choose is *personal*. In our data, collaborations seem to engage people the most, when there is something at stake, something to win or something to lose – something to fight for. During his interview, Scott, one of the partners in Lund Hagem, describes his fear from walking around on building sites, and reveals his hunt for perfection:

> If you walk around on building sites and think that everything looks super nice all the time, then you basically have already left... So I take a lot of photos, of the aspects I question, and I go home and look for solutions. So, I guess it's in my nature that I am a hunter, striving to improve. It's probably like writing a book; you fall in love with all the nice chapters, and give a damn about everything else. But you have to seek out the aspects that does not work - and look for improvements. So, that's why I think it's hard to walk around on building sites, really.

Although arrangements are made, and building is progressing, the drive for doing something better, constantly striving for perfection, seems to be really tormenting our informant. In an industry where nothing is for certain, this need - this drive to go further - is what fuels the passion and inspires the daily practices.

Among our interviewees we recognize a curiosity that goes beyond the work task; rather it is connected to a deeper quest for meaning. In our view the need to investigate is the primal drive. To the extent it seems that some individuals, like one of our architects at Lund Hagem, seek out situations that trigger their curiosity, just for the mere pleasure of doing so:

> At times I even wish I was less curious about architecture. When I walk into a new room there is immediately that desire to investigate, learn from, check the materials and the construction (...) to explore. On the other hand, that is probably the aspect of my job that I enjoy the most… That on my way to work, I can see something, a building or something else, something out of the ordinary. If I see something like that, I know I'll have a good day.

On such occasions, curiosity seems to be linked to something else, something more than a need being met. In other words, our interviewees seem to derive pleasure from curiosity, even when they have no hope of directly satisfying it. In fact, our geologist Pablo calls for curiosity as the first thing:

> For me, exploration is explore, explore is going to the unknown, and a lot of people are not comfortable about the unknown, because you do not know how to deal with it. (...) When you are coming from research you are happy not having a solution because that is what is the driving force (…) In exploration I think curiosity is the first thing. If you are not curious you will hit a wall, and you will never improve.

Even more so than her passion for the subject area, Irene, describes how a project in itself has the potential to become highly motivating:

> If what you are doing is not an inspiration for the succeeding generations, you might as well quit…It is not for your own pleasure you are doing this – it has to be tied to something larger. Because, everything that demands something tremendous of us, that is what we truly enjoy – that's why you have to do things properly, you have to really mean it.

Irene is stressing the importance of seeing beyond oneself, the project, and the organization; only then will the individual seize a part of identity and what is at stake outside the frames of the professional agenda. Much like the type of positive drama (Carlsen, 2008) will define the type of difference and beneficiary that is desired, we see the prosocial motivation in accordance. Not only do the positive dramas engage people, they also bring them together (Carlsen, 2008). Viewing this type of curiosity in the context of therapy, the therapist may be triggered by the returning scars he find in his patients, he is perhaps also motivated to see what lies behind, also for his own part. As we are all human, there are some experiences we all can relate to. These kinds of emotions are thus a vital part of the tummelplatz; they are what fuels the wonder and inspire the dramatic occurrences.

We all have our own personal stories, and through our experiences, we look for occurrences that confirm these. The tummelplatz becomes an arena where

stories can be played out. The other actors on the tummelplatz are a vital part of this scene, as already discussed; we need each other's expertise. When these highly engaged and curious persons meet on the tummelplatz –creative sparks will fly. When describing his ideal state of work, our interviewee Nathan craves (more) drama in his working days:

> The way exploring is organized here in Statoil, it's a lot of licenses. We have a leadership committee, a management committee, a budget... We have a program, that we follow (...). That's the way we have to run it... We need to stick to these programs budgets and agree with others before we proceed. It turns out to be too little of the task-force, the way they do it in the movies... - that someone is going to solve a murder. Everyone diving into one task. With different backgrounds. And you work together, in order to solve something in union.

 We hence see the inherently deep need for making a difference, because through collaboration you mobilize yourself and other in order to fulfill the higher stakes. It is perhaps this mobilization that in the end creates the urgency, and thus the willingness to open up to your peers. Pablo words this beautifully:

> We are not dealing with geology, we are not dealing necessarily with numbers, we deal with numbers - but not only with numbers: We deal mostly with interpretation. And you see something and you interpret it, but sometimes there is more than one interpretation. Most of the time it is more than one possible interpretation. And if you can narrow down the number of interpretation by using different disciplines, which means speaking with other people, that is very beneficial for you.

The curiosity is then not *only* a drive to discover, it is also a drive to unite. Unleashing curios drives within the realm of the tummelplatz, brings it back into a landscape where it is appreciated and understood. It is not just about being curios; it is also about catalyzing the curios drive into the novel. To allow for this to happen you need to meet and trust the other.

5.2.2. Crafting trust through intention and action

To meet the goal of building (a successful) therapeutic relationship, Freud sought transparency of all things hidden in the patient's mental life. To allow for the complete disclosure of such deep secrets, mutual trust appears to be fundamental. In collaborative encounters in organizational settings, it seems equally important. Trust is one of the cornerstones of the tummelplatz, enabling sharing of information and communication flow.

On the tummelplatz, trust in part stems from the knowledge and expertise of the collaborators. Deeply connected to the profession and subject filed, trust is subject to expertise. In knowledge intensive work, this makes sense, as the motive for cooperation is the confluence of knowledge. As such, interpersonal trust can be categorized as cognitive, reflecting issues such as reliability and integrity (McAllister, 1995). For our interviewees it is essential to know that the responsibilities within the projects are safeguarded. When asking them how competence is tied to trust we get the following answer from one of the architects, Lukas:

> Mainly because our profession is directly linked to knowledge that you gain
> through experience, and then you connect that and you naturally trust the person
> that has more experience. But at the same time I think that the other side of it is
> not about experience and the age, but about the way people socialize.

Our interviewee defines another dimension of interpersonal trust, that more closely resembles affective trust (McAllister, 1995), and reflect a special relationship with the other. Hence trust is a complex phenomenon, a fundamental relational asset tied to something more than professional credibility.

In our data, the mutual trust between collaborators often emerge from the effort to try to understand each other, through engaging and including all participants in the common quest. Keeping in mind our initial problematization on the limited encounter of the participants to develop norms of trust through common ground, we perceive the trust issue to be subject of a more intentional approach. The matter of openness appears to be addressed more explicitly. In the case of the *kamikaze curators*, trust can be defined as the hallmark of their

success. As mentioned earlier, their time horizon was far from optimal, and there were no other priorities than the task itself:

> The only reason this went well was that Kristina and I trusted each other. We had the same understanding of the required workload (…) and we didn't give up until we accomplished the task. And we were extremely good at keeping each other informed. Information is important. It has to do with trust.

She continues:

> So the first thing I did when Ralph asked me to get on the project, was to e-mail Kristina, saying –*I have been asked to participate in this project, but I will not do it you feel undermined. If the case is that you feel this project is your responsibility, I will not take it on. We have to have the understanding that this is something we want to accomplish together.* Then I called her and we talked about what we could do (…) no collisions where the one would feel 'this is my project'.

Without an initial common ground (developed over time and frequent interaction), the "cure" lays in the realization of establishing trust through a stern intention –for the sake of the best possible result of the collaboration. For the 'kamikaze curators', the path to mutual trust lays in understanding how they complement each other, through the mutual understanding of the task, and the practice as a whole.

Addressing trust issues directly helps open up the action arena. While elaborating on different collaborations, one of our architects concludes that the successful ones have been characterized by a direct rather than polite tone. This is not to say that there is something wrong in being considerate and friendly, yet when discussing professional issues task orientation should prevail. This is also beneficial when time is scarce. Our interviewee from the art field reflects upon this in relation to e-mail correspondence, where one should be able to cut right to the chase. Ideally there are so many levels one should have consideration for, social and professional, which one has to ensure the essence is brought to the table –the reason we are in this together. "I can be tough with him", says Pablo, acknowledging that some things are strictly tied to the professional aspect of the collaboration, which allows a personal distance. Being tough about work he links to creativity –"if you are tough with work, to be creative: push push push until it

clicks. (…) So it does not matter which tool you use if people are not open for discussion (…) ". It is an open-minded thing. It is difficult to open up for creativity without being able to challenge people, and you should be able to say that they are wrong, without that affecting the person itself. Emphasizing the personal aspects of the collaboration one might risk creating a cozy atmosphere, rather than an arena for progress. Our jazz musician, Max, also recognizes the importance of this:

> I know many people that take everything very personal, people that don't have a personal distance to their own music. So, what you comment on, it is not the person. It is your music. That is something we actually can work with, we have time together, and we can work with it.

Trust is deeply connected to creativity. Without it, you risk the burden of mistrust, which narrows your repertoire of thought and action, restraining you from interacting with others. In this way, trust opens an action space that otherwise would not have existed (Grimen, 2009, p. 75). Without a free and open dialogue one limits the possibility for collective creativity to occur. As such, conversations are not merely a tool for talking about ideas, but rather a mean for them to expand and be evaluated. Our architect, Lukas, says: "(…) without trust there will be no clear communication. I mean you can do your part, but without trust you can never get some inputs from other people which you might get if you would trust them, and vice versa." Trust is deeply connected to sharing, and will in that way affect discussion of "sticky practice problems", the ones that are difficult and require careful treatment (Etienne, MacDermott, Snyder, 2002, p. 82). In a similar manner, the path to finding innovative solution involves a significant amount of uncertainty, thus trust is a matter for tolerating this (uncertainty) in the light of challenging established structures.

However, there is another aspect of trust to be considered in the tummelplatz besides sharing and discussing, namely *listening*. Collaborative activities that are characterized by communicative activities often become synonymous with improvisation. In jazz, as in conversation, self-absorption is a problem (Weick, 1998, p. 549). This can be challenge in collaborative environments, where the conversations might be at a "conclusion level" so the other fails to understand the underlying reasoning for an argument, and perhaps is

not tempted to understand it as he already is crafting one of his own. Knowledge workers are high in competence, skill and ambition, often appearing as autonomous and self-absorbed. On the tummelplatz being explicit and open concerning the issues of establishing trust between collaborators is not enough. One has to demonstrate through actions the will to cooperate and value the other as an equal. More than just giving the other a "trust-mandate", one should show it by recognizing the others contribution and accept critique as constructive elements. In the words of Matt:

> If I invite you to say something, then what you will be saying is of value. It is never wrong. There is always a possibility that what you say is correct. This I find very important (…) this is open communication.

The partner in Lund Hagem similarly reflects upon the reasons for success:

> It is a lot because we have managed to be critical to own ideas. I feel I have been good at listening to others ideas. It is not certain that I agree with them, but I'm listening because there could be something in them that is worth taking further on a later stage.

Having this approach keeps the person from self-absorption, hence opening up for true collaboration. Creative collaboration has a lot to do with hearing each other (out). Thus, on the tummelplatz, trust enables communication, while curiosity drives it.

There is yet another side of trust can be linked to collaboration; in our data we witness great competences when it comes to relating to others, but what is also evident is a high degree of integrity when it comes to understanding oneself. Entering the therapeutic room, opening up, and tearing down walls - is an act of bravery. To participate on the organizational playground with others, you have to be a strong individual, by the means of having integrity in your work. If this collaboration is brief and fluctuating, you have to be even stronger, because you need to meet people, be open to their views – and at the same time be comprehensible and certain with the concerns you bring with you into the tummelplatz. If you are truly to appreciate and build further on another's perspective on an issue, your own voice has to be confident – you need to trust your own contribution of the tummelplatz. In longer, more stable collaborations,

you find value in the collective resources that is enabled by being within this collaboration. On the tummelplatz, the value lay in the osmosis of your own competence with others, and how this brief feeling of unity may result in new and useful results. Although the collaborative mechanisms are of importance, we were lead to wonder whether or not this capacity is best nurtured in solitary. As Beatrice states, even though others inspire her, she derives most creativity from sitting on her own, in her office, "Developing a line of though in totality, in detail", is something she insists is done best on her own. As she labels it –"the experience of sitting in peace." We propose that the trust in the tummelplatz, fueled with the curiosity of the individuals is vital for establishing a common ground where one may hear the beats of the other.

5.3. Summary of findings

The results of our analysis show that in an organizational context, what we perceive as the tummelplatz often is disguised as a project, in terms of having a framework within which actions happen. We have chosen to label this framework *infrastructure of collaboration*, and identified 4 sub-categories – the aspects of *time, goal, space* and *competence*. The pressing element of *time* places demand on the collaborators, motivates collaborators together, and facilitates a higher communication frequency. Time pressure also navigates the collaborators to the end of their quest, and hence enables them to see results of their efforts sooner. Finally, time is highly liberating, as it releases collaborators from their task, leaving space for new ones. Secondly, the *goal* recruits the uttermost capabilities of the collaborators, as it involves their identity as knowledge workers. Additionally, given the internal freedom, it opens up for creative processes. The third sub-category, namely *space* (including the shared space and the tools used by the collaborators in order to convey their ideas) has an important role in facilitating the information flow and continuity in work; the shared space (room) is not necessarily tied to a planned interaction, rather gives the opportunity for the creative to appear serendipitously. Lastly, the hallmark of the tummelplatz is the competence that the knowledge workers encompass. This competence serves to establish a mutual language and forms a bridge between the collaborators.

The *architecture of collaboration*, contains the sub-categories of *curiosity* and *trust*. Our main finding with regards to the complex and untamable nature of

curiosity is that it is a drive; not only does it push creative collaborations forward, but it furthermore serves as a common reference for the collaborators. This cooperation is again facilitated by *trust,* the essence of any successful collaboration. Trust is what enables the collaborators to be strong in their own character, and bring that part of themselves into confluence with others for the purpose of novel outcomes.

5.4. Tummelplatz in practice

Although we have discovered many tummelplatzes in our data, the following section is devoted to three stories selected to exemplify what a tummelplatz can be in different settings. The first example, *where there couldn't have been more*, is a story about how a tummeplatz is about breaking out of the routine with others, and how it can get you to unknown places if you manage to collaborate. The second example, *the project within the project,* is the story of how a tummelplatz can occur in the most unlikely place – in minus 25 degrees in the middle of a ski jump, near Lillehammer the winter of 93/94. The third story is about what is takes to play, not only in sync, but beyond compatible, if only for a short *moment*. These practical examples demonstrate tummelplatz can vary in many forms, but that the mechanism that pull the collaboration together and towards the novel, are alike.

5.4.1. Where there couldn't have been more

How did the collaborative dynamics unfold when finding of one of the largest discoveries on the Norwegian shelf? Although provided with a lot of freedom and possibilities to go beyond convictions, we cannot help but wonder what it takes to actually make such a discovery – not only where others have looked before and failed, but also in an area so close to the shores of Stavanger, that it literally is Statoil's backyard (Carlsen, Clegg & Gjersvik, 2013, p. 194). There are many stories about 'Aldous' or 'Johan Sverdrup' - this is one of them.

Among others, Pablo and Nathan our respondent in the data were called into the search team after the initial team had located the area and big investments were made. Pablo recalls he was called in to help out the project, because his competence was a piece of the puzzle that was missing;

(…) I think it was successful because the team realized they did not have all the skills they need to produce a good product, to do a good job. And they look for other people, so I came in that aspect. And then I collaborate with them. (...) I think that it has been successful because they realized that the discovery will have a big impact so then the company allowed us to cross frontiers and collaborate.

Different specialists were thus brought together with a clear mandate, and a sense of urgency tied to it: (…) in that case we did the job probably faster. They want us to do the job in a year, when these things use to be done in three years, so they need to put more people into it. And then we need to collaborate". These mechanisms together set the scene for a tummelplatz. Another part of what it takes to 'cross frontiers', is to find common ground. In this case, this common ground was the collective engagement:

I think that it really worked this time because the majority of the people were curious and willing to collaborate. So it happens that we were a group of people all of us were listening and trying to discuss things. And we have regular meetings all the time.

Staying within a constant stream of communication enabled the collaborators to work together to such an extent that they did not need to, in his words, "extinguish fires", but rather being in a loop with other collaborators. Pablo sees how this can be supported by bringing people from different expertise areas together:

The interesting thing about why we need collaboration in exploration is because you have many different disciplines, you have chemists, physicist, geologists… So you need to put all these disciplines together, so you really need to collaborate to achieve a good product. So I think room for creating these temporary groups will be very good.

His colleague, Nathan, explain how the collaborations also was tied together by other mechanisms:

We had a very good collaboration. I can see that we were really a team in the sense that we enjoyed to work with each other, and we cared for each other,

which is very good. I don't think through time, none of us has been set aside. Of course, (…), you have different point-of-views and sometimes you don't agree and you have to discuss it. But it has always been very civilized, and that made things easier and made it easier to overcome different opinions. But I must say that I was really happy to work in the team. A measure of how good it is - is this: You get in the office in the morning, you open the door to your office, and you smile.

The experts had confidence both in their own expertise and the other's, setting the stage for relations of trust, with mutual interest nurturing curiosity. The collaboration leading up to the discovery was also affected by a sense of drama to it, the high risk tied to this operation:

We decided to go, despite the fact of that we were sort of failing in clarifying one of the key parameter that we needed to be sure of, which is migration, before going into drilling. (…) Sometimes if you have the perspective of having a very high gain you have to take risk to be courageous, which is in our values. *And just go for it.*

"It is the prime example", Tom argues "that sometimes you have to fuck the established convictions. It *could* work". The tummelplatz enabled a collaboration that led to a quick progression and a precise placement of the wells. When we talk to the experienced geologist John, who claims he's been in Statoil since the *day of dawns*, it is almost as if he still cannot believe what happen when he shakes his head and says; "You know where they found Johan Sverdrup, there *couldn*'t have been more"

5.4.2. *The project within the project*

February 1994, the world turned its eyes on Lillehammer and the opening ceremony of the Olympics. This was an opportunity to show what our nation represents to the audience of the world. When thinking back on her long and versatile career with art production, our interviewee from the Arts Council, Irene, will never forget how working with the Olympic opening ceremony changed how cultural workers was perceived; "From being drunken fools, we became something the whole nation was absolutely dependent on". In particular, the

mentality was favoring the sports event, overlooking the significance of the artistic opening ceremony. In the words of Irene –"this was something not thought of. I don't think Norway had gotten a grip on how huge this really was."

With so little attention and acknowledgement from the outside world, how was it that the project of producing the entire opening ceremony turned out to be such a success? How do you mobilize the collective effort, with so little support? When we ask Irene about this, she explains that you have to energize the collaboration by giving it a life "of its own". She explains:

> It's sort of like a life-boat situation. Your plan was maybe to get on a cruise, but for some reason you ended up in this little boat with this total random composition of people you never thought you would have to work with. But if you don't make the most of it, you will never see the sight of shore. (…) We like everything that has something fierce about it – and then we do it. So you have to do it for real, *really* mean it, and spread your conviction to the other team-members.

The collaboration was navigated by a clear mission –the artistic opening of the Olympics. How to get there was less obvious; "We thought of the Olympics and imagined Korean gymnasts (…)". All the project members knew was that they needed to incorporate the elements that needed to be present within the ceremony; the rest was open for interpretation. A crucial point was that all events were to take place in the ski jump hill, "Lysgårdsbakken" – the same hill that the next day would be used for its right purposes. Irene grins when she says; "They got a bit worried when we told them about the egg coming up from the ground". The unusual surroundings for a performance to take place, demanded presence from the group. All of the work on this project, happened at Lysgårdsbakken, and that meant that everyone involved slept in cabins nearby. We ask Irene, if the collaboration happened in a particular room, and she barks - "No! But we had tents. And it was snowing. And it didn't stop". This seemingly unbeneficial situation activated a collective around Lysgårdsbakken. Irene tells us how she never really was in Lillehammer – all activities, work and life in general was situated at the ski jump.

The intimidating deadline was pushing the collaboration further. Time was scarce; the project was prioritized among the involved collaborators and all other matters were put on hold. Irene remembers that she was extremely engaged in that

period, but also aware of having an enormous responsibility –"I was nervous on behalf of the nation!" This was a multidisciplinary collaboration, involving highly engaged architects, designers, and artists. Of importance was to find people that were good in their professions and safe about their capabilities. "So we literally went in, and found the best people we had, and said; "You have to help us. This is about our national glory." Mutual trust in their work and a shared ambition to succeed prevailed in the collaboration; it was a privilege to work with something that was of interest for all the involved. - "Thank God that the people involved knew what they were doing! You're nerves get kind of shaky when you know 15 million people is watching".

From being anonymous, the machinery behind the opening ceremony got the respects and acknowledgment they deserved. The opening was a success! In Aftenposten's announcement of the ceremony the day after, Jan Hansen writes; "It was proven that the impossible is possible, that is to unite the *winter land* and *the rest of the world* on common ground. (…). In its purest form, the ceremony display the moral obligations tied to any meeting between people or nations" (Hansen, 1994). Ever since, Irene has been asked to contribute in projects where there are few guidelines, high stakes and the opportunity to break boundaries and truly create –such as on a tummeplatz.

5.4.3. The moment

Ted (clavier) and Max (drums) had been playing together for about 3 years, on and off, as they say. In a period leading up to this tour it was more intense, and when you ask what they mean by 'more intense', that is every day – at least 4 hours – always in Max' rehearsal room. Here they could stay as long as they wanted, and they would get a type of continuity in their work, long and intense enough to channel their engagement into the repertoire.. This made sure that they, in Ted's words, "had a place where we could be relaxed, together". He continues:

> I never felt that I had to prove something when I was in that room; I was just relaxed, totally focused on the music (…) I had written a piece, that I wanted the others to try out... And then I guess it was the third or fourth time we tried….the best would probably be to just call it 'The Moment'.

When asking him to elaborate on why it is important to be relaxed, he immediately replies: "Yes, of course. Or else you would never get a moment like *that*." Trust, and how it provides you with a feeling of belonging, embedded the unity of the musicians – enabling them to *play*.

"Maybe it was some Miles? No. I don't remember". Constantly going back to musical references, drifting away from the conversation - and into the landscape of jazz, Max tries to recall as he explains what happened that day form a different angle:

> I think it must have been hardbop… (Laughter) Yes, I was thinking sort of like... (Drums on the table) and I heard… Yes, *definitel*y hardbop drums! But anyway, there was this space, where I stopped... (…) Let me explain it like this, you have been a dancer, so you know what I refer to when talking about musical periods. It's a set of tact's that repeat, and it feels sort of evident in more commercial music forms, more mainstream music. Or, less evangelistic then. And then, I heard.... Yes, I guarantee it must have been Miles. Something like... (drums of the table again) – And then, what normally happens it that when the melody finishes, there are two tact's before the piece is finished... So the bass player and I we were thinking *exactly* the same: That when the melody lands, so will we… But then Ted got this upbeat, a pick-up… and there was silence for one tact… and then we came back in. And it was just so *incredibly* tight! It was so smooth, dynamic. *Real*. It was this sort of moment you recognize from recordings, and think, "ooohhhhhh, that's really great.

Ted further explains: "It was just this moment, and then we… we looked at each other". At this point in time when the musicians explain, both of them burst into spontaneous laughter. And Max almost dissociates for a moment and says: "And then I feel this…. Oh my GOD!! I'm *feeling* it now!" After long explanations and laughter, followed by silence, Max concludes: "It was just too good to be true. So we just had to stop." The moment was a place in time – or in the music – where the musicians were beyond compatible, and had what Ted calls "the highest form of presence in the music". He elaborates: "It's like with any kind of emotional reaction. Take… your first kiss. It's a degree of connectivity. And it leaves you with this feeling of wanting more". When we ask whether or not this moment could have happened randomly, Ted answers; "Yes, it could have – but most likely not". Max explains:

>The thing is, in that period, we were so in sync, we had no doubts towards the others or ourselves. We never thought we were not good enough. There could be thoughts regarding things outside the room, but… We were content with each other. And if there was anything someone needed to work on, we had a very open approach: You could just say it.

The common goal of sharing the creation of something new, *together*, as well as relying on each other's competence, created a space between the musicians that was both safe and challenging at the same time. In unity it was a moment they would never forget – Max sums up: "It was one of the most epic experiences I ever had".

6.0. Discussion

Freud's view on therapeutic relations as a playground can be a fruitful way for understanding not only the therapeutic relationship, but also temporary, creative collaborations. Through this paper we have analyzed how 20 knowledge-workers view collaborations, and how they build understanding across oceans often found between individuals. Attempting to illuminate some inherent mechanisms that strengthen connections in work-based interactions, we have sought the parallel from the therapeutic tummelplatz with the temporary work forms in knowledge-intense collaborations. As displayed in table 4, each of the defined characteristics of the tummelplatz serve as analytical dimensions that shed light on important facilitators of creativity in creative collaborations. Additionally, each of the characteristics bring a certain kind of benefit to the collective and trigger collaborative dynamics.

Going back to our research questions '*Does Sigmund Freud's tummelplatz metaphor convey meaning in an organizational setting?*' and '*What are the characteristics of the tummelplatz that enable creativity in temporal constellations among knowledge workers?*' we provide empirical support for an organizational playground that is reinforced by six mechanisms. Seeing across the two pillars of the tummelplatz (i.e. infrastructural and architectural), organizations can facilitate an infrastructure involving aspects of space, goals, competences and time framing in order to create an arena for a deliberate arrangement of the architecture of collaboration. As such tummelplatz represents a way of framing the collaboration,

where the highest engagement and motivation can be sought, and where the collaborators are on a quest to discover and solve. Through this work we have discovered how the tummelplatz metaphor has a value for understanding mechanisms concerning collective creativity, situated practice models, and the notion of play in collaborative encounter.

We continue with three general assertions that can be drawn from this paper, followed by limitations and suggested directions for future research.

6.1. Tummelplatz as a new lens for understanding temporary collaborations in knowledge intense organizations

The therapist-patient encounter has certain similarities with temporary forms of collaboration. Freud provided us with the idea that even though an encounter may be colored by uncertainty, the qualities of the interaction can facilitate for the thriving of such constellations. The transference between individual to collective happen in the intermediary realm (*zwischenreich*), through which an individual thought is written into by many, and emerge as the result of the interaction. We find empirical support for the thriving of temporary constellations through six characteristics triggering the tummelplatz, and hence collective creativity.

We claim that the mobilizing quality of open goals, energizing aspects of time limits, inspiring features of knowledge, the proximity that allow for an unrestricted sharing, supported by the genuine curious drive and mutual trust, is facilitating the social dynamics that nourish cohesion and mutuality. However these characteristics are not necessarily present at the same time, rather some of them are more salient at a given point of time. Listening to our respondents' stories of fruitful experiences in collaborations we recognized the tummelplatz as a similar, yet different manifestation, of extraordinary collaboration. For the team behind Sverdrup, the mutual curiosity of the project members and common lust for exploring the potential in the portentous area unified the collaborators through combining their valuable expertise, culminating in the discovery. The Olympics opening ceremony was colored by high stakes of defending the nations glory – a force stronger than wind and weather, which mobilized all hands on deck for the purpose of success. The jazz boys in turn nourished their collective "moment" with a high degree of connectivity, supported by physical proximity and continuous interaction over a period of time.

For the tummelplatz to be activated we see two aspects as particularly crucial in relation to Freud's application of the term. For him, a balance between being safe and challenged stands as the precondition for the exploration and participation in play. However, he does not provide us with many concrete suggestions as to how this can be done. Developing his line of thought further (in an organizational context), as well as extending the theoretical understanding of creativity in temporary collaborations, this paper provides a lens for understanding how these collaborations thrive. In light of our findings the feeling of being challenged can be seen through thought-provoking goals marked by uncertainty, and the strict time frame that navigates pace of progress, which in turn are balanced with safety derived from high levels of competence and trust between the collaborators. The notion of trust and curiosity we find to be the organizational equivalent to what Freud considers preconditions for play (i.e. being safe and challenged at the same time). As such the felt trust and curiosity function as two complementary forces that enable the feeling of safety but also the drive to explore and find answers. When these mechanisms are balanced, we can truly play.

Guided by the initial importance of investigating how creativity occurs in every-day settings, we find the tummelplatz metaphor as a fruitful way for pointing to mechanisms that nourish the collective through interaction. As such, tummelplatz is an image of productive interactions resulting in novelty. In contribution to the collective creativity literature this study provides insight about how alignment of collaborators could be understood through play, as a behavioral approach to collaboration. The described characteristics of the tummelplatz each in turn enables collective creativity through mobilizing, navigating, increasing and motivating collective effort (see table 4). A strong parallel to Freud's playground can be seen through trust, which we find is a fundamental precondition for sharing ideas through a broadened thought repertoire of the collaborators, allowing for inter- subjective convergence. Moreover, acknowledging curiosity as a unifying force is important to see that engagement might steam from the temporary group regardless of disciplines and organizations, and also increase the possibility of challenging established truths and engage in a an extensive search for novelty. Practitioners might find it fruitful to focus on ways to increase trust and curiosity as a pragmatic way to enable for tummelplatz in the workplace, in addition to

devoting attention to aspects of the matters discussed in the *infrastructure* (see 5.1).

6.2. Tummelplatz as a metaphor for capturing the changing nature of collaborations including knowledge work

The short-lived encounter and potential self-centeredness of individuals makes it more complex for knowledge workers to build bridges around and across different forms of situated practice. Communicative (and hence collaborative) challenges are more present for persons that come from different communities of practice, and often use different language and knowledge systems for external cognition (Fischer, 2001). In that sense, in contribution to the CoP literature, the tummelplatz as a concept extend existing theoretical models of situated practice by incorporating elements of the nature of social interaction, corresponding with the complexity of the changing nature of collaborations including knowledge work. Keeping in mind that a shared practice is unlikely to be relevant in these collaborations (due to a limited encounter), we open for considering relational dynamics that might evolve around a common goal. As problematized by Amin and Roberts (2008), highly creative epistemic communities have a challenge of alignment due to absence of an obvious social dynamic of cohesion and mutuality, and different socialities of knowing in action each call for a specific terminology (p.354). We suggest that by introducing the tummelplatz metaphor one can better understand how dynamics such as trust and curiosity facilitate mutuality in these collaborations, and that these further can be supported by aspects of time, goals, competence and potentially space. In our data, curiosity is a common denominator for individuals wanting to discover the novel; hence we view curiosity as a vital form of engagement in the work task, which provides cohesion for the participants that strengthen their collective effort.

By actively working for a unified social dynamic within projects, the participants can overcome the potential challenges of working in temporary constellations. This implies a more intentional approach where matters of trust and openness should be confronted more explicitly, in both words and action. For the participants in the collaboration to fully benefit from the enabling of the structural conditions (i.e. having open stimulating goals, set deadlines, a shared space, and access to each other's competence), it is important to consider the

relational dynamics that supports the process towards the novel. Much like in psychotherapy, a bad outcome case can be distinguished from a good based on the interpersonal processes (Safran & Muran, 2000). Through this paper we have shed light on dynamics that contribute in aligning and understanding each other's perspectives, and unifying efforts through a common quest.

Our findings point to the benefits of curiosity for establishing a collaborative ground. Whereas play is connected to creativity through evoking curiosity (Mainemelis and Ronson, 2006, p. 99), our findings suggest that curiosity might activity the playground between collaborators, and as such open up for other generative dynamics. Not only is curiosity linked to knowledge and discovery, but also might serve as a unifying element –as a catalyzing factor in organizing (Harrison, 2011). In line with our findings, evidence point to the value of curiosity as a shared experience, functioning as a relational gravity that pull people together (Harrison, 2001, p. 120). By emphasizing curiosity as a central quality of the tummelplatz, we shed light on (some of the) dynamics of cohesion and mutuality in epistemic and high creative knowing.

6.3. Tummelplatz as a means of understanding how play unfolds in knowledge-intense organizations

Tummelplatz illuminates how the endowment of play may facilitate for a meaningful and engaging encounter in joint-work. Although the notion of play has not been explicitly conveyed through our interviewees' stories, we perceive it as an integral part of the experiences and as a behavioral approach towards the processes involved in collaborative work. When our interviewees talk about their most engaged moments of work, they talk about their experiences not so much as *working* – but as *playing*. This is partly because they often describe their peak experiences as something they do with others, and with a type of interaction that stimulates cooperative exploration. In connection to collective creativity, play is a form of interaction conducive to building high quality connections (Stephens et al., 2011). These connections in turn have the inherent characteristic of connectivity, which can stimulate openness to new ideas and influences (Stephens et al., 2011, p.5), and are also associated with improvements in coordination (Gittell, 2003). As such, the tummelplatz could be understood as an arena where these beneficial connections thrive, and in turn foster beneficial outcomes.

What is the nature of play for an individual working within temporary creative constellations? This may partly be understood in light of psychotherapy. Bromberg (1996) refers to the experience of being in therapy as one of "standing in the spaces", by which he means that "one is able to make room at any given moment for the subjective reality that is not readily containable by the self he experiences as "me" (p.516). On the tummelplatz participants are provided with such a space in between each other's ideas, ambitions and wonder. This is what Bromberg (1996) calls 'playing'. In his view, playing is important in two aspects; first considering the lightness of play as opposed to the heaviness of feeling completely defined by a situation (or struggling to be so). Secondly, playing is often unbidden –it has a quality of surrender to it. Perhaps this feeling is similar to what Csikszentmihalyi (2002) labels as the feeling of *flow* experienced by people engaged in adult play. In the tummelplatz, you are invited into a higher state of reasoning at the collective level, and stimulated to unleash the imaginative.

Coming back to Freud's initial depiction of the character of the interaction between patient and therapist as a tummelplatz, we understand the connotations to the playground as a mean for making the therapeutic experience harmless (as when children play in complete freedom). However, moving away from the therapeutic room, Freud (1908) links play more explicitly to creativity:

> The child's best-loved and most intense occupation is with his play or games. Might we not say that every child at play behaves like a creative writer, in that he creates a world of his own, or, rather, rearranges the things of his world in a new way which pleases him? It would be wrong to think he does not take that world seriously; on the contrary, he takes his play very seriously and he expends large amounts of emotion on it. The opposite of play is not what is serious but what is real. In spite of all the emotion with which he catches his world of play, the child distinguishes it quite well from reality; and he likes to link his imagined objects and situations to the tangible and visible things of the real world. This linking is all that differentiates the child's "play" from "fantasying." (p. 2)

The fantasy thus diminishes the potential to play with others, as this often is a solitary act. Bringing fantasy into a real life setting, as it is when brought into the tummelplatz, serves to enable play. We do not have to go as far back as to childhood to experience the pleasure of engaging in play. The infrastructural and architectural of the tummelplatz makes a platform for the curious to breathe life

into his or her own playground, and explains the thrill of working within such collaborations.

Linking imagined ideas to the tangible and visible (e.g. through language and sharing with others) opens up for the intermediary where one invites the other to participate in the collective endowment of the novel. Viewing play not as a limited set of activities but as a behavioral orientation to performing any type of activity, it can be viewed as a form of engagement that "transforms" daily activities into processes that facilitate the cognitive, affective, and motivational dimensions of the creative process (Mainemelis & Ronson, 2006), and as such play becomes a mean for unleashing the imaginative.

6.4. Limitations and future research

A highly controversial psychologist introduced 'Tummelplatz' as a metaphor over 100 years ago. Many things can be said about Freud, as many of his theories have been empirically abandoned. Still, Freud must be understood in the light of his time. And in that light, he introduced ways of understanding the human psyche that heavily influences how we understand it today. Perspectives that draw from other streams of research shed light on how mechanisms, that although appear in different contexts, are in essence similar and thus potentially can add richness to each other. The writings of Freud are many and multifarious, and this is far from a literary analysis of his works. We have simply borrowed one of his terms, by taking it out from its context. Further, as pointed out, there are clearly differences concerning the interactional context. In a therapeutic context, the relation between therapist and patient is seemingly asymmetrical in the light of competence, whereas in an organizational context, the locus is multiple symmetrical relations. In our collaborative setting, the participants enter the collaboration in order to complement each other's competence. However, in both cases, the competence is a substantial part of what ties the collaboration together. Further, in a therapeutic setting, the therapist is held responsible for facilitating this 'zwischenreich' where the patient can unfold, and play with the elements in life he needs to rearrange. In a collaborative setting the dynamics are more symmetrical in terms of collaboratively establishing an arena where the efforts can be aligned. The differences between Freud's application of tummelplatz and ours should thus not be mixed, but rather inspire each other. We find it highly interesting and valuable

to incorporate therapeutic vocabulary in organizational theory, and acknowledge how this profound view on relations can be a way of understanding the delicate mechanisms present between individuals.

A limitation that we acknowledge is concerned with the objectivity of the stories, as not all of them are told from the view points of each participant. This especially applies to the Olympic opening ceremony story (5.4.2) that was a project involving several actors spanning several disciplines, however conveyed to us through the retrospect of one person. Nevertheless we found the story intriguing to tell as we recognized it having the counters of tummelplatz, though keeping this limitation in mind.

Future research is needed to deepen the understanding of the social dynamics within temporary constellations. The tummelplatz offers a new lens through which collaborative activity can be seen in the light of principles from psychotherapy. Our study identifies only what we perceive as being the contour of a tummelplatz in creative constellations; therefor the derived characteristics should not be considered as final, rather as an indication of the nature of interaction in such collaborations. However, this contour is clearly dynamic, and the temporal complexity of tummelplatz is an issue to investigate; in our data it appears as both moments of peak experiences, but also as a collaborative effort that spans a project lifetime. While the Sverdrup adventure could be thought of as a tummelplatz activated through the vast focus on the exploration, enduring to the final discovery, for the jazz players the tummelplatz was manifested as an exceptional peak, intensified through the short duration of the moment. Thus, an interesting issue to investigate is when (and how) a tummelplatz emerges (and dissolves). However, this would benefit another research design and perhaps include methods that could reveal insights about the observable behaviors constructed between actors, such as direct observations of interrelating (e.g. Reis & Collins, 2000 in Stephens et al., 2011). Moreover, our collaborations span from dyads to several actors involved in a project, which in turn opens up for investigating the dynamics depending on the number of people on the tummelplatz.

Another matter concerns spatial complexity. In our data we find heterogeneities of proximity, where geographical collocation is more prevalent in the context of some of the collaborations; the geologist and architects need rooms that facilitate not only verbal communication of ideas, but also a non-verbal

communication facilitated through accessible tools for materializing ideas. On the other hand, some of the collaborations in the Arts Council are aimed at text production (i.e. involve less technical knowledge), which might explain why the physical proximity is not prevalent for the thriving of ideas for some of our interviewees. We therefor join Amin and Roberts (2008) in calling for research that might better illuminate the complexities tied to the fact that situated knowing can be reduced neither to geographical proximity nor to a prevailing spatial form (p. 365). In the context of tummelplatz, it would be interesting to see whether the dynamics within are enabled (and reinforced) through a relational aspect, rather than geographical. Is it so that the nature of interaction will affect the dynamics and hence set the requirements for proximity, or that pre-given spatial formations facilitates for the relational?

A final interesting venue for research, we propose, is connected to curiosity. As pointed out curiosity might activate the collective engagement among the collaborators and as such, it would be interesting to explore curiosity as a source of coordinated social effort, and collective creativity. How can we deliberately cultivate curiosity in work settings? To study this phenomenon, researchers should adopt methods that enable exploring of how moments of curiosity may catalyze future interactions, and how curiosity emerge, function, and evolve into new dynamics (Harrison 2011, p.121).

6.5. Conclusion

When children engage in play, they enter a world that is entirely their own. No one can intrude on them or change the rules of the game – because these rules they have invented for themselves. The artifacts in the game are manifestations of these rules. The sand becomes a castle. The swing is a spaceship, shooting for the moon. In this sense, it does not matter what the artifacts are, rather, it is what they enable in us. They are what we build our imagination around. Often, these artifacts are not only solid objects, but also ideas, knowledge and other people.

Inspired by Freud's notion of the intermediary realm between participants in successful temporary encounters, we have identified the organizational tummelplatz as a set of generative dynamics that support the collective thriving of ideas; these dynamics are manifested through the *infrastructural* and *architectural* dimensions of the framework. Recruiting competence in the tummelplatz and sharing understanding, engage the collaborators through utilization of their knowledge, often within close proximity. Having stimulating open-ended goals, mobilize the collaborators for a common quest –one that is charged with the sense that something important is at stake. Common ground is crafted through trust as a mean for enabling unrestricted communication, whilst one is anticipating consequences of success. The collaborative encounter is reinforced through curiosity as a unifying force.

We perceive the tummelplatz as a playground for professionals –a place where the "in-between" realm is brought alive by the deliberate arrangement of the infrastructure and architecture of collaboration, and where curiosity and trust are taken as necessary to unlock collective imagination.

7.0. References

Alvesson, M. (2001). Knowledge Work: Ambiguity, Image and Identity. *Human Relations*, *54*(7), 863-886.

Amin, A., & Roberts, J. (2008). Knowing in Action: Beyond Communities of Practice. *Research Policy*,*37*(2), 353-369.

Blackler, F. (1995). Knowledge, Knowledge Work and Organizations: An Overview and Interpretation. *Organization Studies*, *16* (6), 1021-1046.

Bordin, E.S. (1979). The Generalizability of the Psychoanalytic Concept of the Working Alliance. *Psychotherapy: Theory, Research and Practice*, *16*, 252-260.

Bromberg, P. M. (1996). Standing In The Spaces: The Multiplicity Of Self and The Psychoanalytic Relationship. *Contemporary Psychoanalysis*, *32*, 509-536.

Brown, J. S., & Duguid, P. (1991). Organizational Learning and Communities-of-Practice: Toward A Unified View Of Working, Learning, And Innovation. *Organization Science*, *2*(1), 40-57.

Carlsen, A. (2006). Organizational Becoming As Dialogic Imagination of Practice: The Case of The Indomitable Gauls. *Organization Science*, *17*(1), 132-149.

Carlsen, A. (2008). Positive Dramas: Enacting Self-Adventures In Organizations. *The Journal of Positive Psychology*, *3*(1), 55-75.

Carlsen, A. Clegg, S., Gjersvik, R. (2012). *Idea Work. Lessons of the Extraordirnary in Everyday Creativity*. Oslo: Cappelen Damm Akademiske.

Carlsen, A., Klev, R. & Von Krogh, G. (2004). *Living Knowledge. The Dynamics of Professional Service Work.* London: Palgrave.

Csikszentmihalyi, M. (2002). *Flow: The classic work on how to achieve happiness*. London: The Random House Group.

Dutton, J. E. (2003). Breathing Life Into Organizational Studies. *Journal of Management Inquiry*, *12*(1), 5-19.

Dutton, J. E., & Heaphy, E. D. (2003). The Power of High-Quality Connections. *Positive*

    Organizational Scholarshi, *3*, 263-278.

Ericsson, K. A., Prietula, M. J., & Cokely, E. T. (2007). The Making of an Expert.

    Harvard Business Review, *85*, 114 - 123.

Etienne, W., MacDermott, R. A., & Snyder, W. M. (2002). *Cultivating Communities of*

    Practice: A Guide to Managing Knowledge. Washington: Harvard Business Press.

Fischer, G. (2001). Communities of Interest: Learning Through the Interaction of

    Multiple Knowledge Systems. *Proceedings of the 24th IRIS Conference*, 1-14.

Florida, R. L. (2012). *The Rise of The Creative Class: Revisited*. New York: Basic Books.

Freud, S. (1908). Creative Writers and Day-Dreaming. *Standard Edition*, *9*, 143-153.

Freud, S. (1914). Erinnern, Wiederholen und Durcharbeiten. *Weitere Ratschläge zur*

    Technik der Psychoanalyse, 6, 126-136.

Freud, S. (2001). *The Complete Psychological Works of Sigmund Freud*. London: The

    Random House.

Garsten, C. (1999). Betwixt and between: temporary employees as liminal subjects in

    flexible organizations. *Organization studies*, *20*(4), 601-617.

Garud, R., Tuertscher, P., & Van de Ven, A. H. (2013). Perspectives on Innovation

    Processes. *The Academy of Management Annals*, *7*(1), 775-819.

Glaser, B.G. & Strauss, A. L. (1967). *The Discovery of Grounded Theory*. Chicago:

    Aldine.

Gillman, A. (2009).*Viennese Jewish Modernism*. Pennsylvania: Penn State Press.

Gilson, L. L., & Shalley, C. E. (2004). A Little Creativity Goes a Long Way: An

    Examination of Teams' Engagement In Creative Processes. *Journal Of*

    Management, *30*(4), 453-470.

Gittell, J. H. (2003). *A theory of relational coordination*. In K. Cameron, J. Dutton and

R.E, Quinn (Eds.), Positive organizational scholarship: Foundations of a new

discipline (pp. 25-27). San Francisco: Berrett-Koehler Publishers.

Giuffre, K. A. (2009). Collective Creativity: Art and Society In The South Pacific.

Colerado: Ashgate

Grabher, G., & Ibert, O. (2006). Bad Company? The Ambiguity Of Personal Knowledge

Networks. *Journal Of Economic Geography*, 6(3), 251-271.

Granovetter, M. S. (1973). The Strength of Weak Ties. *American Journal Of Sociology*,

1360-1380.

Grimen, H. (2009) *Hva er Tillitt*? Universitetsforlaget: Oslo.

Hackman, R. (2002). Leading Teams. Boston: Harvard Business Review.

Hansen, J. E. (1994). Enkelt og Flott Da Det Umulige Ble Mulig. *Aftenposten*.

13.02.1994, P.19

Hargadon, A. B., & Bechky, B. A. (2006). When Collections Of Creatives

Become Creative Collectives: A Field Study Of Problem Solving At

Work. *Organization Science, 17*(4), 484-500.

Hargadon, A., & Sutton, R. I. (1997). Technology Brokering And Innovation In A

Product Development Firm. *Administrative Science Quarterly*, 716-749.

Harrison, S. (2011). Organizing the cat? Generative aspects of curiosity in organizational

life. In Cameron, K. S., & Spreitzer, G. M. (Eds.) *The Oxford handbook of

positive organizational scholarship*. Oxford University Press: Oxford

Huckman, R. S., & Pisano, G. P. (2006). The firm specificity of individual performance:

Evidence from cardiac surgery. *Management Science*, *52*(4), 473-488.

Ickes, W., & Gonzalez, R. (1994). " Social" Cognition And Social Cognition From The

Subjective To The Intersubjective. *Small Group Research*, *25*(2), 294-315.

Kurtzberg, T. R., & Amabile, T. M. (2001). From Guilford To Creative Synergy:

Opening The Black Box Of Team-Level Creativity. *Creativity Research Journal*,

13(3-4), 285-294.

Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*.

Cambridge University Press.

Lavine, M. (2011). Positive Deviance: A Metaphor And Method Of Learning From The

Uncommon. In K. Cameron & G. Spreitzer (Eds.) Handbook Of Positive

Organizational Scholarship. New York, NY: Oxford University Press.

Lindkvist, L. (2004). Governing Project-Based Firms: Promoting Market-Like Processes

Within Hierarchies. *Journal Of Management And Governance*, *8*(1), 3-25.

Lindkvist, L. (2005). Knowledge Communities And Knowledge Collectivities: A

Typology Of Knowledge Work In Groups. *Journal Of Management Studies*,

42(6), 1189-1210

Lundin, R. A., & Söderholm, A. (1995). A Theory Of The Temporary Organization.

Scandinavian Journal Of Management, *11*(4), 437-455.

Marshall, C., & Rossman, G. B. (2010). *Designing Qualitative Research*. Sage.

McAllister, D. J. (1995). Affect-And Cognition-Based Trust As Foundations For

Interpersonal Cooperation In Organizations. *Academy of Management Journal*,

38(1), 24-59.

Mainemelis, C., & Ronson, S. (2006). Ideas Are Born In Fields Of Play: Towards A

Theory Of Play And Creativity In Organizational Settings. *Research In

Organizational Behavior*, *27*, 81-131.

Paoli, M., & Prencipe, A. (2003). Memory Of The Organization And Memories Within

The Organization. *Journal Of Management And Governance*, *7*(2), 145-162.

Patton, M. Q. (2001). Qualitative Evaluation and Research Methods (3. Edition)

Thousand Oaks, CA: Sage Publications, Inc.

Perry-Smith, J. E., & Shalley, C. E. (2003). The Social Side Of Creativity: A Static And

Dynamic Social Network Perspective. *Academy Of Management Review*, *28*(1),

89-106.

Sawyer, R. K., & Dezutter, S. (2009). Distributed Creativity: How Collective

Creations Emerge From Collaboration. *Psychology Of Aesthetics,*

Creativity and the Arts, 3(2), 81-92.

Sen, G. (2011). Dealing with Ideas: On Creating New Work Practice. In Carlsen, A., R.

Klev & G. Von Krogh, Eds. *Living Knowledge*. *The Dynamics Of Professional*

Service Work (pp. 20 – 39)*.* Palgrave, London.

Gilson, L. L., & Shalley, C. E. (2004). A Little Creativity Goes A Long Way: An

Examination Of Teams' Engagement In Creative Processes. *Journal Of*

Management, *30*(4), 453-470.

Skårderud, F. (2012). Mellomværender - En Psykiater Opplever Kunst. In Statens

125. Kunstutstilling (Red.) *Høstutstillingen* (P. 191 -195). Kunstnernes Hus: Oslo

Sosa, M. E. (2011). Where Do Creative Interactions Come From? The Role of Tie

Content and Social Networks. *Organization Science*, *22*(1), 1-21.

Stephens, J.P., Heaphy, E.D. and Dutton, J.E. (2011). High Quality Connections. In

Spreitzer, G. and Cameron, K. *Oxford Handbook of Positive Organizational*

Scholarship. Oxford University Press. Forthcoming.

Tanggaard, L. (2013). The Sociomateriality of Creativity In Everyday Life. *Culture &*

Psychology, *19*(1), 20-32.

Thompson, L., & Fine, G. A. (1999). Socially Shared Cognition, Affect, and Behavior: A

Review And Integration. *Personality and Social Psychology Review*, *3*(4), 278-

302.

Walsham, G. (2006). Doing Interpretive Research. *European Journal Of Information*

Systems, *15*(3), 320-330.

Weick, K. E., & Roberts, K. H. (1993). Collective Mind in Organizations: Heedful

Interrelating On Flight Decks. *Administrative Science Quarterly*, 357-381.

Weick , K. E . (1998). Improvisation as A Mindset For Organizational Analysis.

Organization Science. 9(5) 543-555.

Wenger, E. (1998). *Communities Of Practice: Learning, Meaning, And Identity*.

Cambridge University Press.

Will, O. (1971). The patient and the psychotherapist: Comments on the uniqueness of

their relationship. *In the name of life. New York: Holt, Rinehart and Winston*.

Woodman, R., Sawyer, J., & Griffin, R. (1993). Toward A Theory On

Organizational Creativity. *The Academy Of Management Review* (2), Pp.

293-321.

Zhou, J., & Shalley, C. E. (2003). Research On Employee Creativity: A Critical Review

And Directions For Future Research. *Research in Personnel and Human

Resources Management*, *22*, 165-217.

Appendix I

Table 1. Overview of interviewees

Firm	Position	Field of expertise	Date	Pseudonym
Statoil	Team leader	Geology / exploration	21.11.12	"Brad" (M)
Statoil	Explorer, prior researcher	Geology, exploration	21.11.12	"Pablo" (M)
Statoil	Explorer, prior researcher	Petroleum technology, geology	22.11.12	"Nathan" (M)
Statoil	Explorer, prior researcher	Paleontology, sedimentology	22.11.12	"Seth" (M)
Statoil	Geology/ Exploration	Geology / Base modeling	21.11.12	"Zola" (F)
Statoil	Search advisor / former unit leader	Geophysics	22.11.12	"Matt" (M)
Statoil	Search advisor / former unit leader	Geophysics	22.11.12	"John" (M)
Statoil	Explorer	Geology / licenses	22.11.12	"Christine" (F)"
Statoil	Explorer	Geophysics	22.11.12	"Tom" (M)
Lund Hagem	Architect	Architecture	20.07.13	"Kathy" (M)
Lund Hagem	Architect	Architecture	20.07.13	"Peter" (M)
Lund Hagem	Architect	Architecture	20.07.13	"Lukas" (M)
Lund Hagem	Architect/ Partner	Architecture	20.07.13	"Scott" (M)
Arts Council	Arts producer	Start up or develop various art projects.	09.05.13	"Mary" (F)
Arts Council	Curator	Conveying art to youths	25.05.13	"Karen" (F)
Arts Council	Culture consultant, Leader	Theater production	16.05.13	"Kristina" (F)
Arts Council	Associate professor	Performance theory, new arts	17.06.13	"Beatrice" (F)
Freelance	Jazz musician	Drums	17.02.13	"Max"(M)
Freelance	Jazz musician	Clavier	17.02.13	"Ted" (M)

Appendix II

Preliminary thesis report

- Exploring the Tummelplatz -

Written by:
Emily Moren Aanes
Dragana Trifunovic

Supervisor:
Arne Carlsen

Hand-in date:
15.01.2013

Campus:
BI Oslo

Examination code and name:
GRA 19002 Preliminary Thesis Report

Programme:
Master of Science in Leadership and Organizational Psychology

To communicate the novel

In this paper we present the start of our journey –our theoretical background, both related to our understanding of creativity, and how we view language and communication as an essential component of social interactions, thus how it nourishes both collaboration and creativity. We will also present our design and methodological choices, as well as preliminary findings and our expectations for our work to come.

Our starting point was that we got interested in exploring and understanding the mechanisms that enhances and motivates creativity in interactions and at the organizational level. Why is it that some organizations are able to create an atmosphere able to bring out the best in people? Further, we got interested in studying the *practices* that are inherent in the organization, that is, what people do. We argue that social interactions are crucial for creativity, making these relationships a pre-condition for creativity, as stated by Carlsen, Clegg & Gjersvik, "*Great ideas are relational in the sense that they need to be shared, shaped, written in to by many. Ideas live the strongest when they leave the cradle and become part of other people's purposes, ambitions and hopes*" (2012, p. 24). For instance, Farrell (2001) is taking the close relationship and communication between Monet and Renoir as influencing the beginning of impressionism. Through examining the dynamics of these interactions he questions why some of them flourish, while other fall apart, and maybe more interesting –how these interactions affect creativity of its members. Moving away from a specific dyad, Giuffre (2009) states that in order to know something about how and why a place becomes the locus of artistic creativity, one has to consider more than the individual – rather the larger social system that allows and encourage their development. Creativity happens at many levels, and at each of these the social dynamics of relationships within the structures are the forces that facilitate the creativity (Giuffre, 2009). Woodman and Schoenfeldt (1990) suggest that creativity is the complex product of a person's behavior in a given situation, suggesting the importance of contextual and social influences. Further, from an interactions position there is always something more to understanding behavior than just describing the observed behavior; this "something more" has to do with the essence of the organism and its behavioral potentiality (Woodman and Schoenfeldt, 1990, p. 279-280). Following the practice perspective taken by Hargadon and Becky (2006), break-through innovations depend on ordinary

people, bridging their expertise and building communities around their insight. Later, studying more than 20 organizations, he also sees lack of communication as one of the main problems in idea generation in organizations (Hargadon, 2003).

With these insights guiding and inspiring us, we started our journey into the field of collaborative creativity – and we wished to seek mechanisms that were fuel for these processes. There is still a great need for research that brings creativity into daily work and that suggest practical schemes for enabling collective creativity; as suggested by Sawyer and DeZutter (2009), previous studies have not given sufficient attention to the interactional processes that occur within the groups. They further stress the importance of this approach in the light of revealing mechanisms and dynamics underlying complex collaborations that produce significant creations. Seeing creativity as a collective phenomenon we thus see the need of interaction and communication, making it a viable predisposition for idea generation. Communication and how it lights the fire for collaborations triggered us, and inspired us to continue our journey.

In this paper we wish to study communicative practices, because we see it as combining two strengthening views on how creativity is situated in everyday activities and work processes; first, by viewing creativity as something that grows and develops also in the collective – not merely by focusing on the individual aspects. In this ongoing debate we agree with Montuori & Purser (1995) when they state that –*it is only by studying humans as humans, within their historical, social and environmental context, that we can begin to do justice to the human struggle. In our view, viewing humans as existing within a context, does not diminish the individual, but adds richness to the picture and makes experience not less unique e- but more human* (p.75). Second, we see the strengths in the practice lens, because if offers a hands-on view on how communication occurs, and thus creates better possibilities to learn from and expand the best practices in the organization. Our view of the creative output through the practice lens means we will be looking for signs of positive deviances in everyday activities and interactions. As suggested by Hargadon and Bechky (2006), researchers that focus on the social aspects of creative solutions through the lens of a collective perspective, should give attention to the essential aspects of particular interactions and preexisting ideas. Consequently, our main interest in our thesis is to investigate in more depth the "idea fertile" interactions that serve as catalyst for the flourishing of creativity. How can we at the best share space with the ideas

that leave the cradle of the individual mind and seek to flourish in the interaction? How do you communicate the novel?

How do we play together?

Creativity is an essential competency of the future (e.g. Sternberg & Lubart, 1996). On an overall level creativity in organizations could be defined as *various processes aimed at producing outcomes that are both novel and useful* (Amabile, 1996). Further, Woodman Sawyer, & Griffin (1993) define it as the creation of valuable and useful new products, processes or ideas by individuals working together in a complex social context.

Creativity happens on many levels, including the level of culture, subculture, group, and at the level of the individual. Within those levels, social dynamics of the relationships may function as facilitators for creativity (Giuffre, 2009). Depending on the perception of this phenomenon it can be considered both individual and collective (Woodman et al, 1993) – the result of a "lone creative genius" or a process nourished by social interaction. In the light of the latter we are interested in creativity as the fundament for innovation as social phenomenon; as stated by Kurtzberg and Amabile (2001) the majority of previous approaches to creativity have highlighted the individual and the effects of the external factors on the individual, whereas relatively little attention was given to synergies resulting from team level creativity. Kurtzberg and Amabile (2001) point to the importance of investigating how creativity occurs in natural settings, suggesting that researchers should explore various manifestations of creativity, spanning from the individual to large and complex groups. Guided by the belief of the complex and relational aspect of creativity, we pay special attention to scholars emphasizing the collective aspects of creativity and ways to get a deeper understanding of processes underlying collective creativity. Hargadon and Bechky (2006) change the locus from individual to collective and from constant to fluctuating. More specific they choose to embrace and explore those insights that emerge in the *interactions* between people. Hence, collective creativity becomes preconditioned by action and interaction at the collective level. Social interactions could further be perceived as the engine responsible for the creation of collective meanings, requiring the participating individuals to converge, diverge or remain unchanged (Ickes &Gonzalez, 1994).

Collective meanings are supported by collective cognition (e.g. Thompson & Fine, 1999; Mathieu et al., 2000). Collective cognition shift of locus from individual to supraindividual cognitive processes. This supraindividual shift suggests that the behavior of individuals cannot be explained by their own motivations and internal cognitions, rather the combination of individuals produce an entity distinct form any individual; the effects of this collective participation are neither additive nor multiplicative, but rather transformative (Thompson & Fine, 1999, p. 282). Weick and Roberts (1993) seize the notion of collective minds, using it as an explanation for the efficiency of people working together. Collective minds are conceptualized as patterns of heedful interrelations of actions in a social system. As these heedful interrelations increase, Weick and Roberts (1993) expect the decrease in organizational errors. Interrelations are not given, but are constructed and reconstructed continually by individuals through ongoing activities (Blumer, 1969, p. 110, in Weick & Roberts, 1993, p. 365). Further, they emphasize a socially structured filed where the activities of individuals are shaped and given meaning to. The effort to interrelate could span from heedful to heedless, where heedfulness (or *mindfulness*) could be described as the amount of attention and effort the individual allocate to the interaction. The authors highlight the importance of the degree of heedfulness in a pattern of interrelations, making it a viable predisposition for collective mind and the capability to comprehend unexpected events that evolve rapidly (Weick & Roberts, 1993). Moreover, the collective cognition opens up for the connection of individual ideas and experiences. If we consider mindful interrelating as the precondition for fruitful interrelations, then these kind of interrelating should according to Weick and Roberts (1993, p. 367) be made visible, modeled, rewarded and discussed so newcomers may have the chance to adapt this style of responding.

The perspective confluence theories take on collective creativity can explain these mechanisms further, by stating that it is the *recombination* of existing ideas as the building blocks for creative solutions. For instance, Hargadon and Sutton (1997) describe how existing technological solutions may serve to create new products that are combinations of existing knowledge. A connection between the existing solutions and problems is necessary for existing ideas to appear new and creative; in these interactions ideas change form thus adapting to new environments. They describe the connection of ideas as a result of both a company's network position and internal behaviors that are aimed at stimulating

the thriving of ideas. The network positions enables the employees to function as technology brokers, making the firm a locus for existing technological solutions in various industries. Through analogies between past solutions and current design problems they use their position and accumulated knowledge to generate new solutions. It seems particularly interesting how the acquired and stored solutions in the organizational memory can be retrieved in the right moment to generate a new solution. The authors further describe other reinforcing activities that function as potential boosters for new solution; one could be the lack of specialization among engineers in terms of a specific industry, rather they move between teams and project and in that way gain a wide range of experience. This flux enables them to learn about others' knowledge and skills, thus setting a better fundament for new idea analogies. Also strong norms about knowledge sharing and mutual help between colleagues reinforce the previously mentioned. The authors point to further research that should focus on specifying the environment in which technology brokering is likely to occur, and moreover, the communication between technological domains. What kind of communication is most likely to stimulate the retrieval of needed knowledge at the right time?

However, in order to enable the confluence of old ideas one should consider the interaction that actually facilitate the potential creative outcome. Hargadon and Bechky (2006) go more in depth in explaining how supraindividual creativity emerges in interactions. Their data revealed several interrelating activities that play a role in triggering the moments of collective creativity, namely *help seeking, help giving, reflective reframing* and *reinforcing.* Respectively, help seeking is concerned with active assistance seeking of others, help giving with willing and devoted providing of assistance, reflective reframing as the mindful behaviors of all participants in an interaction, and reinforcing as the activities that reinforce organizational values that supports individuals as they engage in the three previously mentioned. The aspect of reflective reframing seems particularly interesting, described as the moments when participants make sense of what they already know through a social interaction. Through the interaction there is a shift to the collective level explained not solely by the shaping of subsequent contributions of others, but also a new understanding of others' past contributions. Moreover, rather than simply replying on a given question the individual consider if there potentially is a *better question* to be asked. These interaction provide the individuals with alternative frames that make

new aspects of a situation salient, stimulating them to see their past experiences in a new light. However, interactions involve more than simply bringing people together, but rather the inherent meaning and values become salient for the benefits of those interactions; hence the question of *how* we stimulate the processes of reframing arise.

Going back to the individual level of employee creativity in an organizational context, Amabile provides and influential model –*the componential model of creativity* (1983, 1996). This model is based on three different components of creative performance, namely domain-relevant skills, creativity relevant processes, and task motivation. The first component is concerning the actual knowledge and skills a person has in a given domain, whereas the second is about knowledge linked to the appropriate strategies for producing creative ideas, including cross-domain cognitive and work styles for creative production. The last, task motivation, can be seen through the attitudes towards a task in addition to the perception of own motivation for working on the task. The model suggests that the confluence of the three components will predict creative performance. Hargadon and Bechky (2006) suggest extending this model by considering how the various social interactions may contribute to enabling the participants to acknowledge which of their knowledge domains are relevant in a given moment. Consequently, the authors suggest extending the concept of domain relevant skills to consider the behaviors that actually stimulate the sharing of relevant information. Also, what triggers the reflective reframing of individual contributions? Even if intrinsic motivation may be considered at the individual level, it is interesting to explore the dynamics and formation of it when encountered in an interaction. Similarly, we question how the dynamics that may contribute to increase in task motivation could be explained through the extension of domain skill. Finally, Hargadon and Bechky's (2006) findings demonstrate that the mindful interactions not only stimulate the creation of novel solutions, but also trigger the dynamics of creativity-relevant skills at the individual level.

Studying collaborative circles, Farrell (2001) argue that creative work occurs within dyads that have developed close relationships. According to him these collaborative circles consist of a group of peers with similar occupational goals, which through longer periods of collaboration and dialogue have negotiated a common vision that guides their work. He further stresses several reasons for the likelihood of ideas to emerge in dyads. One aspect is emphasizing an open

exchange seen through a playful interaction, which allows the linkage of both conscious and unconscious thoughts from both minds. Through this playful interaction ideas from one person are combined with the ideas form the other, and the associations result in new combinations that may never have occurred in isolation (Farrell, 2001, p. 158). Drawing on the letter from Sigmund Freud to Wilhelm Fleiss, Farrell (2001, p. 186) zooms in to the interaction they had during the most creative periods of their careers. As he put it – *"they networked their minds such as they shared "hardware and software", that is, they gave each other access to one another's memory banks and cognitive processes (…) Like two computers networked together, they each had access to more ideas and more ways of processing them, which mad creativity more likely*." Fleiss draws attention to the interdependence of cognitive processes as an important component of instrumental intimacy. Finally it is important to note that his results are not just related to extraordinary dyads through history, rather they apply to everyday creativity (Farooq, 2005).

Sawyer and DeZutter (2009) introduce the notion of *distributed creativity,* seen as an analogy to studies of distributed cognition. They suggest that when individuals collaborate in order to generate a creative product, the interactions among group members often become a more substantial source of creativity than the actual inner mental processes of each of the participants. Thus they use the term *distributed creativity* to refer to non-individualsitic creative processes. Using improvisionally developed theatre performances, Sawyer and DeZutter illustrate how certain narrative elements emerge from creative contributions of both actors. They explain this further by pointing to moment-to-moment contingency of collaborative emergence (2009, p. 83). The truly collaborative nature thus resides in the circumstance that one actor may potentially not know the meaning of own contribution until the other has responded. In addition, retrospective interpretation is seen through sense making that is dependent on the subsequent dialogue; together with the contingency of the dialogue, retrospective interpretation serve to explain collaborative emergence. Their study contributes to our understanding of how communication, or more specifically –the unfolding dialogue, contributes to creativity.

To what extent can we share our ideas?

The challenge of building shared meaning is emphasized by the multi language nature of dialogues we engage in (Bakhtin, 1981). Thinking about dialogues one can distinguish between various kinds of language including general business, different theoretical perspectives, or language specific to an activity system. The result is that we can get a very mixed discussion, echoing the various voices, potentially without mutual understanding (in Carlsen, Klev & Von Krogh, 2004). How is it then that we can facilitate for a better understanding, motivation and stimulation of imagination?

Typically, communication is thought of as a linear process, where e.g. A sends message X to person B, and that this message can be changed or damaged in this process, one way – or the other (e.g. in Wittgenstein, 1953). Successful communication, thus, would be that the same message that was intentionally sent was received – unspoiled. What is forgotten in this image of communication is the simple fact that there is no such thing as non-communication. In every sense, our mere presence in the world communicates something, and the belief that one action over the other is more neutral, rather makes this action more open for interpretation, than the other way around. Misinterpretations in communication are thus impossible to escape – we are all independent, and our journeys all original and colored by our own perceptions and histories. However, misinterpretations is not only misinterpretations, they can also become resources, enabling possibilities. As Hargadon and Bechky (2006) emphasizes, the understanding of an challenging situation and the creation of creative solution draw from—and reframe—the past experiences of participants in ways that lead to new and valuable insights. Thus, we might not have ended up exactly where we wanted, but the search might have provided us with what we needed in order to move forward.

Rather than seeing communication as a transfer, it can more fruitfully be seen as an arena. Shotter and Cunliffe (2003, in Sen, 2011), describes *Responsive relational expressions*, where partners try to make a shared landscape of possibilities for action when discussing ideas. The conversation thus function as a guideline of where we are now, and maybe even more important –where we go next. In such a dialogue, when one person communicates something, the other person does not, in general, respond with exactly the same meaning as that seen by the first person. The meanings are only similar, but not identical. On

considering this difference, the "between", he may then be able to see something new, which is relevant both to his own views and to those of the other person. So it can go back and forth, with the continual emergence of a new content that is common to both participants. Thus, in a dialogue, each person does not attempt to make common certain ideas or items of information that are already known to him. Rather, it may be said that two people are *making* something in common, creating something new together – setting to life the "between" in their relation. Social interactions between individuals can therefore trigger new interpretations and new discoveries of distant analogies that the individual alone cannot discover (in Sen, 2011). This can be thought of also as authoring; A process that Deetz (2003) define as *a collaborative process through communication in which the possibility of producing rather than reproducing social life is acknowledged* (in Carlsen & Dutton, 2011). Then, conversations are not merely a tool for talking about ideas, but rather a mean for them to expand, be evaluated and potentially rejected.

This view on language is not new; scholars such as Mead (1934), Wittgenstein (1953) and Vygotsky (1962), argue that people create social reality through communication. This statement can be followed by three central ideas; the first has to do with how people define the situation, also known as *intersubjectivity,* that is, a common definition of what is 'here and now'. A second idea concerns the assumptions, norms, and rules that govern and shape the process of communication itself. Thirdly there is the aspect of perspective taking, in which communicators take the perspective of others (Thompson & Fine, 1999). Taken together, this argues for the possibility that language and communicative practices represents something *more* than words. Rather, it is a tool, and it shapes our actions, thoughts and ideas. Then, *when*, *how* and *why* we use our language, affects the language in itself, and the relations and situations we find ourselves create an arena for how we apply our words. Further, we argue therefore that communication is also situated, both in actual but also in mental images and metaphors.

Our need for other people is an essential need "and it is *of us*, body and soul" (Hustvedt, 2012). Thus, language, and how it creates the "between" where communication lives between us and the others, is crucial for our continuous construction of identities. In this sense, you are what others say you are. Looking at art, Hustvedt (2012) further argue that the artwork can be seen as the language

that pushes meaning from the outside on this "between", before the "between" has been manifested in words. This "between," or intersubjective realm, is what Sigmund Freud referred to as the *tummelplatz*, the arena where emotional transference occurs. The translation of the German word *tummelplatz* is "playground," but other connotations of the term could be used such as "battle zone," "stomping ground," and "hotbed". In his essay in the anniversary yearbook for *The Autumn Expedition* in Oslo, Finn Skårderud presents his view on the concept; *"The tummelplatz is what we find in between, rather than inside us. It is our exploration; we try and fail, adjust and try again. We play with reality. The intention is stern, but play is more as an instrument. Thus, there is no such thing as an isolated mind. The mind grows when congregation with other minds. We are not ourselves, by ourselves, but when meeting others."* (Skårderud, 2012)

Originally, Freud used the term to describe the ideal relationship between the therapist and the patient; to Freud the tummelplatz is an arena where both players know the elements, and where they both can feel both safe enough and challenged enough to explore and participate in play (in Skårderud, 2012). The tummelplatz, from our understanding, is not merely an inner space, but an external one as well, e.g. a child's security blanket, the artists atelier, a project room, and is thus both a solid object and symbolic imaginative construct. The notion of the tummelplatz hypothesizes that is through play that people begin to feel real, states that *all* of human culture is in fact a form of play. The tummelplatz, as such, is an image of how playing with others can function at its best. Another word for play is in this context *collaboration*. True collaboration can then be seen as an arena where actor's responses are dependent of the other person's responses. Inspired by Freud, we thus seek to explore the "between" in communicative practices, where creativity is brought to life.

Design and choice of methodology

Since we choose to look at creativity as a collective phenomenon, our research deign will be qualitative, with a practice based view; social life is an ongoing production, and thus emerges through peoples recurrent actions. The mutually constitutive ways in which agency is shaped, but also produces, reinforces and changes the structural conditions (Feldman & Orlikowsky, 2011). Creativity is a form of deviance in the sense that the creator deviates from routine practices in

order to respond to the unexpected (Giuffre, 2009). Where and when is this positive deviance created? In order to explore creativity as social and organizational phenomena, we find it suitable to base our exploration upon principles found in positive psychology, by portraying the situations and circumstances where collaboration functioned brilliantly, and how communication functioned under such circumstances. Thus, we wish to look at creativity as a socially shared behavior, which is how dyads, groups, and larger collectives create and utilize interpersonal understanding. As Sawyer and DeZutter (2009) suggest, if one consider that cognitive process are distributed across groups, then the best way to capture it is through analyzing verbal and gestural interactions among the participants. This further implies using qualitative and observational methods that will enable capturing real-time processes of distributed cognition.

One can argue that socially shared behavior is best described as an orientation or perspective, rather than as a theory, model, or hypothesis, because it is not yet unified theory, but rather, a collection of ideas and guiding assumptions (Thompson & Fine, 1999). We will look deeper into this field of interest by performing in depth, open-ended interviews, in addition to observe interactions of interest. In order to get an understanding of the underlying mechanisms for our research, we wish to have an open format in our questioning, with an ambition to capture the unseen (Glesne & Peshkin, 1992). We will investigate this in two organizations – seeking to exploit the strengths of comparative methods. Accordingly, our ambition would be to explore these communicative practices in the light of explorers in Statoil, known to work well with idea generation (Carlsen, Clegg & Gjersvik, 2012). On the other hand we find the Norwegian Arts Council, an organization seeking to exceed in their practices in order to find more creative solutions to the challenges they are faced with. In what arenas are the communicative practices in the Art Council and in Statoil situated? And, how can these arenas trigger communication that underpins creativity in daily work processes?

Preliminary findings

In November, we got the opportunity to start our inquiry by conducting a pilot study among oil explorers in Statoil, in addition to sharing our transcribed interviews with another group, investigating similar patterns. This gave us in total

10 interviews, which opened up for several interesting insights. Through the whole process we have been keeping in mind a set of three broad categories that serves as a guideline for making sense of our theoretical assumptions. These three are *communication, collaboration and creativity.* As one of our respondents put it -*" I think the work environment is something that is important, and then what we do in exploration is about collaboration, but it is all about creativity (...) So you need to collaborate in the right way in order to be creative. Because, it is all about coming up with ideas, and maturing those ideas".* As mentioned, we perceive true collaboration as the situation where one actor's response is somehow contingent on the other person's insight, thus diminishing the individual contributions and highlighting the collective. If communication can be seen as an aspect of true collaboration, and collaboration is linked to distributed cognition, which further triggers the notion of distributed creativity, then we see the dialog as an inevitable source of the potential of an interaction.

In the following part we want to present some interesting features of the data. However, the following observations are the ones that have caught our attention so far – the interesting part of our journey still remains, as the comparisons start in the months to come. These interrelated features have emerged as a consequence of us asking us selves how creativity emerges through collaboration and communication.

Physical space – sealing off the workflow

Very clear in our data, was the need for physical space in times of collaboration. These places should be sealed off, in order for the contributors to be close to each other. Also, it should be accessible for only one specific work group, working on one specific task; *"- (...) and for me it was really a lot of additional work, (..) I had to go continuously, especially during operations, into the other office, find the person to ask the questions to and so on, and it would have been different if I was sitting with them, because even by hearing other people talking I could have get this information, just as I had before I moved out of the room. There is something really basic such as moving from one room into another, just at the end of the corridor, really affected the collaboration in the group."* The number of members in such a group also was important, not too many, in order to avoid the formation of sub-groups, but rather be perceived as one unit. How the room or area is

designed, also seemed to be of importance; whiteboards, walls were you can hang up posters and maps were important for many, one respondent describe these tools: "-*You need those basic tools. When I interpret seismic data, I need maps; it becomes the framework of your ideas*".

We got the sense that this type of arena, made it explicit that that the landscape was something the participants owned together - an idea that made sharing more natural. One of our informants called this a "*bubble*", another called it "*find-oil-turbo-team*", and one perceived it as a *"laboratory"*. One informant likened this type of work to the work detectives do when solving a murder. An important part of being in this particular space, was that it lowered the barrier for asking questions, and for being "in the loop" as one of our informants explained - *" In that way there will not be a gain in just doing their own work delivering to us, but they were continuously in the loop that made them more a part of our team then just a provider of the service"*. Being in the loop, means that you follow the rest of the group's activities, by understanding and exploring together; every progress can then be perceived as joint, and we believe that this may stimulate the further curiosity of the final outcome - and how to get there.

Curiosity – fueling the passion

Curiosity seems to be a valuable precondition for good collaborations. One respondent reflects upon it -*"In exploration I think curiosity is the first thing. If you are not curious you will hit a wall and you will never improve."* He elaborates on the distinctions between the mentality of a researcher that is craving for the unknown, and engineers that strive to find a solution; hence the researcher is happy when not having a solution because it serves as stimuli for the curiosity. He continues -*"I think not everyone can be creative if you are not curious".* Moreover, this curiosity signalizes that you want to have an insight in what your colleagues and organization do, and this is (according to our respondent) the best way for collaborating. Otherwise you might end up doing tasks solely connected to your specialty, and consequently "switching off" during a discussion for lacking adequate understanding of the others' contributions.

So, why is it so important to change the locus from ones specialty to the broader picture? Only by understanding each other's fields one can communicate for a higher goal. Sawyer and DeZutter's (2009) concept of distributed creativity

may then become real only if the participants of a communication have an understanding of the logic behind an idea, which enables them to build further on it. Further, it seems that this understanding is crucial for connecting the "*hard core geology stuff*" as one respondent call it, to the mission of Statoil. Hence, this not only connects the work activities - it also makes the respondents tied to a common goal. A respondent explain: -" *You need to work with good people, that are good teachers, and you need to ask a lot of questions... (...) because it's just so different how people view different topics, like someone could have a really good idea looking at your seismic....but you need to trust the people, and that means you have to know the people, and that's why I say meeting people is the first step*".

Questions - in order to move forward

The value of questions occur many places in our data. This insight occurs often when asking about ideal collaborations. That question per se seemed to be of relevance did not surprise us, but rather what the questions triggered. It seems that it is not the mere act of questioning everything, but what the questions bring out; the cognitive act of wondering, and wondering together.

Throughout the data we distinguish between 3 features of questions; first we found the notion of questions as being *generating*, by asking question not to ask question, but rather to open up the minds of the people asked, one of our respondents explain; - " *People has to own their responses. They have the answer to the question inside, but it's more important that they find it themselves, than me finding it for them. When they find it themselves, they more easily are able to perform them*". Further he argues that this type of approach to questioning is important for the feeling of safety. To be open in the approach to questioning, can be of help when wanting people to open up their minds. Also, they are important, because they push people to continue to have ideas - that is, follow them and see where they lead; - "*But another thing I am trying to be more aware of, is to continue asking question (...) Often people sit in a meeting, throwing out ideas, and others join in with their ideas...But no one follows these ideas. It is so many ideas, but no one who follows them...*".

Another type of question that many of our respondents talk of is what they call the "*silly" questions*, that is the questions that there is a high barrier to pose, because they are related to things that may seem trivial. These types of questions

are important to many; *"As soon as you have worked there for a while you can't ask the same question comfortably, and if it is a group of people you don't know then the threshold of asking is very high and the simpler the question the higher the threshold."* However, by asking these so called "silly" questions, the threshold for seeing solutions that may come off as naive. As an informant put it; *"Our filter for new ideas are too narrow"*. By collaborating at an earlier stage one could avoid the ideas without potential and rather keep the ones that may be developed further; *"if you shoot off yourself, and you just focus on your own discipline without taking care of other stuff, then you might end up doing a lot of work that in the end is not worth the effort"*. At this point we also notice how "people chemistry" is of importance when describing the ideal collaboration. It seems that those relations are of importance for feeling safe, because one escapes the fear of being judged by your "working self"; *"I have friends (from work) that I go climbing with, and have beer with (...) We already have a relationship independent of work, so no matter if we are tough with each other at work, or direct, it does not matter because I do not need to be accepted at work... I already am accepted in my real life"*.

Another respondent makes a clear distinction of what she prefers to be asked about and she labels it *knowledge questions,* the ones that are concerning sharing knowledge and not helping with practical tasks. We argue that these knowledge questions can be of importance because it confirms your expertise. By knowing where your knowledge belongs in the larger context, you know that you belong in the organization. These knowledge questions are hence a way for organizational members to feel safe in the organization – an aspect we argue is important for many of the features we are discussing. Similar to Hargadon and Bechky (2006), we see the activity of *help giving* being a common feature among the participants. One respondent express the appreciation of being asked – *"You like that people ask you things, and then you help them and then you see: "Ah, I'm useful". If you are working alone, you don't see that happening. So I think I was happier probably"*.

The puzzle –seeing the whole picture

Coming back to "seeing the whole picture" we believe that both curiosity and the physical space motivate and ease an interaction that may contribute to seeing the

whole picture. While the shared space enables more common interactions, keeping each other in the loop, and having an arena that is devoted to a mission, the curiosity stimulates the further interactions in this shared space - making connections across fields, entering the "between" of specialties. By bridging knowledge and getting insight into each other's specialties, one gets the opportunity to think outside ones' own arena, but rather seize the in between where the creative insight may appear. The individuals that contribute to putting the pieces of the puzzle together, we see as highly interesting; *On one hand you need people that are specialists, while on the other you need somebody to make sense of the contributions in a wider sense. But then you need to learn the other things, so that the other day you are able to put all those ideas together and glue them together (...) the best in exploration is probably not the best in any technique, but the guy who can put it all together".*

Implications of preliminary findings

Looking at our data set more closely has given us a more personal relation to our theoretical framework in this journey. The pilot study has given us the means to test out our thoughts on communicative practices that affect and inspire creativity. So far we have found signs that have given us the feeling of being on the right path, especially concerning the relation between communication and collaborative creativity. In particular, we find it interesting how safety and curiosity may be perceived as opposites, but at the same time mutually dependent aspects of communication. Also, even if acknowledging the importance of physical surroundings, we now see more clearly how the physical arena functions as a mental playground for communication. In particular we found the work processes in sealed off teams to be intriguing.

In the months to come we wish to go back to our geologist, and discuss more specifically how they communicate, and how their communicative practices is affected by entering specific arenas, e.g. working in a sealed off project. Also, we will take this to the comparative level, when observing how the use of communication is in the Arts Council, and consequently how this will affect their creative processes. For our further work we still have many unanswered questions, and probably questions that we have not yet come to think about.

References

Amabile, T. M. (1983). The Social Psychology Of Creativity: A Componential Conceptualization. *Journal of Personality and Social Psychology*, *45* (2), 357.

Amabile, T. M. (1996). *Creativity In Context.* Boulder CO: Westview Press.

Carlsen, A. Clegg, S., Gjersvik, R. (2012). *Idea Work*. Cappelen Damm Akademiske: Oslo.

Carlsen, A. & Dutton, J. E, Eds (2011) *Research Alive: Exploring Generative Moments In Doing Qualitative Research.* Copenhagen: Copenhagen Business School Press.

Carlsen, A., R. Klev & G. Von Krogh, Eds (2004). *Living Knowledge. The Dynamics of Professional Service Work.* Palgrave, London.

Farooq, U., Carroll, J. M., & Ganoe, C. H. (2005). Supporting Creativity in Distributed Scientific Communities. In *Proceedings Of The 2005 International ACM SIGGROUP Conference On Supporting Group Work* (217-226).

Farrell, M. P. (2003). *Collaborative Circles: Friendship Dynamics and Creative Work*. University Of Chicago Press: Chicago.

Feldman, M. S., & Orlikowsky, W. J. (2011). Theorizing Practice and Practicing Theory. *Organization Science* (22), pp. 1240-1253.

Giuffre, K. A. (2009). *Collective Creativity: Art And Society In The South Pacific.* Colerado: Ashgate

Glesne, C., & Peshkin, A. (1992). Becoming Qualitative Researchers. London: Longman.

Hargadon, A. (2003). *How breakthroughs happen: The surprising truth about how companies innovate*. Harvard Business Press: Cambridge.

Hargadon, A. B., & Bechky, B. A. (2006). When Collections Of Creatives

Become Creative Collectives: A Field Study Of Problem Solving At

Work. *Organization Science*, *17*(4), 484-500.

Hargadon, A., & Sutton, R. I. (1997). Technology Brokering and Innovation in a

Product Development Firm. *Administrative Science Quarterly*, 716-749.

Hustvedt, S. (2012.) XXXVIII Sigmund Freud Lecture: Siri Hustvedt. Retrieved

from http://www.youtube.com/watch?v=KijZUUumKIQ, 14.01.13

Kurtzberg, T. R., & Amabile, T. M. (2001). From Guilford To Creative Synergy:

Opening The Black Box Of Team-Level Creativity. *Creativity Research

Journal*,*13*(3-4), 285-294.

Mathieu, J. E., Heffner, T. S., Goodwin, G. F., Salas, E., & Cannon-Bowers, J. A.

(2000). The Influence Of Shared Mental Models On Team Process And

Performance. *Journal of Applied Psychology*, *85*(2), 273.

Mead, G. H. (1934). *Mind, self and society*. Chicago University Press:Chicago.

Montuori, A., & Purser, R. E. (1995). Deconstructing the lone genius myth:

Toward a contextual view of creativity. Journal of Humanistic

Psychology, 35(3), 69-112.

Thompson, L., & Fine, G. A. (1999). Socially Shared Cognition, Affect, and

Behavior: A Review and Integration. *Personality And Social Psychology

Review*,*3*(4), 278-302.

Sawyer, R. K., & Dezutter, S. (2009). Distributed Creativity: How Collective

Creations Emerge From Collaboration. *Psychology Of Aesthetics,

Creativity, And The Arts*, *3*(2), 81-92.

Sen, Grete. (2011). Dealing with Ideas: On Creating New Work Practises. In

Living Knowledge*: The Dynamics of Professional Service Work* (p. 20-

39). Palgrave, London.

Skårderud, F. (2012). Mellomværender - En psykiater opplever kunst. In Statens

125. Kunstutstilling (red.) Høstutstillingen (p. 191 -195). Kunstnernes hus:

Oslo.

Sternberg, R. J., & Lubart, T. I. (1996). Investing In Creativity. *American

Psychologist*, *51*(7)

Weick, K. E., & Roberts, K. H. (1993). Collective Mind In Organizations:

Heedful Interrelating On Flight Decks. *Administrative Science Quarterly*,

357-381.

Vygotsky, L. S. (1962) Thought and Language. Cambridge: MIT Press.

Wittgenstein L. (1953). Philosophical Investigations. New York: Macmillan

Woodman, R., Sawyer, J., & Griffin, R. (1993). Toward A Theory On

Organizational Creativity. *The Academy Of Management Review* (2), Pp.

293-321.

Woodman, R., & Schoenfeld, L. (1990). An integrationist model of creative

behavior. *Journal of Creative Behavior 24* (1).