

# Communication and management : researching corporate communication and knowledge communication in organizational settings

Autor(en): **Lurati, Francesco / Eppler, Martin J.**

Objektyp: **Article**

Zeitschrift: **Studies in Communication Sciences : journal of the Swiss Association of Communication and Media Research**

Band (Jahr): **6 (2006)**

Heft 2

PDF erstellt am: **26.05.2024**

Persistenter Link: <https://doi.org/10.5169/seals-791109>

## **Nutzungsbedingungen**

Die ETH-Bibliothek ist Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Inhalten der Zeitschriften. Die Rechte liegen in der Regel bei den Herausgebern.

Die auf der Plattform e-periodica veröffentlichten Dokumente stehen für nicht-kommerzielle Zwecke in Lehre und Forschung sowie für die private Nutzung frei zur Verfügung. Einzelne Dateien oder Ausdrucke aus diesem Angebot können zusammen mit diesen Nutzungsbedingungen und den korrekten Herkunftsbezeichnungen weitergegeben werden.

Das Veröffentlichen von Bildern in Print- und Online-Publikationen ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Die systematische Speicherung von Teilen des elektronischen Angebots auf anderen Servern bedarf ebenfalls des schriftlichen Einverständnisses der Rechteinhaber.

## **Haftungsausschluss**

Alle Angaben erfolgen ohne Gewähr für Vollständigkeit oder Richtigkeit. Es wird keine Haftung übernommen für Schäden durch die Verwendung von Informationen aus diesem Online-Angebot oder durch das Fehlen von Informationen. Dies gilt auch für Inhalte Dritter, die über dieses Angebot zugänglich sind.

FRANCESCO LURATI & MARTIN J. EPPLER\*

## COMMUNICATION AND MANAGEMENT: RESEARCHING CORPORATE COMMUNICATION AND KNOWLEDGE COMMUNICATION IN ORGANIZATIONAL SETTINGS

This article describes two areas of research in the field of communication within the context of organizations: corporate communication and knowledge communication. In the first part of the article it is argued that there is a clear distinction between strategic and tactical communication and it is shown that very often these two domains are confused. Then the theoretical backgrounds of each domain are discussed. The second part of the article introduces knowledge communication as an instrumental activity for effective organizational action in today's business environment. Several examples of business constellations in which knowledge communication is crucial are offered. A definition is proposed as well as a description of the different modes of knowledge communication. In order to understand what happens in the 'black-box' of knowledge communication, the problems characterizing communication between experts and decision makers are presented.

In discussing the conceptual and theoretical background of the two fields, links to other disciplines are made – e.g. sociology, organizational sciences, cognitive and behavioral psychology and engineering sciences –, highlighting the multidisciplinary approach that characterizes corporate communication and knowledge communication. In the conclusion it is claimed that both fields contribute to the strategy development processes and that concepts in knowledge communication provide useful insights to the field of corporate communication, both on the strategic and tactical levels.

*Keywords:* corporate communication, public relations, stakeholder, organizational identity, communication planning, knowledge communication, expert, decision maker.

\* University of Lugano, francesco.lurati@lu.unisi.ch; martin.eppler@lu.unisi.ch

## Introduction

*Management is Communication.*

Peter F. Drucker

Communication in the context of organizations frequently faces the challenge of playing a catalyst role in dealing with significant asymmetries among various stakeholder groups. Communication ideally bridges differences in perspectives, priorities and professional practices. This, however, requires a deep understanding of crucial mechanisms that often intervene in such asymmetric interactions. The research regarding communication in the realm of organizations conducted at the University of Lugano (USI) examines such mechanisms. It can be broadly divided into two major areas of inquiry: the field of corporate communication and the area of knowledge communication. These two research areas are described in this article by reviewing seminal contributions and key concepts compiled from various fields of the social sciences. The conclusion highlights some of the complementarities between the two fields.<sup>1</sup>

### 1. The field of Corporate Communication

In this article we will argue that corporate communication focuses on three main parameters— stakeholders' expectations, stakeholders' cognitions and organizational identity –, and operates within the strategic and the tactical domain. When it operates at the strategic level, corporate communication deals with the sustainability of corporate decisions in terms of communication – i.e. are strategic decisions in line with stakeholders' expectations and cognitions and with organizational identity? When it operates at the tactical level, corporate communication is in charge of designing communication plans. These two domains have two distinct aims. The first is to contribute to the definition of corporate objectives, the second, to support the achievement of corporate objectives.

The strategic domain of corporate communication is the least known and practiced. It implies that corporate communication participates in the strategic conversations of the organization.

Traditionally, organizations decide what to do and where to go based on availability of resources such as human resources, financial resources,

<sup>1</sup> The first part of the article dedicated to corporate communication is written by Francesco Lurati and the second to knowledge communication by Martin Eppler.

technological resources and market conditions. If a new strategy can rely on these resources, then it is considered sustainable. Today, organizations are increasingly required to make decisions which also consider public expectations and cognitions and the identity mix supporting the organization's activities. In other words, the particular characteristics of these factors are considered additional corporate resources. If the objectives of a strategy do not meet stakeholders' expectations, are not supported by the public's image of the organization or are not in line with the organizational identity, they may not be achievable, in the same way strategy objectives can not be achievable if technological competencies are not available to the company.

In 1995 several publics decided to act against Shell's decision to sink Brent Spar. This action had a devastating effect on the company. As a result of this experience the company's CEO declared that a company's true "license to operate" is inevitably granted or not granted by the public. In fact, Shell almost lost its own license; its action was not aligned with public expectations. Swissair, on the other hand, had a very solid license to operate in 2001 when it went bankrupt. The reputation of Swissair was excellent; the Swiss federal government, cantonal governments and its local communities together with broad support throughout the Swiss population decided to support its 'bailout' financially by founding the new company, Swiss Airlines. This capital today no longer exists. If Swiss were to run into trouble, it would find no such support today. Finally, Bertelsmann's mishap in the digital economy is a good example of a misalignment between the aspirations of its executive board (in particular, its former CEO) and its actual organizational identity. These three examples illustrate the impact communication parameters have on corporate strategy, an impact which can determine what a company is or is not able to do.

It is worth pointing out that both scholars and practitioners often misuse the term 'strategy', when they refer to strategic communication. They apply it to the activity of transposing corporate objectives into communication objectives. From this perspective corporate communication is considered strategic when it pursues objectives which are merely aligned with the corporate ones. The term 'strategy' becomes simply a label that, although attractive, does not change the tactical nature of the task communication fulfills. In other words, the communication function here makes no contribution to the defining of corporate strategy. Instead it has limited itself to the activity of communication planning. Its



contribution is therefore purely tactical and not strategic (Lurati 2005). It is possible that, before 1995 at Shell communication planning was performed professionally, but probably corporate communication was not asked to play a strategic role.

In the next pages we will discuss the strategic and tactical domains of corporate communication in terms of their theoretical backgrounds. These backgrounds are multidisciplinary and draw from communication, sociology, organizational sciences and cognitive and behavioral psychology.

### *1.1. The theoretical background of the strategic domain of corporate communication*

The first task of corporate communication is to understand who are the stakeholders of the organization. Freeman defined stakeholders as “any group or individual who can affect or is affected by the achievement of the organization’s objectives” (Freeman 1984). Since then several approaches to stakeholder analysis have been developed. Three categories can be distinguished: the broad approach, the narrow a priori and the narrow situational approach (Illia & Lurati 2005). The first two categories emerge from different interpretations of Freeman’s original definition (Windson 1992; Mitchell et al. 1997). The broad approach to stakeholder analysis considers all individuals and groups who have a stake in the company, the narrow a priori approach selects stakeholders based on given criteria and, the third approach, narrow situational, links the identification of relevant stakeholders to a situation. Grunig’s Situational Theory of Communication Behaviors (Hunt & Grunig 1984) best represents this view. Here stakeholders become publics when they recognize one or more of the consequences of an organization’s actions or behavior as a problem (Grunig et al. 1992). They become active publics when they create “issues” out of the problems they have identified and decide to do something about them. Therefore, stakeholders become active publics when they have a high level of problem recognition, a low level of constraint recognition and a high level of involvement, whereas non publics do not recognize the existence of a problem. Grunig also distinguishes between aware and latent publics based on different levels of constraint recognition and level of involvement.

In his theory Grunig makes it clear that communication management deals with relationships. Stakeholders and publics are, in fact, character-

ized specifically by the nature of the relationship they entertain with an organization. The concept that publics 'choose' a company and not vice-versa is another of Grunig's central contributions to communication management. Stakeholders are publics because they are able to recognize that the source of a problem that affects them is the consequence of an organization's behavior. This very fact makes corporate communication intrinsically different from marketing communication. Corporate communication cannot ignore its publics, while marketing communication can decide to ignore targets that are not relevant. Boundary-spanning, therefore, becomes a central function of corporate communication (White & Dozier 1992). This has been extensively acknowledged by public relations scholars who underscore that public relations, by reporting and processing information concerning the environment in which a company operates, contributes to the corporate adaptive and interpretative strategy-making process (Moss & Warnaby 2000).

According to Grunig (1992), therefore, unfulfilled stakeholders' expectations are the source of issues. Central to this view is the concept of consequences (Grunig 2002) produced by an organization which affect stakeholders, and, thus, the importance of relationships. Expectations fulfillment, on the other hand, has an impact on stakeholders' cognitions of an organization (Parasuraman 1985).

Stakeholders' cognitions are the second fundamental strategic element in the field of corporate communication. Academic research in the field of corporate image and reputation follows three main streams (Berens & van Riel 2004). According to the first perspective, people develop associations regarding organizations based on the social expectations they have of the organization (Fombrun et al. 2000). The concept of reputation belongs to this view. In the second perspective people view organizations in terms of personalities (Davies et al. 2001 & 2003). This perspective draws from psychological theories and is also extensively used in marketing to analyze product positioning. In the third perspective, cognitions of organizations are defined in terms of credibility, i.e., the trust people have in a company (Newell & Goldsmith 2001). It should be pointed out that this last perspective is partially shared by the first two perspectives which, in differing ways, also include credibility in their conceptual framework.

How cognitions take shape is central to the topic of corporate associations. They may result from direct experience, sharing of third party experience or through communication provided by the organization. The mechanisms through which images are formed in the minds of people probably

affect the degree of stability of an image (Berg & Gagliardi 1985; Grunig 1993; Fombrun & Shanley 1990). The role of relationships is therefore crucial to fully comprehending stakeholders' cognitions, the stability of those cognitions and, subsequently, the implications for managing them.

Expectations and cognitions do not form only outside, but also inside the organization. Scholars refer here to organizational and corporate identity. The subject has been debated now for over fifty years and has given birth to different schools each relying on different traditions coming from fields such as psychology, organizational sciences, marketing and communication. Each field has developed its own concepts and terminology, borrowed from the tradition they represent. There have been several attempts to map this field of research. Balmer and Soenen (1997) provided a historical overview of how the discipline developed. Broadly speaking they differentiate three phases. The first phase, stretching from the Fifties to the Seventies, focused on graphic design and corporate image, i.e. how organizations impressed their customers. During the Seventies and then in the Eighties the concept of corporate identity developed. Authors were interested in understanding the underlying values supporting an organization. Corporate personality (Olins 1978) became a central concept in constructing communication plans which targeted all stakeholders and not just customers. This development was driven by increasing competition, internationalization, deregulation and the rise of mergers and acquisitions, a phenomenon that has since strongly affected the corporate world. It is in this period that Albert and Whetten (1985) produced their seminal work that has shaped the debate up to now, giving birth to the concept of organizational identity. The debate in this third phase has been driven mostly by organizational behaviorists who place at the center of their attention the cognitions organizational members have of their organizations and, in particular, those characteristics which are considered central, enduring and distinctive applying the concepts of Albert and Whetten. Change and multiple organizational identities have been central concerns among many authors (see for instance Elsbach & Kramer 1996; Pratt & Foreman 2000; Gioia et al. 2000; Hatch & Schultz 2002; Carroll & van Riel 2001). In their efforts to understand the nature of organizational identity and its influence on change processes (Illia 2006), organizational behaviorists have brought to the forefront of the debate concepts such as identification (Mael & Ashforth 1992; Chreim 2000; Fiol 2002; Foreman & Whetten, 2002; van Dick 2004) self-esteem (Brockne 1988; Ashforth & Mael 1996 & 1989; Dutton et al. 1994; Albert et al. 2000)

and construed external image (Dutton & Dukerich 1991; Reger et al. 1994; Gioia et al. 2000).

The above developments in the field of corporate and organizational identity have lead scholars to formulate conceptual identity frameworks which bring together the different perspectives on identity in an attempt to provide a model for managing identity. Balmer (2001) distinguishes five identity types: actual, communicated, conceived, ideal and desired identities. Soenen and Moingeon (2002) distinguish five facets of organizational identity: professed, projected, experienced, manifested and attributed identities. Their model differs slightly from Balmer's, both in the definition of identity types and the dynamics among them. This conceptualization work is important. Identity is seen here as a vital element of communication management. The understating of its different facets provides managers with the elements to align both corporate strategy and communication to organizational culture, values and cognitions, thus supporting organizational expressiveness (Schultz et al. 2000). Organizational behaviorists have provided corporate communication with the concepts needed to build image from the inside, overcoming the limitations of impression management.

As pointed out by Illia and Lurati (2006), today organizational identity research adopts a non-situational and non-relational approach. This literature acknowledges the importance of the process of external mirroring in identity formation (Hatch & Schultz 2002) but limits itself to considering only broad interpretations by organizational members of the image external stakeholders hold of their organization. Future research should overcome this limitation (i.e., which *specific* images generate consequences for the organization?) if it intends to provide a better understanding of the relationship between external cognitions and identity, thereby linking the three parameters of corporate communication – stakeholders' expectations, stakeholders' cognitions and organizational identity. Taking this step would be instrumental in providing a better conceptual framework for developing more effective communication plans.

### *1.2. The theoretical background of the tactical domain of corporate communication*

Tactical corporate communication is an *ex-post* managerial function. Communication here plays the role of message engineering. Corporate objectives are a given and need to be projected inside and outside the organization.



A communication planner needs to understand the intra-personal and inter-personal psychological mechanisms that explain the impact and effect of communication on people. He or she also needs to be aware of the mechanisms that could impair the communication action.

In the intra-personal domain, there are particularly useful theories such as the Social Learning Theory (Bondura 1977), the Diffusion of Innovation Theory (Rogers 1962) and the Attitude Change and Behavioral Change Theory (Rokeach 1966 & 1968). The Co-orientation Theory (McLeod & Chaffee 1973) provide the framework for understanding inter-personal communication mechanisms. Possible communication blockages are described in theories such as the Spiral of Silence (Noelle-Neumann 1984) and the Cognitive Dissonance Theory (Festinger 1957).

In the programming phase communication planners may benefit from Framing Theories for their message development, from Conflict Management Theories (Fischer & Ury, 1981) for their face-to-face tactics, from the Uses and Gratifications Theory (Katz & Blumler 1974) and the Elaborated Likelihood Model (Petty & Cacioppo 1986) for selecting the appropriate channels or, more generally, from Influence Theories (Cialdini 1996).

The relationship between some of these theories and communication management practice has been extensively addressed in public relations research and reported in public relations manuals (for instance, Cutlip et al. 2000 and Fischer 1997).

Understanding the mechanisms depicted by these theories helps communication managers translate business objectives into communication objectives. Social Learning Theory provides an explanation of how people learn from observing other people. Referring to different social learning patterns, communication managers are able to make decisions concerning which mechanisms to stimulate with their arguments and actions: attention, memorization or motivation. The Diffusion of Innovation Theory is a framework used largely in marketing communication as well as in corporate communication. It allows one to define objectives and, in particular, to clearly differentiate impact and effect objectives. It also provides the framework for defining the type of channels best suited to reach different cognitive and behavioral objectives. The Attitude Change and Behavioral Theory provides a conceptual framework which explains opinion and behavioral changes by looking at the role played by values and attitudes. By differentiating attitudes

toward objects and attitudes toward a situation and by linking these attitudes to a hierarchy of values, Rokeach's Theory constitutes an additional conceptual reference for defining and substantiating communication objectives. However, the definition of communication objectives should not be based only on an intra-personal, psychological base: this is the main lesson communication planners should gain from the Coorientation Theory, a central conceptual framework borrowed from sociology by public relations scholars. This theory lays the foundations for defining communication objectives in intra-personal, relational terms. From this perspective, traditional cognitive and attitudinal objectives such as retention, cognition and attitude become respectively, accuracy, understanding and agreement (Grunig & Grunig 2001). The coorientational approach emphasizes the boundary-spanning function of communication management and its ability to generate reflective communication measures (van Ruler et al. 2004) instead of generating traditional one-way measures, and therefore makes two-way symmetrical communication possible (Grunig & Hunt 1984).

Communication programs may be ineffective if they encounter blockages in the cognitive processes of the audiences and publics they address. Public opinion, for instance, can be influenced by the fears of isolation experienced by members of a public. This is the main message of the Spiral of Silence Theory. When this mechanism is present, communication objectives have to be revised and focused on breaking the blockage. It is interesting to note that in this case a coorientation approach is particularly useful. The Cognitive Dissonance Theory provides an even broader understanding of these potential blockages by offering an explanation of how attitudes influence people's behavior providing communication managers with an additional argument favoring relationships maintenance as the cornerstone of communication planning.

Although some of the above mentioned theories also offer a framework for the programming phase, there are more relevant theories for translating a plan into tactics. Message strategy is the first step in this phase. Here objectives become messages through a rhetorical and negotiating process. Using framing theories, it can be argued that interpersonal and written communication are used to manage meaning, to make sense of the environment, to translate meaning and to share it with other people, with the final goal of leading them to action (Fairhurst and Sarr 1996). Message development becomes a process of identity elicitation, in that it results from a negotiation between the identity of the organization

(in Fischer and Ury terms, its “interests”) and its environment. From this perspective message strategy is a leadership tool. Media strategy is the second step of the programming phase. It requires an understanding of which media the audiences and publics use and why. Uses and Gratifications Theory, for instance, states that people use media based on what kind of gratification they receive from them. Communication planners, therefore, have to take into consideration these criteria to match message typologies with the right media. Petty and Cacioppo posit that people may consume messages by actively elaborating them (the central route) or by processing them passively (the peripheral route). Understanding the cognitive processes of audiences and publics enables communication planners to better choose channels.

The above mentioned theories provide the conceptual framework for defining specific communication objectives and for developing effective messages which by definition also contain the potential parameters for evaluative research, an area of communication management still often given little attention in practice. To fill this gap, academic applied research could contribute by developing measurement tools for program evaluation built upon the relevant theories in psychology and sociology.

## 2. The field of Knowledge Communication

### *2.1. The importance of knowledge communication in management*

Communicating professional knowledge is a key activity for today’s specialized workforce. The efficient and effective transfer of experiences, insights, and know-how among different experts and decision makers is a prerequisite for high-quality *decision making* and co-ordinated, organizational action (Straub & Karahanna 1998). Situations of such deliberate (interfunctional) *knowledge transfer* through interpersonal communication or group conversations (Gratton & Goshal 2002) can be found in many business constellations, as the following typical examples illustrate: Technology experts present their evaluation of a new technology to management in order to jointly devise a new production strategy (McDermott 1999). Engineers who have discovered how to master a difficult manufacturing process need to convey their methods to engineers in other business units (Szulanski 1996 & 1999). Legal experts brief a management team on the implications of new regulations on their business model (Wilmotte & Morgan 1984). *Experts* from various domains



need to share their views and insights regarding a common goal in order to agree on a common rating of risks, requirements (Browne & Ramesh 2002), industries or clients. Project leaders need to present their results to the upper management and share their experiences of past projects in order to assess the potential of new project candidates (Schindler & Eppler 2003). Scientists who work as drug developers present new avenues for future products that business unit managers must assess. Market researchers present their statistical analyses of recent consumer surveys to the head of marketing (Boland et al. 2001). Strategy consultants present the findings of their strategic company assessment to the board of directors in order to devise adequate measures (Creplet et al. 2001). What these diverse situations all have in common is the problem of *knowledge asymmetry* (Sharma 1997) that has to be resolved through interpersonal communication. While the manager typically has the authority to make strategic or tactical decisions, he or she often lacks the specialized expertise required to make an informed decision on a complex issue (Watson 2004). Because of the wide scope of decisions that need to be made, a manager frequently has to delegate the decision preparation to experts who – based on their professional training and previous experience – can analyze complex situations or technological options in a more reliable manner. The results of such analyses then need to be communicated back to the manager, often under considerable time constraints. The knowledge communication challenge, however, begins long before that, at the time when the manager has to convey his or her knowledge needs and decision constraints to the experts in order to delegate the analysis task effectively.

## *2.2. The concept of knowledge communication*

Based on the reasoning described in the previous section, we define *knowledge communication* as the (deliberate) activity of interactively conveying and co-constructing insights, assessments, experiences, or skills through verbal and non-verbal means. Knowledge communication has taken place when an insight, experience or skill has been successfully reconstructed by an individual because of the communicative actions of another. Knowledge communication thus designates the successful transfer of know-how (e.g., how to accomplish a task), know-why (e.g., the cause-effect relationships of a complex phenomenon), know-what (e.g., the results of a test), and know-who (e.g., the experiences with others)

through face-to-face (co-located) or media-based (virtual) interactions. This type of knowledge communication can take place synchronously or asynchronously<sup>2</sup>. The first mode of communication refers to (often face to face) real-time interactions, while the latter designates delayed (usually media-based) interactions. We use the term *knowledge dialogues* for the first type of (synchronous) knowledge communication, stressing the interactive and collaborative style of knowledge exchange in this communication mode (see Isaacs 1997; Nonaka et al. 2000). Depending on the knowledge-focused goal of such dialogues, we distinguish among *Crealogues* (that focus on the creation of new insights), *Sharealogues* (facilitating knowledge transfer), *Assessalogues* (focusing on the evaluation of new insights) and *Doalogues* (e.g., turning understanding into committed action, i.e., 'talking the walk'). Each type of knowledge dialogue requires different behavior and interaction patterns and support measures (e.g., whereas Assessalogues require critical, convergent evaluation tools, Crealogues require an open atmosphere for divergent thinking and rapid idea generation without judgment). In this understanding, knowledge communication is *more* than communicating information (e.g., facts, figures, events, situations, developments, etc.) or emotions (e.g., fears, hopes, reservations, commitment) because it requires conveying context, background, and basic assumptions. It requires the communication of personal insights and experiences. Communicating insights requires the elicitation of one's rationale and reasoning (i.e., one's argumentation structure), of one's perspective, ratings and priorities, and of one's hunches and intuition. At times it may even be necessary to present an overview of the expert's relevant skills along with his/her previous professional experiences and credentials (Lunce et al. 1993) in order to build trust and enable an adequate atmosphere for effective knowledge transfer. Thus, in addition to pure information (and at times emotion), a myriad of other indicators need to be provided in order to transfer knowledge. These indicators help the person who requires insights from another to understand the other's perspective, to re-construct the other's insights correctly, and to connect them to one's own prior knowledge. Still, knowledge communication does not only differ in terms of *what* is communicated (knowledge in context rather than isolated data or infor-

<sup>2</sup> Both modes can be used in one-to-one or one-to-many contexts. Both modes can rely on speech, text, graphics, and other means of communication (i.e., verbal and non-verbal).

mation<sup>3</sup>), but also *how* one communicates. The transfer of information can often be successful without additional effort beyond an ordinary, every day communication style. Communicating expertise-based, complex insights, by contrast, calls for didactic techniques and at times sophisticated indirect speech acts and visualization means that help the other side to become actively involved in the communication and engage in a collaborative, goal-directed sense making process – a prerequisite for the construction of new knowledge (see Weick 1995). The process of knowledge communication hence requires more reciprocal interaction between decision makers and experts because both sides only have a fragmented understanding of an issue and consequently can only gain a complete comprehension by iteratively aligning their mental models. All of this means that when we communicate knowledge, we are still communicating information and emotions, but we also create a specific type of context so that this information can be used to re-construct insights, create new perspectives, or acquire new skills. This (interpersonal) communication perspective on knowledge transfer has already been emphasized by other researchers – who explicitly label this view as ‘knowledge communication’ – (Scarborough 1995: 997; Antonelli 2000; Harada 2003; Reiserer et al. 2002) and by several practitioners (e.g., Watson 2004). Nevertheless, these authors have often treated knowledge communication as a kind of black box that is described only in broad terms and general traits, such as the major communication goals or steps. By examining the communication problems which often impede knowledge transfer in detail, we can look into this black box and propose pragmatic ways of improving knowledge communication, especially among experts and managers where the chasm between in-depth knowledge and decision authority is particularly apparent.

<sup>3</sup> Our distinction between data, information, and knowledge follows the main stream conception found in current literature (see for example Davenport & Prusak 1998). We view data as isolated recordings that are often generated automatically and cannot be directly used to answer questions. Information is connected, condensed or generally processed data that allows an individual to answer questions. Knowledge is what enables an individual to ask relevant questions (Newman & Newman 1985: 499). It refers to the capability of an individual to solve problems (Probst et al. 1999). Information only becomes knowledge, if a person interprets that information correctly, connects that piece of information with his or her prior knowledge, and can apply it to problems or decisions (see also Alavi & Leidner 2001)

### 2.3. Problems in communicating knowledge among experts and decision makers

In order to better understand the problems that can impede the effective transfer of decision-relevant knowledge from experts to managers and from managers to experts, we will review relevant constructs and prior findings from social and engineering sciences, as there are in fact numerous concepts that describe issues related to sub-optimal knowledge transfer. These concepts regard topics such as interdepartmental knowledge transfer, professional communication, decision making, communication technology, or the nature of expert knowledge. By screening these disciplines and topic areas, we can establish a first overview of possible knowledge communication problems and we can create a systematic terminology to speak more explicitly (and consistently) about knowledge communication barriers. Some of the previously identified barriers of knowledge communication are summarized in Table 1. The 'Impact on' column designates whether the particular concept is mostly a challenge of decision makers or of experts, or for both professional groups.

*Table 1: Key research concepts that illustrate knowledge communication barriers*

Key Concept / Knowledge Communication Barrier	Description	Impact on	References
Decision problems such as plunging in, shooting from the hip, poor feedback, taking shortcuts, frame blindness etc.	The decision maker may for example believe that he/she can make a complex decision right away without looking further at the provided analysis.	Decision makers	Russo & Shoemaker 1989
Communication biases (audience tuning, misattribution bias, saying -is-believing, shared reality)	The knowledge is inadvertently manipulated through communication itself: <i>-Audience Tuning:</i> Communicators spontaneously tune their messages to: -the personal characteristics of the audience -the situational factors <i>-Misattribution Bias:</i> Communicators tend to consider their audience-tuned messages to be about the topic of the message rather than about the audience <i>-Saying-Is-Believing Effect:</i> Auto-persuasion has stronger effects because one does not activate regular mechanisms of critical reflection. <i>-Shared Reality:</i> You consider your audience-tuned message to provide objective, accurate information on the message topic because it was shared with others.	Experts and decision makers	Higgins 1999
Defensive routines (skilled incompetence, learned helplessness, easing -in, etc.)	New knowledge is sometimes not accepted (or provided) due to mechanisms or habits that prevent the identification and acceptance of one's own ignorance. This may lead to a reduced effort to understand complex issues (learned helplessness).	Decision makers	Argyris 1986 & 1990
Knowledge disavowal	A number of factors have been found which limit information use in organizations, such as not spending enough time collecting advice, refusal to share, fear of exposure, etc. Knowledge disavowal occurs when reliable and relevant information is not shared among decision makers.	Decision makers	Zaltman 1983; Deshpande & Kohli 1989

Knowledge sharing hostility	Knowledge communication fails because the 'knowledge giver's are reluctant to share their insights due to micropolitics, strenuous relationships, or due to fear.	Experts	Husted & Michailova 2002
Micropolitics of knowledge	The 'knowledge claims' of an expert are discredited by the decision makers due to their differing (hidden) agenda, because of a coalition of people with an alternative view, or due to the expert's lack of formal authority.	Decision makers	Lazega 1992
Internal knowledge stickiness	Knowledge can sometimes not be transferred because of arduous relationships or casual ambiguities regarding the knowledge or because of the lack of absorptive capacity of the knowledge receivers.	Decision makers	Szulanski, 1996 & 1999
Groupthink	A (management) team may not truly listen to the input of an expert because of the team's group coherence and group dynamics sometimes block outside advice and feel omniscient.	Decision makers	Janis 1982
Information overload	An individual is sometimes not able to integrate new information into the decision making process because too much complex information has to be interpreted too quickly.	Decision makers	O'Reilly 1980; Eppler & Mengis 2004
Self/Other effect	Individuals tend to discount advice and favor their own opinion.	Decision makers	Yaniv & Kleinberger 2000
Knowing-Doing gap / Smart talk trap	Sometimes organizations know where a problem resides and how to tackle it, but do not move from knowledge to action (due to unhealthy internal competition or lacking follow-up).	Decision makers	Pfeffer & Sutton 2000
Paradox of expertise / Curse of Knowledge	Experts sometimes find it difficult to articulate their knowledge or rephrase their insights in a way that non-experts can relate to. An insight seems to them self-evident whereas for others it is in fact difficult to grasp.	Experts	Hinds 1999; Johnson 1983
Expert inconsistency	Sometimes experts indicate other rules than they actually apply in their problem solving.	Experts	Johnson 1983
Terminology Illusion	Experts tend to overestimate the notoriety of terms at the limits of every day language and specialized language. In consequence they overestimate the level of understanding of non-experts of what they communicate.	Experts	Rambow 2000
Ingroup outgroup behavior	We tend to interact more with likewise groups than with others thus reducing our changes to acquire radically new knowledge.	Decision makers	Blau 1977
Task closure	In our communication, we may choose to use a one way communication medium because it permits us to close an open task without having to have a conversation. Thus leaner communication channels are used than may be necessary. In other words: We tend to want to close a communication process in order to complete an open task.	Decision makers	Straub & Karahanna 1998; Meyer 1962
Not-Invented here syndrome	Knowledge from others is sometimes rejected because it originated elsewhere.	Decision makers	Katz & Allen 1982
Preference for outsiders	This is the opposite of the NIH syndrome and describes the tendency of managers to value outside knowledge higher than internal knowledge because it has a higher status, it is scarcer (because of difficult access) and because it is less scrutinized for errors than internal knowledge.	Decision makers	Menon & Pfeffer 2003
False consensus effect	We assume others see situations as we do, and fail to revise our framing.	Decision makers	Manzoni & Barsoux 2002
Inert knowledge	The knowledge that the decision maker has acquired from the expert does not come to mind when it is needed or useful for decision making or actions. The transferred knowledge is stuck in the situation where it has been acquired.	Decision makers	Whitehead 1929
Common knowledge effect	The tendency of a group to focus merely on commonly shared (rather than unique) pieces of information.	Experts and decision makers	Gigone & Hastie 1993
Lack of common ground	Common ground refers to the manager's and expert's assumptions about their shared background beliefs about the world. If those assumptions are wrong or inconsistent communication becomes more difficult.	Experts and decision makers	Clark & Schaefer 1989; Olson & Olson 2000



The problems listed in Table 1 are neither mutually exclusive nor collectively exhaustive. Nevertheless, Table 1 summarizes many of the key pitfalls in communicating knowledge. It is in the nature of the phenomenon that these problems are not isolated, but that they rather interact in many, sometimes unpredictable ways. Finding solutions to these issues is consequently not a simple task. It requires a mix of deepened understanding of the *differences* among knowledge communicators (i.e., decision makers and experts), richer communication *means* (such as real-time visual communication tools or conversation management approaches), as well as paying greater attention to the *contextual factors* of knowledge communication (such as the nature of the exchanged knowledge).

## Conclusion

Organizations evolve as a result of the conversations inside and outside their boundaries. Organization members conduct strategic dialogues which are influenced by the dialogues taking place between organization members and external stakeholders, as well as by those between external stakeholders. Out of these conversations strategic plots and industry paradigms are formed (Rindova & Fombrun 1999). As pointed out by Edward L. Bernays in 1923 in reference to public relations, the communication manager contributes to these processes by, “interpreting the public to his client and helping interpreting his client to the public. He helps to mould the action of his client as well as to mould public opinion” (quoted by Grunig & Hunt 1984: 42). The field of knowledge communication offers a useful conceptual framework for understanding the mechanisms underlying the transfer of complex insights between the parties involved in the conversations between organizations and their various internal and external stakeholders. Knowledge communication’s contribution is also relevant in the strategic domain of corporate communication - in the area of relationship cultivation in which knowledge asymmetries need to be overcome in order to build trust and hence higher quality relationships (Grunig 1999), and in the area of identity formation. Insights from knowledge communication are also crucial to the tactical domain of corporate communication. In particular, they expand the understanding of cognitive and social mechanisms in the inter-personal realm, allowing a co-orientational understanding of communication processes.

## References "Corporate Communication"

- ALBERT, S.; ASHFORTH, B.E. & DUTTON, J.E. (2000). Organizational identity and identification: charting new waters and building new bridges. *Academy of Management Review* 25/1:13-17.
- ALBERT, S. & WHETTEN, D. (1985). Organizational Identity. In: CUMMINGS, L. & STAW, B. (eds.). *Research in Organizational Behavior* 7. Greenwich, CT: Jai Press: 263-295.
- ASHFORTH, B.E. & MAEL, F.A. (1989). Social Identity Theory and the Organization. *Academy of Management Review* 14/1: 20-39.
- ASHFORTH, B.E. & MAEL, F.A. (1996). Organizational identity and strategy as a context for the individual. In: CUMMINGS, L. & STAW, B. (eds.). *Research in Organizational Behaviour* 17. Greenwich, CT: Jai Press: 413-461.
- BALMER, J. (2001). From the Pentagon: A New Identity Framework. *Corporate Reputation Review* 4/1.
- BALMER, J.M.T. & SOENEN, G.B. (1997). Operationalising the concept of Corporate identity: articulating the corporate identity mix and the corporate identity management mix. Glasgow, UK: Department of Marketing, Working Paper Series, University of Strathclyde.
- BERENS, G. & VAN RIEL, C.B.M. (2004). Corporate Associations in the Academic Literature: three main streams of through in the Reputation measurement literature. *Corporate Reputation Review* 7/2: 169-170.
- BERG, P. & GAGLIARDI, P. (1985). Corporate images: A Symbolic Perspective of the Organization-Environment Interface. Paper presented at the SCOS Conference on Corporate Images. Antibes.
- BLUMLER, J.G. & KATZ, E. (1974). *The uses of mass communications: Current perspectives on gratifications research*, Beverly Hills, CA: Sage.
- BONDURA, A. (1977). *Social Learning Theory*, Englewood Cliffs, NJ: Prentice-Hall.
- BROCKNER, J. (1988). The effects of work layoffs on survivors: research, theory, and practise. *Research in Organizational Behavior* 10: 213-255.
- CARROLL, C. & VAN RIEL, C. (2001). We who are many form one body: The impact of multiple identities on organizational identification. Working paper, Dec. 15<sup>th</sup>, 2001.
- CHREIM, S. (2002). Influencing Members' Organizational Identification During Major Change: a communication-based perspective. *Human Relations* 55/9: 1117-1137.
- CIALDINI, R. (1996). *Influence. Science and Practice*, New York:HarperCollins.
- CUTLIP, S.M.; CENTER, A.H. & BROOM, G.M. (2000). *Effective Public Relations*, Upper Saddle River, NJ: Prentice Hall International Limited.
- DAVIES, G.; CHUN, R.; VINHAS DA SILVA, R. & ROPER, S. (2001). The Personification Metaphor as a Measurement Approach for Corporate Reputation. *Corporate*



- Reputation Review* 4/2: 113-127.
- DAVIES, G.; CHUN, R.; VINHAS DA SILVA, R. & ROPER, S. (2003). *Corporate Reputation and Competitiveness*, London: Routledge.
- DICK, R. VAN; ULLRICH, J. & TISSINGTON, P.A. (2004). Working Under a Black Cloud: How to Sustain Organizational Identification After a Merger. Aston Business School Research Papers RP0419.
- DUTTON, J.E. & DUKERICH, J.M. (1991). Keeping an Eye on the Mirror: Image and Identity in Organizational Adaptation. *Academy of Management Journal* 34/3: 517-554.
- DUTTON, J.E.; DUKERICH, J.M. & HARQUAIL, C.V. (1994). Organizational images and member identification. *Administrative Science Quarterly* 39/2: 239-263.
- ELSBACH, K.D. & KRAMER, R.M. (1996). Member's Responses to Organizational Identity Threats: Encountering and Countering the Business Week Rankings. *Administrative Science Quarterly* 41: 442-476.
- FAIRHURST, G.T. & SARR, R.A. (1996). *The Art of Framing*, San Francisco: Jossey-Bass Inc.
- FESTINGER, L. (1957). *A theory of cognitive dissonance*, Evanston: Row Peterson.
- FIOL, C.M. (2002). Capitalizing on Paradox: The Role of Language in Transforming Organizational Identities. *Organization Science* 13/6: 653-666.
- FISCHER, K. & URY, W. (1981). *Getting to Yes: Negotiating Agreement without giving in*, Boston, MA: Houghton Mifflin.
- FISCHER, R. (1997). A Theoretical Basis for Public Relations. In: BASKIN, O.; ARONOFF, C. & LATTIMORE, D. (eds.). *Public Relations. The Profession and the Practice*. Madison: Irwin/McGraw-Hill: 53-70.
- FOMBRUN, C.; GARDBERG, N. & SEVER, J. (2000). The Reputation Quotient: A Multi-stakeholder measure of Corporate Reputation. *Journal of Brand Management* 7/4: 241-255.
- FOMBRUN, C. & SHANLEY, M. (1990). What's in a name? Reputation Building and Corporate Strategy. *Academy of Management Journal* 33: 233-258.
- FOREMAN, P. & WHETTEN, D. (2002). Member's identification with multiple-identity organizations. *Organization Science* 13/6: 618-635.
- FREEMAN, R.E. (1984). *Strategic Management: A stakeholder approach*, Boston: Pitman.
- GIOIA, D.A.; SCHULTZ, M. & CORELY, K.G. (2000). Organizational Identity, Image and Adaptive Instability. *Academy of Management Review* 25/1: 63-81.
- GRUNIG, J. (1993). Image and Substance: From Symbolic to Behavioral Relationships. *Public Relations Review* 19/2: 121-139.
- GRUNIG, J. (1999). *Qualitative Methods for Assessing Relationships Between Organizations and Publics*, Gainesville, FL: The Institute for Public Relations,

- Commission on Public Relations Measurement and Evaluation.
- GRUNIG, J. (ed.). (1992). *Excellence in Public Relations and Communication Management*, Hillsdale: Lawrence Erlbaum Associates.
- GRUNIG, J. & GRUNIG, L. (2001). *Guidelines for Formative and Evaluative Research in Public Affairs*, Gainesville, FL: The Institute for Public Relations, Commission on Public Relations Measurement and Evaluation.
- GRUNIG, J. & HUNT, T. (1984). *Managing Public Relations*, Fort Worth: Harcourt Brace Jovanovich College Publisher.
- GRUNIG, L.A. et al. (2002). *Excellent Public Relations and Effective Organizations: A Study of Communication Management in Three Countries*, Hillsdale: Lawrence Erlbaum Associates.
- HATCH, M. & SCHULTZ, M. (2002). The dynamics of organizational identity. *Human Relations* 55/8: 989-1018.
- HATCH, M. & SCHULTZ, M. (1997). Relations between Organizational Culture, Identity and Image. *European Journal of Marketing* 31: 5-6.
- ILLIA, L. (2006). Threat perception in changing traits of organizational identity. PhD Thesis. To be published. University of Lugano.
- ILLIA, L. & LURATI, F. (2006). Stakeholder Perspectives on Organizational Identity: Searching for a Relationship Approach. *Corporate Reputation Review* 8/4: 293-304.
- LURATI, F. (2005). La Maturità delle Relazione Pubbliche. *Sviluppo & Organizzazione* 212: 115-120.
- MAEL, F. & ASHFORTH, B.E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of organizational behavior* 13:103-123.
- MCLEOD, J.M. & CHAFFEE, S.H. (1973). Interpersonal Approaches to Communication Research. *America Behavioral Scientist* 16/4: 483-88.
- MITCHELL, R.K.; AGLE, B.R. & WOOD, D.J. (1997). Toward a theory of stakeholder identification and salience: defining the Principle of who and what really counts. *Academy of Management Review* 22/4: 853-886.
- MOSS, D.A. & WARNABY, G. (2000). Strategy and public relations. In: MOSS, D.A.; VERCIC, D. & WARNABY, G. (eds.). *Perspectives on public relations research*. London: Routledge: 59-85.
- NEWELL, S. & GOLDSMITH, R. (2001). The Development of a Scale to Measure Corporate Credibility. *Journal of Business Research* 52/3: 235-247.
- NOELLE-NEUMANN, E. (1984). *The Spiral of Silence*, Chicago: University of Chicago.
- OLINS, W. (1978). *The Corporate Personality: An Inquiry into the Nature of Corporate Identity*, London: Thames-Hudson.
- PARASURAMAN, A.; ZEITHAML, V.A. & BERRY, L. (1985). A Conceptual Model of Service Quality and its Implications for Future Research. *Journal of Marketing*. 49: 41-50.

- PETTY, R. & CACIOPOPO, J. (1986). The Elaboration Likelihood Model of Persuasion. In: BERKIWITZ, L. (ed.). *Advances in Experimental Social Psychology* 19. New York: Academic Press: 123-205.
- PRATT, M.G. & FOREMAN, P.O. (2000). Classifying Managerial Responses to Multiple Organizational Identities. *The Academy of Management Review* 25/1: 862-898.
- REGER, R.K.; GUSTAFSON, L.T.; DEMARIE, S.M. & MULLANE, J.V. (1994). Reframing the Organization: Why Implementing Total Quality is Easier Said than Done. *Academy of Management Review* 19/3: 565-584.
- RIEL, C. VAN (1995). *Principles of Corporate Communication*, Harlow: Prentice Hall.
- RINDOVA, V.P. & FOMBRUN, C.J. (1999). Constructing Competitive Advantage: The Role of Firm-Constituent Interpretation. *Strategic Management Journal* 20: 691-710.
- ROGERS, E. (1962). *Diffusion of Innovation*, New York: The Free Press.
- ROKEACH, M. (1966). Attitude Change and Behavioral Change. *The Public Opinion Quarterly* 30/4: 529-550.
- ROKEACH, M. (1968). The Role of Values in Public Opinion Research. *The Public Opinion Quarterly* 32/4: 547-559.
- RULER, B. VAN; VERCIC, D.; BÜTSCHI, G. & FLODIN, B. (2004). A First Look for Parameters of Public Relations in Europe. *Journal of Public Relations Research* 16/1: 1-34.
- SCHULTZ, M.; HATCH, M. & LARSEN, M. (eds.). (2000). *The Expressive Organization: Linking Identity, Reputation, and the Corporate Brand*, Oxford: Oxford University Press.
- SOENEN, G. & MOINGEON, B. (2002). The Five Facets of Collective Identities. In: MOINGEON, B. & SOENEN, G. (ed.). *Corporate and Organizational Identities*. London: Routledge.
- WHITE, J. & DOZIER, D. (1992). Public Relations and Management Decision Making. In: GRUNIG, J. (ed.). *Excellence in Public Relations and Communication Management*. Hillsdale: Lawrence Erlbaum Associates.
- WINDSON, D. (1992). Stakeholder management in multinational enterprises. In: BRENNER, S.N. & WADDOCK, S.A. (eds.). *Proceedings of the Third Annual Meeting of the International Association for Business and Society*. Belgium: 121-128.

## References “Knowledge Communication”

- ALAVI, M. & LEIDNER, D. (2001). Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues. *MIS Quarterly* 25/1: 107-136.
- ALVESSON, M. (1993). Organizations as Rhetoric: Knowledge-Intensive Firms and the Struggle of Ambiguity. *Journal of Management Studies* 3/6: 997-1020.

- ANTONELLI, C. (2000). Collective Knowledge Communication and Innovation: The Evidence of Technological Districts. *Regional Studies* 34/6: 535-547.
- ARGYRIS, C. (1990). *Overcoming Organizational Defenses*, New York, NY: Prentice-Hall.
- ARGYRIS, C. (1986). Skilled Incompetence. *Harvard Business Review* 64/5: 74-79.
- BLACKLER, F. (1995). Knowledge, Knowledge Work and Organizations. *Organization Studies* 16/6: 1021-1046.
- BLAU, P.M. (1977). *Inequality and Heterogeneity: A Primitive Theory of Social Structure*, New York: Free Press.
- BOLAND, R.J. et al. (2001). Knowledge Representations and Knowledge Transfer. *Academy of Management Journal* 44/2: 393-417.
- BOUTY, I. (2000). Interpersonal and Interaction Influences on Informal Resource Exchanges between R&D Researchers across Organizational Boundaries. *Academy of Management Journal* 43/1: 50-65.
- BROMME, R.; RAMBOW, R. & NÜCKLES, M. (2001). Expertise and Estimating what other People Know: The Influence of Professional Experience and Type of Knowledge. *Journal of Experimental Psychology* 7/4: 317-330.
- BROWNE, G.J. & RAMESH, V. (2002). Improving Information Requirements Determination: a cognitive perspective. *Information & Management* 39: 625-645.
- CLARK, H.H. & SCHAEFER, F.S. (1989). Contributing to Discourse. *Cognitive Science* 13: 259-294.
- CREPLET, F. et al. (2001). Consultants and Experts in Management Consulting Firms. *Research Policy* 30: 1517-1535.
- DAVENPORT, T. & PRUSAK, L. (1998). *Working Knowledge: How Organizations Manage What They Know*, Boston: Harvard Business School Press.
- DESHPANDE, R. & KOHLI, A. K. (1989). Knowledge Disavowal: Structural Determinants of informationProcessing Breakdown in Organizations. *Knowledge* 11/2: 155-169.
- EEMEREN, H. VAN & GROOTENDORST, R. (1992). *Argumentation, Communication, and Fallacies: A Pragma-Dialectical Perspective*, Hillsdal, NJ: Lawrence Erlbaum.
- EPPLER, M.; RÖPNACK, A. & SEIFRIED, P. (1999). Improving Knowledge Intensive Processes through an Enterprise Knowledge Medium. In: PRASAD, J. (ed.). *Managing Organizational Knowledge for Strategic Advantage: The Key Role of Information Technology and Personnel*. Proceedings of the 1999 ACM SIGCPR Conference: 222-230.
- EPPLER, M. & MENGIS, J. (2004). The Concept of Information Overload. *The Information Society – an International Journal* 20/5: 1-20.
- GIGONE, D. & HASTIE, R. (1993). The Common Knowledge Effect: Information Sharing and Group Judgment. *Journal of Personality and Social Psychology* 65: 959-974.

- GOLDHABER, G.M.; YATES, M.P.; PORTER, D.T. & LESNIAK, R. (1978). Organizational Communication. *Human Communication Research* 5: 76-96.
- GRATTON, L. & GHOSHAL, S. (2002). Improving the Quality of Conversations. *Organizational Dynamics* 31: 209-223.
- GÜLICH, E. (2003). Conversational Techniques used in Transferring Knowledge between Medical Experts and Non-Experts. *Discourse Studies* 5/2: 235-263.
- HAGGLUND, S.; LÖWGREN, J.; RANKIN, I. & SOKOLNICKI, T. (1992) Communication Knowledge for Knowledge Communication. *Man-Machine Studies* 37: 215-239.
- HARADA, T. (2003). Three Steps in Knowledge Communication: the Emergence of Knowledge Transformers. *Research Policy* 32: 1737-1751.
- HIGGINS, T. (1999). Saying is Believing Effects: When Sharing Reality About Something Biases Knowledge and Evaluations. In: THOMPSON, L; LEVINE, J. & MESSICK, D. (eds.) (1999). *Shared Cognition in Organization: The Management of Knowledge*, Mahwah: Erlbaum.
- HINDS, P.J. (1999). The Curse of Expertise: The Effects of Expertise and Debiasing Methods on Predictions of Novice Performance. *Journal of Experimental Psychology: Applied* 5/2: 205-221.
- HUSTED, K. & MICHAILOVA, S. (2002). Diagnosing and Fighting Knowledge-Sharing Hostility. *Organizational Dynamics* 31/1: 60-73.
- KROGH, G. VON & ROOS, J. (1995). *Organizational Epistemology*, New York, NY: St. Martin's Press.
- ISAACS, W. (1997). *Dialogue and the Art of Thinking Together: A Pioneering Approach to Communicating in Business and in Life*, New York: Doubleday.
- JANIS, I. (1982). *Groupthink: Psychological Studies of Policy Decisions and Fiascoes*, Boston: Houghton Mifflin.
- JOHNSON, P. E. (1983). What Kind of Expert should a System be? *Journal of Medicine and Philosophy* 8: 77-97.
- KATZ, R. & ALLEN, T.J. (1982). Investigating the Not Invented Here (NIH) Syndrome: A Look at the Performance, Tenure, and Communication Patterns of 50 R&D Project Groups. *R&D Management* 12/1: 7-19.
- KIRMEYER, S.L. & LIN, T. (1987). Social Support: Its Relationship to Observed Communication with Peers and Superiors. *Academy of Management Journal* 30/1: 151-162.
- LAZEGA, E. (1992). *Micropolitics of Knowledge. Communication and Indirect Control in Workgroups*, New York: deGruyter.
- LUNCE, S.E.; IYER, R.K.; COURTNEY, L.M. & SCHKADE, L.L. (1993). Experts and Expertise: An Identification Paradox. *Industrial Management and Data Systems* 93/9: 3-9.
- MANZONI, J.-F. & BARSOUX, J.-L. (2002). The Set-up-to-fail Syndrome, How Good

- Managers Cause Great People to Fail, Cambridge: Harvard Business School Press.
- MCDERMOTT, R. (1999). Learning across Teams. *Knowledge Management Review* 8: 32-36.
- MCLEOD, J.M. & CHAFFEE, S.H. (1973). Interpersonal Approaches to Communication Research. *American Behavioral Scientist* 16/4: 469-499.
- MENON, T. & PFEFFER, J. (2003). Valuing Internal vs. External Knowledge: Explaining the Preference for Outsiders. *Management Science* 49/4: 497-513.
- MEYER, R.L. (1962). A Communications Theory of Urban Growth, Boston: MIT Press.
- NEWMAN, J. & NEWMAN, R. (1985). Information work: the new divorce? *British Journal of Sociology* 24: 497-515.
- NONAKA, I.; TOYAMA, R. & KONNO, N. (2000). SECI, ba and Leadership: a Unified Model of Dynamic Knowledge Creation. *Long Range Planning* 33: 5-34.
- OLSON, G. & OLSON, J. (2000). Distance Matters. *Human-Computer Interaction* 15/2-3: 107-137.
- O'REILLY, C.A. (1980). Individuals and Information Overload in Organizations: Is more necessarily better? *Academy of Management Journal* 23: 684-696.
- PFEFFER, J. & SUTTON, R.I. (2000). The Knowing-Doing Gap: How Smart Companies Turn Knowledge into Action, Boston: Harvard Business School Press.
- PROBST, G.; ROMHARDT, K. & RAUB, S. (1999). Managing Knowledge: Building Blocks for Success, London: Wiley.
- RAMBOW, R. (2000). Experten-Laien-Kommunikation in der Architektur, Münster: Waxmann.
- REISERER, M.; ERTL, B. & MANDL, H. (2002). Fostering Collaborative Knowledge Construction in Desktop Videoconferencing. Effects of Content Schemes and Cooperation Scripts in Peer Teaching Settings. Paper Presented at the International Workshop on Barriers and Biases in Computer-Mediated Knowledge Communication - And How they May Be Overcome, Münster, Germany.
- RUSSO, J.E. & SHOEMAKER, P.J.H. (1989). Decision Traps, New York: Simon and Schuster.
- SCARBROUGH, H. (1995). Blackboxes, Hostages and Prisoners. *Organization Studies* 16/6: 991-1019.
- SCHINDLER, M. & EPPLER, M. (2003). Harvesting Project Knowledge: A Review of Project Learning Methods and Success Factors. *International Journal of Project Management* 21: 219-228.
- SHARMA, A. (1997). Professional as Agent: Knowledge Asymmetry in Agency Exchange. *Academy of Management Review* 22/3: 758-798.
- STARBUCK, W.H. (1992). Learning by Knowledge-Intensive Firms. *Journal of Management Studies* 29: 147-175.
- STRAUB, D. & KARAHANNA, E. (1998). Knowledge Worker Communications and



- Recipient Availability: Toward a Task Closure Explanation of Media Choice. *Organization Science* 9/2: 160-175.
- SZULANSKI, G. (1996). Exploring Internal Stickiness: Impediments to the Transfer of Best Practices within the Firm. *Strategic Management Journal* 17/Winter: 27-43.
- SZULANSKI, G. (1999). The Process of Knowledge Transfer: a Diachronic Analysis of Stickiness. *Organizational Behavior and Human Decision Processes* 82/1: 9-27.
- TVERSKY, A. & KAHNEMANN, D. (1974). Judgement under Uncertainty: Heuristics and Biases, *Science* 1/185: 1124-1131.
- TSOUKAS, H. (1996). The Firm as a Distributed Knowledge System: A Constructionist Approach. *Strategic Management Journal* 17: 11-25.
- VAUGHAN, D. (1997). *The Challenger Launch Decision*, Chicago/London: The University of Chicago Press.
- WATSON, C.M. (2004). Don't blame the engineer. *Sloan Management Review* /Winter: 26-29.
- WEICK, K.E. (1995). *Sensemaking in Organizations*, Thousand Oaks: Sage Publications.
- WHITEHEAD, A.N. (1929). *The Aims of education and other essays*, New York: McMillan.
- WILMOTTE, R.M. & MORGAN, P.I. (1984). The Discipline Gap in Decision Making. *Management Review*, September: 21-24.
- YANIV, I. & KLEINBERGER, E. (2000). Advice taking in decision making: Egocentric discounting and reputation formation. *Organizational Behavior and Human Decision Processes* 83: 260-281.
- ZALTMAN, G. (1983). Knowledge Disavowal in Organizations. In: KILMANN, R.H. et al. (eds.). *Producing useful Knowledge for Organizations*. New York: Praeger: 173-187.