Bachelor Thesis – Strategic Communication

A model of internal communication for creativity

RICHARD HYLERSTEDT

Lund University
Department of Communication and Media

Abstract

Creativity has become a central concept in today's society and economy. Despite this, the concept of creativity is largely absent in organizational communication theory. The aim of this thesis is to show how internal communication that promotes and supports creativity in an organization can be conceptualized in a model and what the main mechanisms of this process are. The model is developed with an interpretive view of organizational communication and based on Edgar Schein's three-level interactive model of organizational culture. A thorough review of research on organizational creativity found a set of communication factors which form the content of the model. The model distinguishes communicative practices and values that promote and support creativity. The central practices are face to face interaction, knowledge sharing and lack of barriers, while the most important values are those for creativity, sharing, openness and diversity. A small ethnographic case study has been conducted in an innovation consultancy organization, in order to illustrate components of the model and to provide a first indication of the plausibility of the model. The case study found the most important aspects of internal communication for creativity in this organization to be face to face communication, informality, sharing, respect and open-mindedness. Thus, the case study indicated no major flaws in the model.

Keywords: internal communication, creativity, organizational culture, theoretical model, practices, values, case study

Sammanfattning

Kreativitet har blivit ett centralt begrepp i dagens samhälle och ekonomi. Trots detta är konceptet kreativitet i stort sett frånvarande i teoribildningen om internkommunikation. Syftet med detta arbete är att visa hur internkommunikation som främjar och stöttar kreativitet i en organisation kan konceptualiseras i en modell och vilka som är de huvudsakliga mekanismerna i denna process. Modellen har utvecklats med en tolkande syn på kommunikation i organisationer och utgår från Edgar Scheins interaktiva trenivåmodell av organisationskultur. Genom en noggrann genomgång av forskningen om kreativitet i organisationer hittades en uppsättning kommunikationsfaktorer som utgör modellens innehåll. Modellen skiljer mellan kommunikativa praktiker och värderingar som främjar och stöttar kreativitet. De centrala praktikerna är interaktion ansikte mot ansikte, kunskapsutbyte och avsaknad av barriärer, medan de viktigaste värderingarna är de för kreativitet, utbyte, öppenhet och mångfald. En liten etnografisk fallstudie genomfördes i en innovationskonsultorganisation för att illustrera komponenter i modellen och för att ge en första indikation av modellens tillämpbarhet. Fallstudien visade att de viktigaste aspekterna av internkommunikation för kreativitet i den här organisationen är kommunikation ansikte mot ansikte, informella förhållanden, utbyte, respekt och öppensinnighet. Således indikerade fallstudien inga avgörande brister i modellen.

Nyckelord: internkommunikation, kreativitet, organisationskultur, teoretisk modell, praktiker, värderingar, fallstudie

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1. Introduction

Since Richard Florida and others popularized the idea of the "creative economy", creativity has evolved into a paradigm (Koivunen & Rehn, 2009, p. 7-9). Today a massive number of actors in the private as well as the public sector are pinning their hope to the ambiguous and esoteric notion of creativity.

However, one area that has not jumped the creativity bandwagon is the academic field of internal organizational communication. Both "creativity" and "innovation" are absent in the subject index of a recent handbook (Jablin & Putnam, 2001) on the subject. In fact, "innovation" redirects to "technology adaptation" which is far from the more basic idea of innovation as a creative process. Miller, on the other hand, does mention "innovation communication" (2006, p. 16) in her volume on recent developments in organizational communication. But she only identifies "idea-related communication" as one of three types of communication featured in the classical mechanistic view of the organization. Later, Miller observes that "coping with innovation [is now] a requirement for all workers" (p. 238). This view, that innovation is something threat-like that can be dealt with and negotiated through communication, is very incomplete and one-sided.

One has to turn to the most recent research in strategic communication (Hamrefors, 2009, pp. 12, 162-163) to find a proposal of how strategic management communication might affect innovation. It is worth noting that Hamrefors introduces this theme in terms of a future vision and a subject for further research. I agree with this need and I believe that there is much to gain from approaching creativity from the perspective of internal communication in organizations.

Staying in the field of strategic communication, there is an argument (Falkheimer & Heide, 2007, pp. 24-25) that internal communication traditionally has a lower status among practitioners than other facets of integrated communication. Showing how internal communication can positively affect creativity can potentially increase its status and perceived value.

The lack of focus on creativity in internal communication studies is mirrored in the field of creativity studies. One of the most cited and classic works that move beyond the study of the creative individual and deal with the influence of the social environment on creativity (Amabile, 1996) does not have "communication" in the subject index. This is not to say that communicative aspects are entirely absent, but since Amabile approaches creativity from a social psychology perspective, the social-environmental factors are not put in a communication context. A more recent volume (Paulus & Nijstad, 2003a), specifically dedicated to group creativity, also presents no grand theory of how the organizational communication framework relates to creativity. Despite an emphasis on creativity as a collaborative activity, the book is intended for those "interested in creativity from the perspective of psychology, sociology, or business" (p. vii). It is unfortunate that the fact that sharing, expressing and understanding, which are central when multiple subjects engage in creativity, are essentially communication activities is not acknowledged more in the creativity research field. Although some researchers (e.g. Kratzer, Leenders & van Engelen, 2004) are starting to reckon that communication is an essential foundation of innovation and creativity, it remains one of the under-explored aspects of organizational creativity (Sosa, 2011, p. 17).

Investigating internal communication and creativity is also motivated by an interest from business professionals. Creativity is now valued in more business contexts than ever and it is seen as an important contribution to continuous innovation and good performance (Paalumäki & Virtaniemi, 2009, p. 111). The collective focus that is implied in any study of internal

communication has relevance in connection to creativity, because the surging amounts of information and the need to specialize mean that more innovation needs to come out of group processes (Paulus & Nijstad, 2003b, p. 3). In general, communication is gaining interest and momentum among business practitioners from various fields, including management (Heide, Johansson & Simonsson, 2005).

Methodologically, a qualitative approach has potential to add a new dimension to the limited existing research on the actual relationship between communication in organizations and creativity. This research (e.g. Kivimäki et al., 2000; Schepers & van den Berg, 2007; Ohly, Kase & Škerlavaj, 2010; Binnewies, Ohly & Sonnentag, 2007) so far mainly applies quantitative data gathering methods, such as questionnaires.

In conclusion, I believe that there is a strong case for a study which highlights how internal communication has positive impact on creativity, both from the academic and practical point of view. The communication as well as creativity field will benefit from a study of this relation, gathering previous knowledge from different studies and proposing a theoretical framework.

Purpose

In my thesis project, I seek to explain how the relationship between internal communication and creativity in organizations can be understood and what this relationship consists of. This means that I address the question of what role internal communication has in promoting and supporting creativity and how this mechanism works. Thus, the core purpose of my research is to suggest, by means of a model, how the communicative aspects of organizational creativity fit in a framework of internal communication. By developing my model of internal communication for creativity, I aim not only to describe the relationship, but also to explain how and why internal communication can provide beneficial circumstances for creativity.

Research Questions

In order to translate my purpose into a concrete research project, which fits within the scope of a bachelor thesis, I have defined the following research questions:

- How can the relationship between internal communication and creativity be conceptualized in a theoretical model?
- How does internal communication practically promote and support creativity in an organization focused on innovation?
- By which key means does internal communication promote and support creativity?

The emphasis of my work is on the first question. The second question offers a practical perspective that helps in understanding the mechanisms and illuminates what the concepts of the model mean in real life. The third question draws on both theory and practice to summarize why internal communication can have a positive impact on creativity. I have consequently labeled the relationship between in internal communication and creativity in terms of "promotion and support", to maintain a focus on the positive contribution of the former. This does not mean that I take a normative stance. My research explores how internal communication is related to creativity, not how it definitely should be related.

Conceptual limitations

This section covers only the most general decisions I have made to limit my work. More detailed limitations to concepts that I make are presented in the later sections on definitions, which also explain the scientific paradigm I subscribe to.

Due to my time frame and resources, I do not intend to give a full and final explanation of internal communication for creativity. Rather, my aim is to suggest one way of understanding the connection between internal communication and creativity.

My research begins in internal communication. Since this communication occurs only among multiple actors, I have looked only at creativity as it is proposed to occur in the inter-action between subjects. Doubtlessly, internal communication has an impact on creativity on the individual level, but I have chosen to leave this, and definitions of creativity based on personality, outside of my study.

Further, I limit myself to the relation between internal communication and increased creativity. This limitation is based on my assumption that communication has positive effects on creativity, which goes against some traditional research on groups but is consistent with more recent findings (Paulus & Brown, 2003, p. 110).

My study is focused on creativity rather than innovation. In one sense, this distinction is a matter of research perspectives, because developments in innovation studies tend to come from management research, while creativity is explored mainly through psychological analyzes (Koivunen & Rehn, 2009, p. 8). There is agreement (West, 2003; Kristensson, 2003) that innovation is more about implementation of novel concepts, making it a more narrow and practically oriented concept. Kristensson describes creativity as "the embryo of innovation" (2003, p. 13). My main reasons for focusing on creativity it that it is wider, less goal-oriented and traditionally not so tied to with "harder" organizational features. Also, I believe that creativity makes more sense than innovation, because it makes the findings of my study more generally useful. When I rely on, or refer to, research that is more focused on innovation I have tried to sort out the creative component.

I have chosen to work with the term "internal communication", to avoid the wider associations of "organizational communication", such as leadership communication, organizational identity and change communication (as in Heide et al., 2005). However, an absolute distinction between internal and external organizational communication is only possible in theory (Heide et al., 2005, pp. 72-73).

2. Methodology

The basis of my research design is my belief that most of the findings and theories needed to make a first model of "internal communication for creativity" are already available in what has been written separately on internal communication and creativity. This means that I have employed a deductive approach, where the model can be seen as the hypothesis. However, something as abstract as a model is difficult to verify and therefore my empirical study is primarily intended to give the model a clearer context.

The work flow of my research has consisted largely of the three phases theory development, case study and analysis. The presentation in this thesis follows the same structure. This approach resonates with my deductive stance in that theory and theorizing precede the empirical study. My model of internal communication for creativity has also to some extent guided the

operationalization of my research, indicating which areas are the most relevant to investigate. The rest of this chapter expands on the methods I have used in my theory development and empirical investigation.

Theory development

Theory development makes up the larger part of my work. The first point that should be made in relation to this method is that I have not worked with a grounded theory (Bryman, 2008) approach. Instead my intention has been to show how a theory of internal communication that promotes and supports creativity can be constructed from existing theory.

To do this I started out by reviewing theories on a large scale. This review gave me an idea of which interpretations of internal communication and creativity were the most useful and it formed the base for the first part of the theory development, the definitions of the concepts. When I searched for more detailed research, it became obvious that communication factors were more common in creativity research than vice versa, so the next step was to extract and organize these factors. The final step in developing the theoretical model was to set up a framework for organizational communication into which could be populated with the identified factors.

The primary advantage of this method is its flexibility. Starting on the level of general definitions allowed me to let the content of the research I investigated shape the development of my model. A second advantage with my thorough review of creativity research is that I base my reasoning on the work of researchers from diverse backgrounds and traditions.

Similar processes of theory development are used in related research. Woodman, Sawyer and Griffin (1993) clearly base their model of organizational creativity on previous theories. They choose a perspective to apply on creativity research, but instead of communication they opt for interactional psychology. Sosa (2011) also selects a particular view on innovation, that of information processing. With support from more detailed research he then proposes a theory of creativity on the dyadic level.

Qualitative research and case study

Qualitative research in the social sciences has a number of basic characteristics (Holme & Solvang, 1997, pp. 92-94). The most fundamental of these is the closeness between the researcher and the research object. By engaging in a subject-to-subject relation, one can fulfill the purpose of stepping into the life of the subject. Closeness to the object and honest reporting allows the researcher to create an authentic representation of structures, patterns of action and social order in the situation that has been studied. This approach must involve an interpretation on behalf of the researcher, which separates most qualitative research from the positivist tradition.

Reliability and validity take a special meaning in the qualitative approach (Holme & Solvang, 1997, p. 94). Measuring reliability, in terms of external and internal consistency of findings (Bryman, 2008), is by default not very meaningful. Qualitative reliability is more an issue of finding a unit of analysis that contributes to a more nuanced understanding. Validity and the possibility to generalize findings are also minor concerns in qualitative research. Qualitative conclusions are not primarily meant to be generalized and the closeness and interaction between researcher and object decreases the risk of the investigation missing the area of interest. (See Taylor & Trujillo, 2001)

Case study

My qualitative approach is based on a mainly exemplifying (Bryman, 2008, p. 56) case study. It is exemplifying because the particular case in my research is an organization with a documented high degree of innovation combined with a size and structure that demand an effective internal communication. Through this case, I gain access to a condensed form of the fields I focus on. I have chosen this case since it "provide[s] a suitable context for certain research questions to be answered" (Bryman, 2008, p. 56). A case study of this exemplifying kind is also suitable for looking more in detail at the "key social processes" (Bryman, 2008, p. 56) in the organization that explain why internal communication can help creativity. In other words, the case shows how creativity is a part of internal communication in the everyday life of an organization.

The case can also be described as critical (Bryman, 2008, p. 55) since I approach it with a developed theory at hand. One can look at the case study as a first verification of the model I have developed. Since I am only relying on one case, the ambition is basically to judge whether the model is realistic at all. A part of this critical side of the case study is also that it reveals aspects that are unclear, which can be a ground for future research.

All the above, including that case study research is often applied for intensive analysis in connection with theory development (Bryman, 2008, p. 57), supports my choice of the case study method. It is worth noting that the qualitative case study sits within a deductive research design. This goes against the general tendency (Bryman, 2008, p. 55) that with a qualitative methodology, research through a case study is the foundation for theory via induction. However, this is not a firm rule (Bryman, 2008, p. 57) and in my situation, given the existing research, it makes sense not to use the case study as a base for theorizing.

The choice of the case study method is also supported by the fact that earlier studies have opted for this approach. In a well-cited ethnography of a product design firm, Hargadon and Sutton (1997) conducted an in-depth case study. The management of creativity has been explored through a case study of two advertising agencies (Forsgren, Tregert & Westerlund, 2004). Finally, Lievens, Moenaert and S'Jegers (1999) used an exploratory case study to investigate the contribution of communication to the commercial success of financial service innovations.

Researcher effects and bias are issues in all qualitative methods (Holme & Solvang, 1997) and the case study is no exception. I have tried to overcome these issues by taking the role of the "interested listener" (Holme & Solvang, 1997, p. 98). Inspired by ethnographic methods I have spent 13 eight-hour office days positioned inside the case organization, gathering and analyzing data as well as writing my thesis. I also to a small extent joined the organizational members in their work when it was possible, placing myself in the observer-as-participant role (Bryman, 2008, p. 410). This approach allowed me to become more comfortable in the organization and my presence to be more natural to organizational members. I was totally open during my time with the organization, including that I introduced myself at a gathering for all members at the beginning of my visit. This approach allowed me to make the most of my time in the organization and it is also the most desirable approach from a research ethics perspective.

The case organization

The organization where the case study has been conducted is an innovation consulting agency based in Munich, Germany (referred to as X in the empirical material). The company assists clients with innovative solutions for products and services (e.g. suitcases and credit cards), by

combining open innovation, industrial design and online IT solutions. The innovation process is based on customer interaction and focused on the generation, management and development of ideas. Since its foundation by the three current owners in 2000, the company has grown to a size of about 60 employees. The company consists of three departments, dealing with design, user integration and market research. The design department is somewhat smaller than the other two, with just over ten people. Each department is lead by one of the founders, and also has one or two team leaders.

Nearly all the members of the organization have completed a master's degree, most of them focusing on market research, management, industrial design, online communities, user integration or software development. A handful of employees are conducting research on the PhD-level parallel to their work. The average age in the organization is around 30 years and roughly one third of the members are female. It is worth noting that at the time of my study, the office layout had recently been changed. The organization expanded from one rather crowded floor to three adjacent levels in the same building. Each department now occupies one floor.

Data gathering

My data gathering while I was positioned inside the case organization consisted of interviews, observations and a visualization task given to respondents. The combination of semi-structured interviews and participant observations is typical for ethnography (Bryman, 2008, p. 469). The different methods support each other and thereby give a fuller image and a broader understanding (Bryman, 2008, p. 612) of internal communication and creativity in my case organization.

Interviews

I conducted a total of eight interviews during my time in the organization. The interviews were concentrated to the later part of my visit, between April 11th and 18th. Each interview lasted between 25 and 35 minutes and was conducted in English without interpretation, with the exception of one which was shortened to ca. 15 minutes and conducted with partial translation to and from German by a colleague of the respondent. The interviews were held in private at the office of the organization, either in the respondent's office or in a conference room. I used a voice recording device in combination with note-taking during the interviews.

The selection of whom to interview was first made from the staff section of the website of the organization. I then refined this selection in consultation with an employee with several years of experience of the organization. The final sample is representative for the organization in terms of gender, age and distribution between departments, but it displays an intentional focus on organizational members with longer experience with the organization (on average just over three years) and an emphasis on middle management. I made this purposive selection (Bryman, 2008, p. 414) of my sample in order to gain access to more experiences of internal communication from people who are most involved in it.

Following suggestions from Bryman (2008, pp. 442-448) I compiled an interview guide (see appendix A) with questions that I used in each interview. The two central themes of the questions were: the use of internal communication in creative work and general features of internal communication that are positive for creativity. In the interview guide, the questions were arranged in such a way that more factual questions led the way to more abstract ones. I paid particular attention to bringing up the network-specific questions in the later half of

the interview so that they would have minimum impact on both the respondent's answers and concluding assignment. The respondents were not provided with any example questions beforehand, but they were aware of the theme of my research.

The main strength of using this kind of interview-based research is that I gained access to the respondents' way of thinking and their own interpretation (Holme & Solvang 1997, p. 99). In the interview situation where I used open-ended questions they were free to articulate their understanding of the connection between internal communication and creativity. The interview can thus be very helpful to discover how the organizational members believe that the organization works (Bryman, 2008, p. 468). Even though respondents were free in their formulation, the interview method allowed me too keep a focus on my desired theme.

At the end of each interview, except the one requiring interpretation, I presented the respondent with an illustration assignment. The assignment was to make an interpretation of internal communication in the organization on a blank sheet of A4-sized paper. I gave no further instructions or restrictions, saying that any format (text, pictures, sketches, diagrams, etc.) were acceptable. Depending on the scheduling of the interview, the respondent had between two and eight days to complete the assignment. However, the response rate was relatively poor as I received a visualization from only four of the seven respondents who were asked for it.

Observations

To complement the data obtained through interviews I also conducted observations in the case organization. My participatory observations included taking part in a small number of scheduled events, but the majority of observations were spontaneous in the sense that I simply took note of what happened throughout the day. My base for these observations was my temporary working space in the largest room of the design department, although I also made observations in other parts of the office on some occasions. The overall principle of the observations was to look for characteristics of the internal communication which was used for creative problem-solving.

I selected which events to observe in consultation with the same employee who helped me select the interview respondents, and then added to this my own impression after a few days with the organization of which events were the most intense in terms of internal communication and/ or creativity. The selection consisted of one kick-off idea generation session for a product design project, two weekly department meetings and one after work activity (collaboratively installing new lamps in the office). The total observation time for these four occasions amounted to about six hours. During all of these events I took notes and in the idea generation session I accepted an invitation to participate in the creative process through sketching. I began each observation by quickly mapping the premises, listing the participants and indicating their position.

In the spontaneous as well as the planned observations, I tried to take a broad approach to internal communication. The basic framework I set up consisted of noting who was talking to whom at what time, for how long and where. On top of this basic structure I added notes about: how much time different people spent talking, who was leading the conversation, who was asking questions, the way people were talking (length of statements, pitch, loudness, unfinished sentences, metaphors and foreign loan-words), what communication aids were used, how many people were engaged in communication simultaneously, how much attention and response people were giving and other non-verbal communication.

Observing the interaction in the organization in this manner had the advantage of letting me perceive directly what was going on and thereby potentially uncovering things that would not

have been accessible through interviews. Bryman (2008) adds that the participatory observation leaves more room for new angles on a given topic because the thematic orientation is less obvious, both for the researcher and the subjects under observation.

Data analysis

The data gathered in the case study presented itself in three formats: digital audio recordings of interviews, a digital document with field notes from my observations and four visualization assignments on paper. The first step in the analysis of this data was to turn to my literature review and extract from it nine broad categories (such as "use of technology", "way of talking", "communication climate" and "other"). I used these categories as a filter when I did a selective transcription of the interviews. I based the categories on the literature review rather than my developed model to avoid influencing the interpretation of data with concepts from the model. The transcription resulted in just over 200 quotes entered in a digital spreadsheet.

The challenge at this stage, where I had all my data in accessible formats, was to decide how much influence my theoretical model should have on the analysis of the data. On one hand, analyzing the data in close relation to the model would increase the usefulness of the case as an illustration. On the other hand, analyzing the data separate from the model would increase the value of the case as a contrast to the theoretical model. As a compromise between illustration and contrast, I opted for analyzing the data in terms of practices and values, features inspired by the model, but to let the themes within these two key categories emerge from the data, unrelated to how they are structured in the model. The practices emerged as a sum conclusion of observations, interviews and visualization assignments, while the values were derived from interview answers to the questions regarding climate, norms and values.

I sorted out practices and values from the case data through a parallel parts analysis (Holme & Solvang, 1997, p. 143) of the three data formats. I reviewed the interview quotes, episodes from the observations and features of the visualizations, collecting the pieces that suggested a similar theme. This mode of analysis gives a fuller coverage of the data than beginning with select themes based on an overview of the data set as a whole (Holme & Solvang, 1997, p. 141).

3. Developing a model of internal communication for creativity

In this chapter I give an account of the development of my theory of internal communication for creativity. The first step is to draw up a theoretical framework by explaining how I define internal communication and creativity. The basic problem with both internal communication and creativity as scientific concepts is that there is a lack of agreement on their definition and that, accordingly, there exists a number of competing definitions (Kalla, 2005, pp. 303-304; Kristensson, 2003, pp. 17-22).

Defining internal communication

In its very simplest form, internal communication can be defined as "the exchange of information and ideas within an organization" (Boveé & Thill, 2000, p. 7; cited in Kalla, 2005, p. 304). However, such a definition is problematic because it hides the complexity of communication in the organization. Much of this complexity rests in the "confusion […] concerning the relationship between communication and organization" (Putnam, Phillips & Chapman, 1996, p.

375). According to Putnam et al. (1996), the concept of communication has been incorporated in organizational studies more than perhaps any other construct. This makes it difficult to draw a clear line between organizational theory and organizational (internal) communication theory and hence the theories and models in the two fields are closely related. To clarify how organizational communication research is intertwined with organization studies, this section begins with an overview of the origins of academic research on organizational communication.

The first advances in the study of communication in organizations (Putnam et al., 1996) were made at the end of the first half of the 20th century. These early studies looked at communication as a factor that affected organizational performance and effectiveness, both from an individual skill perspective and a wider systemic viewpoint. This modernist view included a rational, clearly limited and mechanistic idea of the organization. Communication was then instrumental to the organization and could be measured objectively as a separate entity. This paradigm, in which communication was a one-way transmission, was dominant until the 1980s.

An interpretive perspective (Miller, 2006, p. 99; Putnam et al., 1996, p. 377) was introduced in the early 1980s. This is accredited to Linda Putnam, who noted that when studying communication in organizations one must take into account "the way individuals make sense of their world through their communicative behavior" (Putnam, 1983, p. 31). This turn in theorizing emphasized the complex interrelations between communication and organization. One way to explore this complexity (Putnam et al., 1996, p. 377) is to look at the metaphors used to describe the role of communication in the organization.

Metaphors of communication in organizations

Putnam et al.(1996) identify seven metaphor clusters in the field of organizational communication: conduit, lens, linkage, performance, symbol, voice and discourse. Select features of these metaphors form the base of a definition of internal communication that is meaningful for my work. The most relevant components are found in the linkage, performance and symbol metaphors.

The linkage metaphor (Putnam et al., 1996, pp. 382-384) is focused on the connections that communication creates in the organization. Communication thus constitutes the organization as a network. An alternative to this view, that communication produces the organization, is that the communicative network is produced by the organization. A single network can be used for many topics, but at the same time multiple networks can develop for various activities. Most often "communication is implicit, defined as a tool for building the network" (Putnam et al., 1996, p. 383), but a sensemaking perspective can be applied to uncover how the relationships in a semantic network contributes to interpretations. The linkage metaphor offers a view of communication in the organization which highlights the fluidity and dynamic of collaboration and interdependence in people's connections.

The starting point of the performance metaphor (Putnam et al., 1996, pp. 384-386) is social interaction. This metaphor presents communication as a process and activity (not a factor of productivity), consisting of interconnected exchanges. Communicative performances are "part of an ongoing series of cues, without a clear beginning and ending" (Putnam et al., 1996, p. 384). Performances can also be collaborative, in the form of co-production, where social practices are produced and agreements coordinated. In some applications of the performance metaphor, communication and organization are viewed as co-constructing each other. The bottom line is that performance emphasizes the interactive in organizational communication, by conceptualizing it as collective production.

The symbol metaphor (Putnam et al., 1996, pp. 386-388) shifts the focus to interpretation. The role and function of communication according to this metaphor is to create, maintain and transform meaning. By ascribing meaning to the world around them, members of the organization act symbolically. Symbol is used in a wide sense to mean any object or behavior that can be said to carry a meaning beyond its obvious function. Organizational culture and shared meaning are typically approached from a symbolic perspective. One of the most studied symbols is metaphors, found in the everyday language used in the organization. These metaphors structure beliefs and behaviors. The symbol metaphor describes not only manifestations of an organizational culture. It also portrays communicative representations as the means of organizing.

The cultural approach

These metaphors show various aspects of the relation between communication and organization that converge in the cultural approach to organization studies, where organizations are seen by communication scholars as "social entities that [are] constituted in interaction" (Eisenberg & Riley, 2001, p. 293). Eisenberg and Riley continue to explain the specifically communicative perspective on organizational culture in more detail: "The process that we wish to label organizational culture consists solely of patterns of human action and its recursive behaviors (including talk and its symbolic residues) and meaning." (p. 294) With this interpretation, communication is critical when approaching organizations from a cultural perspective. Further, the communication perspective allows looking for cultural meanings in all facets of the organization (p. 295). Also, communication is the human activity that most clearly joins interpretation and action, which means that it is the focal point of both enabling and constraining forces of social interaction.

The communication perspective has been employed to support numerous interpretations and studies of organizational culture (Eisenberg & Riley, 2001, p. 296). Similar to the divide between tool and process orientation among metaphors, communication-centered studies of organizational culture are based on ideas of communicative process and communicative goals. It seems natural that communication researchers should interpret culture as symbolism. Indeed, there are attempts to establish a "comprehensive view of all types of communication in creating, maintaining and transforming organizational reality" (p. 296). A key feature of these all-inclusive studies is the structurational approach, which derives from the idea developed by Giddens (1984) that social structure and human action constrain each other in an evolving way, in a process of reflexive feedback. A more cognitive approach (Eisenberg & Riley, 2001, pp. 305-307) to organizational culture highlights that culture is a system of shared assumptions, shared reference frameworks or shared values and norms. This type of communication research is more interested in systems of meaning and habits rather than the content of messages and individual actions. Some researchers argue that meaning and cognition are more directly linked to behavior, but it is important to avoid individual bias. A third approach, which is somewhat similar to the cognitive, is to view culture as climate (pp. 307-308). The contemporary approaches to communication climate have become acculturated, but maintain a more practical stance, more focused on perceptions of the work environment than organizational values. In effect, this means that climate has taken the role of an "effectiveness interpretation" of culture.

Internal communication as reflexive culture

To summarize, I base my understanding of internal communication on the ideas that organizational communication is a concept characterized by fluidity, interaction and organizing. Organizational culture is the best vehicle for showing how this communication is an integral part of the organization itself, through processes such as structuration, cognition and climate.

I draw on all the aforementioned tendencies in my defining view of internal communication as constituting structures and social relationships in the organization, which at the same time are the organization. As a communication research paradigm, this is in one sense a rephrasing of the interpretive approach introduced by Putnam, where "organizing becomes a process of communicating" (1983, p. 53). However, I lean toward functionalism in that I am more interested in the communicative practice than the individual's meaning-making, which I nevertheless agree is the starting point of the formation of the practice. As illustrated in figure 1, communication can thus be understood as the central component of a reflexive culture. It gives and is at the same time governed by, the physical and social conditions of life in the organization. In terms of communication activities, internal communication as I see it includes all communication processes, synchronous and asynchronous across all levels of hierarchy and the full spectrum of formality-informality, as long as these processes are not intended to reach outside

Fig. 1. Internal communication as reflexive culture

the organization. Putnam et al. (1996, p. 379) support this type of conscious construction of definition and metaphor by integrating related perspectives.
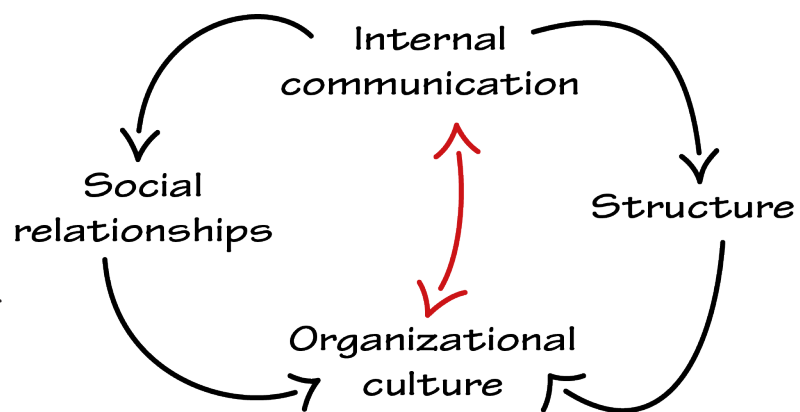
Defining creativity

Many of the early definitions of creativity focused on thought processes (Amabile, 1996, p. 20). This is related to the fact that it was the field of psychology that first concerned itself with the scientific study of creativity. The starting point of this study is generally considered to be Joy Guilford's address to the American Psychological Association in 1950. (Kristensson, 2003, p. 17; Amabile, 1996, p. 21) The address proposed a definition of creativity based on character traits of creative persons. However, when this focus is translated into explicit and formal definitions, the emphasis is placed on the creative product. Such a "product" should be understood very broadly, as a creative outcome in general rather than a tangible object (see Kristensson, 2003, p. 24).

Before entering the discussion around product, person and process, something ought to be said about defining creativity in general as a concept. If we point something out as creative, what qualities do we then claim that it possesses? According to Amabile (1996, p. 21), two associations have followed the notion of creativity since its popularization in the 1960s. These two qualities are novelty and appropriateness. The exact wording differs between theories, offering a variety of terms such as: "original(ity)", "new", "novel(ty)"; "value(-able)",

"appropriate(ness)", "significant", "resolution" (Kristensson, 2003, p. 21), but the consensus that something creative needs to represent a break with what has come before and that it at the same time must still be useful remains. Paulus and Nijstad join this consensus in their discussion of group creativity, talking about "the development of original ideas that are useful or influential" (2003b, p. 3). These two cornerstones of creativity can be recognized in most of the recent research (e.g. Binnewies et al., 2007; Sonnenburg, 2004).

The dominance of the product-outcome perspective

Returning to how creativity can be defined more in detail for research purposes, Rhodes (1961; cited in Kristensson, 2003) has introduced the 4P model. The model consists of four areas, product, person, process and place, which all contain key components in the concept of creativity. The creative product is normally measured for creativity in regard to certain dimensions, typically originality and value. Regardless of the specific dimension, the focus of product-oriented creativity research is to judge the merit of the product. Research on the creative person centers on divergent thinking, which normally means the intellectual capacity of an individual to produce original solutions to problems. The creative process refers to various models of the sequence of phases, stages or modes of operation that constitute creative work. The aim in research about the creative place (or environment), finally, is to "identify the factors, in certain groups and in organizations, which enhance or stifle creative outcomes" (Kristensson, 2003, p. 29).

Kristensson (2003, p. 31) points out that the distinctions within the 4P model are not very clear, with the result that the same theory could sort under many categories. A second issue also arises from this ambiguity. Looking at the creativity research to date, it appears that the P for product is overriding the others. Studies concerned with person, process and place seem to have some form of creative product as a "frame of reference" (p. 32). Such a frame of reference might not be optimal when approaching creativity from an organizational perspective.

An opening to a different interpretation of creativity is offered by researchers who define creativity as "the production of novel and useful ideas in any domain" (Amabile, Conti, Coon, Lazenby & Herron, 1996, p. 1155). The use here of the term "production" indicates a slightly more holistic approach, which is natural as this research is concerned with assessing the work environment for creativity on a larger scale. One further small step away from the functionalist output-orientation (see Drazin, Glynn & Kazanjian, 1999, p. 288) is found in a classic definition of organizational creativity: "the creation of a valuable, useful new product, service, idea, procedure or process by individuals working together in a complex social system" (Woodman et al., 1993, p. 293). The crucial word here is "creation", since it can be seen as something ongoing as well as something accomplished.

Focusing on the process

Drazin et al. (1999) are critical of the above definitions, which they see as still product-centric. The competing definition that they put forward makes it very clear that creativity is not seen as an outcome: "the process of engagement in creative acts, regardless of whether the resultant outcomes are novel, useful, or creative" (p. 287, original emphasis). It can of course be questioned whether it is possible to engage in a "creative act", which one could argue by default should lead to something creative, without arriving at a creative result. The response from Drazin et al. to this issue is that they look at creativity in the context of large-scale, long-term projects (p.

291), where each creative act does not necessarily generate a breakthrough outcome.

In summary, the interpretations of creativity have become more diverse as more researchers representing various fields show interest in it. Traditional definitions based on the lone creative genius or modernist ideas of creative output are now contended by process-oriented approaches. Inspired by these tendencies, I propose defining creativity as: activities undertaken by interacting subjects in an organization in order to reach the novel and useful. This definition is influenced by the emerging "social view of creativity" (Perry-Smith & Shalley, 2003, p. 89), that I have outlined above. It acknowledges that creativity results in an outcome, but it does not limit it by making it equal to that outcome. I do not mean that all creative activities are interactive, but rather that interaction is a prerequisite for creativity in the specific context of organizations.

Internal communication in creativity research

Having established my constitutional cultural definition of internal communication and my definition of creativity with a focus on process and interaction, I now proceed to summarize how various aspects of communication influence creativity in an organizational context. This section begins in the most general notions and progresses toward the more specific.

The topic of organizational creativity can be approached from many different angles, which to a large extent determines the communication factors involved. Scholars have for example considered collaborative creativity from individualist, team and organizational points of view. The research contexts also vary greatly, from the development of new banking services (Lievens et al., 1999) to community based innovation contests for students (Bullinger, Neyer, Rass & Moeslein, 2010). I have tried to extract the most relevant findings guided by my definitions of creativity and internal communication.

A substantial part of the research I have reviewed consists of theoretical advancements and literature reviews. These works present a problem when one wants to single out the impact of the communicative dimension since they are often quite generalizing, or simply assimilate communication into other concepts. One example of the latter is McFadzean (1998), who suggests that an organization that wants to foster creativity should "develop creative problem solving teams that can work together and develop trust for each other" (p. 310). McFadzean gives no further indication of what sort of communication is needed or preferred in a team where the members can work together. The issue of how communication permeates virtually any field that is argued to influence creativity surfaces again in Andriopoulos (2001). The factors affecting organizational creativity are arranged in five clusters. Communication features, "interaction with small barriers", "open flow of communication", "effective system of communication", are obvious in three of them and clearly present, "develop effective groups", "fair, supportive evaluation", in the remaining two (all quotes from Andriopoulos, 2001, p. 35).

Even recent research (Hemlin, 2009) on creative knowledge environments cites a similar, communication-permeated framework. In this citation, communication aspects can be identified in the five themes of: resources, unity and cooperation, supervision, teamwork and recognition (McCoy & Evans, 2002; cited in Hemlin, 2009, p. 279). However, Hemlin's investigation (2009, p. 283) provides a lead-in to the communication for creativity field by emphasizing information and knowledge sharing and linking it to personal interaction. Face to face networking is required for the sharing of knowledge and knowing.

Face to face social interaction and sharing are recurring themes. Kristensson (2003), although concerned mostly with computer-mediated communication, concludes that "to engage in rich in

smooth and rich communication, i.e. face-to-face interaction, increases the prospect to divergent thinking" (p. 57). This divergent mode of thinking is a key component in creativity. A study of project teams working within research and development (Chen, Chang & Hung, 2008) showed that "social interaction has positive and significant impact on creativity" (p. 30). The social interaction was investigated in terms of learning, constructive discussion and exchange of opinions between team members, without any deeper exploration of the communication process. Sonnenburg (2004) underlines the basic importance of interactive participation: "Collaborative creativity can only emerge, if all participants take part in the process of communication." (p. 256) From a more managerial point of view, focusing on culture and climate for creativity, Ahmed (1998) mentions participative face to face communication as a component of an organic structure promoting innovation (driven by creativity). Moving on to cultural norms for innovation, Ahmed brings up "open communication and share communication" (p. 37). In general, the sharing aspect is more concretely explored in the body of research. I will therefore first concentrate on the fuzzier concept of "open communication", which nearly appears to have emerged as a catch-all phrase in creativity research.

Open communication

An early, but often returned to, model of organizational creativity (Woodman et al., 1993) proposes a type of open communication as a main condition for creativity in the organization. Woodman et al. note that previous research suggests that creativity is aided by the "free exchange of ideas" (Cummings & O´Connell, 1978; cited in Woodman et al., 1993) and a general "information flow" (Paolillo & Brown, 1978; cited in Woodman et al., 1993). When Martins and Terblanche (2003) conclude which organizational culture factors influence creativity, they describe the beneficial communication precisely as "open communication" (p. 70). They argue that a trust-based, open and transparent communication will promote creativity. Further, an open-door communication policy, meaning that all individuals, teams and departments are involved in "open communication" (p. 73), is needed to support creativity. Amabile et al. (1996) add the observation that "collaborative idea flow" (p. 1160) plays a role in encouraging creativity. In the measurement instrument for assessing the work environment for creativity developed by Amabile et al. the scale of work group support mechanisms is clearly related to communication, with a sample item evaluating the presence of "free and open communication" (p. 1166). In further work by Amabile (1996) the concept of open communication is presented as "an open, supportive interaction norm between groups" (p. 262), which should foster creativity by limiting competition and infighting. Finally, Forsgren et al. found in their case study of advertising agencies that an "open flow of communication" (2004, p. 65) is the main factor that smooths the work flow and sustains a high level of creativity.

Hargadon and Sutton (1997) in their in-depth ethnography of a product development firm came closer to what open communication means on a concrete level. They observe that "brainstorms, other scheduled meetings, e-mails and informal conversations create […] rich communication" (p. 740). This highlights another general feature of creativity-enabling communication, that it includes all types of idea exchanges within the organization. Richness means that communication of complex problems and solutions is possible, and should be considered along with openness. A somewhat similar generalizing description of the relation between quality in internal communication and creative outcomes is attempted by Lievens et al. (1999), who employ the following definition of quality in communication:

> The quality of communication during the service innovation process is described as the degree to which relevant and understandable information reaches the intended information sources/receivers (i.e. project members) in time. (p. 25)

Based on their case study, Lievens et al. expect that a high quality of communication defined in this manner should influence creativity positively through uncertainty reduction, creation of a positive climate and/or improved cross-functional cooperation (p. 39). This relationship description is more informing than "open communication", but on the other hand it has a rather strong functionalist tone. For a more nuanced image of what characterizes the processes that constitute open communication, one can first turn to the theme of participation.

Participation, encouragement and sharing

According to Martins and Terblanche (2003, p. 70), participation in the form of cooperative teamwork improves organizational creativity. Participation can also be understood as engagement, which was found by Binnewies et al. (2007, p. 450) to correlate with the amount of idea-related communication. Engaging in interaction is helpful for creativity, especially when it means that authentic minority opinions are ventilated (Nemeth & Nemeth Brown, 2003, p. 78). The point is that heated debate, powered by dissent and diversity, is good for generating creative ideas. However, this must not be exaggerated, as trust, cooperativeness and warmth should characterize these vigorous debates (West, 2003, p. 256). Ahmed summarizes this as "many views aired and considered" (1998, p. 36). Kivimäki et al. (2000, p. 40) found that a participative climate is important for the perception of innovativeness among organizational members. Clearly, participation and engagement are essential to bring about the open communication which is the most favorable for creativity.

Encouragement and feedback make up another facet of open communication. One way to understand encouragement is to describe it as "management enthusiasm for new ideas, creating an atmosphere free of threatening evaluation" (Amabile, 1996, p. 231). The findings of Kivimäki et al. (2000, p. 39) confirm that communication which actively encourages initiatives has a positive influence on creativity. On the level of the whole organization, Amabile (1996) concludes that it is important to encourage creativity through communication of a "vision of the organization as creative and innovative" (p. 261) and by "focusing communication [...] on the excitement and potential of the ideas being generated" (p. 262). Such communication helps to maintain an "emphasis on creative interaction and aims" (Ahmed, 1998, p. 36), which is part of a creativity-inducing organic structure.

Much of the encouragement of creativity practically comes in the form of feedback and evaluation. Generally, evaluative communication should be fair, supportive and informative (Amabile et al., 1996, p. 1160). Amabile (1996) notes that the evaluation which appears to have a positive effect on creativity is one that is work-focused and constructive. This type of feedback should ideally be uttered frequently, from peers as well as supervisors. Overall, communication between supervisors or leaders and subordinates in the organization should be open (Amabile et al. 1996), so that it minimizes the fear of negative criticism which is detrimental to creativity. Schepers and van den Berg (2007) found that a work environment which is as an "adhocracy", where managerial communications are transformational and focus on bringing about change, stimulates creativity. This is can be interpreted as another dimension of constructive feedback.

A third major theme in open communication is knowledge sharing. Knowledge sharing by communicating promotes creativity in many ways. Leenders, van Engelen and Kratzer (2003)

make the basic observation that more interaction leads to more cross-fertilization. They mean that knowledge sharing is valuable from a creativity point of view because it "gives consultation and possibilities to predict outcomes that did not exist for the individual" (p. 72). Schepers and van den Berg (2007, p. 422) add that knowledge sharing is positive for creativity since it exposes the organizational members to relevant feedback and to untypical ideas which are more varied. On the same note, the main finding in the research conducted by Kristensson (2003) on aiding organizational creativity was an "emphasis on the possibility to connect information elements that appear separate at the outset" (p. 60). Bringing together disparate pieces of information is a central part of how knowledge sharing communication supports creativity. Nijstad, Diehl and Stroebe (2003, p. 156) found that this type of exchange of information and ideas specifically can moderate the decline of creativity in brainstorming groups. The effect was strongest when participants were exposed to semantically diverse ideas. Cultural norms of knowledge sharing (Perry-Smith & Shalley, 2003, p. 101) in the organization are also beneficial for creativity which relies on network ties. However, not all knowledge sharing is positive for creativity. Stasser and Birchmeier (2003, p. 105) conclude that the interaction in knowledge sharing must be structured so as to overcome effects of group think, such as assuming that information which is agreed upon is correct and lacking trust in unique information contributed by a minority.

Knowledge sharing should preferably reach across the whole organization to maximize the positive impact on creativity. Ahmed (1998) emphasizes the importance of vertical, upward and downward, information flow. Contrasting this hierarchal perspective, Ohly et al. (2010) observe that communication in successful idea generation happens across departmental borders (i.e. horizontally). They interpret it as open knowledge sharing. Other researchers (Amabile, 1996; Woodman et al. 1993) make more general statements on knowledge sharing across all parts of the organization, such as: "[an environmental stimulant to creativity is] a corporate climate marked by cooperation and collaboration across levels and divisions" (Amabile, 1996, p. 231).

Networks, frequency and technology

The research on hierarchy, communication networks and frequency of communication is more concrete than the ideas about open communication and presents valuable insights into how internal communication can affect creativity. A flat structure with low centralization is generally positive for creativity (Martins & Terblanche, 2003, p. 70). This has been confirmed for teams in regard to communication by Leenders et al. (2003, p. 79), who found that creativity is negatively affected by increased centralization of team communication. This is due to the fact that less creative potential is tapped when communication is channeled through one or a few individuals. Informality and lack of hierarchy are characteristics of the organic structure that promote creativity, according to Ahmed (1998).

Perry-Smith and Shalley (2003) applied network analysis to investigate how network ties and position relates to creativity. It is argued that weaker network ties (i.e. less frequent, less emotionally engaged and less reciprocal communication) facilitate organizational creativity in comparison to stronger ties. This conclusion is based on the notions that a network with weaker ties has less information redundancy, supports autonomy, connects individuals with various perspectives and provides a wider knowledge base. However, having a number of weak ties that goes beyond a certain point is a source of distraction for the individual and might constrain creativity. The relation between network centrality and creativity (Perry-Smith & Shalley, 2003, p. 97) shows a similar pattern, where centrality in the network, up to a certain level, helps

creativity. Sosa (2011) takes a different approach and looks at the qualities of one specific network tie between two individuals that fosters creativity. Strictly between two individuals, the connections that are best suited for generating creative ideas are "strong ties that conduit a broad set of knowledge and link actors who enjoy working closely together" (p. 16), especially when they are free from strong connections to common third parties. It is worth noting that network cohesion surrounding the two individuals becomes a constraint on creativity, through social pressure to conform, when that cohesion exceeds average levels. Finally, Kratzer et al. (2004) have produced evidence that the formation of communicative subgroups within larger teams is negative for creativity.

Which frequency of communication is the most beneficial for creativity is debated and clearly very dependent on context. Studies carried out on innovation teams (Leenders et al., 2003; Kratzer et al., 2004) suggest that the interaction frequency should not be higher than the level necessary for the proper functioning of the team. The conclusion from Leenders et al. is that "[t]eam creativity is highest when the interaction frequency is modest" (2003, p. 78), because a very low frequency hinders input from various actors and a very high frequency leads to distraction and conformism.

Computer-mediation of communication has been explored as a way of optimizing the interaction for creativity. Research on groups using electronic brainstorming (Dennis & Williams, 2003) in comparison to groups where the members were either talking about or writing down their ideas showed that increased group size means increased losses in terms of creativity for verbal groups while the computer-mediated groups experienced creativity gains as the number of members went up. The critical number of group members, where a computer-aided system becomes more effective, appears to be around three to four members (p. 170). On the larger scale of (virtual) teamwork, Leenders et al. (2003) observe that advanced communication technology appears to be best applied as a complement to interpersonal interaction. The virtuality of communication created through technological aids has a moderating effect on creativity, so that when more radical creativity is required virtuality should be lower (p. 87). Similarly, Sonnenburg (2004) suggests mixing synchronous and asynchronous modes of communication. Kristensson (2003) concludes from his study of the creative benefits of computer-mediated communication that face to face communication is a necessary to make the use of computerized systems effective.

It is difficult to summarize and draw conclusions from his section without returning to the elusive concept of "open communication". Any summary tends to become another list of abstract qualities in communication which are hard to translate into a concrete organizational context. However, it is safe to say that face to face interaction is the cornerstone of internal communication for creativity. This interaction contributes to the necessary transparency, flow and involvement. Involvement is achieved through encouraging and participative communication. Knowledge, information and idea sharing across the whole organization is also a defining feature of creativity-stimulating internal communication, because organizational creativity is fueled by exposure to new thoughts and perspectives. Low centralization of communication and a network with generally weaker ties are also positive factors. Technological systems can be helpful, especially for larger groups, but they cannot replace face to face interaction. How these insights can be inserted in a model of internal communication is shown in the next section.

A cultural model of internal communication for creativity

This section draws on the recently discussed communicative aspects of enhancing creativity and

my earlier definitions to present how the two can be brought together in a modified version of Schein's cultural model (1992; cited in Miller, 2006; 1990) of the organization. The main challenge I face here is to merge an abstract triad of concepts (internal communication, organization and culture), which float into each other, with the insights about which communication supports and promotes organizational creativity. The conceptual space where I let this merging take place is Schein's model. The section is structured as follows: First, I introduce the cultural model of the organization as it has been elaborated by Schein. Second, I explain the role of communication in this model. Third, I present the necessary modifications to the model that make it useful as a framework for creativity-enhancing internal communication. Fourth, I insert the findings from the previous section into the modified model.

Introducing Schein's cultural model

Before one can delve into Schein's model of organizational culture, it is necessary to review his definition of what is characteristic of such a culture. Setting out from a management and organizational psychology perspective, Schein gives a definition of culture based on the learning of a group as it negotiates problems:

> Culture can [...] be defined as a pattern of basic assumptions, invented, discovered, or developed by a given group, as it learns to cope with its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore is taught to new members as the correct way to perceive, think, and feel in relation to those problems. (1990, p. 111)

According to Miller (2006, pp. 105-106) culture must be this kind of group phenomenon, because it depends on communication. Miller notes that the core of Schein's definition is a pattern of basic assumptions, meaning that other manifestations of culture will largely be reflections of the core. Culture as Schein defines it also has a strong socializing effect.

Schein (1990) claims that if we are seeking to analyze and discuss the culture of a group or organization it is useful to distinguish three key levels on which culture becomes manifested. These levels are the basic structure of his model and they are observable artifacts, espoused values and underlying basic assumptions. The three levels constantly interact, which is not to say that they are in constant harmony and synchronization, and can thus be simplistically illustrated as a hierarchy of cultural manifestations, as in figure 2.

Artifacts in Schein's interpretation (Schein, 1992; cited in Miller, 2006) are not only objects. It is a much wider concept, aiming to include all visible (i.e. that can be observed through some form of observation) cultural indicators. This means that the artifact level is made up of the physical and social environment created by the members of the organization. Cultural artifacts (Miller, 2006, p. 108) thus come to include a large and very diverse set of things and behaviors, such

Fig. 2. Basic components and mechanisms of Schein's model of organizational culture (adapted from Miller, 2006, p. 107)

as for example physical properties of the built environment, furniture and decorations, usage patterns of communication technology, dress codes, principles of documentation and handling documents, forms of address between organizational members, levels of collaboration in decision-making, meeting routines and changes in intra-organizational communication and social networks. However, Schein (1990, p. 112) points out that a major problem with making
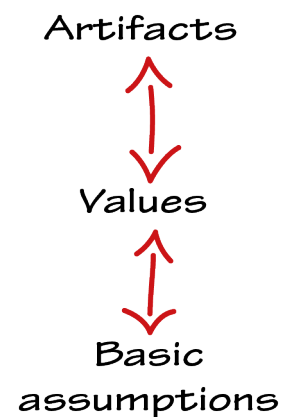
inferences about culture based on these observable artifacts is that there is no way of knowing how they are interpreted by and what they mean to the people in the organization.

Miller summarizes the level of espoused values as "a mosaic of beliefs about how things ought to be done in an organization" (2006, p. 109). The mosaic is a good metaphor since each individual holds multiple unique values. Values are often quite generally formulated, for example as in "value for teamwork" or "value for innovativeness". Interaction in the organization puts the values in relation to each other and they also come to be expressed in the form of norms, ideologies and philosophies (Schein, 1990, p. 112). Studying values gives a clearer picture of culture in the sense of how people think compared to looking at artifacts, which are much tougher to decipher (Miller, 2006). But since values are expressions of preferences, they do not necessarily indicate a final and "correct" understanding of how things are. For this reason, it is critical to examine how the values correspond to the artifacts. The match or mismatch between values and artifacts is an important indicator of culture for Schein.

The third and final level of Schein's cultural model is the most essential. According to Schein, the most influential factor of organizational culture is "taken- for-granted, underlying, and usually unconscious assumptions that determine perceptions, thought processes, feelings, and behavior" (1990, p. 112, original emphasis). In contrast to values, core assumptions are uniformly held by members of the organizational culture (Miller, 2006). This is due to the fact that they are reinforced each time the group deals with a problem and they become a natural part of how organizational members view the world. Indeed, the core assumptions revolve around such themes as the nature of reality and the nature of human activity. The assumptions can be seen a paradigm underpinning the organizational culture, which are united and stable if the paradigm is coherent.

In the case of a culture with a consistent pattern that binds assumptions, values and artifacts, Schein's model can be visualized as "an 'onion' with interconnected levels" (Miller, 2006, p. 111). Figure 3 (see p. 22) gives a schematic example of such an illustration of a culture with the basic assumption that change is good.

The onion is supposed to show how underlying assumptions about the world can be articulated as a set of values, which in turn generates artifacts and behaviors (Miller, 2006). In the onion metaphor, this compares to how the onion grows from the inside out. However, Schein (1990) points out that the influence between levels is not unidirectional. Specifically, the core assumptions are often values that have matured over time and become taken for granted. Schein also argues that the model is perhaps most useful to discover discrepancies between the different levels, in situations that are not so straightforward as Miller's example. To conclude, it must be noted that the model, as all models, is a considerable simplification of organizational culture. The clear-cut distinction between levels and categories hides the fragmentation and ambiguity of culture. In the following I will address this issue by explaining how communication can be integrated in Schein's conceptualization.

Communication in Schein's model

A major shortcoming of Schein's model is that it does not give any account of the role that communication plays in creating and sustaining an organizational culture (Miller, 206, p. 112). To modify the model so that it accounts for communication and explains the role of communication requires an argumentation similar to the one I introduced in my definition of internal communication. My main point in that argument was that communication is closely
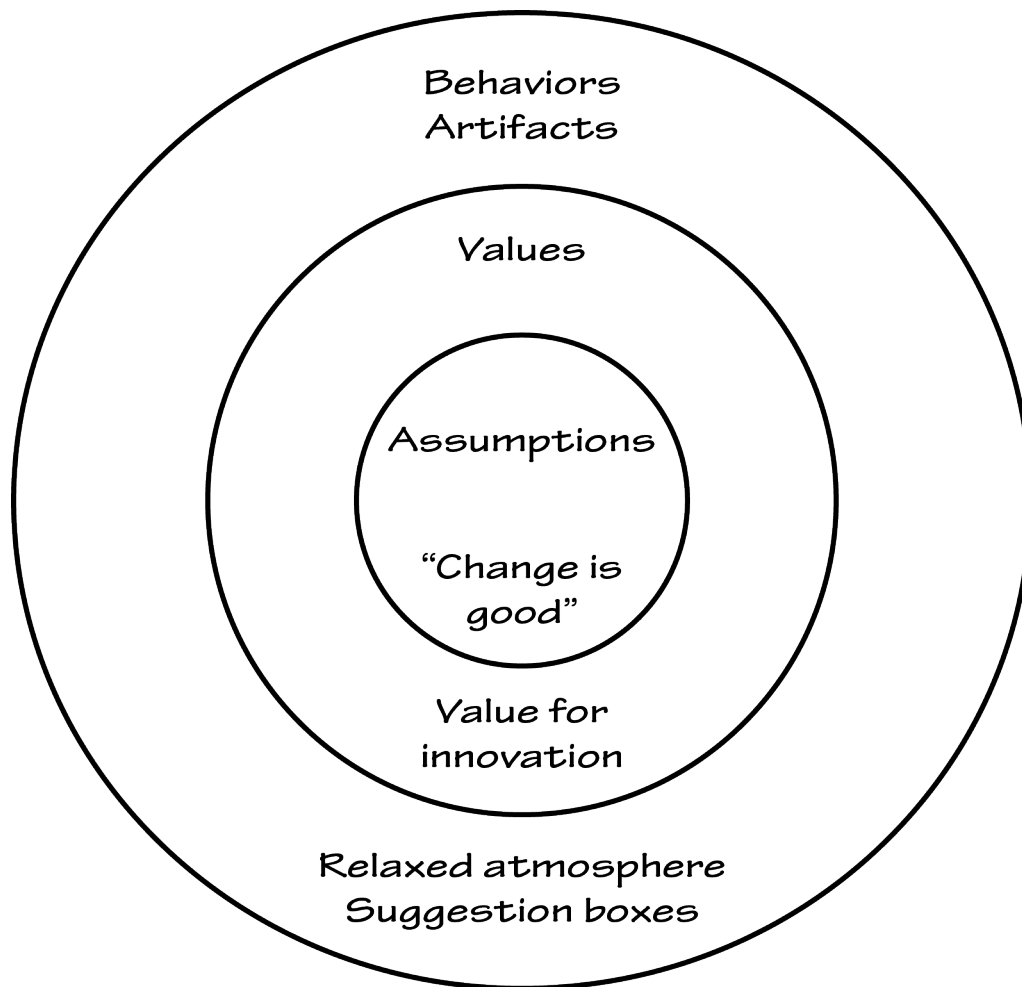
Behaviors
Artifacts

Values

Assumptions

"Change is
good"

Value for
innovation

Relaxed atmosphere
Suggestion boxes

Fig. 3. An "onion" interpretation and example of Schein's model (adapted from Miller, 2006, p. 111)

tied to culture because organizational culture emerges from communicative interaction and meaning-making. I will not repeat the whole argument here, but rather give some examples of how communication theory can be integrated in an analysis of organizational culture.

Bormann (1983) is concerned with the sharing of group fantasies as the primary communication episode where group participants make sense of and create their common social reality. This is a manner of injecting communication theory into the study of organizational culture that relies on an interpretive understanding of culture as process. Bormann explains in his introductory notes:

> Culture in the communicative context means the sum total of ways of living, organizing, and communing built up in a group of human beings and transmitted to newcomers by means of verbal and nonverbal communication. Important components of an organization's culture include shared norms, reminiscences, stories, rites, and rituals that provide the members with unique symbolic common ground. Communication is a necessary but not a sufficient condition for organizational culture. Other things are such as material goods, artifacts, tools, and technology, but without communication these components would not result in a culture. (p. 100)

The first thing to note here is the similarity to Schein's definition of culture. The similarity (i.e. culture as a way of life that is taught to newcomers) means that the idea of communication as a necessary condition for organizational culture is not foreign to the three-level model. Bormann also leaves room for the diversity of artifacts in Schein's model, but underlines that communication is needed to bring them together to a culture.

Poole and McPhee (1983) discuss climate rather than culture, but still propose an interesting way of bridging the gap between individual and organizational attributes. The basic issue that

they address is the paradox of how people are the creators and maintainers of organizations while at the same time the organization has the power to constrain and manipulate its members (p. 195). The resolution of the issue begins with establishing an intersubjective perspective. The intersubjective perspective leads on to structuration theory, which "aims to trace the processes by which organizations are created and maintained in interaction while they simultaneously shape and channel that interaction" (Poole & McPhee, 1983, p. 210). Seen from a structurational perspective, climate then becomes a collective attitude, which is produced and reproduced in the interaction between organizational members. This application of structuration theory has significance for introducing communication in Schein's model because it shows how a wide organizational attribute (climate in this case, but also culture) can be both a medium and an outcome of interaction (Poole & McPhee, 1983, p. 215).

Eisenberg and Riley (2001) tap into the same vein in the concluding remarks to their much more recent overview of communication-oriented research on organizational culture. The observation they make is that when contemporary organizations become more fluid the importance of communication and interaction processes will increase:

> As boundaries or organizations become less definite, it will make sense to worry less about "organizations" and more about the organizing and structuring of communicative relationships and our discursively produced environments. […] We must adapt our theoretical frameworks so that we can use such concepts as complexity theory to investigate the myriad of cultural forces *made manifest* at an organizational nexus. (p. 316-317, added emphasis)

A somewhat structurational dualism is implicit in this assessment, since the organizing of communicative relationships most likely happens through a communication process. The call for new theoretical frameworks goes further than my intentions with the model of internal communication for creativity, but what I wish to highlight is that the multitude of cultural forces (Eisenberg and Riley (2001, p. 316) specify these as practices, assumptions, values and interpretations) are made manifest. I see this reference to a process of manifestation as another indication of the fundamental role of (internal) communication in producing organizational culture. Again, the implication for Schein's model is that communication is ever-present in relation to organizational culture, because it shapes it, it is a part of it and it is affected by it.

How should internal communication then be represented in the "onion" model of organizational communication? It might not even be appropriate to think of it as something that should be "in" the model, since communication is not so much a part of culture as a process by which culture comes into being. From the previous discussion, and my definition of internal communication, I conclude that one needs to take into account the following: Communication is a necessary condition for organizational culture. Culture is brought into being through communication, it even exists in communication, but at the same time it mediates communication. Communication is not limited to any specific level of culture, but constitutes all of them and the connections between them. I believe that the best way to illustrate this relationship is to think of communication as the flexible substance in which the pattern of organizational culture appears and changes. Figure 4a (see p. 24) shows this as if the levels of culture were milled out of a "block" of communication while figure 4b represents a simpler top-down view of the same concept.

The simplified graphic representation of my addition to Schein's model (figure 4b) shows how communication (the rectangle and its texture) permeates and how it transcends the three levels. To reduce clutter, the layer of communication appears below the "onion", but the two
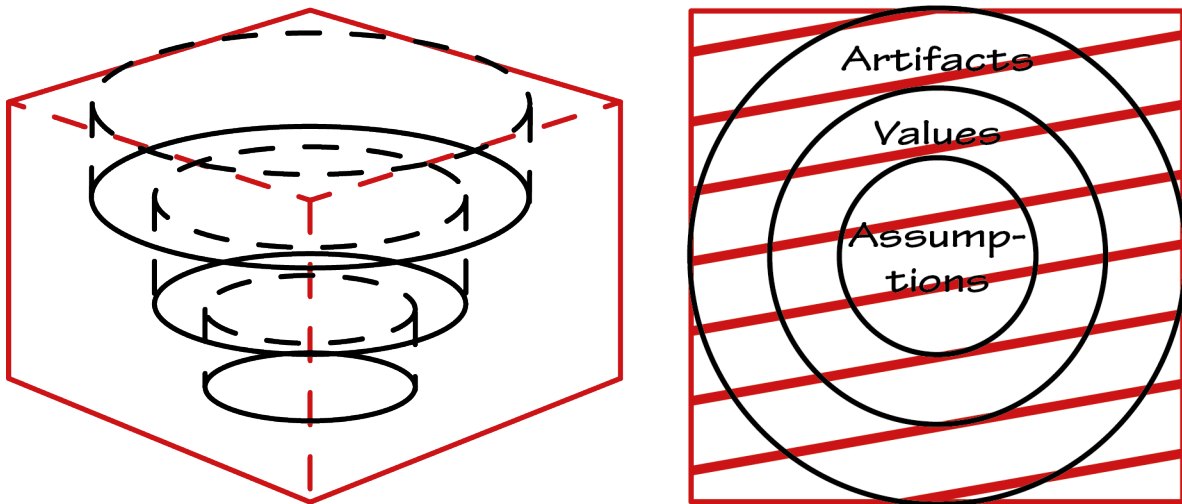
Fig. 4a/4b. Internal communication as the substance of the levels of organizational culture

layers should rather be seen as substance and shape, what I attempt to illustrate in figure 4a. Returning to Schein's definition, culture should be understood as a pattern in the fabric of communication. To emphasize that culture is not completely governed by communication, but affects it back, the cultural layer overflows the communication field where the border of the artifact level meets the outmost part of the underlying field. However, this is not to indicate that only artifacts have an influence on communication.

Adapting the model for creative communication

The next step in adapting Schein's model is to make sure that it can effectively accommodate the dimensions of internal communication which promote and support creativity. This is more a question of reducing than expanding the model, since the communication-based understanding of the three level model includes many aspects of internal communication that have no clear or positive relation to creativity.

The first question to ask is whether all three levels of culture are necessary in a model of internal communication for creativity. Of course, no organization could sustain a creativity-enhancing mode of operation, or even itself (Schein, 1990), without a culture that is "complete", in the sense that it consists of artifacts, values and assumptions. But as I have shown, the research on internal communication for creativity is limited and therefore there might not be findings that support a communicative interpretation for creativity of Schein's full model.

This problem mainly presents itself on the core level of basic assumptions. Although this is the level that is at the heart of culture and so to say is the driver of values and artifacts, communication-oriented creativity research has, as far as I am aware, not quite arrived at any conclusions regarding how a particular world view promotes and supports creativity. This is not entirely surprising, as it seems somewhat far-fetched, considering the more practical orientation of much creativity research, to attempt an investigation of internal communication that shapes the organization's underlying assumptions about the world so that they are beneficial for creativity. Basic assumptions of culture emerging from interaction and communicative organizing, a process similar to the "exceedingly complex" (Poole & McPhee, 1983, p. 210) structuration, is definitely something that could fit in the concept of internal communication for creativity. But to disentangle this connection requires making many precarious inferences from values and artifacts in existing research and it is beyond the scope of my investigation.

Further, according to Schein (1990, p. 112), uncovering the basic assumptions in a specific

organization requires the most intensive observation and deepest involvement and it seems reasonable that the same distribution of the workload would carry over to, and even be amplified in, the development of a general theory. When Schein (1990, p. 113) applies his model on example cases, the analysis begins with the artifact level and proceeds to values, before moving on to deeper conclusions about the assumption pattern, or paradigm. Extracting knowledge about the assumption pattern is a very tedious process, even in one particular organization. In theory development on a broader scale, where the focus is not one organization but one dimension of culture (e.g. internal communication for creativity), finding the pattern will be even more difficult, if not impossible. In conclusion, I propose as a first reduction of Schein's model to exclude the level of assumptions, since my resources and the lack of research on the paradigms created by and inspiring internal communication for creativity would make it too much of a speculation to include it at this stage.

Leaving out core assumptions puts more emphasis on values, which is the one non-observable (according to Schein (1990, p. 112) values are uncovered in interaction with organizational members) component of culture remaining. Thus, the distinction between the tangible and the intangible becomes more clear cut. At the same time the level of values can be more freely defined, since it does not have to be distinguished from core assumptions, as the beliefs of organizational members about internal communication that promotes and supports creativity. It is important to keep in mind that even though values is now the single intangible level it has not grown to include more collectively generated constructs such as climate, although they may not be related to a specific communicative action. These features, since they are in some way observable, remain on the level of artifacts in order to maintain the power of Schein's conceptualization (1990, p. 112) to highlight conflicts between what is said and what actually happens. However, expressed norms should sort under values, as they do in Schein's original categorization.

Even though each artifact is traceable to communication according to the interpretive communicative approach, not all artifacts, or subprocesses of organizational culture, are related to internal communication that is positive for creativity. The research on communication for creativity limits the artifacts and behaviors that need to be considered in the model. What the cultural level of artifacts must capture in the context of communication for creativity is to a large extent principles of interaction. The observable notions of this specific internal communication revolve around how organizational members engage in communication in order to be creative. Therefore I suggest that the wide understanding of artifacts from Schein should be replaced with the more focused "practices". This is a more suitable description of the first level of culture because it highlights the understanding of communication, culture, organization and creativity as processes. Practices is wide enough to encompass all conclusions regarding communicative beha-vior from my literature review, and distinctly separate from values. The reduced model, or rather a framework at this point due to the lack of content, of communication for creativity organizing and organized as a culture of practices and values thus takes the form illustrated in figure 5.

This might appear to be a strict separation of tangible and intangible, but it is then important to remember that for Schein (1990) the interplay between values and observed
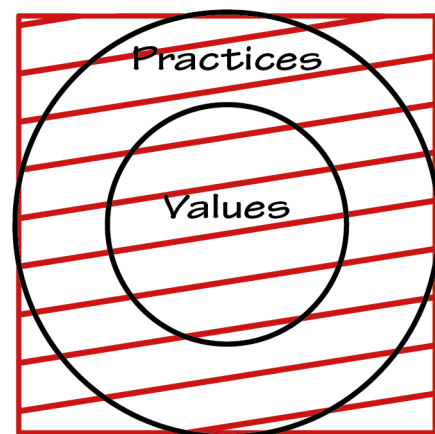

Fig. 5. A framework for the model of internal communication for creativity

phenomena is a key issue and that Eisenberg and Riley (2001) point out that both practices and values are cultural forces made manifest. The two levels are also as before united by the substance of the reduced onion shape, the layer of internal communication.

Practices and values in the adapted model

To address the fourth and final concern of this section, namely to populate the framework with the specific practices and values that make up the internal communication culture for creativity, I have returned to my literature review. I have first clustered the findings on how internal communication promotes and supports creativity in a set of eight practices and then summarized six value statements which are likely to be made by members of organizations where the culture includes these practices. The eight practices are presented in my own words in the following, with remarks on how they contribute to creativity and references to the research I have discussed previously.

Knowledge sharing – The most basic way in which internal communication can contribute to creativity is by enabling collective interchange of knowledge, ideas, insights and information. This process is so vital that it is more or less a part of what it means to be creative. Intellectual sharing in the organization does not just promote creativity, it is necessary for creativity to come about. This practice works in such a way that the sum of intellectual inputs can become something greater than the parts on their own. (See for example Leenders et al., 2003; Schepers & van den Berg, 2007; Kristensson, 2003)

Face to face interaction – To communicate directly and without mediation, making use of the full spectrum of live interpersonal communication, is a key practice in internal communication for creativity. Communication processes based on face to face interaction have a richness and smoothness by which they facilitate a connection that helps for example divergent thinking, learning and constructiveness, which in turn have a positive influence on organizational creativity. (See Kristensson, 2003; Chen et al., 2008; Ahmed, 1998)

Various modes of communicating – Internal communication that takes place in many different forms promotes and supports creativity. Using more modes of interaction makes internal communication more multi-faceted, which boosts the creativity-enhancing factors of intellectual exchange and collaboration. This practice includes diversity both in general internal communication to increase the support for creativity and in specific communication related to processes where creativity is wanted. (See Hargadon & Sutton, 1997)

No barriers, multiple voices – An internal communication practice where everybody talks to everybody fosters creativity through increased participation and engagement. Fewer barriers and communication taking place "in the open" leads to a transparency that is good for creativity because it increases the chance of disparate knowledge and information being connected. This practice of open communication also creates emotional safety for organizational members who are then more likely to express ideas that challenge the norm and thus contribute to a more diverse debate which stimulates creativity. (See Martins & Terblanche, 2003; Cummings & O'Connell, 1978; Nemeth & Nemeth Brown, 2003; Ahmed, 1998)

Encouraging and constructive feedback – Any internal communication will necessarily involve feedback. Practicing feedback that promotes and supports creativity means to be work-oriented and constructive in one's communication, in order to reduce the fear of criticism. However, a communicative feedback practice for creativity involves more dimensions than evaluation. It also includes communication that encourages initiatives since this has a positive

psychological influence on organizational creativity. (See Amabile, 1996; Amabile et al., 1996; Kivimäki et al., 2000)

Weak ties, strong couplings – An internal communication network practice for creativity can be summarized as strong pairs in a network of generally weak ties, which includes an overall low centralization of communication. This network structure is positive for creativity because pairs benefit from sharing a wide spectrum of knowledge and engaging in tight cooperation, while the less tight network on the organizational level decreases information redundancy and conformity as well as exposes individuals to more diversity. (See for example Perry-Smith & Shalley, 2003; Sosa, 2011; Leenders et al., 2003)

Modest frequency of communicating – Too much or too little internal communication is obviously negative for creativity. There is no one single practice that gives the ultimate frequency of communication most beneficial for creativity, but modesty should be the guiding principle since it leaves room for the diverse interaction and sharing that is crucial for creativity while at the same time minimizing negative effects such as distraction and pressure to think in line with the environment. (See Leenders et al., 2003; Kratzer et al., 2004)

Technology as a complement – The final practice of internal communication for creativity is to use communication technology only as a complement to, not as a substitute for, real-life interactions. Using communication mediated by technology can indeed be positive for creativity, especially in larger groups, because it has the potential to reduce the negative effects of direct interaction in groups with numerous members. Having the option of internal communication via a technological system also supports creativity because it gives organizational members an opportunity to regulate the creative potential of their communication by choosing a more or less virtual medium. (See Leenders et al., 2003; Dennis & Williams, 2003; Kristensson, 2003)

Moving on to the values that are a part of this cultural interpretation of internal communication the analysis is not as easy as on the level of practices. As Schein (1990, p. 111) has noted, artifacts (including practices) are relatively easy to observe and record, but often difficult to decipher. To get at the values and norms behind the practices, Schein suggests that it is necessary to ask organizational members directly. This naturally poses a problem when one is developing abstract theory, not related to a particular organization or even subtype of organization. To navigate around this issue I have tried to theorize values based on my review of creativity research and the practices I have outlined. According to Miller (2006, p. 107), the value level of organizational culture can be analyzed in terms of a superficial (as opposed to the deeper level of assumptions) social consensus. In my case this means values for how communication ought to be and organizational values that people say are expressed through a certain kind of communication. Setting out from this understanding I have formulated a set of six values which should be espoused by organizational members (i.e. be a part of the overt social consensus) in an organization where internal communication functions according to the practices above.

Value for creativity – It might appear obvious or redundant, but the core value in communication for creativity is the value for creativity itself. Without this value there will be no commitment to an internal communication that is supposed to support and promote creativity. The value for creativity is expressed for example in the practice of encouraging and constructive feedback.

Value for sharing – Interaction as a mean of sharing is a theme in many of the practices I have suggested above. For this communicative sharing to come about and have a real positive influence on creativity organizational members must value sharing. Espousing a value for sharing means that there is agreement on giving all your possible input, through internal communication, to the process of creativity.

Value for openness – I avoided the vague concept of openness in the formulation of the practices of internal communication for creativity. But on a higher level there has to be a value for openness in this communication. Openness is a key value that is reflected in the practices of knowledge sharing, face to face communication, not setting barriers, feedback and networking with low centralization.

Value for diversity – In internal communication for creativity there must be a value for diversity among people and opinions. If organizational members do not acknowledge the value of different points of view and make that a part of their communication, the practices of multiple voices and various ways of communicating cannot be realized. Communication based on a value for diversity is positive for creativity because it is less homogeneous and thereby fosters divergent thinking.

Value for equality – Parallel to diversity, equality and integrity must also be valued. Equality must be an embraced principle that is enacted in communication if the practices of not setting barriers and not organizing communication hierarchically are to become reality. A value for equality also supports a "flat" network of weak ties and promotes creativity by holding back the formation of subgroups and cliques.

Value for collaboration – Looking across all practices it is clear that a value for cooperative work requires a presence in internal communication for creativity. The collectivity of the process of creativity is a notion that comes back in all of the communicative practices and therefore organizational members must make a value for collaboration an integral part of their internal communication for creativity.

With the practices and values of internal communication (seen through a cultural lens) for creativity now established, a final version of the modified model can be compiled. As before, also in figure 6 practices reside in the outer circle and values in the inner.
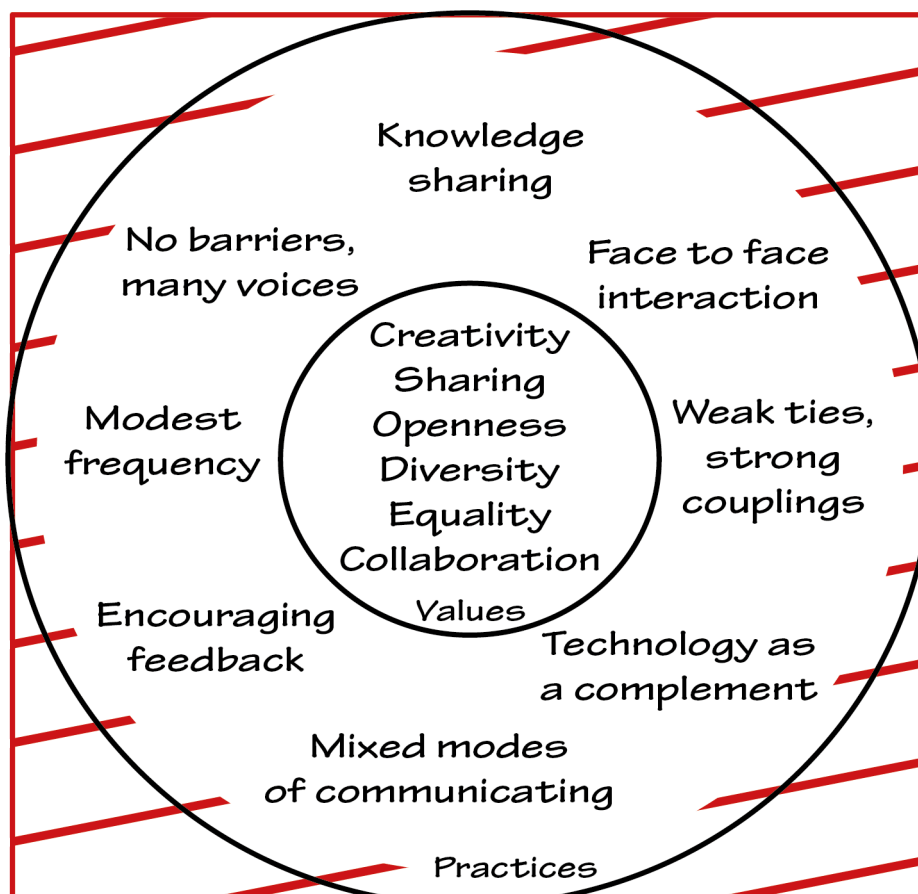

Fig. 6. A cultural model of internal communication for creativity

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To conclude and summarize, this model was derived from Schein's (1992; cited in Miller, 2006; 1990) triple layer model of organizational culture. Internal communication was introduced in the model as the substance constituting culture, in the sense of a material or layer in which the pattern of the cultural "onion" is inscribed. The three levels were reduced to two, practices and values, which are essentially the two categories of internal communication seen as culture that have an impact on creativity according to existing research. Eight communication practices and six values together make up the means by which internal communication promotes and supports organizational creativity. The next chapter will proceed to illustrate and exemplify more concretely certain dimensions of the model by presenting the findings from my case study.

4. Case study results

In this chapter the attention shifts from theory to practice as I present the results of my case study of internal communication in a creative organization. I have not tried to frame the results in the eight practices and six values of the model, but rather looked at the material freshly and concluded what the practices and values of internal communication for creativity are in the case study organization. Like before, practices describe what happens and values refer to people's opinions of what ought to happen and their statements about why communication takes a certain form.

Practices in the case study

Since these practices are derived from a real world organization, they are not as "processed" as the practices that are part of the model presented in the previous section. This means that practices here are less strictly limited than the theoretical equivalents. They blend into each other more and a quote illustrating one of them might also support another one.

Personal face to face communication – In the case organization there is a clear emphasis on communicating directly in real life interaction, particularly when this communication is part of a creative process. A good illustration of this is one of the visualizations I received from a project manager. The title of the page reads "Communication at X is everywhere..." and the rest consists of a collage of photos of members of the organization engaged in conversation in various settings (from the office kitchen to Oktoberfest). The consistent theme of the images is that people are involved in conversation and discussion.

Face to face communication was dominant in the creative processes I observed. Generation and evaluation of ideas always involved lively dialog. For example, when three designers were evaluating design suggestions and sketching on new ones in the process, the one whose sketch was the center of attention at the moment would constantly narrate his drawing process. Generally, it was uncommon to see someone in the office sitting quiet for more than 30 minutes without either being approached by someone or getting up to talk to somebody.

Of course, talking is prominent in most organizations and in many less creative activities, but the notion that face to face interaction is a cornerstone in the organization's internal communication for creativity was pointed out over and over in my interviews:

> Creativity requires being face to face. (team leader)
> I think face to face [communication] cannot be replaced by anything. (senior industrial designer)
> Face to face you always have a good channel to the other person. With other communication styles it is always hard to bring the issue to the core. (community designer)

> If we are really trying be creative, we use face to face meetings or brainstormings. (senior project manager)
> Talking to people always makes it easier. They just ask the right question and then everything is solved. […]
> Writing would not work. It's about real conversations. (senior project manager)
> Internally here it is a lot of talking, a lot of talking actually. (team leader)

All these statements were made in relation to creative work, solving problems or looking for original ideas. Clearly, there is a practice in the case organization where face to face communication is used as the primary mean of internal communication to support and promote creativity.

Limited use of communication technology – Related to the dominant practice of face to face communication is the reverse practice of avoiding communication technology in creative interactions. It is of course difficult to observe something that is not occurring very often, but in the weekly meetings of the design department that I attended I noticed that none of the participants brought laptops or any other electronic equipment. The most common accessory was a notebook or calendar.

The interviews revealed that mediated communication (for example conference calls) was seen more as a "work mode" of communication than something that could be used to aid a creative process. When technology is used in internal communication relating to creativity, it is more as a back-up option rather than as an augmentation of interpersonal communication. Interestingly, e-mail might be used for specific low intensity communication, such as sharing a potentially inspiring article found on the internet:

> I really don't think this [creative session] would work via videoconferencing because sitting together at one table is the core of the creativity process. (senior industrial designer)
> You can't be creative in a telephone conference call. It's not going to work, because it is a working mode. I make conference calls with my clients. (project manager)
> If I want very good and elaborate results in a short time I would prefer meeting for two hours and then to gather ideas digitally for one week. (senior project manager)
> Internally I would not use a digital platform to come up with new concepts. (team leader)
> We don't have an intranet, really. (team leader)
> If you find something on the internet that could help someone's project then you would always send it by e-mail, and maybe talk about it later. (senior project manager)

The idea of having a digital idea gathering as a follow-up to physical meeting that is suggested by one respondent, apparently is not agreed on throughout the whole organization. The practice in the organization is rather that communication technology is used very restrictively in internal communication for creativity.

Sharing and teamwork – Internal communication in the case organization is noticeably influenced by a practice of sharing and working together. All the visualizations of internal communication I received featured groups and/or networks of organizational members. Collaboration and reciprocal exchanges are illustrated with two-directional arrows and figures gathered in intersecting bubbles.

I saw many examples of communication-driven teamwork in my observations. Much of the creative problem solving in the organization takes place in ad hoc group formations that seem to appear naturally. These teams often formed by a principle of overhearing and joining. For example, one designer on his way out of the office to smoke a cigarette was caught up in a concept evaluation discussion among his colleagues. The same thing happened when one person turned to a colleague for support with a computer-task. A third and sometimes fourth person would often join the two by the computer when they heard what issue they were talking about.

This teamwork is a consequence of a practice of sharing what you are working on openly,

and therefore the two blend into each other. One of the visualizations showed this with small gift-wrapped boxes drawn next to some of the network connections, with the comment that "secrets are communicated obviously". Another aspect of this collective sharing was pointed out to me by the manager of the design department: "We all give our input and everyone makes a small or a big contribution to make the pile [of ideas] higher. By sharing we make the material common ground." Understandings of how communicative sharing contributes to creativity in the interviews also brought up the themes of mixing competencies, different perspectives and sharing opportunities:

> You have to combine the resources from programming, from conceptualization, project management and graphics. (team leader)
> Each one of us three [in the team] has a different perspective on the world surrounding us. The discussions and combinations we have, I think, are the most creative way to rethink products, ideas and solutions. (senior industrial designer)
> Discussion enriches your idea or kills it. (team leader)
> You have to give your idea to another person to really evaluate it. (senior industrial designer)
> [For a meeting] I try to find people who have the perspective of an analog field so that they can bring in their background, and their expertise, to stimulate the creativity of the other people in the meeting. (team leader)

The practice of collaboration and sharing in the case organization is multifaceted and could be studied more in depth, but it is clear that not keeping ideas to yourself and interacting in a way that fosters involvement are central in the internal communication that supports and promotes creativity.

Lack of obvious hierarchy – I noticed during my observations that the managers and team leaders were taking part in work and communicating with other members of the organization on very equal terms. One situation that illustrates this toning-down of hierarchy well occurred at the beginning of a department meeting when the manager, who arrived a few minutes late, found that there were no free chairs in left the meeting room. His solution was to fetch a wooden model of a toy tractor for kids from the design studio and use it as a seat throughout the meeting, sitting lower and more uncomfortably than the other participants. Internal communication that supports creativity by holding back hierarchy was also exemplified by a designer, who shared his experience of joining the design team as an intern. He underlined that he from the beginning naturally had the same right to express his views as the senior designers and that he could discuss with them on the same level. The theme of promoting creativity through communication that de-emphasizes hierarchies was echoed in the interviews:

> We don't have any outspoken hierarchy here at X. (team leader)
> I would say that creativity is the output of the tremendous space that we have, that we receive from our bosses. (project manager)
> We have very small hierarchies here, which means everybody can talk to everybody. (team leader)
> Here you have more freedom and you are allowed to do your thing. This freedom helps creativity. (office manager)
> To have a really good creative process I think it is crucial to eliminate all political issues and hierarchic steps. (senior industrial designer)

The practice of communicating in such way that hierarchies are minimized sits within the larger framework of leadership communication. One respondent claimed that thanks to the attitude from the managers "you can pretty much do whatever you want, as long as it's cool". This is an obvious exaggeration, but the statement still highlights the benefit for creativity in terms of confidence to think outside the box that comes with an internal communication that seeks to do

away with official top-down control and influence.

Informal interaction – The fifth noticeable practice in the case organization is that of communicating with a low degree of formalization. The core of this practice is that communication is easy-going and casual. A typical indication of this is the consistent use of the personal pronoun "du" rather than "Sie" (corresponding to the distinction between the English "you" and "You") among organizational members. Familiarity and the use of "du" was also highlighted as a part of communication for creativity in one of the visualizations I received. Shortened forms and nicknames were used frequently (e.g. "Andi" for Andreas and "Meli" for Melanie) and I also picked up some internal nicknames for design concepts, which were often quite sarcastic and humorous. Although everyone in the organization speaks fluent German I heard English being spoken almost everyday. Normally, it would only be a couple of phrases or a greeting in the beginning of a conversation. These parodies of English with a thick German accent often lead to more serious talk in German.

The informality of internal communication was also noticeable in the absence of standardized timing and procedures. The most telling observation I made of this was that the weekly department meetings were held at different times and announced verbally with five to fifteen minutes notice. The meetings themselves were held in a conversational style without any formal agenda. It was not uncommon that one or more meeting participants listened passively and made longer notes or sketches in their notebooks during the meeting. Another example of informality in communication is that when I passed by the designated smoking area outside the office building or the kitchen inside I would often see and hear people engaged in animated discussions. A recurring theme in my interviews was that this informal communication contributes to a relaxed atmosphere that helps creativity:

> Nobody thinks about communication here. It is just happening. (senior industrial designer)
>
> Everything is informal. There is no communication manual. (senior project manager)
>
> You have a lot of freedom in how you carry out your work, so that also goes for communication. There is no policy. (community designer)
>
> The communication is free and we talk to each other as peers. (office manager)
>
> I have no reason to talk differently to my colleague when we are working compared to when we are on a train talking about our cars or motorbikes. (senior industrial designer)
>
> The way of talking is helpful [for creativity] because we don't have that degree of formalization at the moment. (team leader)
>
> Using made-up words in English helps to initiate communication and questions very easily. It helps to be on a more relaxed level. (senior project manager)

This practice of informality touches on the previous ones, but its unique contribution is to show that the internal communication that promotes and supports creativity in the case organization is to a large extent unplanned and unguided. There is also an emphasis on improvisation, freedom and maintaining a similarity between private and professional communication.

Positive critique and encouragement – This final practice has to do with principles of feedback and climate in the creative process, which are enacted through internal communication. Mainly, this communication is the talk that keeps a session of creative work on the right track and drives it forward. The key principle is to always remain positive in communication. With such positive jargon creativity is promoted and supported because all ideas are welcomed and a focus on opportunities and possibilities is firmly established.

In the creative session I observed there was at one point an argument between three of the designers about which mechanical layout was the most suitable for the product under

consideration. As soon as this interaction shifted from coming up with new solutions and improvements to pointing out the shortcomings of the alternatives proposed by others, the (informal) leader of the session raised his voice and stopped the debate by saying to his colleagues: "All of you are right." During the three hours of the session that I observed this was the only instance where a negative side of an idea was mentioned. However, it was common that a designer would look at a colleague's sketch, say something about its strong points, then make a sketch of his own that addressed an issue or weakness in the original idea and present it to the colleague as an improvement. This way of communicating, where a complaint is reformulated as a suggestion for improvement, was also used during the spontaneous problem-solving that came with installing new lamps in the office. In the interviews I encountered other dimensions of this positive way of talking, including some particular expressions that were not appreciated:

> We are used to accepting only the positive aspects of this idea. (team leader)
> In a creativity process, let's say, everything is positive. (senior industrial designer)
> If you have critique for someone that you have respect for, then you bring the critique like a nice present. (senior industrial designer)
> In other companies where I have been [...] you didn't specifically talk to others to leverage your ideas or to get their creative input. (team leader)
> If you dare to say whatever comes to your mind, on the one hand you are creative and on the other you help others to be creative. (senior project manager)
> It is not allowed to say: "It would be funny to have..." It is forbidden. (senior industrial designer)
> When we are trying to come up with ideas I would not like to hear: "It doesn't work." "We cannot do it." "We've tried it." "This one or this one is better." (team leader)
> If someone is talking about a new administrative procedure, it would be quite clear and straightforward. About solving problems people would talk around more, or be more careful. … There would be many "woulds" and "maybes". (senior project manager)

The point made in the last quote, not voicing a very firm opinion when talking in a creative process, was reinforced by my observation that the German word "quasi" (meaning "so to say", "sort of") occurred more frequently in internal communication connected to creativity than in other talk around the office. This carefulness is also a part of the communicative practice of positivity and encouragement.

To summarize, the practices of internal communication for creativity that I have identified in the case organization are personal face to face communication, limited use of communication technology, sharing and teamwork, lack of obvious hierarchy, informal interaction and positive critique and encouragement.

Values in the case study

The values in the case organization are intertwined, just like the practices. The five value categories I present here are derived from the themes that were most prominent in the interviews, perceptions of the organization's general philosophy and finally ideas about the important qualities of internal communication for creativity. Since the concept of a value that both affects communication and is formulated through it is rather complex, the quotes I have selected to illustrate the values are quite diverse. Nevertheless, I have arranged the quotes so that they exemplify and explain five sides of the social consensus (Miller, 2006, p. 107), equal here to values, in the case organization.

Value for creativity and innovativeness – The organizational members I talked to gave voice to a special way of relating to creativity and being innovative. They expressed the obvious

place creativity takes in their work. Creativity is thus valued in the sense that it is understood as a natural part of what it means to be a member of the organization. This integration of and relationship to creativity is upheld through internal communication, it becomes a part of the social consensus of how things ought to be.

> We are extremely creative. You know, it's more or less mandatory to be creative somehow. (project manager)
> I also believe that everyone of us has some kind of creativity. (team leader)
> When you're talking about creativity at X it comes along with such a self-understanding. It's the most normal thing on earth. (team leader)
> There is a value that ... innovation … is more important than sheer business success. (project manager)

Value for respect – One of the most common themes in the interviews was respect. It was mentioned in many contexts, but generally the idea was that respect meant not pushing others down. This means that respect is valued and expressed in communication because it helps the diversity of ideas and opinions. The final quote below demonstrates one particular aspect of this consideration for others and their ideas, namely that harsh competitiveness without respect is claimed to have no place in the culture of the case organization.

> Communication is free and friendly, but still we do it with respect. (office manager)
> Of course you will not always be of the same opinion, but still there is this kind of respect. (team leader)
> You have to respect the people's ideas. An idea is an idea and it's up to you what you do with that idea. (senior industrial designer)
> … Like the elbow stuff or something you see in bigger corporations. You need that and it's fine. But we don't have that culture! (project manager)

Value for friendliness – Many answers to my questions about communication climate and atmosphere, brought up friendliness as something that is valued in communication for creativity Although the value for friendship was referred to often, it is one of the more vague values. It was difficult for the respondents to make it concrete how friendliness is expressed in communication and the examples they did give were scattered over virtually all the six practices. But at the same time the fact that the value for friendliness is present in many of the communicative practices that are positive for creativity and can hold these together as the general sentiment of communication, is what makes it a strong value in the organization.

> [RH: What is most important when people meet to communicate about ideas?] Friendship. Respect. Lack of politics. (team leader)
> We can say whatever we want, and sometimes it is also quite rude or so. And we make fun of each other and we laugh, so this is more like friendship or family. (senior project manager)
> Of course, an informal rule would be that you have this friendly atmosphere in your discussions with others. (team leader)

Value for open-mindedness – According to my respondents, there is a value among members of the case organization for open-mindedness. Valuing open-mindedness in internal communication as they described it means not only to accept unfamiliar ideas when they are communicated, but also to hold the belief that communication should not be restrictive. This social consensus about the value of not closing yourself to the uncommon and communicating in a way that fosters an atmosphere of no restrictions is very important, especially for the practice of sharing and teamwork. As the last quote points out, an open attitude in communication decreases the feeling of being narrowed down and thereby lowers structures or barriers that could impede creativity.

Being honest and open is good. (senior project manager)
Open-mindedness is the most important criterion [for creative communication]. (team leader)
If you put five of the people together at X, you get one idea after the other: "We could do this and that, and this and that." Because they are used to being open-minded. (project manager)
I think, what makes us creative is that we don't have these typical company structures... And we do not have these ways to dress or ways to talk … that narrow you down. (senior project manager)

Passion for work – The final evident social consensus that emerged from the interviews was a value for seeing work as something more than just work. When this value for being passionate about your work translates into practices of internal communication it takes the form of enthusiasm and involvement. This enthusiastic and involved communication is beneficial for creativity since it brings energy and commitment to the creative process. It is noteworthy that for some of the respondents the commitment is so strong that it means consciously thinking about work also outside the office.

I think the value that we all have in common is that for us work is not only work to earn money. It is passion. (team leader)
We're small, it's a startup mentality. You work late hours because you like it. … But it's a creative atmosphere. (project manager)
What makes communication here at X good for creativity is the enthusiasm of the people for their work here. (community designer)
With some colleagues I noticed that when they left the office they switched off their brain, they stopped thinking about the projects here. It was very hard to work with those people. (senior industrial designer)

In conclusion, the values in the communication culture of the case organization that promote and support creativity are values for creativity and innovativeness, respect, friendliness, open-
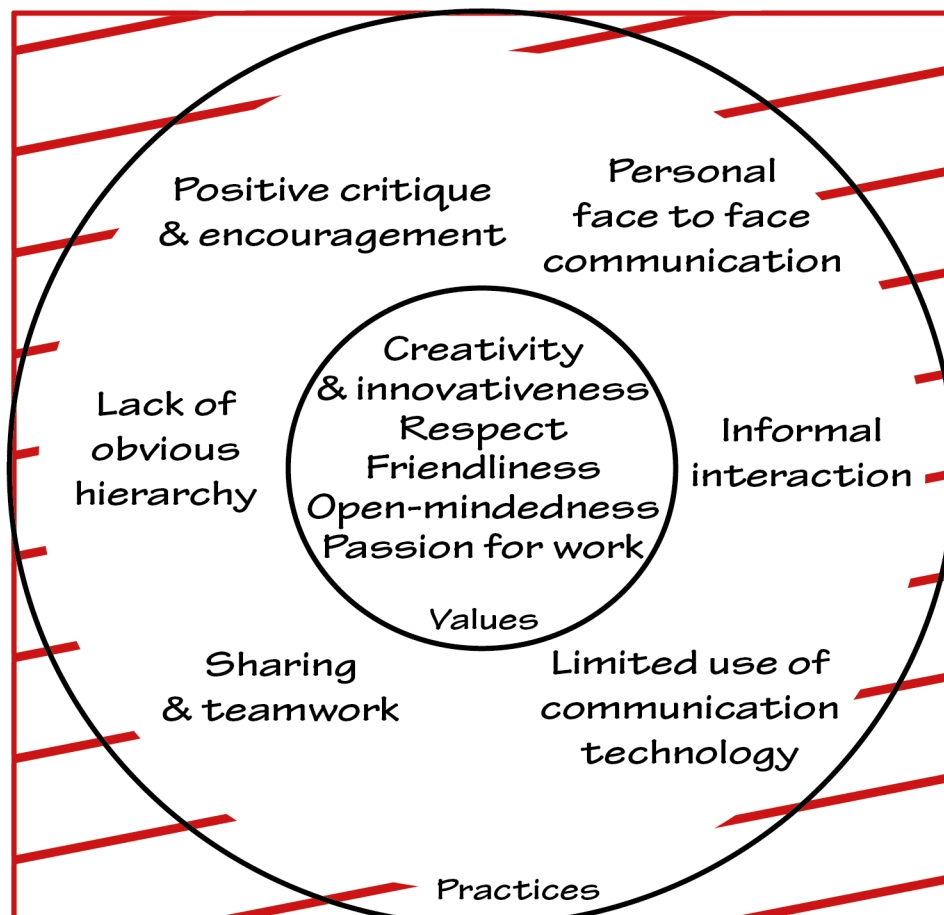

Fig. 7. Practices and values in the case organization

mindedness and passion for work. Consequently, the case study revealed a total of six practices and five values (as in figure 7) which are the means of how internal communication promotes and supports creativity in this innovation-focused organization. It is in some cases hard to distinguish these characteristics from each other, even between the levels of practices and values, but nevertheless the case study fulfills its purpose as a collection of real-life examples of various dimensions of the theoretical model and as a first indication of the usefulness of the model. How this illustration of the communication in terms of practices and values in the case organization illuminates the theoretical model and how it differs is one of the topics of the following chapter, which offers a preliminary evaluation of the model and points out some directions for future research.

5. Conclusions

The two previous chapters have given answers to my first and second research question respectively. The aim of this concluding chapter is to go deeper into the third question and reflect on the key mechanisms of creativity-enhancing internal communication. The first section does this by contrasting the model and the case study and the second reflects on the contribution of the model to communication theory. The two final sections present an overview of factors that limit my study and suggestions for future research on internal communication for creativity.

The model in a practical context

The findings of the case study illustrate a number of features from the theoretical model. But there are also some noteworthy differences between the model and the practices and values in the case. This section summarizes these relations and interprets what they imply for the model.

First of all, face to face interaction takes the same dominant position in the case study as in the model. My observations gave many examples of the smoothness and richness of interpersonal verbal communication. During the creative session I took part in the dialog started as soon as two people were looking at the same sheet of paper. There would often be two separate conversations going on simultaneously between the five participants. But face to face means more than just talking. The full spectrum of communication in live interaction referred to in the model was highlighted by a number of the respondents, for example talking about inspiration and instant communication of reactions via facial expressions.

The value for creativity is central in the case as well as in the model. But the case reveals a broader view of what this value is. It is about the "self-understanding" of the organization as creative and of creativity as something natural, almost commonplace. To hold a value for creativity is not just to believe that creativity is good and ought to take place, but to see the organization as a manifestation of creativity. This manifestation connects to the communicative view of organizational culture, as it is proposed by Eisenberg and Riley (2001).

The practice of encouraging feedback in the model is clearly echoed in the case study, with many examples of what this practice actually means in terms of formulating feedback. The metaphor of bringing critique like a respectful present and as a suggestion rather a complaint is a telling description of constructive feedback. For the model, it shows how feedback must be integrated in the creative process through conscious communication efforts.

An emphasis on sharing is a final major similarity between the case and the model. The case study underlines that sharing is closely related to teamwork. Intellectual sharing from the model

is exemplified in real life as people coming together at a computer to solve a problem or work out a common understanding. In this case they are not just mechanically exchanging a piece of knowledge, but again they are engaged in the process of creative communication, which forms and is formed by the organizational culture.

One of the most striking differences is that the practice of modest frequency is not represented in the case study. Of course, observations have a limited capacity when it comes to showing how people choose not to communicate. But also in the interviews none of the respondents brought up the issue of how too frequent communication could potentially hinder creativity. This highlights the potential conflict between the practice of modest frequency and for example that of knowledge sharing. Since interaction is a prerequisite for organizational creativity, any limitations of it must be imposed carefully.

No outright equivalent to the networking practice in the model emerged in the case study. The respondents did have ideas on the subject of the case organization as a communication network. But despite my effort to be precise, the interpretations of the questions on this theme varied greatly. Looking back at the model this means that the network perspective is perhaps one aspect that is too abstract to be picked up naturally by organizational members.

Interestingly, no value in the model corresponds directly to the value for respect in the case study. I believe that the best match for respect is a combination of the more abstract values for openness, diversity and equality. Respect was seen in the organization as a way of promoting diversity, which is not surprising, but some respondents also indicated that the value for respect contributed to a communication that discouraged competition. Holding back competition and valuing equality is not the same, since fierce competition can take place among equals, so this is a side of internal communication for creativity that is largely missing from the model.

The practices of the case organization are also much more one-sided when it comes to communication technology and mixed modes of communicating. There is a clear preference for personal, unmediated and informal interaction in creative processes. The potential benefits of using computer systems and more structured modes of communication for creative work that are integrated in the model, are not considered in the case organization. The respondents seemed to agree that "the computer is definitely a more organized and systematic way of working", as one of the team leaders put it. This "technology skepticism" together with the unrestricted frequency of communication in the organization are the two main differences between the case and the model.

Despite the differences I have mentioned here, I would argue that the matching of the model and the empirical findings is as good as one can reasonably expect with a single-case comparison. In the light of the case study, there is no reason to believe that the model is completely off track. On the contrary, there is a considerable similarity in the major areas: face to face interaction, feedback, intellectual sharing and openness. These areas are, I would argue, the main features of internal communication that promote and support creativity. Thus, the primary result of my theoretical and empirical work in combination is that the proposed model was not rejected by the case study.

I believe that where coherence between the theoretical model and the situation in the case organization is lacking, it is to a large extent a consequence of the size of the case organization. Much of the empirical research that populates the model has been carried out in larger organizations where internal communication has shaped and been shaped by different structures. It is therefore possible that the model primarily represents a more systemic and less organic context. This highlights the important conclusion that internal communication for creativity

does not necessarily follow the same principle or take the same shape in all organizations.

Reflections on internal communication for creativity

The first question one must ask upon seeing that the case study largely matches the model is whether the model then addresses the lack of theory that inspired it, as I outlined in my introductory section. I believe that the answer to this question is yes.

The model I have proposed has firm roots in organizational communication theory and at the same time displays a clear focus on communication as a set of practices and values that promote and support organizational creativity. What sets the model apart is this combination of a broad communication framework and a strict thematic orientation toward creativity. Previous attempts, unfortunately few of them undertaken by communication scholars, have been either wider or more narrow. For example, when Martins and Terblanche (2003) approach organizational creativity at large (from the perspective of organizational culture nonetheless) their model resorts to the hopelessly vague "open communication". On the other end of the scale are the specific, almost technical, studies that do not consider the organization as a whole. One example of this would be Nijstad et al. (2003) who investigate the impact of verbal interaction and cognition on creative brainstorming. These studies are doubtlessly useful in their own right, but my research offers a contribution by combining a broad approach to creativity with high resolution in terms of actual practices and values, which is possible since I limit myself strictly to internal communication.

As I have pointed out before, there is not much creativity-specific communication research that I can relate my work to. Hamrefors (2009, pp. 156-163) sketches a proposal for strategic communicative management for innovation, but he is mainly concerned with networked interactions between organizations. The proposal touches on internal communication only in the brief suggestions (p. 160) that the organization should counteract political processes that hinder progress and decrease its internal path dependency. My research can be seen as a foundation for more in-depth communication strategies for creativity and innovation, framed in the understanding of communication as organizing.

So, by which key means does internal communication then promote and support creativity? Why is communication in an organization important for creativity? The most simple answer is that internal communication enables organizational creativity. But with an interpretive and constitutional view on communication, applied through the cultural understanding of the organization, it is possible to go further and say that creativity happens in communication. The process of creativity is promoted and supported by a certain kind of communication. Interpersonal interaction face to face is the base of this communication. It is a key mean because of the complexity and spontaneity of idea generation and because it is the most effective way to realize many other practices and express values that promote creativity. Next among the key means is open intellectual sharing. Without communication that lets ideas, knowledge and experience flow freely and incorporates the values that drive such sharing, this essential subprocess of creativity would not take place. Lastly, I would point out positive feedback and climate as a key mean. The case study made it clear that internal communication is instrumental for establishing and maintaining an environment where all ideas are encouraged, both in jargon free of negative critique and in a more general understanding of oneself as creative.

Thinking one step further, the essence of internal communication for creativity is in many ways an instinctively human communication. What shines through as underlying forces in

the communication summarized above are basic human characteristics, such as a belief in progress, a joy of being creative and a desire to engage socially and share thoughts with others. I believe these and similar basic traits of human nature to be what is truly at the heart of internal communication for organizational creativity.

Limitations of my research

As a consequence of the conceptual and methodological limitations in my work, there are some circumstances worth mentioning that have restricted my study.

On the theoretical level, the form and scope of this thesis project have not allowed me to go as deeply into theories of internal communication and creativity as I would have wished. I do not think that this lack of depth has affected my choice of organizational culture as the point of contact between communication and creativity. But with a more detailed exploration of the conceptual triad of organizational communication, organizational creativity and organizational culture there is a chance that the model I have developed as a suggestion could have been even more nuanced and well-founded.

When it comes to the case study, I owe the organization and the respondents an apology for treating the data they contributed very superficially. My intention from the beginning was to keep the case study in the background and use it exclusively as an illustration and first verification of the model. Being successful in this treatment of the case study meant leaving out many dimensions that would have been interesting to explore. It also means that my presentation of the case study results and analysis is neither critical nor questioning. Since I am focusing on the relatively consistent slice of organizational culture that is communication for creativity, I have not spent any effort on analysis of the match or mismatch between practices (artifacts) and values, which is a central theme in Schein's cultural analysis.

Intercultural issues are another relevant limitation in relation to the case study. Only two of my scholarly sources for this work originate in a German context. This fact is necessary to keep in mind when the case study is compared to the model, because it is not unlikely that factors relating to "national" culture influence internal communication for creativity. My limited knowledge of the German language and culture have also left their mark on the case study. Content analysis is virtually absent and the interviews were conducted in a language which is neither native to me nor to the respondent.

Overall, the approach I have chosen to explore and explain internal communication as something that promotes and supports creativity is a limitation. Some alternative approaches are discussed in the next section.

Directions for further research

Considering the scarcity of research connecting internal communication and creativity, I hope that my study can inspire further investigation of this field. I believe that I have taken a first step by demonstrating at least a part of the potential of internal, or better yet organizational, communication as a way of understanding creativity in organizations better.

I would be delighted to see attempts at approaching creative internal communication with a different lens than the cultural-interpretive. I chose this perspective for its accessible explanatory power but I do not doubt that other interpretations of what communication means for and in the organization could uncover interesting dimensions that are absent in my conceptualization.

For example, I would be curious to see a critical take on internal communication and creativity, exploring how communication can be used to control and direct creativity and by whom.

Methodologically, an inductive approach to theorizing about internal communication for creativity, based on the theory development principles of grounded theory, would surely result in a very interesting contrast to my deductively constructed model. Such an undertaking would of course involve an empirical investigation on a completely different level than mine, that would have the potential to uncover and inspire a completely different framework than the one built on Schein's cultural model.

Staying closer to that same model instead, research with a more respectful treatment of Schein's ideas is also an interesting prospect. To me it does not seem unlikely that a communicative approach could lead the way to a hypothesis about which basic cultural assumptions are related to organizational creativity. At the same time, extended empirical research on the values that are part of creative internal communication, preferably across different cultures, would also be relevant.

Finally, I see the possibility that a verified version of my suggested model could be used as the basis for an instrument to measure and evaluate internal communication for creativity in a more generalized way. Such an instrument could contain interview guides and observational guidelines as well as resources for interpreting the results. With correct implementation it could offer organizations much more concrete insights than a comparison of their situation to my propositions in this work.

But for now, these propositions are what I have to offer. It is my hope that they spark interest and inspiration, and that they will be used to promote and support creativity through internal communication.

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Appendix A: Interview guide

NB. Questions in finer print were used for clarification and thus not always asked.

How long have you been working at X?
What is your position within the organization at X?
What are the main tasks in your job?
On an average day, how much time would you say that you spend interacting with other employees at X?
Which are the channels/types of internal communication at X that you are involved in?

Which are the most creative situations you find yourself in at work? Why?
How do you define creativity at X?
On a typical day, when do you feel most creative? Why?

Which types of communication are used for creative work?
Why is that a good way of communicating for working creatively?
What is the most important quality in creative communication?
When you are creative and you are communicating, what is characteristic of that communication?
How do you use technological systems to communicate about creativity?
How do they help you? Why?

Are there rules, guidelines and routines for internal communication at X?
How about informal, unspoken rules and norms?
How do you think they make it easier to be creative? Why?

Looking at X like a communication network, how does creativity fit in?
Which are the most creative positions in the network?
Why are those positions extra creative?

In what way does the manner of talking between employees at X help you to be creative?
Is there a specific way of talking about creativity at X?
Which special words, metaphors and language do you use when you are working creatively?
How do they help your creativity?

Do you see a difference between general internal communication at X, like about new forms for travel expenses or a new lunch place, and the communication that takes place when you are working creatively, to solve a problem?
What is the difference?

Taking all these things together, is there a special climate of communication?
What is it like?
How does this climate help you to be creative?
Which are the most important values that help creative work?
Do you think that the climate is related to a certain kind of culture at X?

Is there anything you would like to add on these themes?

Assignment: Please make an illustration of how you perceive internal communication at X.