Emotional Sensegiving

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Abstract

Earlier research on strategic sensegiving has discovered numerous tactics that change leaders use to influence their followers' mental models. However, these studies have focused only on the content of the words spoken during the sensegiving process. This has led to an overemphasis of cognitive processes and identity dynamics in the existing theory. At the same time, the role of non-cognitive factors and, especially, emotional arousal, in sensegiving has been understudied.

   To fill this gap in the sensegiving theory, I analyze sensegiving from an emotional perspective in this dissertation. In contrast to previous studies, my empirical analysis goes beyond the content of words spoken. Instead, I use video-based, qualitative analyses to recognize emotional dynamics from non-verbal cues. A total of 1,252 sensegiving instances, which include both the sensegiver's actions and the sense-receivers' reactions, are analyzed in this way. The instances occurred during a strategic change seminar of a Finnish Property Service Company. This analysis is complemented and contextualized by interviews, surveys, and field observation.

   A process theory of emotional sensegiving is generated through the data analysis. Accordingly, emotional sensegiving consists of dozens of micro-sequences that further consist of three micro-phases. The micro-phases are increasing arousal, cognitive (re)framing, and reinforcing commitment. Emotional arousal that is generated during the first micro-phase decays slowly and transfers to the later micro-phases. The arousal becomes associated with cognitive content that is delivered during the subsequent micro-phases. Consequently, the latter content feels more emotional and is better internalized. The use of tactics for increasing emotional arousal is supported by a background process which counters resistant reactions in a pre-emptive way.

   This dissertation contributes to research on sensegiving in four specific ways. First, the recognition of "increasing emotional arousal" as a sensegiving tactic allows scholars to see that the primary purpose of many sensegiving acts is to influence emotions, not cognitions as the previous theory would indicate. Second, the process theory of emotional sensegiving explains how emotional arousal can be used to increase the effectiveness of sensegiving in organizations. Third, the process theory has implications for the current, identity-based sensegiving theories. Most importantly, the need to unfreeze sense-receivers' identities is reduced. Fourth, this thesis illustrates how video-based data collection and analysis methods can be used to enrich our understanding of sensegiving.

Tiivistelmä

Aikaisempi strategista merkitysten luomista käsittelevä tutkimus on tunnistanut lukuisia taktiikoita, joita muutosjohtajat käyttävät vaikuttaakseen seuraajiensa mentaalimalleihin. Aikaisemmat tutkimukset ovat kuitenkin keskittyneet lähinnä sanojen sisällön analysoimiseen. Tämä on johtanut kognitiivisten tekijöiden ja identiteetin ylikorostamiseen nykyisessä teoriassa. Tunteiden ja tiedostamattomien prosessien rooli strategisessa vaikuttamisessa on samanaikaisesti jäänyt tutkimatta.

Pyrin täyttämään tämän tutkimuksen aukon analysoimalla strategista merkitysten luomista emotionaalisesta näkökulmasta. Toisin kuin aikaisemmat tutkimukset, analyysini ei rajoitu pelkästään sanojen sisältöön. Teen sana-analyysien sijaan videoanalyysin ja tunnistan emotionaalisia tekijöitä ei-verbaalisista reaktioista. Kaikkinensa analysoin 1 252 merkityksenluomistilannetta, jotka sisältävät sekä vaikuttajan teot että vaikutettavien reaktiot. Nämä tilanteet toteutuivat erään suomalaisen yrityksen muutosseminaarissa. Kyselyt, haastattelut ja havainnointi täydentävät ja kontekstualisoivat tätä videoanalyysiä.

Analyysin tuloksena syntyy emotionaalinen merkitysten luomisen prosessiteoria. Sen mukaan emotionaalinen merkitysten luominen koostuu lukuisista mikrojaksoista, jotka edelleen koostuvat kolmesta mikrovaiheesta. Nämä mikrovaiheet ovat tunneintensiteetin kasvattaminen, kognitiivinen uudelleen määrittely ja sitoutumisen vahvistaminen. Ensimmäisen mikrovaiheen aikana synnytetty tunneintensiteetti heikkenee hitaasti ja siirtyy myöhempiin mikrovaiheisiin. Tunneintensiteetti assosioituu myöhemmissä mikrovaiheissa keskusteltuun sisältöön. Näin ollen jälkimmäinen sisältö tuntuu voimakkaalta ja se muistetaan paremmin. Tunneintensiteettiä kasvattavien taktiikoiden käyttöä tukee taustaprosessi, joka estää vastustelevat reaktiot etukäteen.

Tämä väitöskirja edistää tutkimusta neljällä tavalla. Ensimmäiseksi se, että "tunneintensiteetin kasvattaminen" tunnistetaan merkitysten luomistaktiikkana auttaa näkemään, että monien taktiikoiden tavoite on vaikuttaa tunteisiin, ei ajatuksiin, niin kuin aikaisempi teoria väittäisi. Toiseksi emotionaalinen merkitysten luomisen prosessiteoria kuvaa, kuinka emootioita voidaan käyttää tehostamaan strategisten merkitysten luomista. Kolmanneksi syntynyt prosessiteoria haastaa aikaisempien identiteettiin keskittyneiden teorioiden väitteitä. Erityisesti tarve vaikutettavien ihmisten vanhojen identiteettien murskaamiselle vähentyy. Neljänneksi tämä väitöskirja kuvaa, kuinka videoanalyysejä voidaan käyttää merkitysten luomisen tutkimiseen.

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Research has been the central thing in my life during the past few years. It has been consuming and taken its toll, but most often it has been a source of joy and excitement. I've worked with several projects and papers, as well as with this dissertation. During this time, I've had to acknowledge several times that I've taken steps in the wrong direction and start over again. And again. Yet, I've learned a lot during the process and each iteration cycle has increased my understanding of the interpersonal cognitive and emotional dynamics in organizations. I'm happy that I've spent all this time working with this thesis and related research. I hope that I will someday look back at this thesis and consider it as an early step.

Numerous people have been part of my research and dissertation process. Many of you have become my friends, Natalia even became my wife. That's been a meaningful part of the process. And the help I've gotten! In many instances, I've kept going and moved forward only because someone has pushed and helped me to do so. I think I owe a lot to many of you.

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Contents

1 INTRODUCTION

Research on strategic change has shifted its focus from structures and processes to understanding how cognitive reorientation can be achieved in organizations. During the past 20 years, numerous scholars have recognized the importance of realigning mental models with the new strategy (Fiss & Zajac, 2006; Gioia & Chittipeddi, 1991; Gioia & Thomas, 1996; Labianca, Gray, & Brass, 2000; Maitlis & Lawrence, 2007; Rouleau, 2005). However, while this cognitive turn has advanced our understanding of strategic change, the latest advances in the research on the human mind are still to be incorporated into the theories of strategic change. It has increasingly been recognized that emotions have a substantial influence on how people understand things and choose to act (Bechara & Damasio, 2005; Damasio, 1994, 2003; Hodgkinson & Healey, 2008; Hodgkinson & Healey, in press; Huy, 2002; Loewenstein, Rick, & Cohen, 2008). Hence, when the purpose is to change what people do in organizations, realigning only their conscious thinking and explicit cognitions is not sufficient. Instead, change leaders also need to influence their emotions. It is only when people "*feel* connected to the strategy" (McKinsey_Quarterly, 2011, emphasis added; see also, Vuori, Healey, & Hodgkinson, 2011) that they really change their behaviors. I investigate in this thesis how emotional arousal can be generated and leveraged during sensegiving to make people truly internalize the new organizational direction.

Sensegiving refers to the process of influencing others' sensemaking and cognitions towards a preferred definition of organizational reality (Gioia & Chittipeddi, 1991). The current understanding is that people's sensemaking is much influenced by their identities (Mills, 2003; Patriotta & Spedale, 2009; Weick, 1995; Weick, Sutcliffe, & Obstfeld, 2005) and that the route to successful sensegiving, therefore, goes through the sense-receivers' identities (Gioia & Thomas, 1996; Pratt, 2000). People are likely to accept only those ideas that allow them to maintain a consistent, positive understanding of themselves; i.e., only those ideas that fit with their identity needs (Weick, 1995: 20). Hence, the existing theory argues, to make people think in radically new ways one must first break their existing identities and then build a new identity

that is consistent with the new idea (see, Mantere, Schildt, & Sillince, in press; Pratt, 2000). For example, when CEO Stephen Elop e-mailed that, "Consumer preference for Nokia declined worldwide. […] at least some of it has been due to our attitude inside Nokia. We poured gasoline on our own burning platform," (Engadget, 2011) he was trying to make Nokia's employees think that whoever they were and whatever they were doing was not going to work; and that they should therefore be open to new alternatives.

Management scholars have recognized a large number of tactics sensegivers use to make their followers abandon old thinking and internalize new thinking. The tactics range from the use of symbolism (Gioia & Thomas, 1996), metaphors (Hill & Levenhagen, 1995), and narratives (Brown, Stacey, & Nandhakumar, 2008) to adapting explanation styles (Rouleau, 2005) and using specific framing language (Fiss & Zajac, 2006). However, practitioners are still unhappy: "only one transformation in three succeeds [...] It seems that, despite prolific output, the field of change management hasn't led to more successful change programs" (McKinsey Quarterly, 2009). Likewise, the increased employee withdrawal intentions (IT-Viikko, 2011), market share decrease from 30.6% to 25.1% within a few months (Gartner, 2011), and the 21% decrease in stock price in one week[1] after Nokia's CEO Stephen Elop's burning platform -sensegiving illustrate how acting exactly as prescribed by the orthodox theory can produce bad outcomes.

There is a fundamental methodological limitation in the existing sensemaking and sensegiving studies that largely explains why their advices are insufficient. They have only analyzed words written on paper, in the form of interview transcripts, field notes, archival materials, and survey answers. Each of the sensemaking (Balogun & Johnson, 2004, 2005; Bechky & Okhuysen, in press; Grant, Dutton, & Rosso, 2008; Maitlis, 2005; Quinn & Worline, 2008; Weick, 1988, 1993; but, Whiteman & Cooper, in press, is an exception) and sensegiving studies (Gioia & Chittipeddi, 1991; Gioia & Thomas, 1996; Gioia, Thomas, Clark, & Chittipeddi, 1994; Maitlis & Lawrence, 2007; Pratt, 2000; Rouleau, 2005) has only recorded words said during sensemaking/sensegiving episodes and then analyzed their content. Yet, much of human communication is non-verbal (e.g., Choi, Gray, & Ambady, 2005), many things beyond people's awareness

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[1] Elop gave out the burning platform memo on 2011-02-08. Nokia's stock price decreased from 11.28 USD to 8.84 USD in seven days. see:
http://www.google.com/finance?client=ob&q=NYSE:NOK [accessed 2011-07-21]

can influence their emotional states (e.g., Russell, 2003), and people interpret any information differently depending on their own emotional state (e.g., Izard, 2009). When only words are analyzed, all these emotional effects are missed.

There are three specific points about emotions that are especially relevant for sensegiving. First, research has shown that people make choices not based on their knowledge but based on their affective reactions to that knowledge (Bechara & Damasio, 2005). Hence, it is not sufficient that sensegivers make people cognitively know something but they must ensure that they will also affectively feel in a way that makes them prefer the intended alternatives. Second, people internalize and remember those things that are associated with strong emotional reactions better than neutral content (Finn & Roediger, 2011; Phelps, 2006). Hence, to make people remember their message, sensegivers should ensure that the sense-receivers react to it emotionally. Third, people often misattribute the source of their emotional arousal such that arousal created in a previous moment can transfer into a next moment, making whatever people hear in the next situation feel highly emotional (see e.g., Foster, Witcher, Campbell, & Green, 1998; Zillmann, 1971). Hence, it might be possible for sensegivers to manipulate sense-receivers' emotional arousal first and only then make them think that this arousal is triggered by the actual, cognitive message the sensegivers are delivering.

However, the existing sensegiving research has not focused on or has had no access to these kinds of emotional dynamics. Even ethnographic sensegiving research (e.g., Pratt, 2000), which is supposed to be close to people's experience, misses a lot of what is going on in any situation. A researcher making field notes simply cannot record all the facial expressions, changes in the tone of voice, body postures, and other emotional cues displayed and exchanged in social situations. Instead, the focus tends to be on the words—and the subsequent analyzes tend to focus on the content and meaning of those words. Consequently, I argue, the existing sensegiving theory tends to overemphasize the cognitive meaning of words said during sensegiving episodes. At the same time, the existing sensegiving theory remains ignorant to the emotional influences on the way people extract, interpret, remember, and act on the information delivered by sensegivers. By way of an illustration, according to the current identity-and-meanings-dominated sensegiving theory, sending an e-mail saying that "our platform is burning"

(as Nokia's Elop did) should produce the same effect as intensive, emotional, face-to-face communication of the same message. Yet, it is obvious that this is not the case.

To fill this gap in the sensegiving research, I studied sensegiving from the emotional perspective. The primary data of the study consists of a video of 1,252 sensegiving instances. I was able to recognize different types of sensegiving acts and different emotional and cognitive reactions to them by comparing how these instances were different from and similar to each other. The sensegiving instances occurred during a three-day seminar that was a part of the strategic renewal of a large Finnish property service company. The video allowed analyzing not only what the sensegiver said but also the emotional tone of those words and the sense-receivers' verbal and nonverbal reactions to those words; I had access to the sensegiver's and the sense-receivers' facial expressions, the volume and pitch of their voices, and their bodily gestures. I could replay the video several times, also in slow motion, which ensured that I was able to capture much more emotional dynamics than a study relying only on field notes or transcripts.

The video data was contextualized and complemented by various data sources. The data included interviews of the seminar participants before and after the seminar, the sensegiver, and the change leaders of three firms that had used the sensegiver's services, repeated surveys, and my own participant observation and non-participant observation in the seminars. This vast set of data ensured that I could understand the contextual meaning and the overall effects of the emotional sensegiving that I was able to study through the video.

A model of emotional sensegiving emerged from my analysis. The model describes how sensegivers can leverage emotional arousal to increase the effectiveness of their sensegiving. Emotional arousal can first be created with content that is only marginally related to the actual, organizationally relevant content of sensegiving. Emotional arousal is slow to decay and it can therefore transfer to a next moment. When emotional arousal generated by irrelevant content co-exists in sense-receivers with organizationally relevant cognitive content, the sense-receivers will associate the emotional arousal with the organizationally relevant content and, therefore, remember it better and act on it more likely.

The arousal effect can be applied through a series of micro-sequences during which sensegivers first increase sense-receivers' emotional arousal levels through a variety of tactics; then deliver the cognitive sensegiving message, and finally use tactics that reinforce sense-receivers' commitment to the cognitive message. The smooth flow of such micro-sequences is supported by a background process which legitimizes the tools the sensegiver is using so that sense-receivers will not get defensive or avoidance reactions. The emotional arousal the sense-receivers experience will become associated with the cognitive content of sensegiving through arousal transfer and misattribution and, hence, increases the impact of the cognitive sensegiving.

The first contribution of this thesis is the recognition of "increasing emotional arousal" as a sensegiving tactic. This discovery of the process of increasing arousal shows that many sensegiving actions can be better understood through their emotional effects, not cognitive effects. Many sensegiving actions are carried out to influence the emotions of sense-receivers, whereas previous sensegiving research has only conceptualized sensegiving tactics that directly aim at cognitions. Understanding that immediate emotional reactions to sensegiving are relevant also allows recognizing how several, seemingly unrelated factors, like jokes, physical activity, and music can significantly influence the outcomes of sensegiving.

Second, the process theory of sensegiving that is inductively developed in this thesis sheds further light on how emotions can be leveraged in sensegiving and starts filling the above identified gap in the existing research. The model provides an early step for an emerging research program that is to fully incorporate emotions into our understanding of sensegiving. The model is also relevant from a practical point of view and provides a large set of new opportunities for increasing the effectiveness of organizational sensegiving.

As a third contribution, the emergent process theory of emotional sensegiving has implications for the existing identity-based views on sensegiving. It complements their explanations and also provides an alternative interpretation for many of the findings and inferences. Most importantly, the possibility that one can make sensegiving more effective by leveraging emotions reduces the need to use identity threats in the process of cognitive change in organizations.

The fourth contribution of this thesis is a methodological one. The thesis illustrates how video-based analysis of sensegiving can be used to move analyses beyond words written on paper. The technological developments during the last ten years has made it simple and inexpensive to produce digital videos and analyze them using computer software. This new development in the tools for making sense of data will inevitably lead to more accurate understandings of what happens in organizations in general (see also, LeBaron, unspecified) and in sensegiving situations in particular.

This thesis consists of eight chapters. Next, after the introduction, I will review previous research on sensegiving. The third chapter describes the research setting and the way I collected and analyzed the data; as well as the limitations of the study. The findings are then described in three sections: Chapter four describes the process of emotional sensegiving in the change seminar at a concrete level. Chapter five describes data showing that the participants' mental models indeed changed during the seminar. The main theoretical finding is presented in chapter six: It presents a process theory of emotional sensegiving that emerges from the data analysis in combination with the existing literature and theoretical reasoning. This section also illustrates how the model can be applied in practice. Chapter seven describes the theoretical and research implications of the process theory of emotional sensegiving. Chapter eight is the conclusion which summarizes the main contributions of this dissertation.

2   PREVIOUS RESEARCH ON SENSEGIVING

This dissertation is about how leaders and change agents can more effectively change the mental models of other people by leveraging emotional arousal. I use the word sensegiving to refer to the process of influencing others' mental models. Also several other concepts could be used to characterize similar attempts, such as persuasion, influencing, manipulation, and teaching.[2] My aim is to contribute to the management theories of sensegiving. This study, therefore, builds on sensegiving theories that are relevant and legitimate in the management context. These are the theories that are currently used to understand how leaders and change agents promote strategic changes in organizations. These theories are also used for deriving practical lessons for leaders to follow, as the Nokia CEO Stephen Elop burning platform example in the introduction illustrated. In essence, to improve the way we understand strategic sensegiving and the lessons practitioners take from our theories, the sensegiving theories that are relevant in the management context need to be expanded.

The research on sensegiving builds on the research on sensemaking. Understanding how human mental models change is an optimal starting point when the goal is to ultimately understand how they can be changed. When one understands which factors contribute to changes in the way people understand situations, one can then intentionally manipulate those factors to cause the people's mental models to change in the desired way. In this thesis, I use the concept of sensemaking to refer to the process during which people form and change their mental models of the situations in

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[2] Each of these processes results in changes in what people think about a topic. For example, when someone speaks about Marxists' thoughts about organizing, and the person hearing the speech changes his understanding of how ownership structures influence people's well-being, there are several ways to interpret the situation: (1) He was persuaded to admit that the firm structure is not optimal for employee well-being, (2) he was influenced to change his attitudes toward the owners, (3) he was manipulated to support the left-wing political coalition in the next election, or (4) he was taught about interdependencies between different units and a theory that has been developed to describe them. By this example, I want to illustrate that effective sensegiving skills can be used for several purposes and the moral value of any sensegiving attempt is not in the theory of sensegiving but the person applying the theory is responsible for his or her aims.

which they are based on the cues they have extracted (Weick, 1995). I define sensegiving as the intentional manipulation of the cues other people extract and process, consciously or sub-consciously, to make them change their mental models in a desired way.

Scholars have, for long, studied how people form understandings of situations and make decisions based on these understandings. Different perspectives make different assumptions about the nature of sensemaking and of the factors that are central to sensemaking. These assumptions have significant implications on how sensegiving should be done. The assumptions start from full rationality and bounded rationality, and then move on to the role of heuristics and biases, cognitive maps, identity, and subtle emotional influences.

However, the sensegiving literature has not kept pace with the latest developments in the understanding of human cognition. During the past 15 years, researchers have recognized how subtle emotional factors influence people's sensemaking in a major way (Damasio, 1994; Hodgkinson & Healey, 2008, in press; Loewenstein et al., 2008). A person can interpret and remember the same information in drastically different ways depending on which emotional state he or she is in when hearing the information. Yet, as the literature review below shows, no-one has so far investigated how organizational sensegivers could leverage such emotional effects in sensegiving. For example, which kinds of cues should they provide for sense-receivers to make them be in an emotional state that increases the chances that they will change their mental models as intended by the sensegiver?

The earliest ideas of sensemaking assumed it to be a fully rational process. Accordingly, people have access to all relevant information and are able to process it immediately and reach an accurate assessment of the situation. Hence, to change people's understanding of a situation, one just needs to provide new information. However, this perspective was strongly criticized by Simon (March & Simon, 1958/1993; Simon, 1947; 1955) who developed the concepts of "bounded rationality" and "satisficing search." Accordingly, people try to be rational but there is a limit to how much information they can collect and process; hence, the order in which a sensegiver communicates information to sense-receivers influences how they will understand the situation. This happens because they will mainly pay attention to the information that comes first.

Two separate perspectives emerged to explain how individuals cope with bounded rationality. The heuristics and biases perspective (Kahneman, Slovic, & Tversky, 1982) emphasizes the process of thinking. Accordingly, people reduce their need for cognitive processing by applying (consciously or non-consciously) simple rules such as "if others believe it, I should believe it as well." A sensegiver can apply these ideas by framing his message in a way that leverages such biases (Cialdini, 1993). The second perspective, cognitive maps (Bougon, Weick, & Binkhorst, 1977; Huff, 1990), has shown that people maintain internal representations of their environment and use (consciously or non-consciously) these representations to select which information they should pay attention to and how they should interpret it. The implications for sensegiving are that to make people change their understanding of a situation, one either needs to make new information salient from the point of view of the old cognitive map or first "unfreeze" it (see e.g., Gardner, 2004).[3]

The currently dominating perspective in the management context maintains that identity is central to sensemaking. According to this view, people's definition of what is happening depends on how they define themselves; and because they want to maintain a stable and positive definition of themselves, they tend to interpret situations in ways that support their identity concerns (Weick, 1995: 18-24). The implication for sensegiving is that to change the way people understand situations one must first help people to redefine their identities (e.g., Gioia & Thomas, 1996; Pratt, 2000) or link the new understanding to the old identity in a constructive way (Heath & Heath, 2010; see also, Plowman et al., 2007).[4]

However, as stated above, these perspectives have not incorporated the latest findings of the subtle emotional effects on human cognition. Neither has a separate literature stream of emotional sensegiving emerged. In the following pages, I will first review the existing perspectives on sensemaking and sensegiving in more detail and discuss how some of their findings could be interpreted or expanded from the emotional

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[3] All the perspectives assume that people have some kinds of internal representations of the environment and the purpose of sensegiving is to change these representations. I call these representations mental models. The stream of literature that I call cognitive maps perspective has given a central role to the representations themselves in the process of their change. To differentiate this more central role, I call the representations cognitive maps when discussing this perspective. If not cutting hairs, mental models and cognitive maps could be treated as synonyms.

[4] When sensemaking and sensegiving scholars, including myself, speak about identity, they are referring to social identity rather than personal identity (see Ashforth et al., 2008: 327, for this observation; and Tajfel & Turner, 1986, for the difference between social and self-identity).

perspective. I will then review theory and empirical findings on how emotional factors influence sensemaking. I will discuss how these factors might be leveraged in sensegiving and how I will explore them empirically. The overall review is summarized in Table on the next page.

2.1 Fully Rational Perspective

2.1.1 Sensemaking from the fully rational perspective

The fully rational perspective on sensemaking has been used to describe how people make decisions. The perspective is still (often implicitly) assumed in many theoretical perspectives ranging from economics (see e.g., Lucas, 1997) to strategy (see e.g., Furrer, Thomas, & Goussevskaia, 2008). In extreme forms of fully rational ideas, people are assumed to be able to access all information relevant to their situation and process that information without delay. Hence, people are assumed to constantly understand the external reality with full accuracy, even if it was changing rapidly. In addition, people are assumed to be able to envision all possible action alternatives in any situation and calculate their expected utility. Hence, people are seen to be able to make optimal decisions at any point in time.

The fully rational model of sensemaking does not have to assume any kinds of stable internal presentations for people, such as mental models or schemas. People are constantly able to access the information about the environment directly and reconstruct their understanding; hence, there is no need to store ideas, meanings, or knowledge from the previous moment. The consequence for studying cognitive change is that cognitions should change whenever environments change and there is no reason why cognitions would lag behind environmental changes.

2.1.2 Implications of the fully rational perspective for sensegiving

The implications of the fully rational perspective for sensegiving are straightforward. As people change their understandings without delay when they receive information about changes in the environment, a sensegiver just needs to provide such information to people to change their understandings. The form, style, or amount of the information, or the way of presenting the information should not matter. As long as people have the new information, they will change their evaluation of the situation.

Table 1: Different perspectives on sensemaking and their implications on sensegiving

Assumptions about sensemaking	**Fully rational**	**Bounded rationality**	**Heuristics and biases**	**Cognitive maps**	**Identity is central**	**Subtle emotional influences**
Example literature or references	Assumed in neoclassic economic theory	Simon (1947, 1955); March & Simon (1958)	Kahneman et al., (1982)	Barr et al., (1992); Hodgkinson (1997); Tripsas & Gavetti (2000)	Mead (1934); Dutton & Dukerich (1991); Weick (1995)	Damasio (1994); Bechara & Damasio (2005); Hodgkinson & Healey (in press)
Implications for sensegiving	Providing accurate information is sufficient	Order in which the information is given matters	Biases can be leveraged	Repetition is important. The old cognitive map must somehow be addressed with new information	(1) first break old identity or (2) build on top of existing identity	(1) Considering emotional reactions; (2) Seemingly unrelated and irrelevant emotional factors can influence the process and its outcomes
Example literature or references	Assumed in neoclassic economic theory	March & Simon (1958)	Cialdini (1993); Cacioppo et al. (1986)	Ackermann & Eden (2010); Hodgkinson & Wright (2002)	(1) Gioia & Thomas (1996); Pratt (2000); (2) continuous change	(1) Hill & Levenhagen (1995); Huy (2002); Rouleau (2005) **(2) Under-researched area**

However, the fully rational perspective is not an accurate description of how the human mind works, even though the rational assumptions are sufficient for some theories describing macro-level phenomena. The first inaccurate assumption relates to the time needed for absorbing and understanding information. It has been estimated that people can consciously process about 45 bits of information per second (Dijksterhuis, Aarts, & Smith, 2005) which equals to reading one page of text per minute. Obviously, then, people cannot change their understanding of a situation immediately after receiving all the new relevant information about a situation. Second, as the empirical findings reviewed below show, the way people process information tends also to be biased, not accurate. Third, everyday experience shows that people do not always believe or remember all the information they have received. Hence, just providing all the information is not a good strategy for sensegiving.

2.2 Bounded Rationality

2.2.1 Sensemaking from the bounded rationality perspective

The bounded rationality perspective emerged as a critique against models that assumed full rationality. Simon and March (Simon, 1947; March & Simon, 1958) recognized the first of the above listed limitations of the rational model; that people are unable to collect and process all information relevant to any situation or choice. They recognized that when making choices, people do not systematically evaluate each alternative and then choose the best one. Instead, they search alternatives in a sequential order and choose the first one that satisfies the criteria they have set for the decision. For example, when a couple is buying an apartment, they may set three criteria for an acceptable house: (1) price less than 300,000 euro, (2) located within 10 kilometers from the office, and (3) larger than 80 square meters. Then they start searching for the apartment. They take a look at the first one, check it against the criteria, and if it does not meet the criteria, they move on to the next apartment. Once they find one that meets all the three criteria, they will buy the house. The solution is satisficing. However, there is no guarantee that the solution is optimal because they never searched all alternatives; it is possible that there would have been apartments that are cheaper, located closer to the office, and larger. But because it is impossible to evaluate all alternatives due to time constraints, they will settle for the one that is good enough.

The same logic of satisficing search can be illustrated in an organizational context. For instance, when firms are hiring new employees, they often get hundreds of applications. Often, they have a set of criteria (they can be implicitly defined) that the candidate chosen should satisfy. A busy manager then starts going through the pile of applications and picks up, for example, the first three ones that match the satisficing criteria. The manager may not even read the rest of the applications. Instead, he invites the first three candidates that met the criteria to an interview. Similarly, when firms are choosing strategic actions, they may develop a small number of alternatives. They use a set of criteria such as expected profitability, risks, and possible strategic consequences to evaluate the alternatives. If they find one that is good enough along these criteria, the firm is likely to choose that one—without ever even developing a comprehensive set of alternatives it would have in that market situation. They do not develop them because they do not have the time and resources to think about every possible scenario and because the chosen alternative already seems good enough.

The search logic for decision alternatives can also be interpreted to describe the process of forming understandings of situations (see also, Rudolph, Morrison, & Carroll, 2009). When people are making sense of a situation, they are exposed to a set of cues from the environment and they can generate alternative explanations of what is happening. A fully rational account of such a situation would maintain that they observe all the cues from the environment and consider all the alternative explanations, and then choose the explanation that is fully consistent with the cues. The boundedly rational process, on the other hand, would follow the logic of satisficing search: people observe some set of cues and consider them against the first explanation of the situation that comes into their mind. If the first explanation is satisficing, they will consider it as the explanation of the situation. Formally, one could say that an explanation is satisficing when it explains 45% of the variance observed, or casually, when the explanation seems to account for the most important cases. However, if people consider that the first explanation is not good enough, they will consider an alternative explanation and/or observe more cues. Once they have recognized a satisficing explanation and, thus, constructed a mental model of the situation, they will reduce active attention to the cues and stop critically evaluating their mental model.

2.2.2 *Sensegiving from the bounded rationality perspective*

The general implication of bounded rationality for sensegiving is that people will mainly pay attention to the information they hear first. They will not systematically consider everything a sensegiver is saying but make up their mind as soon as they reach a satisficing explanation of the situation. If the sensegiver does not convince the sense-receivers fast enough, the satisficing explanation can be that the sensegiver is not worth listening. Once the conclusion has been made, people will reduce active attention to the sensegiver's words and are not likely to revise their emergent understanding of the sensegiver.

In addition to establishing the sensegivers' credibility, one should consider how bounded rationality influences which alternative the sense-receivers choose to believe. The targets of sensegiving are in the process of developing or changing their understanding of an organizational issue or situation. There can be many explanations of the situation and the sense-receivers are likely to choose the first plausible explanation that they hear; and then stop paying active attention to the issue. Hence, to give sense effectively, one should provide the preferred alternative first (see also, March & Simon, 1958: chapter 6).

Also the supporting evidence for the preferred alternative should be provided early. If sense-receivers are exposed to evidence that is against the preferred alternative before hearing the supporting evidence, they may reject the alternative before even hearing the supportive evidence. On the other hand, they might accept the alternative after hearing the supporting evidence and never even consider the conflicting evidence, if the supporting evidence is presented first.

Empirical findings are consistent with the lessons derived from the bounded rationality perspective. For instance, a deductive presentation style, in which sensegivers first give a key argument and then describe the supporting evidence in a prioritized order, before moving on to the background and less critical details, has been found to be more effective than an inductive style (see, Huczynski, 2004: 293). Also lessons like "it's better to give one excellent reason than ten good reasons" (Bechwith, 1997: 173-174) and "clarity should be your primary goal" (Starbuck, 1999) are consistent with this view.

March and Simon (1958) also described what triggers the search in the first place. This is a crucial question for sensegiving as well, because, if it is true that people stop paying attention to cues and critically evaluating their mental model once they have formed the first satisficing explanation, then further changing their mental models should be impossible. So, what triggers the search for a better understanding of a situation? March and Simon argued that individuals have a more general aspiration level which refers to acceptable outcomes. For example, as long as my understanding of reality allows me to function smoothly in social interactions, I can keep going on as usual. However, if my social interactions suddenly become awkward, it might trigger me to ask "what is going on?" Hence, I would again start paying active attention to the cues and evaluating new explanations against the set of satisficing criteria. Likewise, firms are likely to revise their strategies only after performance declines (see e.g., Huff, Huff, & Thomas, 1992).

The point that not meeting the aspiration level triggers the search implies that sensegivers should first show sense-receivers that their current understandings are not good enough. Sensegivers should somehow show that the old understandings people hold do not enable them to function in ways that produce the outcomes they want to achieve. In this way they can make the sense-receivers actively listen to and process the information the sensegivers then provide to change their understandings. (There might also be other ways to make the sense-receivers pay active attention to the sensegiving message and process it but the bounded rationality perspective does not provide them.) Once the sensegiver gets their active attention, he or she should follow the lessons derived from the logic of sequential, satisficing search.

There are also sensegiving situations where people cannot leave the sensegiving situation. In most extreme cases, prisoners of war, who are being brainwashed, can undergo months of intense sensegiving and they are forced to pay full attention to the message. In organizationally more relevant cases, companies arrange mandatory seminars for employees—like the one analyzed in this thesis. The bounded rationality perspective does not provide completely clear implications of what happens in such instances. At some point in time in such seminars, people will probably have found a satisficing explanation of the seminar content. Hence, their natural reaction would be to stop searching for better explanations. However, the situation can force them to be active. This might make some of them revise their first choice but others may remain

mentally passive and hold on to their first explanation. A question emerges, how can a sensegiver maintain the participants' activity levels for extended periods of time, without making them believe that the understandings they formed at the early phases of the seminar are invalid?

Another question that emerges when looking at the bounded rationality perspective is, "are there other ways, in addition to the sequential search, that people use to cope with their limited ability to process relevant information?" This question is partially answered by the heuristics and biases perspective as well as by the cognitive map perspective.

2.3 Heuristics and Biases

2.3.1 Sensemaking from the heuristics and biases perspective

Soon after Simon's work was published, several scholars studied how individuals simplify the task of making sense of complex set of cues. The most central piece in this work is Kahneman's (Kahneman et al., 1982; Tversky & Kahneman, 1974) research on heuristics and biases. They found that people use "a limited number of heuristic principles which reduce the complex tasks" and that while "In general, these heuristics are quite useful [they] sometimes lead to severe and systematic errors" (Tversky & Kahneman, 1974: 1124).

An often described bias Tversky and Kahneman (1974) recognized is the ignorance of base rates: For example, when people are first told that Steve is a helpful, shy and introverted person and then asked whether he is more likely a librarian or a salesman, people tend to answer that he is more likely to be a librarian. They provide this answer because Steve fits the stereotype of a librarian and does not fit the stereotype of a salesman. Yet, there are far more salesmen than librarians and, hence, it should be more likely that he is a salesman, not a librarian. The process of estimating the probability based on the stereotypes consumes less cognitive effort and is, therefore, applied.

Anchoring is another example of the biases recognized by Tversky and Kahneman (1974). Anchoring refers to the effect that "different starting points yield different estimates, which are biased toward the initial values" (p. 14). For example, when individuals are asked to estimate the product 8*7*6*5*4*3*2*1 they systematically give higher answers than individuals who are asked to estimate the product

1*2*3*4*5*6*7*8 because the first task starts with higher values. Not surprisingly, this effect is nowadays a part of many negotiation strategy toolsets: when you are the one to set the initial price, the outcome is supposed to become anchored to that initial value (e.g., Hammond, Keeney, & Raiffa, 1998).

Besides Tversky and Kahneman (1974), also several classic experiments have been associated with this school of thought. These experiments include, for example, Milgram's (1974) obedience to authority studies which showed that people are willing to do many things that go against their own judgment if authority figures ask them to do so. Another example is studies showing that people infer what they should do in potentially dangerous situations from the behavior of others (Latane & Darley, 1969; 1968). These studies showed that instead of processing information and trying to make sense of the observed cues directly, people often simplified the situation by looking at others and (subconsciously) chose to react in the same way as others were reacting. Most dramatically, they relied on this heuristic even when physical cues, such as smoke, strongly pointed to different behaviors than the behaviors of the other people.

2.3.2 *Implications of the heuristics and biases perspective for sensegiving*

Cialdini (1993) popularized the idea that one could influence people by using their heuristics. If a message is communicated in a way that triggers any of the heuristics people have, the people are more likely to accept the persuasive message. For example, the above mentioned finding that people often look at cues of how to behave from the behaviors of others rather than directly making sense of the whole set of cues constitutes the social proof bias. To apply the social proof bias, when a sensegiver wants to convince people of an argument, he or she should show that other people already believe him or her. Likewise, a sensegiver might communicate his message in a way that activates appropriate stereotypes and makes people ignore base rates, when trying to develop support for an unlikely alternative. In a third example, Cialdini referred also to Festinger's (1957) work on cognitive dissonance and derived a "commitment and consistency" bias from his work (even though Festinger did much more than showed this tendency). Accordingly, if a person is first made to take a minor voluntary action supporting a certain attitude, that person is likely to change his or her attitude to be consistent with the action. Consequently, he or she will become more likely to take more substantial actions aligned with the new attitude.

Scholars have also investigated when people are most likely to fall victim to the heuristic-based influencing. A central and a peripheral route to persuasion and attitude change have been recognized (Cacioppo, Petty, Kao, & Rodriguez, 1986; Chaiken, 1980). The central route refers to deliberate, effortful processing of the message relevant cues, whereas the peripheral route refers to making relatively automatic inferences based on message irrelevant cues, such as the sensegiver's formal status. It has been found empirically that people who are motivated are less likely to rely on heuristics when making sense of situations. The motivation can be internal to people, such as the need for cognition that makes some people always prefer an active way of thinking (Cacioppo et al., 1986). The motivation can also be created externally; for instance, created motivation by telling the research subjects that they are expected to discuss the content of the message in the future (Chaiken, 1980). These findings highlight that while the heuristics perspective promises nearly magical tools for persuasion, there are several ways people can counter these tactics; and that the higher the stakes, the more likely they are to do so.

It should be noted that while the early research on heuristics tended to emphasize their negative effects on sensemaking, more recent research has started to highlight the positive outcomes of using heuristics. In fact, the most recent review on heuristic decision making defined them as follows: "A heuristic is a strategy that ignores part of the information, with the goal of making decisions more quickly, frugally, and/or *accurately* than more complex methods" (Gigerenzer, 2011, emphasis added). The central argument is that in complex and uncertain environments heuristics have high ecological validity and they actually perform better than more elaborate decision tools, such as complex statistical algorithms. Examples of application include the prediction of heart-condition in emergency wards (Green & Mehr, 1997) and the prediction of winners at the Wimbledon tennis tournament (Scheibehenne & Bröder, 2007). In the management context, Bingham, Eisenhardt, and others (Bingham & Eisenhardt, in press; Bingham, Eisenhardt, & Furr, 2007; Eisenhardt & Martin, 2000) have studied how heuristics are a part of dynamic capabilities and capability development.

The positive heuristics view has not yet been modified for influencing purposes. However, it is easily imaginable that so will be done soon. Heuristics rely on the fact that complex patterns (e.g., fire; heart condition) produce certain surface manifestations (e.g., smoke; simple measure). In natural settings, such manifestations

are not likely to occur without the underlying complex pattern. However, if someone was to artificially produce similar surface manifestations, the person using the heuristic would be trigged to act according to the heuristic. For example, a middle-manager might artificially manufacture figures that are used as the key inputs for heuristic decision making if he or she wanted the decision makers to favor his or her suggestion.

2.4   Cognitive Maps

2.4.1   *Sensemaking from the cognitive maps perspective*

Each perspective reviewed here assumes some sort of a cognitive presentation for people. I have referred to these representations as mental models that contain beliefs and attitudes about the world. I have so far discussed how bounded rationality and heuristics and biases influence the process of developing mental models of the environment, and how these influences should be taken into account in sensegiving. In this section, I review literature that has discussed how these mental representations themselves influence the process of their development. To provide some conceptual clarity, I call this perspective "Cognitive Map" perspective, instead of mental model perspective. The most central thing to note is that this perspective assumes that the cognitive presentations themselves influence the process of extracting and interpreting cues which is to lead to change in the cognitive presentations themselves. To highlight this recursive process and bidirectional influence between mental models and information processing, I call the cognitive representations "cognitive maps." Yet, it should be remembered that talking about change in cognitive maps is tantamount to talking about change in mental models. The only difference is that mental models are not necessarily assumed to influence the process of their change whereas cognitive maps are assumed to have a central role in the process of their change.

Psychologists started studying the cognitive maps people develop of their environments more than fifty years ago. Tolman (1948) studied how rats found their way through mazes. His main finding was that rats develop spatial maps that locate different entities in a two-dimensional space rather that strip maps that would prescribe whether the rats should turn left or right in each choice point. The main evidence for this conclusion was the fact that the rats were able to find the shortest way to the reward even though the specific turn-points in the maze were changed. Hence, the rats knew where the reward was rather than which combination of turns would lead to the

reward. From this he also concluded that humans similarly construct cognitive maps of reality, rather than merely learn action sequences that lead to rewards.

Another early scholar to study cognitive maps was Piaget (1954). He studied how children form understandings of their surroundings and recognized that they mentally construct maps[5] that allow them to function. He also recognized that these maps are used and developed in two ways. Assimilation refers to a process where people interpret the surroundings through the map and classify environmental objects according to the map. Assimilation can lead to incremental changes in the cognitive maps, such as refining some element or dividing an element into two sub-elements. The second process, accommodation, refers to more radical changes in the cognitive map. It occurs when people realize that their current map does not explain reality and then construct a new map in bottom-up fashion from the environmental cues they have observed. Later scholars have developed similar concepts to assimilation and accommodation, such as type I vs. type II learning (Bateson, 1972), first-order vs. second-order change (Watzlawick, Weakland, & Fisch, 1974), single-loop vs. double-loop learning (Argyris, 1976; Argyris & Schön, 1974), or business vs. strategic learning (Kuwada, 1998).

One of the first applications of cognitive maps in the management context was the study by Bougon, Weick & Binkhorst (1977). They carried out a relatively descriptive study of the cognitive maps held by jazz orchestra members. This study showed that some elements are seen as antecedents and other elements as consequences in cognitive maps and that people tend to believe that they have more power over the consequences than the antecedents. This study laid a foundation for later management studies that focused on how managers' cognitive maps influence the way they interpret their environment and how these maps change or do not change after radical environmental changes.

In the nineties, several scholars recognized that managers' cognitive maps tend to lag behind environmental changes and cause them to make poor decisions. Barr, Stimpert, and Huff (1992) studied the US railroad industry and recognized that while some

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[5] Piaget actually used the concept "schema" to describe the mental representations the children constructed. While some scholars might recognize nuanced differences between the different constructs, for the purposes of this review and dissertation, it is sufficient to treat the different constructs as interchangeable, as has been done in the management context in general (see Walsh, 1995).

managers recognized the environmental changes, they failed to think through their implications and integrate them to their cognitive maps and strategy. Huff et al. (1992) argued in a simulation paper that only cumulative stress (cumulative bad results and evidence inconsistent with cognitive maps) triggers cognitive maps to change. Hodgkinson (1997) carried out the first prospective longitudinal, quantitative study of changes in cognitive maps and recognized that managers' cognitive maps of competition did not change over an 18-month period, despite major structural changes in the industry. Finally, Tripsas and Gavetti (2000) showed how Polaroid failed to adapt to the digital era, even though it had the necessary capabilities and resources, because the management held on to old cognitive maps that contained assumptions that would have been valid only in the analogical era. The basic message from each of these studies is that cognitive maps tend to change only after a vast amount of contradicting evidence has accumulated. The basic explanation has been the human tendency to mainly look for evidence that confirms the existing assumptions (see, Neisser, 1976; Wason, 1968) and the tendency to interpret any evidence through the cognitive maps (like in Piaget's assimilation).

I have synthesized much of the existing cognitive map literature in a conceptual model that describes the process of cognitive map change (Vuori, 2008; Vuori & Laamanen, 2008). The model is presented in Figure 1 below. Accordingly, people first develop some "basic beliefs" that describe some central environmental fact. They construct the basic beliefs by observing and interpreting the environmental cues. In the second stage, people derive additional, "derived beliefs", from the basic belief. These derived beliefs can be described as consequences or implications of the basic belief(s) and/or additional descriptive beliefs that partly get their justification from the basic belief rather than the environmental cues directly. Hence, a cognitive map has been formed and this cognitive map guides the scanning, interpretation, action, and reflection processes of the individual possessing the map. However, as the environment keeps changing, cues which are inconsistent with the cognitive map eventually emerge. At first, the individual is likely to ignore these cues (cf. assimilation); however, once enough of contradicting cues have accumulated, the whole cognitive map is likely to collapse and the person starts building a new cognitive map from the scratch (cf. accommodation). The model is presented here only as a heuristic tool to facilitate the discussion of how sensegivers can leverage the existing knowledge of cognitive maps.

1) **2)** **3)**
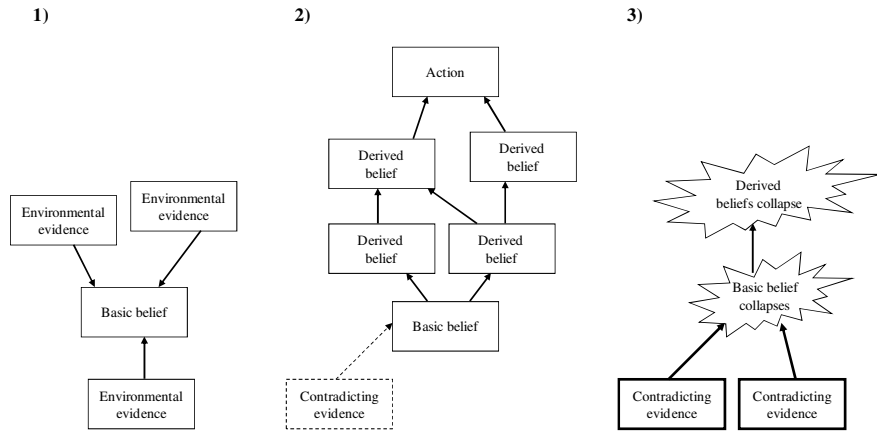
Figure 1: A synthesis model of the literature on cognitive map development (Vuori &
Laamanen, 2008)

2.4.2   Implications of the cognitive maps perspective for sensegiving

General implications for sensegiving can be drawn from the cognitive maps literature.
First, because cognitive maps influence which information people will pay attention to,
merely providing information is insufficient. Instead, that information must somehow
be made salient to the interpreters, even if their cognitive maps would not
automatically focus attention on that information. Second, because the cognitive maps
also influence how sense-receivers will interpret the information, the interpretation
process should also be aided externally. A sensegiver should walk through the
implications of his or her message and actively counter alternatives. If a sensegiver
does not provide such a step-by-step instruction for interpreting the new information
and its implications, sense-receivers are likely to use the new information to reinforce
their old cognitive maps due to the confirmation bias and selective attention rather than
to revise their cognitive maps. Third, before trying to force a new cognitive map, a
sensegiver should make the old cognitive map collapse by providing contradicting
evidence and describing how it invalids the existing cognitive map. In this way, the
sense-receivers should become more open to alternative perspectives.

While there is surprisingly little research on the implications of cognitive maps for
sensegiving, scholars have developed training interventions to help managers change
their cognitive maps. These studies imply that cognitive maps may change when

individuals process new information; however, they may also react defensively to new information and choose not to revise their mental models.

Consider the study of Ackermann and Eden (2010) as an example of management interventions for updating cognitive maps. They studied software tools that allow managers to explicate their beliefs visually. They described a method in which each manager first draws his or her own cognitive map on a computer screen, in the same virtual space as other members of the management team. Then the managers examine each others' maps and build links between them and/or change their own maps. In the empirical data that Ackermann and Eden described, some of the managers ended up changing their cognitive maps quite radically during the exercise, while some made only cosmetic changes. Similar findings were made also by El Sawy and Pauchant (1988) who found that cognitive maps tended to change when group members discussed new environmental information. Hence, being exposed to new information and being forced to process it can lead to changes in cognitive maps. However, group interaction may also amplify biases if alternative perspectives are suppressed (Janis, 1972; see also, Vuori, 2011a).

However, people sometimes react negatively when someone challenges their cognitive maps and tries to change them. Hodgkinson and Wright (2002) described how they tried to use a scenario-planning technique to make a top management team revise their cognitive maps. The intervention failed because "the participants adopted a series of defensive avoidance strategies [that] served as a means of coping with the unacceptably high levels of decisional stress, which arose as a result of having to confront a variety of alternatives, each with potentially threatening consequences for the long-term well-being of the organization" (p. 949). The implication for sensegiving is that attempts to invalidate sense-receivers' cognitive maps can fail if they reveal too strong a threat for the individuals holding those maps. The identity perspective on sensemaking and sensegiving sheds further light on this effect.

2.5   Identity

2.5.1   Sensemaking from the identity perspective

The identity perspective on sensemaking can be traced back to Mead (1934) who theorized how mind, self, and society are related. He described how people learn to understand who they are by looking at themselves through the eyes of the others; and

argued that the self that is created in the process (the "me") influences how they make sense of the world and choose to act: "we normally organize our memories upon the string of our self" (p. 135) and "what occurs takes place not simply in his own mind, but rather that his mind is the expression in his own conduct of this social situation … Mind is nothing but the importation of this external process into the conduct of the individual … " (p. 188). Mead argued that the socially learned "me" influences people's behavior so much because it is the way people coordinate their behaviors and, thus, maintain a functioning social order. The sensemaking and sensegiving literatures have regarded this social aspect of identity as central and when referring to identity, sensemaking and sensegiving scholars refer to what is called social identity in the psychological research (Ashforth, Harrison, & Corley, 2008: 327).

A second important early work in this stream of research is Berger & Luckmann (1966). Like Mead, they described how social interaction increases and stabilizes people's understanding of themselves, which will also stabilize the way they understand reality: "I hear myself as I speak … as I objectivate my own being by means of language, my own being becomes massively and continuously available to myself … and I can spontaneously respond to it" (p. 53). Hence, the way someone understands himself or herself influences what he or she will say and do.

Weick brought the centrality of identity into the management discourse on sensemaking. In 1995, he defined the seven properties of sensemaking and "Grounded in identity construction" was the first of them. He argues, following (and citing) Mead, that the individual is constantly trying to define himself or herself, hearing several alternative conversations in his or her head, and imagining alternative situations that would define himself or herself in different ways. Most centrally, Weick argues, "Depending on who I am, my definition of what is 'out there' will also change" (p. 20), which implies that identity has a major influence on which kinds of mental models people construct of their environments and how they potentially update them. Usually, people prefer to interpret situations in ways that allow them to maintain a consistent view of themselves as good individuals who are capable of influencing the course of events. For example, pharmaceutical sales representatives tend to emphasize that they provide physicians with the latest information about medicine so that they can better treat their patients; the sales representatives also downplay the profit motives behind

the attempts to manipulate physicians to prescribe more expensive medicine (Vuori, San, & Kira, 2009).

One of my main critiques of the existing sensemaking and sensegiving literature is that the centrality of identity has been emphasized too much. The way Weick (1996) (see also, 1993) re-explained the dynamics of Mann Gulch fire illustrates my point. Thirteen firemen died partly because they did not drop their tools when they were running away from the fire. The tools were heavy and slowed them down too much. The obvious question is: why did they not drop their tools? Weick (1996: 308) answered,

> "fires are not fought with bodies and bare hands, they are fought with tools that are often distinctive trademarks of firefighters and central to their identity […] Given the central role of tools in defining the essence of a firefighter, it is not surprising that dropping one's tools creates an existential crisis. Without my tools, who am I? A coward? A fool? The fusion of tools with identities means that under conditions of threat, it makes no more sense to drop one's tools than to drop one's pride."

I believe that it is reasonable to challenge the claim that the men who were running for their lives engaged in this introspection and decided to keep their tools, no matter what. Even one of the founders of the identity-centered stream of literature provides a strong counter-argument against Weick's conclusion: "When one is running to get away from someone who is chasing him, he is entirely occupied in this action, and his experience may be swallowed up in the objects about him, so that he has, at the time being, *no consciousness of self at all*" (Mead, 1934: 137, emphasis added). The central point here is that there are identity-*un*related, reflex-like, automatic, emotional, and sub-conscious dynamics that influence how people think and behave but the current sensemaking and sensegiving literatures are not capitalizing them.

2.5.2 *Implications of the identity perspective for sensegiving*

While the foundation may be shaky, management scholars have elaborated their ideas building on the centrality of identity in sensegiving. It has been recognized that image and ambiguity are two central constructs needed to describe how identities develop, evolve, and can be changed in organizations.[6] Dutton and Dukerich (1991) studied

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[6] The studies reviewed here suffer to some extent from fuzzyness in the level of analysis. They often claim to study organizational identity but then the data describes individual-level sensemaking. This problem has been widely recognized (Whetten, 2006: 220). Furthermore,

how the members of the Port Authority of New York made sense of their organization's response to an issue about homeless people. Their key finding was that the image (how others were thought to see the organization) influenced how they saw themselves (identity) and how they understood the issue and reacted to it. In sensegiving terms, the idea of using image as a means for changing identities was further studied by Gioia and Thomas (1996). They discovered qualitatively and corroborated quantitatively that projected future images (how we want others to see us in the future) influenced organization members' identities and how they thought about the organization's situation and preferable actions. Hence, to change how people think, one should first change how they think others should see them in the future, which will influence their identities, which will change the way they interpret situations and issues.

Ambiguity is the second central construct in the current sensegiving literature. Gioia and Chittipeddi (1991) recognized that one central sensegiving tool is "ambiguity-by-design." Creating ambiguity among sense-receivers allows the sensegiver to push his or her own interpretation of the situation forward; when people do not understand what is going on, they are more likely to accept any plausible interpretation of the situation. Studies of identity construction have similarly recognized that some sort of ambiguity is central in the process of redefining identity. Corley and Gioia (2004) recognized how a spinoff created several changes for the employed individuals which triggered identity ambiguity and made them say things like "we don't even know who we are right now" (p. 184). This ambiguity then triggered the leaders of the organization to engage in active sensegiving which ultimately led to a renewed, post-spin-off identity. Most recently, Gioia, Price, Hamilton, and Thomas (2010) discovered that ambiguity plays a central role also in the process of building an identity for a newly established organization that has no prior identity. Ambiguity triggers people to consider and contrast against alternative identities in a process that ultimately results in converging to a single identity.

The future image can also be used intentionally to create ambiguity and dissatisfaction with the present identity. Pratt (2000) studied how a network marketing organization, Amway, managed identification among its employees. Based on ethnographic data, he

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social identity (i.e. identification with a group with a specific identity) is part of individual identity (Tajfel & Turner, 1986); and the organizational part of individual identity has the strongest influence on people's behavior in organizations (Ashforth et al., 2008: 339).

built a theoretical model that described the identification process in the firm. In the first phase, the firm engaged in "sensebreaking" with the goal of making the employees dissatisfied with their current lives and identities. The main tool for sensebreaking was "dream building" in which people were encouraged to imagine themselves as rich, happy, and powerful in the future. The gap between this ideal future self (cf. future image) and the present identity made them dissatisfied with the presented identity. This gap created seekership ("a sense of identity-related discontentment that results in a drive to find meaning" p. 469) in the employees. The organization provided this meaning by the means of sensegiving. It used mentoring and relationship barriers to ensure that the members' sensemaking was "encapsulated" and, hence, received inputs only from the organization. The lesson from this study and from the identity-centered sensegiving research in general, then, is that to change the way people think, you should first make them hate their current selves by creating dreams of something better and then describe how your way of thinking will help them achieve those dreams. A similar, more generic process model of identification/identity change that consists of sensebreaking and sensegiving was also proposed by Ashforth et al. (2008) in their review of identity and identification in organizations.

In addition to the intuitively derived critique about overemphasizing the role of identity in sensemaking (the firemen example above), another fundamental limitation in the identity-based sensegiving studies should be mentioned. Each of the studies reviewed in this section has analyzed field notes, interview transcripts, and/or archival materials. Such an approach has facilitated tracking how identities evolve over time. However, the central limitation is that each data analyzed only consists of words written on paper and nothing else. The data does not contain the way those words were said, the facial expressions of the speakers and listeners, the pitch and loudness of voice, bodily gestures, and many other non-verbal features of communication. There is much more going on in any social situation that people can consciously recognize (e.g., Bargh, 1999; Choi et al., 2005; Dijksterhuis & Aarts, 2010; Gawronski & Payne, 2010), let alone write down into field notes or retrospectively describe in an interview. When only words are recorded and analyzed, the existence and potential effects of all these non-verbal forms of communicating and responding are ignored. Hence, it is no wonder that the studies have emphasized the content and meaning of words when explaining why and how people's thoughts and actions changed.

Given both the methodological limitation and the intuitive critique about overemphasizing the role of identity, it can be argued that the existing sensegiving research has focused too much on tactics of identity breaking. It may well be that there are other, stronger reasons beyond identity that explain why sensegiving succeeded in the cases analyzed (the next sub-section and the findings of this thesis offer concrete alternatives). For example, it might be that the emotional arousal created by the identity threats caused people to buy into the new beliefs (see e.g., Phelps, 2006) and that identity threat as a source of this arousal was just coincidental. If such is the case, then the lesson that "you should first make them hate their current selves" may not only be ineffective but also a morally questionable advice because identity threats can create anxiety and suffering (e.g., Major & O'Brien, 2005; Spencer, Steele, & Quinn, 1999).

A milder critique to the existing identity-central sensegiving studies is that they seem to have ignored the idea of building on top of the current identities in a process of continuous change. In such an approach, sensegivers could capitalize on the positive elements of the current identities of the sense-receivers and build new ideas on top of them; central in this approach is that there is no future vision or a process of unfreezing but one just looks at what is going on now and how it could be improved by adding something (Plowman et al., 2007; Weick & Quinn, 1999; Vuori & Khoroshkova, 2010). For example, if a firm's identity includes the desire to make good phones, a sensegiver might use this positive aspect of the identity as a source of excitement and describe a new phone with a new operating system as an opportunity to expand the current strength of the firm, instead of saying that the firm is on a burning platform and about to lose everything. Small additions to the current identity could incrementally accumulate and, ultimately, produce a radical change (cf. Plowman et al., 2007). In addition, empirical evidence from mergers shows that individuals are more committed to the merged organization if they perceive that there is continuity from their old identity to the new situation (van Leeuwen, van Knippenberg, & Ellemers, 2003). However, if identities are not threatened, then the question becomes, how can a sensegiver make the sense-receivers internalize the new ideas when they are not experiencing meaning void caused by sensebreaking and identity threat? Again, the answer is likely to be found in the subtle emotional dynamics of thinking and communicating.

2.6   Subtle Emotional Influences

There are a large number of studies and theoretical models that show how the sensemaking process is influenced by subtle emotional factors. The basic message across these studies is that seemingly irrelevant factors can influence how people make sense of entities and change and form mental models. However, the current sensegiving theory has not yet leveraged these ideas and no-one has developed sensegiving tools that would utilize the power of emotions in the process of producing a desired mental model change in sense-receivers.

2.6.1   How emotions influence sensemaking

A new wave of research in decision making and economics (Bechara & Damasio, 2005; Loewenstein et al., 2008; see also Hodgkinson & Healey 2008, in press) has discovered that emotions have a fundamental influence on how people understand situations and choose to act in them. The effects of emotions are rooted in biological processes:

> "changes in neurotransmitter release induced by somatic state [emotions] signals modulate the synaptic activities of telencephalic neurons subserving behavior and cognition, thereby providing a mechanism for somatic states to exert a biasing effect on behaviors (e.g., selection of a response over another), feelings, and cognitive patterns." (Bechara & Damasio, 2005: 343)

Damasio's (1994; 2003) research on patients who have lost emotional components from their brain has been the key driver of the research on how emotions influence human sensemaking and choice processes. Elaborating the initial insights, Bechara and Damasio (e.g., 2005) have focused on studying how the emotional reactions triggered by different choice alternatives ultimately determine which alternative people will choose. Despite what people know of a choice issue, they tend to choose the alternative that produces the most positive emotional reactions. Usually, the choice that is the best one also from a rational perspective produces the most positive emotional reaction and, therefore, makes people prefer the rationally best alternative. However, if a task irrelevant emotion occurs in a person's mind, this can make him or her choose sub-optimally. Likewise, people with certain brain damages suffer from a similar problem: they understand that their choice is bad but still do it because it feels the best (see also, Damasio, 1994). Also the choices' closeness in time and certainty influence how strong an emotion they produce, which is why people sometimes prefer

small certain short-term pleasure over uncertain long-term success. The emotions influence people's choices even when they are not aware of the emotional reactions (Bechara and Damasio, 2005: 348).

One implication of Damasio's work for this dissertation is that sensegiving without associated emotional reactions may be insufficient. Because "'knowledge' without 'emotional signaling' leads to dissociation between what one knows or says, and how one decides to act" (Bechara and Damasio, 2005: 348), it is not sufficient to make sense-receivers understand what they should do. In addition, a sensegiver should make them develop emotional reactions consistent with the new cognitive understanding.

There are also a large number of other empirical studies that illustrate the different ways emotions influence the sensemaking and choice process. The first set of these studies shows that self-induced emotional states can influence how people make sense of external factors. As many elements of the brain are bi-directional (see e.g., Barsalou, 2008; Strack & Deutsch, 2004), emotional states can be induced by making people physically act as if they were experiencing the emotion (see also, Ekman, 2003). Such physical moments can induce the emotion and then make people interpret unrelated stimuli as being consistent with the emotion and, thus, evaluate it differently. For example, when people are made to have a smiling expression by holding a pencil between their teeth, they tend to evaluate comics to be funnier than control groups (Strack, Martin, & Stepper, 1988). Likewise, when people are made to shake their heads from side to side, as if to be in a negative state, they tend to evaluate arguments more negatively than control groups; and when people are made to shake their heads up and down, they tend to evaluate arguments more positively than control groups (Wells & Petty, 1980).

Other studies have tested and documented more ways of how emotions influence people's sensemaking and decision making. When people are angry, they tend to take more risks (Lerner & Keltner, 2001). When people are in a positive mood, they are more creative and generate more alternative ideas (Fredrickson, 2005). Conversely, a negative mood makes individuals (Forgas, 1992) and groups (van Knippenberg, Kooij-de Bode, & van Ginkel, 2010) evaluate alternatives more critically and, hence, improve decision quality in tasks which require logical thinking.

Besides influencing the way people make sense of an issue, the emotional state also influences how well they will remember the issue. Basically, the more emotionally arousing an issue, the more people will remember. Already William James (1890: 670) argued that:

> "The attention which we lend to an experience is proportional to its vivid or interesting character; and it is a notorious fact that what interests us most vividly at the time is, other things equal, what we remember best. An impression may be so exciting emotionally as almost to leave a scar upon the cerebral tissues."

More recently, several scholars have found empirical evidence supporting the claim that emotional arousal enhances memory. Specifically, arousal enhances the encoding of the content that is temporarily held in the working memory into the long term memory (e.g., Phelps, 2006). This is relevant for sensegiving which aims at changing sense-receivers' mental models because mental models reside in the long term memory (Carlston, 2010; Smith & DeCoster, 2000). If the goal is to change mental models, it is not sufficient to make people think about something consciously for a fleeting moment in their working memory but a lasting change in the long term memory is needed. Yet, it is far more difficult to make semi-permanent changes in their long term memory than it is to make people think about some content in their working memories (Smith & DeCoster, 2000).

The evidence that emotional arousal can enhance the encoding of the contents of the working memory into the long term memory comes from both naturalistic studies and from lab studies. Naturalistic studies have recognized that people tend to remember emotional events like the death of Princess Diana (Davidson & Glisky, 2002) and the September 11 tragedies (Pezdek, 2003) better than non-emotional events. As an example of lab studies, MacKay and Ahmetzanov (2005) measured if people remember the location of taboo words, such as "shit" and "whore" on a computer screen better than the location of neutral words, such as "crow" and "mouse." They found support for their hypothesis and concluded that "emotion triggers binding mechanisms that link an emotional event to contextual features such as its location" (p. 31). Phelps (2006: 34) described these binding mechanisms in more detail:

> "Emotion, specifically arousal, is proposed to enhance hippocampal-dependent consolidation. [...] physiological arousal results in activation of the beta-adrenergic receptors in the amygdala. The amygdala, in turn, modulates hippocampal processing,

> resulting in enhanced consolidation or storage for events that elicit an arousal response."

Arousal can also enhance the internalization of more abstract thoughts, in addition to having a positive effect on episodic memory. By more abstract thoughts, I refer to ideas of what are good behaviors, heuristic behavioral rules, descriptions of cause-effect relationships, and values. If such an abstract idea is associated with emotion, it should be better remembered. Consistent with this idea, there is recent empirical evidence that emotional arousal triggered by photographs can improve the retention of English-Swahili word pairs (Finn & Roediger, 2011). The possibility of enhancing the memory of abstract ideas is important for sensegiving purposes the goal of which is to make sense-receivers internalize, for example, a new mental model of their organization's situation.

In addition to the amygdala triggered enhancements in memory consolidation, emotions increase memory through repetition. This further supports the idea that also abstract thoughts can be better internalized through emotions. Bechara and Damasio (2005: 360) explain how:

> "With each 'thought' brought to working memory, the strength of the somatic state [emotion] triggered by that 'thought' determines whether the same 'thought' is likely to recur (i.e., will be brought back to memory so that it triggers another somatic state that reinforces the previous one), or whether that 'thought' is likely to be eliminated."

This reappearance of an emotional thought into consciousness is important because every time a thought is brought into consciousness, the related associations in the mental model in the long term memory are reinforced (Carlston, 2010; Smith & DeCoster, 2000).

In sum, the above reviewed research on emotions and sensemaking shows three important findings. First, emotions influence people's choices, in addition to their cognitive understanding of the situation. Hence, it is not sufficient that a sensegiver makes people "know" things but he or she must make them also "feel" those things. Second, the emotional state in which people are influences how they will interpret any information they receive. Hence, sensegivers should make the sense-receivers be in an emotional state that is consistent with what they are trying to argue. Third, emotional arousal enhances people's memory of the content they hear. Hence, sensegivers should

increase the intensity of the emotions the participants are feeling during a sensegiving episode.

To apply the above reviewed effects of emotions on sensegiving, one needs to understand how a sensegiver could make sense-receivers be in the optimal, highly aroused, emotional state. The manipulations used in the above-reviewed lab studies are not feasible for managers and consultants who need tools that can be used in the organizational context. The research on how emotions and emotional arousal emerge, accumulate, and transfer from one situation to another provides a useful starting point for exploring this question.

2.6.2   How emotions "behave"

A central question for understanding how a sensegiver could leverage the above described emotional dynamics is how emotions emerge and remain active. Russell's (2003) core affect model provides a parsimonious way of investigating the basic dynamics of emotion for this purpose. Core affect refers to "state of the central nervous system experienced as a subjective feeling and with peripheral correlates [such as heart rate, tone of voice, facial expressions, and body movements]" (p. 154). Core affect can be described in terms of two dimensions that are *valence* that varies from positive to negative and *arousal* that varies from low to high. These two dimensions are orthogonal and, according to Russell, all emotions can be described as points along the two-dimensional space created by arousal and valence. People experience core affect and then cognitively interpret what is going on. If the cognitive elements of the situation match with a prototype of an emotion, then people think they are feeling that emotion.

What is most essential in Russell's model for this thesis is that while several factors influence people's core affect, they often attribute their core affect to a limited number of factors. It is possible that a first event causes changes in people's core affect, while they misattribute those changes to a second event. Hence, they end up (mistakenly) making an association between the second event and the emotional reaction. As Russell explains:

> "Core affect can be manipulated by drugs: stimulants, depressants, euphoriants, and dysphoriants. More typically, however, changes in core affect result from a combination of events, such as the cumulative stresses of a week on the job. Some of

these causes are beyond one's ability to detect consciously, such as ionization in the air and infrasound. A key to understanding core affect is that people have no direct access to these causal connections and limited ability to track this complex causal story. Instead, a person makes attributions and interpretations of core affect. Sometimes the cause is obvious, but at other times, one can undergo a change in core affect without knowing why. […] In misattribution (Schwarz, 1990), a change in core affect due to one source is misattributed to another […] Attributions usually seem correct to the attributor, but research has demonstrated misattributions." (Russell, 2003: 149)

The possibility that core affect created by one thing transfers to a new situation and is attributed to another thing can be illustrated as follows. When people have fever, they tend to be low in arousal and negative in terms of valence. This is a physical state and without a cognitive framing, they just feel bad. However, if they hear bad news while in this state, they may attribute the low-arousal, high-negative-valence to the news and experience the news as more depressing than they would in a normal state. Consequently, they may start feeling really sad because of the news, instead of just feeling bad because of being sick, even though their core affect has changed little because of the news. The cognitive reframing changes their understanding of their own emotional state.

There are also studies showing how high arousal created by one event can transfer to the next situation, while the valence created by the first event is forgotten. Understanding how the arousal transfer happens would provide a unique tool for sensegivers to associate high arousal with their cognitive sensegiving content. Zillman (1971) carried out a lab study that tested if content-unrelated arousal can transfer to a new situation. The following procedure was used: Subjects first received electronic shocks from an actor. This was to make them somewhat angry toward the actor. The subjects then watched either a neutral, an aggressive, or an erotic film. After watching the film, the subjects were asked to give 12 electronic shocks to the actor, supposedly to give feedback to enhance learning. They could choose the intensity of the shocks from a scale from 1 to 10. The intensity was measured as a dependent variable in the study, as a proxy measure for how angry the subjects were toward the actor. It turned out that those who had watched the erotic film gave the strongest shocks (on average, 5.071 intensity), those who had watched the aggressive film also gave quite strong shocks (3.948), and those who had watched the neutral film gave the mildest shocks

(3.067; all differences statistically significant). Zillman interpreted this finding to support the excitation transfer paradigm: the erotic film increased the participants' arousal which amplified the anger they felt toward the actor. Because both the erotic film and the aggressive film increased the value of the dependent variable compared to the neutral video, it can be concluded that it was the emotional/physical arousal that increased the anger toward the actor rather than the cognitive content of the videos. The arousal created by the erotic film was transferred into the anger felt toward the actor and intensified it.

Another illustrative study was carried out by Dutton and Aron (1974; see also, Foster et al., 1998, for a review and meta-analysis on similar studies). All the subjects in this study were male. Dutton and Aron first scared the research subjects by making them cross a bridge which had "a tendency to tilt, sway, and wobble, creating the impression that one is about to fall over the side [to] a 230-foot drop to rocks" (p. 511). A control group carried out a non-scary task (they crossed a low stable bridge). After the initial mood manipulation, the individuals interacted with a female research assistant who asked them to fill a survey and write a short story of a female whose picture was shown to them. The content of these stories was coded for sexual content. It was found that those subjects, who had been scared before they interacted with the female assistant, described the picture in more erotic terms than the participants who were not scared before the interaction. In addition, the research subjects had been given the phone number of the research assistant: in the condition group, 9 out of 18 research subjects called her afterwards, whereas in the control group only 2 out of 16 called. Given all the results, it was concluded that the emotional arousal caused by the scary bridge was transferred to the interaction with the female research assistant and the subjects interpreted this arousal as sexual arousal toward the picture shown and the research assistant.

There are also several other studies that have shown that arousal created in one situation by means of one emotion can transfer into a next situation and amplify another emotion. Anger can turn into an urge (Brehm, 1999), chemically induced arousal can transfer into whatever emotion cognitively accessible in the situation (Schachter & Singer, 1962; 2000), warm subliminal feelings produced by a warm coffee cup can turn into interpersonal liking (Williams & Bargh, 2008) and "the same core affect (induced through subliminal stimulation) can emerge into consciousness as

a mood in some circumstances but as liking for a beverage in other circumstances" (Winkielman, Berridge, & Wilbarger, 2000, cited in Russell, 2003: 148). Hence, it has been concluded that:

> "arousal is nonspecific and slow to decay, that people are inept at partitioning the sources of their arousal, and that people cognitively interpret their arousal. Hence, arousal left over from a previous setting can combine with arousal in a new situation and intensify one's emotional reaction. … What is provocative about these findings is that the valence of the prior experience is irrelevant; only the arousal transfers" (Fiske & Taylor, 2008: 319-320)

The physiological approach by Bechara and Damasio (2005) is also consistent with the behavioral-level findings of valence-independent arousal transfer. Bechara and Damasio note that physical arousal can indeed decay slowly and transfer from one situation to the next one. When it is transferred to the next situation, it functions as a baseline in the next situation. If the events in the next situation also produce arousal, this arousal adds on top of the baseline arousal. Hence, a moderately arousing event can be experienced as highly arousing if the person is already aroused when going through the event. As Bechara and Damasio (2005: 363) write:

> "pre-existing somatic states influence the feeling and triggering of subsequent ones […] Indeed, operation of the somatic marker circuitry is a complete circle: primary and secondary inducers trigger somatic states; feedback signals from triggered somatic states influence activity in neural structures critical for primary and secondary induction; the modulated neural activity within these structures will in turn influence subsequent induction of somatic states from primary and secondary inducers. […] Neurotransmitters such as dopamine lower the threshold of neuronal cell firing in structures such as the insular/SII, SI cortices, the amygdala, and the VM cortex, so that the threshold for feeling and triggering somatic states is changed."

However, Bechara and Damasio (2005) also note that there are some differences between positive and negative emotions, so this effect is not as pure as the behavioral experiments would suggest. Yet, there are many similarities between positive and negative arousal and more complex mechanisms that may create a strong opposite reaction in the secondary inducers that can boost the flip from positive to negative (p. 365). Consequently, the idea of using negative arousal to amplify later positive arousal remains plausible. These ideas can be interpreted to imply that while it is possible to transfer the arousal from many emotions to many other emotions, it is not possible to

transfer all emotions to any other emotion. Hence, some level of continuity should be maintained if a sensegiver is to amplify emotional arousal first with some content and then associate the arousal with some other content such that the strong emotion *seemingly* results from the second piece of content. It is an empirical question of how to create such continuity.

In conclusion, the research on emotions and their effects on sensemaking suggests that people would remember, internalize, and act on emotional content better than unemotional content. The research also suggests that it might be possible to make any content feel emotional by transferring emotional arousal from earlier moments and then somehow make people associate that arousal with the desired content. Before I will empirically explore how sensegivers could use this opportunity, I will review the scant management sensegiving research that has referred to emotional dynamics.

2.6.3 Emotions in the management sensegiving literature

There are a handful of management studies that have considered emotions in the context of sensegiving. Hill & Levenhagen (1995) argued that metaphors are useful in sensegiving because they provoke emotions. Hill and Levenhagen argued, "establishing an organizational direction requires the ability to communicate a vision or mission in an understandable and evocative manner … The emotions and contradictions built in to metaphorically articulated visions provide a means of motivation." (pp. 1069-1070). In essence, they are saying that if a sensegiver can communicate his or her cognitive content in a form that is emotionally arousing (i.e. the metaphor), the impacts will be stronger. This argument is consistent with the arguments of Bechara and Damasio on the point that "knowing it" is not enough but one must also "feel it" to take action. However, considering the emerging understanding of how emotions are formed and can transform from one situation to the next one, metaphors seem to be an elementary and not very effective tool for creating emotional reactions and commitment.

In another conceptual paper, Hodgkinson and Healey (in press) proposed that: "The greater the extent to which firms foster emotional commitment to new investment opportunities, the greater the likelihood that they will seize those opportunities." However, they did not discuss in detail which kinds of practices, tactics, tools, or approaches would be suitable for this kind of emotional sensegiving and commitment building. All we know, so far, is that metaphors might be a way to put emotion into the

cognitive content of sensegiving. My goal in this thesis is to find alternative, more effective ways for doing it.

There are two empirical studies that have focused on emotional dynamics during sensegiving and organizational change. Huy (2002) found two seemingly opposing emotion management patterns: pushing people to commit to a change and attending to change recipients' own emotions. The combination of these two patterns facilitated organizational adaptation by making people take actions to enact the change while simultaneously allowing the people to deal with the emotional reactions to the new practices. Rouleau (2005) recognized several micro-practices that two middle managers used to sell change every day in their organizations. These micro-practices relied on the middle managers' tacit knowledge. They used them, among other things, to give emotional support to the employees and to create "subjective and emotional effects" in the sense-receivers so that they would be more committed to the ongoing organizational change. However, while Rouleau recognized this purpose of the micro-practices, her focus was not on their emotional dynamics nor did she explain why and how the tactics created the emotional effects. Taken together, these two studies seem to suggest that to promote an organizational change, sensegivers should both empathically allow sense-receivers to deal with their emotional reactions and to enhance emotional commitment to the new direction. This dissertation continues from where they finished and asks how the emotional commitment to the new understanding of the organization and its purpose can be created.

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In conclusion, as our understanding of how humans make sense of issues and change their mental models has increased, scholars have been able to update the theories of how sensegivers can intentionally modify others' mental models. The latest developments in the research on sensemaking have highlighted the role of emotions but the sensegiving research has not yet internalized these ideas. Emotions influence which cues people will extract from the environment, how they interpret those cues, and how well they will internalize, remember, and act on those interpretations. Furthermore, basic research on emotions has shown that emotional arousal created in one setting can be transferred into another setting and make the other setting feel emotional. Hence, it might be possible for sensegivers to use *some techniques* to influence sense-receivers' emotional arousal in ways that *somehow* make sensegiving

more effective. The existing sensegiving research does not tell us what those "some techniques" might be, how they should be used, or how they increase the effectiveness of sensegiving. The purpose of the empirical part of this dissertation is to investigate and conceptualize those techniques and study how they can be combined to ensure the effective delivery of the desired cognitive content. Formally, I aim to answer the following research question:

> *Research Question: How can emotional arousal be used to make sensegiving more effective?*

3 DATA AND METHOD

This study aims to increase the understanding of emotional dynamics in sensegiving. It was deduced from existing research that emotions might be used to increase the effectiveness of sensegiving. The question that emerged was: "How?" To answer this question, I analyzed a change seminar which was to initiate the strategic renewal of a Finnish Property Service Company (pseudonym) by changing its employees' mental models. The seminar was run by a change coach who used original sensegiving tactics. During the seminar, the sensegiver increased the participants' emotional arousal in various ways and then associated this arousal with work-related cognitive content. My aim has been to create generalizable knowledge that will be relevant for academics studying the phenomenon of sensegiving as well as for practitioners who aim to boost performance and well-being by creating new meanings in their organizations.

This study followed an inductive, open-ended design. When I started the study, I had only a loose idea of improving the understanding of sensegiving in the context of strategic renewal. During the course of the study, the goal evolved to be to extend existing sensegiving theory with the most recent insights on the way the human brain works. Particularly, the goal evolved to be to explore empirically how emotional arousal can be generated and leveraged during sensegiving processes, and to conceptually expand these findings into a process theory of emotional sensegiving.

The sensegiver (the change coach) that is studied in this thesis was an optimal theoretical sample for studying emotional sensegiving. Initially, the coach and the seminar were chosen as the objects of this study because they had something unique, special, and powerful in them. The coach seemed like a unique character and several companies witnessed that the coach's seminars produce results. Also, the coach seemed to use a very negative approach, yet produce very positive results and optimistic thinking. All this was puzzling and held the promise of finding *something* that is theoretically novel, relevant, and interesting. Hence, the study was started. Retrospectively, the coach and his seminar provided an excellent opportunity for

studying the emotional dynamics of sensegiving because the coach used emotional arousal to enhance the effects of his cognitive sensegiving in a peculiar way. The emotional intensity in the seminars was so high that it can be considered as an extreme case of emotional sensegiving. The "something" that was initially recognized to be unique and worth studying in the seminar thus turned out to be the way the coach created and used emotional arousal as a tool for sensegiving. Observation and deep qualitative analyses were needed because the coach's ability to use emotional arousal in sensegiving was based on his tacit knowledge. He was not aware of the way he used emotions in sensegiving and was unable to explicate the process of using them.

There were also two other reasons why qualitative methods were suitable for studying the coach and sensegiving. First, at the beginning of the study, there was no clear understanding of what made the coach's sensegiving successful. Hence, an open-ended, exploratory approach was more likely to produce valuable theoretical insights than the testing of ad hoc hypotheses about the coach. Second, as the focus of the study evolved to the question of how a sensegiver can leverage the emotional influences on people's sensemaking, it was important to understand the qualities of the coach's sensegiving tactics rather than any quantitative attribute of the sensegiving. By analyzing *how* the coach delivered his message and *how* the participants reacted, I was able to recognize both a number of qualitatively distinct emotional sensegiving tactics and an overall pattern of emotional sensegiving that explain the effects of the seminar. The understanding of these mechanisms and processes are analytically generalizable to other settings, and provide a basis for future theory development and testing.

I got access to the seminars through a mutual interest in the content of the seminar—increases in well-being and productivity through respectful social interaction and empowerment. The coach that is analyzed here participated in a seminar on these topics held by a professor at Helsinki University of Technology. They casually discussed during the professor's seminar and the professor found the coach's sensegiving approach interesting. Hence, he suggested finding a student to study the coach's sensegiving. The coach agreed. Around the same time, I e-mailed the professor and asked for a summer job relating to same topics (earlier, I had written a book chapter about influencing (Vuori, 2006) for a book edited by the professor); hence, they hired me to study the coach. The professor is a celebrity in the Finnish context and the coach saw it as an honor and a good learning opportunity to participate

in the study. The coach also helped me to get access to the seminar participants by asking the company representatives to allow and organize interviews with the participants. The organization saw this as an opportunity to evaluate the effects of the seminar on their employees.

I collected and analyzed data on the seminar in an iterative fashion, as is common in inductive, qualitative research (Strauss & Corbin, 1998). The purpose of the iterative process is to simultaneously develop a deeper understanding of the empirical material being analyzed and contribute to theory. In a way, the purpose is to understand, in a deep way, some aspect of the empirical material that has not yet been explained by previous research. For example, Pratt (2000: 462) described this process as follows:

> "I then organized the emerging themes into a coherent framework. After developing, exploring, and evaluating the utility of several alternative frameworks, I arrived at the one that I believed offered a strong contribution to theory without doing undue violence to my experience. It was important that my framework add to theories of organizational behavior, but I did not want my framework to unduly distort the actual experiences of [the research subjects]."

I similarly developed and experimented with various theoretical frameworks, until I arrived with one that both explains the seminar dynamics and contributes to the sensegiving theory. During this process, my focus deepened such that as I initially analyzed three seminars and related organizational factors, the ultimate deep focus was on the one seminar that was video-recorded. While the general process provided a good contextual understanding, the focus on the video provided the necessary depth. This changing in focus is also legitimized by Pratt (Pratt, 2009: 859): "one's criteria for sampling may change as a study progresses—and that is not only legitimate, but expected!"

In general, it can be said that the way I collected and analyzed the data during the various iterative cycles of my study was influenced by various methodological books (Glaser & Strauss, 1967; Lee, 1999; Lipton, 2004; Smith & Hitt, 2005; Strauss & Corbin, 1998; Yin, 2003) and articles (Alvesson & Karreman, 2007; Dubois & Gadde, 2002; Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Pratt, 2009; Rousseau & Fried, 2001; Siggelkow, 2007; Weick, 1989; see also, Vuori, 2009; Vuori & Piik, 2010), as well as by my reading of numerous qualitative articles that have used similar research designs to study similar phenomena (the most important ones have been Corley &

Gioia, 2004; Maitlis, 2005; Mantere & Vaara, 2008; Michel, 2007; Pratt, 2000). However, I did not strictly follow any single methodological authority in conducting my analysis. Rather, it was a highly personal sensemaking process during which I used the methodological tools as aides for sensemaking. I have tried to describe this process transparently in the following pages.

3.1   The Change Seminar

The change seminar was a part of strategic renewal in the Property Service Company. The Property Service Company employed about 10,000 people and had annual revenue of 700 million euro during the study. The purpose of the strategic renewal and the associated seminar was to shift strategic focus from cost competition to high value services, hence boosting profitability and longevity of the firm. There were three main elements in this strategic renewal: (1) reorganization from hierarchical structure to team-based structure, (2) new values, attitudes, and culture, and (3) new focus in sales from revenue to profitability. The new values, attitudes, and culture were to be created by training all the employees of the firm in three-day seminars, all held by the same coach. Emotional sensegiving during these seminars is the focus of this study. More contextual factors and their potential effects on my findings are discussed below in the sub-section "contextual limitations."

The coach had held the seminars for 20 years and developed a strong routine for running the seminars. He had an overall plan of the content of the seminars and this content remained the same in each seminar, even when different companies were being trained. In addition, he had his unique sensegiving style, which was not explicated or conceptualized in his head or in writing, which remained similar across the seminars. Hence, I was able to first participate in one seminar, then develop more structured data collection instruments, and then collect data in the following seminars, as described below in the "data collection" section.

The seminar contained a mix of lessons regarding organizational structure and culture, linked with folk-psychological theories of social interaction. The coach's basic message was that old, hierarchical structures lead to sub-optimization, low productivity, and waste. They must, therefore, be replaced with team-based organizing, in which employees take more responsibility of the work; there is continuous improvement and consideration of the whole work system; and even innovative initiatives by the employees. To make this new structure work, the coach argued,

workers also need to learn new, more assertive and responsible ways of interacting with each other, management, and customers. The coach used several concepts to describe the new, needed behaviors in the team-based organization. These concepts are briefly defined in Table 2 below. The findings section contains several illustrations of the coach's sensegiving and the "what" of the sensegiving becomes apparent in these illustrations, even though the theoretical focus is on "how" the coach gives sense.

Table 2: Definitions of key terms that the coach used for describing social interaction patterns

Concept in Finnish	Free translation to English	Meaning of the concept
Kerttu	[name of a woman]	Kerttu refers to an overly nice woman. She does not stand up for herself but allows others to abuse her.
Markku	[name of a man]	An indifferent man who avoids facing problems and people who talk about problems. If something does not work, he ignores it and, for instance, leaves his task unfinished.
Idiootti	The idiot	When people are angry and behaving badly, the coach argued, they are letting their idiot speak for them. I.e. the idiot is the angry part of a person, who sometimes takes over (when people lose self-control).
Vastuuttaminen	The process of assertively demanding that others behave correctly	When others make a mistake or do not follow rules, the coach explained, people must assertively demand them to behave in the right way. This way the work system will remain functional and no-one is abused.
Kriisiyttäminen	Surfacing problems that have been suppressed	If there is a problem in a work unit and supervisors do not fix it, even when employees have asked for this, the employees must make a crisis out of the situation. They must communicate the problem to higher levels and to the coach and stop activities until the issue is resolved.
Kuri vs. kurinalaisuus	External discipline vs. self-discipline OR authoritarian vs. authoritative	Key concept pair describing organizational culture. External discipline refers to the use of hierarchical power, control, and sanctions. Self-discipline refers to a system in which people take responsibility and initiatives, and behave well.

As the seminar progressed, the coach kept moving back and forth between his organizational theory and his theories of social interaction. As can be seen from Table 3 below, the emphasis slightly shifted from the description of problems to the description of solutions towards the end of the seminar. Yet, the coach kept describing both problems and solutions; as well as both organizing-related and social interaction -related content throughout the seminar. One notable

detail in the timeline is that group assignments were carried out only during the latter half of the seminar, when the coach had already told the participants how they should think.

Table 3 (1 of 2): The realized timeline and content of the seminar

Time	Content
Mon 9:30-10:20	General introduction to the seminar, location, and the organizational change. Round of introductions, each participants tells who they are & where they are from
Mon 10:30-11:33	The organizational restructuring and TMT commitment The rules of the seminar Taylorism as the root reason for current problems and bad working life
Mon 11:33-12:30	(Lunch break)
Mon 12:30-13:35	Structural and cultural change from Taylorism to team-based organizing New definition of productivity Critique of the current structure of the firm
Mon 13:45-14:30	Several concepts relating to social interaction
Mon 15:00-15:50	More about social interaction Culture and values relating to team-based organizing
Mon 16:00-16:50	Growing as a human being; self-esteem Interdependencies between social interaction system and self-esteem Definition of love
Tue 8:30-9:30	Recap of Monday's content Outline of the organizational and cultural change that is being implemented
Tue 9:45-10:30	Honesty and openness First forbidden word ("you") in the process of behaving assertively
Tue 10:40-11:30	Solving interpersonal conflicts How to handle one's own bad mood Second forbidden word ("intentionally") in the process of behaving assertively About punishments and punishing
Tue 11:30-12:30	(lunch break)
Tue 12:30-13:55	Punishing children Attitudes influence perception The process of surfacing suppressed problems
Tue 14:10-14:30	The new strategy of the firm Rules and principles guiding the organizational change
Tue 15:00-15:40	Creating teams and the right culture for team-based organizing
Tue 15:50-16:15	Instructions for group assignment Group formation
Tue 16:15 →	Groups work on the assignments [no video of the process]

Table 3 continues (2 of 2)

Wed 8:35-9:30	Recap of seminar content so far
	Illustrations and discussion of concrete problems in the firm
Wed 9:54-10:50	New requirements for supervisor work
	Employee initiative system
	Presentation of group assignments begins
Wed 11:00-11:30	Presentation of group assignments
Wed 11:30-12:30	(lunch break)
Wed 12:30-13:00	Last group presents their assignment
	Instructions for second group assignment
Wed 13:00-13:45	Groups are doing the assignments [not on the tape]
Wed 13:45-14:30	Discussion about a problem mentioned by a participant
	Groups present the assignments
	Recap of seminar content
	Encouragement for the change

3.2   Data Collection

I used multiple sources of data (Table 4) in four phases to get a thorough understanding of the coach's sensegiving and its effects. The use of multiple data sources is commonly recommended for theory building research because it allows understanding the complexity of the phenomenon better and verifying tentative findings from multiple sources (Yin, 2003; Strauss & Corbin, 1998). All the data was collected between January 2006 and August 2006.

Table 4 (1 of 2): Data sources and phases in data collection

Data source	Description	Primary purpose for collecting the data
Phase 1: Pre-understanding to facilitate structured data collection		
Seminar #1 with Milk Company	Participant-observation with only very limited pre-understanding of what is on the agenda; active participation also in the evening activities Extensive notes of seminar content & informal discussions with participants	General understanding of the seminar content and process to prepare for more structured data collection Get an insider understanding of the seminar and its effects
Phase 2: Structured data collection of the seminar and its immediate effects		
Seminar #2 with Property Service Company [This is the primary seminar analyzed in the findings section]	Video recording the seminar Some notes of seminar content and informal discussions	Record accurate data for future analyzes [Fragments of the video were coded in 2006 but the video was fully used only in 2011 when it was digitized and I analyzed it directly with Atlas.ti software]
Interviews with ten participants of seminar #2 before and after the seminar	Interview questions focused on the participants' opinions, beliefs, and attitudes on topics that were discussed in the seminar. In the after interviews, I also asked about their views about the coach and the seminar	Assessment of the effects of the seminar on the participants' thinking and attitudes by comparing their before and after answers to the same questions Insights about the process
Surveys filled by participants in seminar #2 before, during, and after the seminar	Likert-scale questions about beliefs and attitudes that related to the content of the seminar After-survey also contained questions about the coach Two open questions about how the participants are feeling and what they think of the coach (asked after the first and second day of the seminar)	Assessment of attitude and belief change by comparing before and after answers Assessment of participants' views of the coach Get a more comprehensive understanding of how the participants' thoughts and emotions evolved during the seminar
Phase 3: Additional data on the seminar and its immediate effects		
Seminar #3 with Property Service Company	Participant-observation, notes	Ensure that the dynamics of the seminars are similar with one another; gain deeper informal and first-person understanding of the process
Surveys filled in by the participants of seminar #3 before and after the seminar	Open questions about general thoughts and feelings Likert-type questions relating to seminar content	Further data on belief and attitude change; and on reflections about the coach and the seminar

Table 4 continues (2 of 2)

Phase 4: Data on the context and overall effects of the seminar		
Interviews with four change leaders from three companies (Milk, Property Service, & Sausage)	Questions about the context and effects of the seminars in the three firms; and about the leaders' views on the coach	Deeper understanding of the context of the seminar Evaluation of the general effects of the seminar
Interviews with five participants of seminars held in 2000 (Sausage Company)	Questions about what they remembered from the seminar; and how it had influenced their own thinking and behavior, and their work system	Evaluation of whether the seminar has had long-lasting effects on the participants' thinking or behavior
Continuous process: Interaction with the coach		
Interviews (3) and informal discussion (>20) with the coach	Questions relating to the context and content of the seminar; and sensegiving tactics of the coach	Deeper understanding of and data on what and how the coach is trying to make the participants believe (unfortunately, the coach was not able to explicate his sensegiving tactics and the "how" of his sensegiving but only spoke about the content and context)

3.2.1   Phase 1: Participant-observation in the first seminar

I started the data collection by participating in the coach's seminar in January 2006. I had three goals in this first phase of data collection. First, I wanted to develop a thorough understanding of the content of the seminar. This would allow me to design interview and survey questions to assess belief and attitude changes potentially caused by the seminar. Second, I wanted to develop a preliminary understanding of the process of sensegiving in the seminar to be able to focus my data collection on the following phases of the seminar on factors that seemed crucial. Third, I wanted to develop a deep, first-hand understanding of the process of the seminar. This first-hand experience would provide valuable inputs for my later theorizing and also functioned as a reality check for emerging ideas of how the training potentially influences people.

When I participated in the first seminar, I had very limited understanding of the coach and what the seminar was about. Hence, I had no pre-conceptions of the coach at the beginning of my data collection. I was an active participant in the seminar. I listened to the coach just like the rest of the audience (I did not participate in discussions, though; nor did many other audience members). I also participated in the evening activities: I

went to sauna with the male participants and got drunk with them in the hotel bar on both evenings; I also actively had discussions with the participants, about both life in general and the content of the seminar during these evening activities.

During the first seminar, I made detailed notes of the coach's arguments and my own reflections. My focus and reflections mainly related to the content of the seminar because I got really excited about them. In total, I made 35 pages of handwritten notes of the seminar. Thirty-one of these pages were filled with content-related notes and four pages contained notes about my observations of the coach's sensegiving tactics and the participants' reactions during the seminar. In addition, I made five pages of notes of my informal discussions with the participants in the evenings. I used the notes to develop the first memos of the content of the seminar and the coach's sensegiving tactics.

3.2.2 Phase 2: Comprehensive data collection of the second seminar and its effects

The goal of the second phase of data collection was to collect comprehensive data on the process of the seminar and its effects on the participants. I video recorded the seminar to get accurate, objective, and lasting data of the seminar, and asked the participants to fill in surveys and give interviews to understand how they experienced the seminar and how the seminar had influenced their mental models and attitudes.

Video recording the second seminar

I video recorded the second seminar in March 2006. I had realized during the first seminar in January that I should have video of the seminar to be able to analyze the coach's sensegiving and participants' reactions comprehensively and thoroughly. While I was able to make plenty of notes during the first seminar, it was obvious that I had missed a lot – if I focused on content, it was difficult to make notes of "how" the coach was giving sense and vice versa. Even more difficult would have been making notes about participants' reactions simultaneously. It would simply have been impossible to observe, let alone write down all the emotional reactions ranging from changes in the tone of voice to bodily movements and facial expressions. Hence, I videotaped the seminar.

The video camera was located at the back of the seminar room and was therefore not constantly visible to the participants (see Figure 9 below – the picture is taken from the

video). Many of the participants also told me that they forgot that I was recording the seminar and the camera is not mentioned or pointed at even once in the 16 hours of material that I have of the seminar. However, the coach said that he initially felt a bit nervous about the camera but he also said that he got used to it after a couple of hours. Hence, the recording should not have disturbed the normal dynamics of the seminar.

I used the video in two phases. First, in summer 2006, I watched about 50% of the video from the screen of the video camera and made notes of the sections that I found to be most relevant. In total, I coded 153 instances in this way. About half of my codes also contained a verbatim transcription of what happened in that particular instance, while the remaining half contained only my description/interpretation of the episode. This first set of coding functioned as an input for my analysis of the process—together with the handwritten notes described above and below—for the analyses until the spring of 2011.

The second phase of analyzing the video occurred in spring 2011. I decided that I have to go deeper into the data and analyze the video more comprehensively. Hence, I digitized the 16 one-hour tapes. Consequently, I was able to view, pause, and code the videos on a computer, which allowed me to analyze the sensegiving dynamics in the seminar much more comprehensively. I coded the video minute-by-minute and produced 1,252 codes of the video. These codes and the sections of the video that were linked to these codes functioned as a new input for my analyses. I was able to analyze and categorize clips of the video directly, which provided a good access to non-verbal dynamics. I also carried out two separate inter-coder reliability assessments to ensure the validity of my own coding.

Interviews with ten participants of the second seminar

I interviewed ten participants of the second seminar before and after the seminar. The interviews were conducted about one week before the seminar and one week after the seminar. The interviews lasted about 30 minutes. I asked questions that I hoped would reveal a change in the participants' mental models, when answers before the seminar would be compared to answers after the seminar. I asked them, for instance, (1) to assess their own and the firm's strengths, weaknesses, opportunities, and threats, (2) describe on what and who their work influences, and (3) how they would behave if a coworker asked them to carry out extra tasks/a customer was trying to start a fight/they

disagreed strongly with their supervisor/they had insulted someone. In addition, in the interviews that I carried out after the seminar, I asked how they felt about the coach and the seminar; and was there some content that they found exciting. I voice recorded the interviews and later transcribed them in a near-verbatim way. I also made notes during the interviews.

I used the interview data in two main ways. First, I compared the participants' answers to the same questions before and after the seminar to assess any changes in their thinking. The comparison to pre-training answers was important to avoid the retrospect-bias. Second, I underlined any statements they made about the process of the seminar and their reactions to it, so that I would have richer inputs for analyses of the coach's sensegiving.

Surveys filled by the participants of the second seminar

I also asked the participants of the second seminar to fill in surveys before, during, and after the seminar. The surveys they filled before and after the seminar contained Likert-type questions about attitudes and beliefs relating to the content of the seminar (see Table 19 in chapter 5). Again, my goal was to find evidence of mental model change by comparing the answers the participants provided before the seminar to the answers they provided after the seminar. These surveys were filled as the first thing in the first morning of the seminar, and as the last thing on the last day of the seminar. The latter survey also contained questions about how the participants perceived the coach.

The participants also answered two open-ended survey questions after the first day and on the third morning. The questions were: "Please describe in a few sentences which kinds of feelings and thoughts this day made you feel" and "What do you think about this training, its usefulness, and the coach? Please answer in a few sentences." The reason for asking these questions was that the participants' answers to these questions would provide a more comprehensive understanding of how the participants' thoughts and feelings evolved during the sensegiving process.

I used the open-ended answers provided after the first and at the beginning of the third day in two ways. First, I read through all the answers and coded them in different ways. My codes included, for instance, "signs of survival anxiety," "hostile toward the coach," and "indifferent." I used this coding to develop a better qualitative

understanding of the whole process and the participants' reactions—which functioned as an important input for my later sensemaking of the coach's sensegiving. Second, once I had understood that the coach seemed to manipulate the participants' level of emotional arousal, I also coded the open-ended answers along two dimensions of arousal (high-low) and valence (positive-neutral-negative). I also carried out an intercoder agreement check with these codes.

3.2.3   Phase 3: Further data on the seminar and its effects

In the third phase of my study, I collected additional data on the process and effects of the seminar. The main purpose for collecting this additional data was to verify that the dynamics of the second seminar (which underwent the most comprehensive analysis) were not idiosyncratic to this seminar but representative of more general sensegiving dynamics.

Participation in the third seminar

I participated in the third seminar in April 2006. It was organized in Oulu for the Northern-Finland employees of the Property Service Company. The primary goals for participating in this third seminar were: (1) further deepening my understanding of the seminar dynamics, (2) checking if the seminars were similar to one another [the three that I participated in were], (3) further interacting informally with the coach and the change leaders of the Property Service Company [they also participated in this seminar]. I made 15 pages of handwritten notes during this seminar. Each of these goals was met and they provided an incremental contribution to my overall understanding of the seminar.

Surveys filled by the participants of the third seminar

I asked the participants of the third seminar to fill in surveys before and after the seminar. The surveys contained open questions relating to their expectations/reflections, thinking, and feelings, and Likert-type questions relating to the seminar content (see Table 20 in chapter 5). Again, the goal was to collect evidence of mental model change by comparing answers given before and after the seminar. In addition, I hoped to assess their general attitudes towards the training and mood before and after the seminar. Each of these pieces of evidence functioned as inputs for sensemaking about the sensegiving dynamics in the seminar.

3.2.4 Phase 4: The context and overall effects of the seminar

In the fourth phase of data collection, I wanted to collect data that would allow assessing whether or not the seminar had also long-lasting effects on the participants and their behavior at work. In addition, I wanted to better understand the organizational context of the seminar. To achieve these two goals, I interviewed change leaders from three companies who were or had been working with the coach and five persons who had participated in the coach's seminar five years earlier.

Interviews with four change leaders from the three companies

I interviewed the change leaders of the three companies who were involved in this study during the summer 2006. The interviewees included the development manager (I interviewed him twice) and the retired CEO of the Sausage Company, the development manager of the Property Service Company, and the development manager of the Milk Company. The interviews lasted between one and two hours. I asked questions about how they thought the seminar influenced the participants and what they thought about the coach. I also asked if they thought the seminar supported the organizational renewal processes in the firms and what other factors influenced the success of this process.

Interviews with five participants of seminars held in 2000

As a final source of data, I interviewed three employees and two managers of the Sausage Company who had participated in the seminar in 2000. I carried out the interviews in August 2006. The goal of the interviews was to assess if they still remembered some of the content of the seminar and believed that it had influenced the behavior and thinking of themselves and their work units. The interviews lasted about 30 minutes each. I basically asked what they remembered about the seminar, what they thought about the coach, and how the seminar changed the way they and others think and act at work. My rationale was that if the seminar had an influence on the participants' thinking and behavior, they should have explicit memories of the content of the seminar.

The retrospective, explicit memory approach to assess mental model change has, of course, several limitations. Three of them are most relevant in this context: (1) some learning might happen sub-consciously (e.g., Reber, 1989); (2) the participants could remember the content because it was repeated after the seminar; and/or (3) they might

not have changed their thinking even if they remembered the seminar content. Hence, mere retrospective assessments would not be of much value if one aims to evaluate the effects of any seminar. However, when combined with the prospective measures of mental model change, I believe the retrospective measures provide valuable, triangulating evidence of the effects of the seminars analyzed in this thesis.

3.2.5 *Continuous process: Interviews and informal discussions with the coach*

I interviewed the coach formally three times and had tens of informal discussions with him through the period from January 2006 to August 2006 and during summer 2007. The formal interviews lasted from 30 minutes to two hours. I voice recorded and transcribed them. I asked questions about the background, context, and content of the seminar and his approach to sensegiving. He described several successful company renewals and his theory of how companies should manage their employees and, thus, increase their productivity and well-being. These interviews, as well as the informal discussions, helped me to develop a deeper understanding of the content of the coach's sensegiving and the context and background of the seminar.

I also tried to use the interviews to understand the sensegiving tactics and process from the point of view of the coach. However, the coach had severe difficulties in explicating his tacit knowledge of sensegiving (the "how" of his sensegiving). Whenever I asked him how he tries to persuade the participants, he immediately started talking about the content of his sensegiving. This happened even when I interrupted him several times and explained that I was interested in his persuasion tactics, not the content. Hence, I was not able to extract an explicit theory of sensegiving tactics that the coach was following (and the findings section describes my interpretation of his tacit knowledge that surfaced in action only). The facts that I had developed a close relationship with the coach, that he genuinely tried to help in doing the study, and that he was close to retiring ensure that the coach did not pretend to not understand what I was asking to protect his intellectual capital and competitive position.

3.3   Data Analysis, Part 1: the Sensegiving Process

My data analysis consisted of two parts. First, the theoretically most relevant part focused on the sensegiving process in the seminar. The second part assessed changes in participants' mental models.

The first part of the analyses proceeded in iterative cycles during which the study's focus became sharper, reducing the breadth of analyses and increasing their depth (Figure 2 and Table 5). Each iterative cycle was characterized by moving between data analysis, reading the literature, and general conceptual reasoning. I first analyzed the seminar and its context in a holistic way to develop a narrative of how the seminar unfolded and was related to and supported by organizational factors. Then I put more focus on the seminar and, through an iterative process, became more and more focused on the coach's sensegiving tactics, their emotional effects, and then again, at a more micro-level on the coach's emotional sensegiving tactics. The last analysis phase provided the theoretical contributions of this study, while the earlier phases provided inputs for this last phase and contextual understanding that helps in understanding how the theoretical findings can be generalized.

Breadth of analysis

Depth of analysis

Phase 1: General understanding of the seminar and its context

Phase 2: Seminar macro-structure and sensegiving micro-tactics

Phase 3: Linking micro-tactics with the macro-structure

Phase 4: Emotional effects of the micro-tactics

Phase 5: Transfer of emotional arousal

Phase 6: Micro-level focus on emotional sensegiving
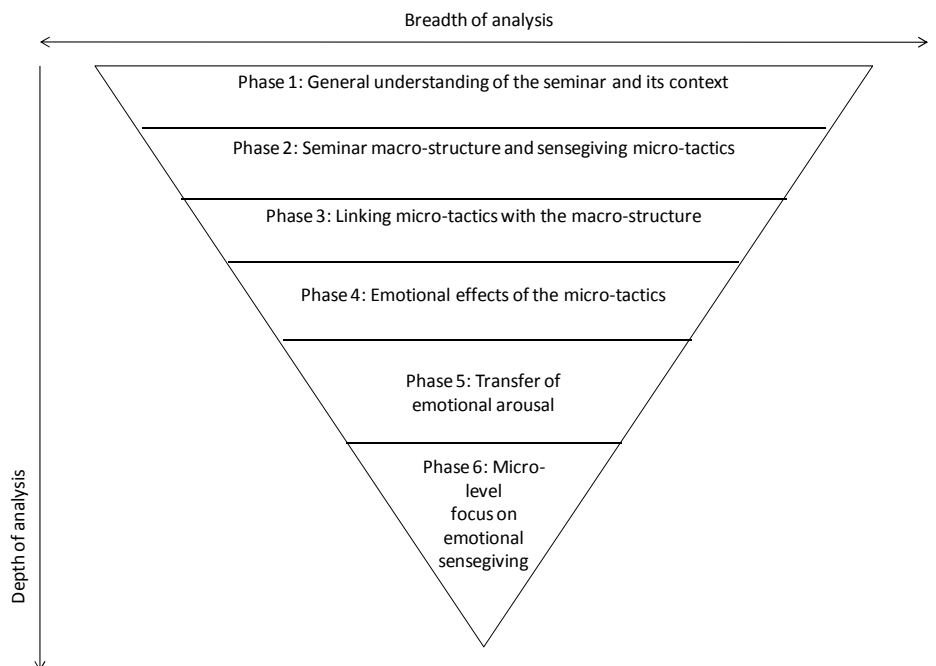
Figure 2: The study's focus became sharper during the iterative analysis process

I applied various theoretical perspectives throughout the analysis. I read over 1,500 books and articles during the five-year analysis period. I applied several of the models of the literature in my mind on the data and mentally experimented if they would help in explaining the data and in developing theoretical insights. I explored and tested

those models that passed these initial tests more explicitly in notes and short memos. In this section, I describe those ideas that also passed this second round of testing. The broad variety and the mere number of theoretical perspectives applied during the process as interpretation aides should have ensured that I have not been overly biased by a theoretical lens, when interpreting the data. Rather, I chose to focus on the combination of theoretical perspectives that seemed to best explain the data, after experimenting with various alternatives. This explanation created by the synthesis of the sensegiving theory with the emotion theory also constitutes the foundation of my theoretical contribution.

I will describe the phases of my data analysis as transparently as I can. Even though journal articles conventionally describe a reconstruction of data analysis that seems to proceed in a linear and straightforward way, it is generally acknowledged that data analysis is almost always a messy, iterative process. I hope that the increased transparency in my description will increase the trustworthiness of my findings (see also, Pratt, 2009; Zalan & Lewis, 2004).

3.3.1 Phase 1: General understanding of the seminar

In the first phase of my data analysis, I wanted to develop an overall understanding of how and why the seminar influenced the participants and their firms. I used two main analytical perspectives to structure this analysis: Kotter's (1995) eight factors contributing to the success of organizational change and Gardner's (2004) seven factors contributing to individual mental model change. I interpreted the seminar data through these two lenses and described how the coach's influencing tactics applied their principles.

In concrete terms, my analysis proceeded as follows: I created tables in which Kotter's eight factors and Gardner's seven factors were in the left column. Then I wrote notes of how the coach and the trained firms applied the principles of the theoretical frameworks in the right columns of the table. For instance, one of Gardner's (2004) seven factors is "Real World Events"; he argues that when a new idea is linked with concrete external events, people are more likely to believe the new idea (p. 17). I showed, in my analysis, how the coach used this principle whenever he told examples of the case companies or other companies. Likewise, Kotter argues that "creating a sense of urgency" is an essential element of making organizational change succeed; I

wrote in the column next to this how the coach's description of the firm's problems can create such sense of urgency.

The output of this phase was a narrative report of the unfolding of the seminar and the related organizational changes. The document also included the tables I had made as a "theoretical explanation" of why the seminar had the effects it had on the participants and their firms. The document did not yet contain strong, novel theoretical ideas and its main role was to deepen my understanding of the data and its context, as well as to function as an input for later phases in the analysis.

3.3.2   Phase 2: The seminar macro-structure and sensegiving micro-tactics

The second phase of my analysis consisted of two goals at different levels of analysis. First, I wanted to understand the macro-structure of the seminar. I analyzed the seminar macro-structure through the unfreeze-change-refreeze model (Lewin, 1951/1997; Schein, 1999). Again, I created a table in which the concepts of the theory framework (psychological safety, survival anxiety, change, refreezing) were in the left column. Then I put notes and segments of the data in the right column to investigate how the seminar content was consistent with the framework. Through this analysis I understood that the coach created strong negative emotions especially during the early phases of the seminar (later, during phases 4 to 6, I would focus on how he created these emotions and associated them with the cognitive content of the seminar; later analyses would also reveal that the coach continued to create strong emotional reactions throughout the seminar).

The second part of the second analysis phase focused on micro-tactics the coach used to influence the participants. I used two theoretical perspectives to help me conceptualize his micro-tactics. The first perspective was the research on the use of heuristics and biases in persuasion (as summarized in Cialdini, 1993 and Huczynski, 2004: Chapter 9). It focuses on understanding how sensegivers use the cognitive shortcuts people use to influence those people. For example, people often change their attitudes to match their previous actions, even though those actions had been caused by external triggers rather than their attitudes (Festinger, 1957); hence, if a sensegiver manages to manipulate someone to show minor commitment to a topic, he or she is more likely to be convinced by subsequent sensegiving on the topic (see Cialdini, 1993: 57-113).

Table 5: Six main cycles of the iterative analysis process

Phase	Theory lenses	Material analyzed	Analysis techniques	Outcomes	Limitations
1	Gardner (2004), Kotter (1995)	Field notes, all interviews & surveys, a few sections of the video (resulted in 10 pages of notes)	Theory-based tables	Explanation of the effectiveness of the seminar through Gardner's (influencing) and Kotter's (org. change) frameworks	Wide rather than deep, no theoretical insights
2	Lewin (1947), Schein (1999), Cialdini (1993), Huczynski (2004) Systems Intelligence	Field notes, all interviews, open-ended surveys, short notes of the video	Theory-based tables, Systems diagramming	Conceptualization of 11 influencing tactics; Interpretation of the seminar macro-structure through unfreeze-change-refreeze structure	Anecdotal (single instances), no theoretical insights, data forced into theory lens
3	Lewin/Schein, sensegiving, sensemaking	Field notes, some interviews, open-ended surveys	Systems diagrams, visual mapping	Model of how micro actions influence macro process; three micro-tactics	No strong empirical support, data forced into theory lens
4	Sensegiving, Weick (2006), Fiske & Taylor (2008)	Field notes, some interviews, open-ended surveys, short notes of the video	Second-order interpretation	Insight that negative arousal can transfer into positive	Too long delays in arousal transfer, inaccurate description of macro-phases, concept of "faith"
5	Sensegiving, arousal-valence emotion theory (Russel, 2003)	Field notes, some interviews, open-ended surveys, short notes of the video	Selective coding	More focused description of how the coach created and transferred emotional arousal	Model assumed that arousal transfers over long time periods (hours, days). No conceptualization of specific emotional sensegiving tactics and reactions. Superficial data analysis
6	Sensegiving, arousal-valence theory (Russel, 2003), emotions (Damasio, 1994; Ekman, 2003)	16 hours of digitalized video of the seminar	Minute-by-minute coding of the whole video. Categorization of 1st order codes into 2nd order categories and theoretical constructs	Recognition of three micro-phases in emotional sensegiving and a supporting background process; detailed description of each element and their sub-categories	Strong qualitative support of the sensegiving tactics but sub-optimal accuracy in the measurements of audience arousal; lack of explicit control group

The second theoretical perspective I used to analyze the coach's sensegiving micro-tactics was Systems Intelligence (Hämäläinen & Saarinen, 2004). It combines insights from Senge's (1990) systems thinking with general lessons of positive psychology (Snyder & Lopez, 2005). The main question I was asking from this perspective was how the coach creates self-reinforcing interaction cycles that reinforce the effect of the coach's sensegiving among the participants.

In concrete terms, I used the two theoretical perspectives in my data analysis as follows. I went through my observational material of the coach's sensegiving and coded them from these two perspectives. As an example of how I used the heuristics and biases perspective, when the coach asked the participants to indicate that they agree with the coach, I marked a code, "uses the commitment and consistency bias" to the text. Likewise, to illustrate the systems intelligence perspective, when a participant then provided an affirmative answer and other participants saw this and also indicated their agreement, I drew an arrow diagram (systems diagram as described in Senge, 1990) and coded the whole section as "commitment reinforcing interaction cycle." The outcome of this coding was the recognition of 11 specific micro-tactics that the coach used. Later data analyses, however, caused these initial conceptualizations to undergo major changes.

3.3.3   Phase 3: Linking micro-tactics to macro-process

I continued analyzing the seminar data from the point of view of both micro-level influencing tactics and more macro-level phases of change intervention during fall 2008. I had changed theoretical perspectives a bit, though. I had replaced the systems intelligence perspective with sensemaking (Weick, 1995) and sensegiving (Gioia & Chittipeddi, 1991) because they suited the data better and offered a more rigorous theoretical perspective. I still used the theories of Lewin and Schein to describe the macro-phases of change interventions; while also recognizing that both Pratt's (2000) "sensebreaking" and Gioia & Chittipeddi's (1991: 439) "ambiguity by design" resemble the unfreezing concept. I also kept the heuristics and biases perspective as a part of my micro-level analyses and Senge's (1990) system diagrams as a methodological tool (although I had already realized that Weick used similar loop diagrams in his 1979 book).

In concrete terms, the analysis proceeded as follows: I used the earlier documents as inputs for this analysis phase. I identified the most interesting sensegiving micro-

tactics recognized earlier and started thinking how they contribute to the macro-phases of the seminar. For instance, I noticed that a micro-tactic called "the cycle of opening up" seemed to create trust among the participants. Hence, I conceptualized that this sensegiving micro-tactic was an essential part of creating "psychological safety" at the early stages of unfreezing, in the seminar. Likewise, I concluded that two other micro-tactics were central to creating "survival anxiety" and "commitment to the change." While I later realized that the way I linked these single instances to the macro-phases of the seminar was inaccurate, the insight that the micro-tactics created emotional reactions that were relevant for understanding how the coach's sensegiving worked was crucial for my theoretical analysis.

3.3.4   Phase 4: Focusing on emotional reactions

When I began the fourth analysis phase, I had already realized that the participants' emotional reactions to the coach's sensegiving were central for understanding the success of his sensegiving. I, therefore, went back to the data and tried to interpret it from new angles, understanding what happens, in an emotional sense, during the seminar. I read my field notes and the open survey answers the participants had provided after the first day and in the morning of the third day. At the same time, I kept reading sensegiving articles and reviews about emotion theories. During this relatively unstructured process, I discussed with other researchers, wrote short memos regularly, and experimented with different perspectives. Ultimately, I got an insight that the concept of "faith" (Weick, 2006) could be used to describe the emotional state the participants were in after the seminar. I defined faith as a "strong sensation that we can do this and we must do this." In essence, it was a state of high, positive emotional arousal (but this more parsimonous description came to my mind only later—after I had abandoned the faith concept).

I also incorporated my emerging understanding of the theories of social cognition (as outlined in Fiske & Taylor, 2008) into my analyses. My ideas were, naturally, a bit naïve at this stage but they also contained the seed of the main idea of this thesis: I understood that one moment of sensegiving can create emotional arousal that can transfer to the next moment and be associated with different cognitive content (Fiske & Taylor, 2008: 319). I realized that many of the coach's lessons that had little to do with work indeed increased the participants' emotional arousal and that this arousal could be associated with the work-related content the coach was also talking about.

Combining the two insights, that faith (a high arousal, positive emotional state) is the outcome of the seminar, and that negative arousal can transfer into positive and be associated with novel content, I created a preliminary model of how the coach used various micro-tactics to "build faith through sensegiving" (Figure 3).

There were two main limitations in this version of my theorizing: First, I had become slightly decoupled from the data in the process of increasing the level of abstraction in my conceptualization of the data. My arguments about the flow of events and combination of tactics suffered from inaccuracies. Second, the concept of faith created more confusion than clarity—it took attention away from basic emotional dynamics, while inviting religious questions, and not helping in understanding the data or sensegiving.
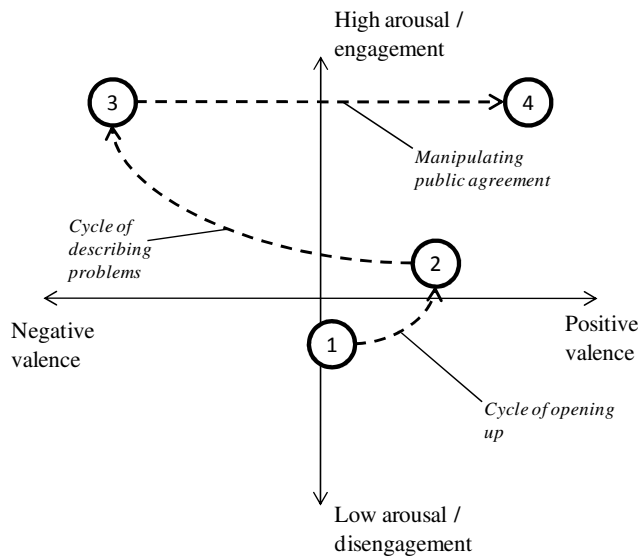
Figure 3: According to my 2009 interpretation, three micro-tactics moved emotional state from (1) neutral to (2) mild positive to (3) strong negative to (4) strong positive faith

3.3.5   Phase 5: Creating and transferring emotional arousal

During the fifth analysis phase, I kept simplifying and elaborating the model presented in Figure 3. I simplified the model by abandoning the concept of faith and by merging the two arousal-increasing cycles into one tactic: increasing arousal. I also selectively

coded all the notes I had of the seminar to identify any tactics the coach used for increasing the participants' emotional arousal. I recognized a handful of such instances and collected them into a table. However, I did not further process these tactics into sub-categories or conceptualize them. I did not do this further analysis and conceptualization of the tactics because the number of instances was small in my notes (I still had no access to the digitized video).

I elaborated the model by reading more about sensegiving and emotion and social cognition theories. I developed a better theoretical understanding of what can cause emotional arousal, how it can be recognized in people, how it influences their thinking, behavior, and memory, and how fast/slowly arousal can decay. I incorporated these insights into the manuscript I had of the sensegiving process at that time.

While the key insight of leveraging emotional arousal that is created with work-unrelated content started to become stronger, my model still contained a serious flaw. The model assumed that the arousal transfer happens over longer time periods than a few minutes. I was still biased by the idea of three main phases (i.e. Lewin's [1947] unfreeze-change-refreeze and also Pratt's [2000] sensebreaking-sensegiving-identification). I was able to recognize this flaw in my thinking with the help of the data. I used the open-ended survey answers that the participants of the seminar that was video-recorded had provided after the first day and at the beginning of the third day in the seminar to verify my hunch. Once I had understood that the coach seemed to manipulate the participants' level of emotional arousal, I coded the open-ended answers along two dimensions of arousal (high-low) and valence (positive-neutral-negative). This coding showed that the majority of the participants were negatively aroused after the first day and positively aroused in the morning of the third day. However, when I asked another PhD student to code the same material in the same way, it suffered from low inter-coder agreement (71% for arousal and 54% for valence). The low inter-coder agreement in this phase was an important turning point for my theorizing. Earlier in the process, I had thought that the coach would first increase arousal by providing negative information during the first day, and then associate this high arousal with positive valence. The fact that the data did not support this claim helped me to realize also the theoretical flaw in my idea—that emotional arousal can transfer only over short time periods (minutes), not days, as I initially had thought.

3.3.6 Phase 6: Microscopic focus on the dynamics of emotional sensegiving

I started the final iteration cycle with (1) the insight that there are emotional and cognitive components in sensegiving and (2) the assumption that arousal reinforces the effects of cognitive sensegiving. I digitized the 16 video tapes (approximately 15 hours of video) which I had of the seminar and analyzed that video with computer, as described below. As I moved further in my analysis, I got deeper and deeper into the "how" of the arousal component.

I will describe the iterative coding process in detail below. To make my data as transparent as possible, I will describe in a chronological narrative how I recognized different sub-elements in the data; how I categorized them into second-order categories and theoretical dimensions (Figure 4); and how the model that is presented in the section "emotional sensegiving in the seminar" ultimately emerged from the data. Before moving to the narrative, however, allow me to make six general observations about the coding process.

First, the coding proceeded as follows. I watched the video and paused it every few seconds or couple of minutes, depending on what was happening. Whenever something relevant happened, I stopped the video, marked the beginning and end point of that relevant episode, and wrote a code that described this episode. These descriptions are called first-order codes. I needed about four to six hours to code each hour of the video. I coded only one or two hours of video per day to maintain freshness and attention in coding. In this way, I produced 60-100 first-order codes per one hour of video.

Second, the coding process was highly iterative. While I was coding, I constantly wrote memos and initial categorizations and models to keep making sense of the data. The categorization of first-order codes into second-order categories and aggregate, theoretical dimensions are essential elements of inductive, qualitative analyses (Strauss & Corbin, 1998; Corley & Gioia, 2004). I constantly compared the first-order codes in my mind and created various alternative categorizations. I also recorded these ideas into memos, producing 5-10 memos per one hour of video.

Third, categorization is always a bit fuzzy a process. In fact, there are two ways humans can categorize entities (see e.g., Fiske & Taylor, 2008; Smith & DeCoster, 2000) and both of these ways bracket continuous reality (Weick, 1979). The first way

to categorize is to group similar objects together. The second way is to first define the abstract properties of a category and then include those empirical instances in that category that meet the abstract criteria. In reality, when I was coding, these two ways of categorizing were intertwined. I conceptually understood what happened in concrete episodes and then generated ideal/abstract properties of a category from my insights. Then I observed instances that roughly met these criteria and grouped them into the same category. At the same time, I recognized that some concrete instances were similar to the ones already included in the category, and grouped them together based on similarity and further thought about the abstract properties of that category. But I also used these new instances to define the category. Consequently, by comparing the similar instances and making sense of their properties, I actually redefined the abstract properties of the category that was emerging. Then I again looked for instances that met the abstract criteria and/or were similar to the instances already included in the category. Hence, it was through this fuzzy and iterative process that the ultimate categories emerged.

Fourth, I constantly worked directly with the video, not transcripts during this last analysis phase. This way I got a much deeper understanding of not only what was said, but how it was said and all the non-verbal behaviors and reactions of the coach and the participants. The coding, categorization and writing were much slower this way, but the additional depth it provided was invaluable.

Fifth, as my focus was now on emotional sensegiving, I also needed to code for emotions. I needed to pay attention to both the sensegiver's emotional displays and the participants' emotional reactions. To increase the trustworthiness of my coding, I familiarized myself with various ways of assessing emotions from observational data. I read reports, books, and studies that discussed assessing emotions from the pitch of the voice (Sobin & Alpert, 1999), skin resistance (Bechara & Damasio, 2005; Naqvi & Bechara, 2006), facial expressions (Ekman, 2003; Ekman & Friesen, 1978), body postures and movements (de_Meijer, 1989; Pease & Pease, 2006), and the display of emotions in general (Damasio, 1994, 2003; Goleman, 1995, 1998). I also experimented with many of the instruments that have been developed for assessing emotions in these different ways (including: software for assessing voice pitch; hardware and software for measuring skin conductance; software for reading emotions from facial expressions). I had also gained familiarity with such tools by developing

concrete prototypes of a device that applied such emotion-reading hardware and software.[7] To maintain the transparency of my interpretations, I have tried to describe the facts of what I saw and heard in the video as accurately as possible in the findings section, whenever I am making inferences about the participants' emotional reactions. The explicit cues that I used for recognizing emotions are presented in Table 6 below.

Table 6: Observable cues of emotional states used in coding emotional reactions

Emotional cue	Description	Reference
Laughter & crying	*Positive arousal*: laughter: "ha-ha-ha" voice and smile with open mouth which usually shows teeth *Negative arousal:* crying: Tears, trembling voice, whining sounds	Damasio, 1994; Goleman, 1995
Change in volume and pitch of voice	*Fear/nervousness:* higher pitch, somewhat lower volume *Anger:* lower pitch, higher volume *Joy:* somewhat higher pitch, somewhat higher volume *Sadness:* lower volume	Sobin & Alpert, 1999
Body movements	*Anger and excitement:* increased body activity, such as aggressive waving of hands or leaning forward *Anxiety and uncomfortable emotions:* moving back and forth or from side to side; repeatedly changing position on a chair. Similar head movements and scratching head. Looking for help from others. *Fear and sadness:* closing down (head down, hands pulled together close to the body, lack of movement) and/or moving as if to avoid something (backwards, around an object)	de Meijer, 1989
Facial expressions	*Anger:* eyebrows pulled down and together, lips tightened or grimace *Sadness:* eyebrows pulled up and together, cheeks pulled up, lips pulled down, face tilts downwards *Fear:* eyebrows pulled up, upper eyelids high up, mouth open, lip corners pulled toward ears *Joy:* smile (lips pulled up, eyes wrinkled) *Disgust:* wrinkled nose, eyebrows down, lower eyelids up *Contempt*: asymmetric face such that one lip corner is pulled up while the other remains still	Ekman, 2003; Ekman & Friesen, 1978

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[7] The prototypes were developed during a student course "Mechanical Engineering 310" organized by Stanford University: http://www.stanford.edu/group/me310/me310_2010/ [Accessed 2011-04-15] I participated in the course in the academic year 2006-2007. My team's task was to develop a portable device that uses biofeedback to communicate emotions to people. We built several prototypes that used different technologies for this purpose. They included tone of voice, content of words, heart-rate, skin conductance, skin temperature, facial expressions, and body posture. This coursework increased my knowledge of and ability to recognize non-verbal signs of emotions

I used the cues outlined in Table 6 in a heuristic way when I carried out the qualitative, theory building analysis. The cues recognized in Table 6 are peripheral correlates of emotional states that exist inside the heads of individuals (Russell, 2003). Hence, these cues do not always manifest when there is an emotional state. People tend to suppress some emotional reactions, like crying, shouting, and aggressive body movements, in public situations. In addition, a purely cognitive reaction, such as thinking "that is logically correct" should not provide any visible reactions, such as nodding or shaking head from side to side, as thinking happens inside the head. Body movements indicate that some level of emotional arousal was triggered by an argument and the consequent thinking process; the arousal might be too low for the person to register it as an emotion, yet sufficiently high to produce a spontaneous behavioral reaction (see Damasio, 2003: Chapter 2; Russell, 2003). Hence, even marginal signs of emotional reactions can be considered as relevant evidence. In addition, the fact that several participants showed signs of emotions in most instances that were categorized as emotional reactions reduces the probability that I had coded random body movements as emotional reactions.

I also carried out a reliability check with more focused coding on emotions, including an assessment of inter-coder reliability, after I had finished the inductive coding phase. The procedure and results of the inter-coder reliability assessment are reported later in this section.

Sixth, when I was coding for the seminar participants' reactions, my focus was on the most common reactions. Not all people reacted in the same way all the time. However, most people reacted in similar ways most of the time. As my goal was to understand sensegiving tactics and their typical effects, I chose to limit my focus to the common reactions. There are undoubtedly several individual-level factors that influence how people react to sensegiving. I address some of them in the "contextual limitations" section below. For the purposes of my theorizing, however, understanding how most of the seminar participants reacted to the coach's sensegiving is sufficient.

Coding: ideas of data structure emerge on 2011-03-20

Having now discussed the general principles of the last phase of my data analysis, it is time to describe the actual analysis process in detail (if you just want to see the outcome, please jump to Figure 4 on page 70). I describe in microscopic detail the

coding and theorizing that happened between March 20 and March 25, as this period is representative of how my theoretical insights emerged. It also illustrates how I started refining the emergent idea; a process that ultimately led to my findings.

I started simply by watching the video with the Atlas.ti software and coding the video. I had first developed more elaborate insights about what the coach was doing after coding Tapes 1-3 and 33 minutes of tape four. I recognized three main elements in the coach's sensegiving, and some potential sub-categories in them. The three main elements formed in my head as I was doing the first-order coding – I compared the instances and grouped similar instances together in my thoughts; I experimented with tens of combinations during this thinking process. I wrote the following memo about the data structure:

------ Memo begins ------

1. Increasing arousal

   - Harsh claims
   - Jokes
   - Intimate stories
   - Confusion about concepts [Retrospectively added comment: This sub-category did not get sufficient empirical support and I had to abandon it at a later stage]

2. Cognitive reframing

   - Re-explaining harsh claim [This category later transformed into "re-explaining"]
   - Same example linked to work context
   - Less related lecturing [This category later transformed into "Simple telling"]

3. Ensuring commitment

   - Asking for affirmation
   - Asking to think about the point [This sub-category did not get sufficient empirical support and I had to abandon it]
   - Recap/summarize key points [I realized later that this category is a form of simple telling rather than a tactic for increasing commitment]

These three phases repeat themselves again and again. Much of the content that has followed the pattern are

         o overview
         o Taylor
         o Org chart
         o Kerttu ["Kerttu" is the name of a woman]

```
o  Hoiva [Translation: nurture]: Starts with arousing fact &
   question ("why mom wants to destroy his son?"),
   description of hoiva [nurture] process (really blaming
   women and mothers = harsh claims)
o  kuri & kurinalaisuus
o  if rules are not followed: first discusses with
   audience, then makes his point with "minua on
   hakattu" [I have been beaten]
```

------ Memo ends ------

After these initial realizations, my coding focused more on these elements. As can be seen below, the idea was refined, elaborated, extended, and sharpened during the coding and analysis process.

Refining the set of second-order categories 2011-03-22

I started experimenting with initial second-order categories more systematically by creating "families" in Atlas.ti software: I started with those second-order categories that seemed the clearest by creating a family name for such categories. I started this explicit grouping for families after I had coded four hours of the seminar video and produced 363 codes and 34 memos. I felt that I had to create some explicit structure on the complex data or I would get too confused. On March 22, 2011, the initial set of second-order categories was:

- Asking for affirmation
- Brutal, provocative claim
- Joke
- Legitimizing emotions
- Links previous illustration to workplace
- Open display of emotion
- Reacting to audience's display of disbelief (this category emerged only when I was grouping together codes for 'Asking for affirmation')
- Reference to intimate relationship
- Work-related provocative examples (this category emerged only when I was grouping together codes for 'Reference to intimate relationship')

I accumulated 15-40 codes for these initial categories. Once I had grouped them together, I could develop a better understanding of each emergent category and its properties. I wrote new notes and memos also in this phase, and an initial description of these categories with theoretical explanation and empirical illustrations in both text and tables.

In parallel with creating the second-order categories and defining their properties, I also coded for micro-episodes that showed progress in time from amplifying arousal to cognitive (re)framing, and reinforcing commitment, after viewing the first four hours of the video. I was able to recognize various instances with this kind of a pattern, even though I still had no explicit second-order codes to describe the specific tactics the coach used in each of the three main phases.

By simultaneously coding for the second-order categories and for the micro-episodes, I was able to develop both a deepening understanding of each specific tactic and a more general understanding of their interdependence. In this way, I managed to cope with the challenge of understanding the whole vs. parts. On one hand, none of the micro-acts of sensegiving, such as a single joke, makes sense if it is not connected to a larger whole. On the other hand, a description of the larger process is not that insightful unless one understands its elements.

Intense refinement continues 2011-03-25

I kept making sense of the data and writing my insights down into a text document that ultimately became the findings section of this thesis between March 22 and March 25. During this writing period, I constantly went back to the data to understand it better. In three days, the initial set of second-order categories had evolved such that I thought I had good understanding of the following five categories:

- Reference to intimate relationship (38 coded instances in the data)
- Jokes (36)
- Bridging an example to work content (6)
- Pure lecturing (8)
- "Do you find this logical?" (23)

I had also recognized that the following categories have potential value in explaining the emotional sensegiving process and tactics in the seminar. However, I felt that there was not enough data to clearly understand, define, and conceptualize these categories, so I decided to pay close attention to such kinds of dynamics in the subsequent rounds of coding.

- Tactics that weakened the desire to control emotions or encouraged the participants to react emotionally (28) [Retrospectively added comment: The fourth theoretical dimension—legitimizing sensegiving tools—evolved from this second-order category]
- Brutal claims (38)

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- Re-explaining with more nuances and qualifiers (2)
- Increasing efficacy (3)
- Other tactics for increasing commitment (-)

I also decided to still keep an open mind when continuing the coding after analyzing the first four hours of the video. I did this because the coach might introduce some new tactics during later phases of the seminar. Likewise, new kinds of reactions and patterns could emerge from the audience.

In terms of the second dimension along which I was coding—the temporal progress with the tactics—I decided to still code several examples from the second and third day so that I could see if and how the micro-level episodes changed during the seminar. The evidence I had gathered by coding data from the first day indicated that the episodes progressed in a similar manner from (i) increasing arousal to (ii) cognitive (re)framing to (iii) increasing commitment. This insight needed to be verified with additional data from the next two days of the seminar.

One more round of sensemaking before moving to the fifth hour 2011-03-26

Before moving on to code the fifth video, I decided to go through all the codes one more time and try to assign them to families (second-order categories). I felt that I still could find many relevant categories and codes from the data that I had missed during the earlier days of coding. It took me about two hours to go through the list of 360+ codes, with focus only on those codes that had not been assigned to families before. During this process, I assigned tens of first-order codes to the existing families (second-order categories) and also recognized a handful of potential new families and assigned some codes to these families. I also started seeing similarities and differences between different families. Regarding the categories that I had earlier recognized to need more data, I found more codes for the following:

- Brutal claims: new total number of codes: 56
- Increasing efficacy: 16
- Re-explaining: 10
- Links previous example to workplace: 12
- Pure lecturing: 47
- Legitimizing emotions: 30

Also new categories started emerging at this stage. Hence, I decided to give attention to them in the future rounds of coding. Such new categories were:

- Audience arousal (26)[8]
- Background of the coach (9)
- Emotional lecturing (content that is emotional and work-related): 25
- Interactive lecturing: 19
- Legitimizing sensegiving tools (2)
- Open display of emotion[9] (9)
- Pushes the participant(s): 13
- Work-related provocative examples (38)

It is also important to note that I did not find support for two categories that I had thought would have a central role in explaining the data. In other words, my earlier intuitive feel of what was going on in the data was not corroborated by the more analytical approach of coding the data. The implication of this lack of support was that I seriously needed to consider dropping these categories from my model. However, I decided to keep them still in the process so that I would notice if the behaviors only emerged in later phases of the seminar (yet, there was no more data about them, so I dropped these categories from the final model). The categories were:

- Imagining the personal consequences of the idea (a form of increasing commitment): 0 codes
- Confusing terms trigger arousal and debate: 4 codes

There were also four other second-order categories that received only a handful of codes. However, some of these tactics were of such quality that it made sense that such behaviors only occurred a few times. In addition, the fact that such behaviors were missing from the seminar and the coach's sensegiving toolkit were also revealing.

- Reacting to audience display of disbelief: 8 (actually quite many times for four hours)
- Recaps core points: 4
- Speaks about his own role: 1 (the coach did very little meta-level discussion in the seminars and also in the interviews with me)

Outcome of the data analysis A: Data structure in categories

I kept coding the video and simultaneously categorizing the codes along the two dimensions of data structure and temporal pattern in the same iterative way as illustrated above. The data structure that is presented in Figure 4 ultimately emerged

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[8] In the description of the data, I have merged this category with the categories describing sensegiving tactics that aimed at increasing arousal because the participants' reactions were tightly coupled with such tactics

[9] I initially coded for open display of emotions as a separate emotional sensegiving tactic. However, I noticed that open display of emotion was usually part of the other emotional sensegiving tactics. Therefore, I decided to not present it as a separate category in the findings

from the data. I categorized the 1,252 first-order codes into 17 second-order categories. I further categorized these 17 second-order categories into four main theoretical dimensions that refer to different types of sensegiving tactics: increasing arousal, cognitive (re)framing, reinforcing commitment, and legitimizing sensegiving tools. The findings section describes numerous data to illustrate each category.

1st Order Codes (examples)	2nd Order Categories	Aggregate Dimensions
About crying * another marriage example * "When my mother beated me" * divorce	Reference to intimate relationship	Increasing arousal
A nice person destroys herself * effectively eats you from the inside * A woman is a martyr	Brutal claims	
Funny example of friendship * Joke about nearby mental hospital * sex related joke	Jokes	
Coach keeps pushing further * debates with a participant * pushes about punishing childred	Pushing the participants	
Example of bad supervisor * example of bad failure in Lahti unit * "I said this directly to CEO"	Work related, provoking examples	
Audience member tells how she cried * audience comment triggers general laughter	Audience generated arousal	
"This is what we try to do in your firm ,as well" * Links the shit-imaginary with work content	Linking previous example to workplace	Cognitive (re)framing
"in other words" * Re-eplains with new concepts * re-explanation with new concepts	Re-explaining the idea	
Coach further lectures * explains "theory" * Keeps talking about the slide	Lecturing	
"Raise your hand if you are in a team" * another brain task * asks audience opinion	Interactive lecturing	
"Do you agree?" * "Eiks niin?" → Nods * "Right, Seija?" * Asks, "don't you agree?"	"Do you find this logical?"	Reinforcing commitment
"Go through these questions, write answers to slides, and present" * leading question by coach	(Making) audience members describe how they commit	
Also CEO is involved * another positive example * examples of aleady succeedd parts	Increasing efficacy	
"you have now gotten a homework assignment" * gives direct instructions for the participants ...	Concrete, & direct action instuctions	
Explains why social skills are important * Justifies why keeps talking about [life] problems	Legitimizing non-work content	Legitimizng sensegiving tools
"My job is to push all the way" * Coach has weak self-esteem and wants put people down	Legitimizing aggressive behavior	
"We need more pressure. You must shout louder" * the stonger the interaction the better	Legitimizing emotions	

Figure 4: Emergent data structure

Outcome of the data analysis B: Temporal progression of sensegiving

The data also showed the temporal progression from increasing arousal to cognitive (re)framing to increasing commitment. As the data described in the next chapter shows, one of the second-order codes categorized under the aggregate dimension of increasing arousal often started the teaching of a new content. These second-order codes were often followed by one of the second-order codes categorized under the aggregate dimension of cognitive (re)framing. Finally, second-order codes categorized under the aggregate dimension of reinforcing commitment often concluded episodes focusing on a single point.

It should be noted that defining what constitutes a micro-episode is not a trivial question. When I decided which sensegiving instances together constituted a micro-episode, I was bracketing a continuous flow of events and words in the seminar. The choice of how to bracket continuous events is always a judgment call and a social agreement rather than a fact that exists in the external reality (Weick, 1979: 153-157). The way I bracketed the data was my interpretation which was influenced by the theoretical lenses I used. Other scholars using different lenses might have bracketed the data in a different way. At the same time, there are two empirical facts that do not depend on the lens used to bracket the data: (1) the coach increased the participants' arousal levels just seconds or minutes before telling work-related content and (2) emotional arousal influences people's perceptions, interpretations, and memory. The way I bracketed the data allowed conceptualizing the process of generating emotional arousal and associating it with work-related content. This conceptualization allows us to better understand what happened in the seminar and to theorize how emotional arousal could be used to increase the effectiveness of sensegiving also elsewhere. In essence, my interpretation of the data increases our theoretical understanding of sensegiving.

3.3.7 Inter-coder agreement of the second-order categories

To ensure the trustworthiness of my conceptualization of the data into second-order categories and theoretical dimensions, I asked two outsiders to code segments of my data. The initial level of agreement was 96% and consensus was found over the remaining codes through discussion. The specific steps in the external validation exercise were:

1. I first created a document to provide structure for the inter-coder assessment: I wrote down instructions for the assessment for the outsiders, made a table into which they could provide their answers, and wrote a definition of each category in the document.

2. I collected one to three representative video clips of each second-order category. In total, I collected 23 video clips. The duration of these clips varied from four seconds to three minutes.

3. I showed the 23 video clips to the two outsiders and asked them to answer which clip belonged to which category in the document that I had created in the first step. I briefly walked them through the category definitions before the coding exercise. The two coders carried out the process separately. Neither of them knew the theoretical idea or data of my research prior to the coding exercise. I did not see their answers until they had finished the coding exercise. I allowed the coders to watch the clips many times. Both of them recognized most of the clips/categories immediately and wanted to see only a few categories two or three times. Both coders needed about one hour to categorize the 23 video clips.

4. I asked the coders to tell me once they were ready. They then showed their coding results to me and we went through them together. We compared their results with the way I had categorized the video clips.

The level of agreement was sufficiently high in this reliability check. Both coders agreed with 22 of 23 (96%) categorizations with me. Both coders only disagreed with me on the categorization of one video clip. It was a different clip for each of them. When there was disagreement, I explained my idea to them and asked if they could see my logic. Both of them immediately said that they realized what I meant and agreed with my categorization.

Given that both coders were able to categorize the video clips in the same way as I had done in my inductive categorization of the data, the trustworthiness of my findings is increased. It seems that I coded and categorized the data in a way that is reasonable for outsiders who are exposed to the data and the category definitions for the first time. Hence, it can be concluded that my conceptualization of the data accurately describes the data.

3.3.8 Inter-coder agreement of the emotional reactions to sensegiving

After having recognized and externally validated the sensegiving categories discussed above, I carried out a further validity check. I wanted to double check that the seminar participants did indeed react emotionally to the six sensegiving tactics that were categorized under the aggregate dimension of "increasing arousal." While I was coding for the sensegiving tactics as discussed above, my approach was open-ended and I did not explicitly score emotional reactions among any dimension. Instead, I was paying attention to sensegiving and reactions to it, keeping also emotional dynamics in mind. What emerged were the categories described above. My open codes implied that emotions are a relevant part of the process. The explicit coding for emotional reactions to sensegiving that I describe here was carried out to verify that this was indeed the case. The coding proceeded in five steps.

1. I used the Table 6 (above, on page 63) which shows four main categories for recognizing emotional reactions as the starting point of the validation task.

2. I selected video clips that consisted of the coach's sensegiving act and the participants' reactions to the sensegiving. I collected five or six representative clips of each of the six sensegiving categories. Hence, I had 32 clips. I edited the clips so that only the participants' reactions remained in each clip (but I kept record of which reaction related to which sensegiving act). I also included 8 clips that showed non-emotional reactions so that I could distinguish between emotional vs. non-emotional reaction. In total, then, I had 40 video clips.

3. I first coded the 40 clips myself in terms of the explicit cues of emotions shown in Table 6. I coded each clip on a scale from zero to two in terms of each of the four categories of emotional cues (0: no evidence, 1: some evidence, 2: clear evidence). I recognized emotional cues in all of the clips that showed reactions to "increasing arousal" tactics and I did not recognize emotional cues in the clips that showed reactions to non-emotional sensegiving tactics. Hence, the preliminary check was satisfied.

4. I asked two outsiders to code the same clips using the same coding scheme. They had only a marginal understanding of my research topic. They only saw the participants' reactions so they had no idea why the participants reacted the way they did. Hence, they only focused on coding whether or not the participants showed emotional cues in their reactions or not. The fact that one

of the coders did not speak Finnish (which is spoken on the video) further corroborates the claim that the coding was indeed based on non-verbal reactions, not on the content of words. I asked the coders to view each clip four times, so that on each viewing, they focused on one of the four signs of emotions. I also allowed them to review any clips as many times as they felt was necessary.

5. I first calculated the level of agreement between the two coders and between me and each coder in terms of the details of emotional displays. This was done by calculating how many of the 160 cells (40 clips x 4 emotion-cue categories) the coders agreed on with each other.

6. I also calculated the level of agreement in terms of whether each clip was coded as emotional or not. This latter check provided a general view of if there were emotions in the participants' reactions in the specific clip or not. It was judged that the coders agreed that the episode was emotional if they both had recognized at least some evidence for at least one of the four emotion categories. Conversely, they were judged to disagree if one of them coded that there was no evidence of emotional cues in a clip, whereas another one of them coded at least some evidence of emotional cues in the clip.

7. In addition to the simple level of agreement which is the de facto standard for assessing inter-coder reliability in qualitative sensemaking and sensegiving studies (see e.g., Clark, Gioia, Ketchen, & Thomas, 2010; Gioia et al., 2010), I also counted Cohen's Kappa values for agreement. The Cohen's Kappa can be considered a more robust measure for inter-coder agreement because it adjusts the estimates such that the effects of chance agreement are taken into account. However, it can also be considered too conservative because it assumes that if coders are not certain of their input they simply guess, whereas in real life this is not likely to be the case. Instead, coders may often feel uncertain between two alternatives and choose the one that feels a bit better than the other one. In any case, values between .41–.60 are considered to indicate moderate agreement and values between .61–.80 are considered to indicate substantial agreement (Landis & Koch, 1977).

The results of the inter-coder reliability check show a sufficient level of agreement between the coders. In terms of the specific emotion categories, the level of agreement between the two coders was 83%. Coder #1 and I agreed on 80% of the codes and

Coder #2 and I agreed on 79% of the codes. In terms of whether the clips showed any emotional cues or not, the level of agreement was 90% between the two outsiders, 82.5% between me and Coder #1, and 92.5% between me and Coder #2. Given that existing sensemaking and sensegiving studies have reported agreement levels around 85% as sufficient (see e.g., Clark et al., 2010), the level of agreement in this study can be considered sufficient as well.

Likewise, the values of Cohen's Kappa were sufficient. In terms of the specific emotion cues, the values varied between substantial and moderate: the values were 0.64, 0.58, and 0.59, respectively, between the two outside coders, me and Coder #1, and me and Coder #2. In terms of whether the clips showed any emotion or not, Cohen's Kappa varied between substantial and moderate: the values were 0.69, 0.48, and 0.75, for the three pairs, respectively.

In conclusion, also the second validity check increases the trustworthiness of my findings. The inter-coder reliability is sufficient, indicating that I have coded the material in an acceptable way. When I had made the judgment that the participants' reaction was emotional, also outsiders recognized an emotional reaction in the same video clip. Hence, my theorizing on the effects of the coach's sensegiving on the seminar participants' emotional arousal seems to build on solid enough an empirical foundation.

3.4   Data Analysis, Part 2: Changes in Mental Models

While the main theoretical focus of this thesis is in understanding the process of emotional sensegiving, I also analyzed if and how this process had influenced the seminar participants' mental models. I used four sources of data to assess different types of changes in the participants' mental models.

3.4.1   Interviews before and after the seminar

I assessed whether those participants that I interviewed before and after the seminar #2 had changed their thinking. I listened and transcribed the ten before and after interviews. I then systematically compared the before and after statements to recognize any kind of changes in the participants' beliefs and attitudes.

The interviews allowed recognizing two different types of mental model change. The first type of change in mental models is the addition of a new element or relationship

into a mental model. For instance, an old mental model might contain a causal relationship from A to concepts B and C. An addition of a concept-type of a change in this kind of a mental model would be the addition of concept D in such a way that A has a causal influence on D in addition to B and C (Figure 5). I was able to recognize this type of changes in the interviewees' mental models when they described a broader set of connections between elements and/or totally new elements in the after-the-seminar interview, compared to the before-the-seminar interview.
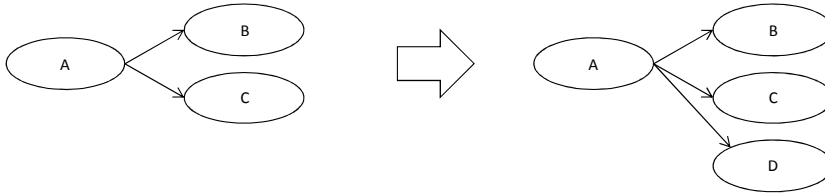
Figure 5: The addition of an element and a relationship to mental model

A second type of change in the mental model is a change in the valence or quality of a relationship to its opposite. For instance, the old mental model might hold that "k" belongs to category A, whereas the new mental model would hold that "k" does not belong to A. In another example, a person might initially believe that communicating with the dead is impossible but after seeing persuasive evidence, she might start to believe the opposite and hold that communicating with the death is actually possible.

In technical terms, such a flip to the opposite consists of two parts: the first part is the rejection of the old relationship and the new part is the addition of the new relationship. For instance, a person who previously believed that smoking is good needs to invalidate the belief that it is good and develop a new belief that smoking is bad. Many recent models of attitude (Bohner & Dickel, 2011) and belief (Strack & Deutsch, 2004) change maintain that the first part, the negation of the old belief, is done by adding a negation tag to the old belief. The outcome for the smoker would be a mental model in which smoking is associated with both good and bad, but in such a way that the association to good is also associated with the tag "invalid" (Figure 6 below). As long as the associations between smoking and bad, and between good and invalid are stronger than the association between smoking and good, the person is more likely to behave according to the new belief.
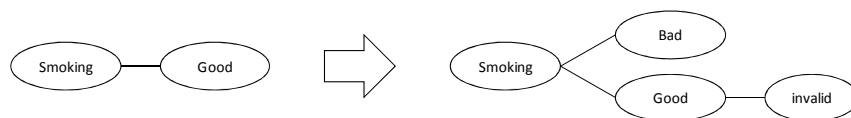
Figure 6: Flip to the opposite in a mental model (Adapted from Bohner & Dickel, 2011)

Recognizing changes in which a person's belief flips to the opposite from the interview data was relatively straightforward. For example, if the interviewees had described some activity as positive before the seminar and then described it as negative after the seminar, I concluded that they had developed an opposite belief to what they used to have.

3.4.2 Before and after surveys

As a second way to assess mental model changes, I used excel to analyze if the answers to the Likert-type survey questions that the participants of the second and third seminar filled before and after the seminars had changed. One row was allocated for the answers of each participant, so that both before-the-seminar and after-the-seminar answers of each participant were matched on the same row. I simply calculated the average change in the survey responses before and after the seminar, as well as how many participants had changed their thinking.

The survey approach allowed assessing changes in the strength of beliefs rather than the more categorical changes in mental models depicted above. People can reinforce their beliefs about some relationships. For instance, a person might believe that A influences B. After persuasive communication supporting the idea that A→B, the person might become more convinced that A indeed influences B, and that the influence of A on B is actually stronger than he previously believed (Figure 7). This kind of change is the most difficult to observe because the mental model does not change qualitatively. However, the quantitative change in the strength of the relationship can still have a major influence on the way the person makes sense of the world and acts in the future. For example, if a CEO believes initially that new technology is a weak threat for the company, he or she is not likely to take action. However, as the intensity of that belief incrementally increases, also the likelihood of action increases.
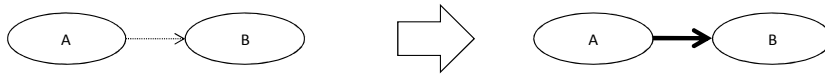
Figure 7: Increase in the intensity of a belief in a mental model

Technically, when the averages in the participants' level of agreement with a statement in the survey responses increased, I concluded that they had increased the strength of the corresponding belief.

3.4.3 Two retrospective interview analyses

I used the retrospective interview data to heuristically evaluate whether or not the cognitive changes created by the seminar were long-lasting. I listened to and transcribed the five interviews of the participants of the seminars held in 2000. I systematically marked each sentence in which the participants described what they remember of the content of the seminar and how it has (or has not) influenced their thinking and behaviors. Then I presented these statements in a document and discussed if and how they provide evidence of mental model change caused by the seminar.

I also reread the change leaders' interviews and underlined every sentence they made about the effects of the seminar on the participants. I then summarized each change leader's arguments, presented them in text, and discussed which kinds of evidence the statements provide. Altogether, the outcomes of this assessment of mental model change are presented in chapter "Evidence of Mental Model Change in the Change Seminar."

3.5 Limitations in the Research Design

There are four research design limitations and six contextual limitations that should be taken into account when considering the findings of this study. This section describes the limitations in the research design and the next section focuses on the contextual limitations. Even though research limitations are conventionally discussed only in the discussion section, I chose to follow Starbuck's (1999) advice and Burgelman & Gove's (2007) example and address the limitations already in the method section. I believe this allows the reader to better understand my findings and their context.

3.5.1   Just one coach

The most salient limitation of this study is that I focused only on one coach and, ultimately, only on one seminar. However, the unit of analysis in this kind of research is not actually the sensegiver but rather the sensegiving instance (see Glaser & Strauss, 1967: Chapter V). I analyzed and compared a total of 1,252 sensegiving instances in the data. Some of the sensegiving instances were highly emotional whereas others were not emotional at all; different instances created different audience reactions. It was these nuanced differences between the different sensegiving instances that allowed me to recognize the key theoretical dimensions in the data—that some sensegiving tactics influence emotions whereas others influence cognitions, commitment, or perceptions of the legitimacy. Hence, there was mass, richness, and variety at the micro-level in the data that allowed generating novel and relevant theoretical findings.

The influence of more macro-level factors, like the coach's size, location of the seminar, and the educational level of the participants, are macro-level variables that are treated as contextual factors in this study, as discussed below.

3.5.2   Measuring emotional arousal

When I planned this study, I had no intention to focus on emotional arousal. I therefore did not incorporate any specific instruments to assess participants' arousal levels in my data collection. Consequently, when the idea of the importance of emotional arousal ultimately emerged, I had to infer emotional arousal from the participants' verbal and non-verbal reactions from the video and other materials. This approach to measurement is, obviously, suboptimal. However, I believe that the rough estimates of the participants' emotional reactions that I was able to deduce from the video and other sources provide a sufficiently accurate description of what happened during the seminar. The fact that the inter-coder agreement check provided a sufficiently high level of agreement further corroborates this claim. By minimum, my description of the cognitive and emotional dynamics in the seminar is more accurate than those of the previous sensegiving studies that have relied only on field notes and interviews. Hence, despite the limitations of my way of measuring emotional arousal, it can still be believed that my inductive theory building is based on solid enough a foundation.

If I did the study again, I would use physiological measures of arousal. I would make the participants wear recording heart rate and GSR devices and match their time log with the video. This would allow me to assess the participants' physiological reaction to each sentence spoken by the coach. This way I could get reliable data linking specific sensegiving acts by the coach to increases in participants' emotional arousal. It would also allow observing emotional reactions that cannot be recognized through visual observation. Furthermore, such accurate measures would allow testing if those participants, whose emotional reactions were stronger, also changed their mental models more and/or whether those lessons that were accompanied by more arousal tactics had a larger average effect on the participants.

One might also consider using surveys to measure the participants' emotional arousal. However, they would not allow tapping the instant, momentary reactions to specific sensegiving tactics but only an overall assessment of emotional arousal during some period. For instance, the surveys could be filled every hour (how aroused were you during the last hour? 1…7). A second limitation of this kind of a survey approach would be that such repeated measures would invite self-reflection and intervene with the process. Hence, I would not use survey design as the primary means for collecting process data on emotional reactions.

3.5.3   Assumptions about the effects of emotional arousal

A central theoretical assumption that I am making throughout this study is that emotional arousal created at one moment in time can transfer to the next moment in time and influence the cognitive processing and its outcomes during the second moment. These assumptions are based on robust empirical studies (e.g., Foster et al., 1998; Phelps, 2006), yet they were not under strong empirical scrutiny in this study: Yes, I recognized that the participants got aroused during the seminar and that they heard cognitive content just seconds after showing signs of arousal. However, I did not quantitatively measure their arousal levels when they were hearing the cognitive content; and I did not measure whether arousal experienced during the hearing of cognitive content moderated the effects of the cognitive sensegiving on mental model change.

The first of these assumptions—the transfer of arousal—would be best assessed by the physiological measures discussed above. For instance, an emotional sensegiving tactic might increase participants' skin conductivity and heart rate; and they both might stay

increased for several minutes after the emotional sensegiving, when the participants are already hearing cognitive content. Unfortunately, as discussed above, I was unable to see the need for this kind of measurement when planning the data collection of this study. Instead, I had to rely on the qualitative observation of signs of arousal.

The second assumption—the moderating effects of emotional arousal on mental model change—would require more elaborated solutions. Above I discussed how measuring arousal would allow testing if the content that is lectured while participants are still highly aroused would be remembered better. This might be plausible, even though the fact that the coach used repetition a lot (and, hence, the same content was sometimes associated with arousal and at other times not) and explained similar ideas with different concepts makes the approach somewhat inaccurate.

A second possibility for testing the effects of arousal on mental model change would be some kind of a control group. However, here the question of what exactly one should control emerges: Should we ask the same coach to teach the same content without telling jokes and other arousal tactics? Or should we ask a different coach to go through the same material? How should the empty moments be filled in the control conditions? It becomes apparent that such a control group is not a feasible option in the field setting. However, in laboratory conditions one could provide exactly the same cognitive sensegiving content to condition and control groups but initiate the task with arousing vs. non-arousing material; and, hence, test whether arousal experienced before hearing cognitive sensegiving influences the effects of that cognitive sensegiving. The implications chapter of this thesis provides a more detailed discussion on the potential laboratory experiments that future research could carry out.

3.5.4   Measuring mental models and attitudes

I measured the participants' mental models and attitudes before and after the seminar to assess if the seminar succeeded in changing them. The fact that I used both a survey design and interviews can be considered as a methodological strength of my study. However, I could also have used significantly more advanced instruments for measuring mental model and attitude change. First, I could have used different kinds of cognitive mapping techniques to measure changes in the participants' explicit mental models of causal and other types of relationships between different concepts (see e.g., Hodgkinson, Maule, & Bown, 2004; Huff & Jenkins, 2002). Such techniques would have allowed me to map more comprehensively how the whole structure of the

participants' mental models changed or did not change during the seminar, instead of just assessing whether their answers to specific questions changed.

Second, I did not measure the importance of the beliefs and attitudes for the people. One of my arguments is that emotional sensegiving is needed because people do not base their choices on their knowledge but on the feelings that knowledge produces. Hence, it would be desirable to measure how important people consider each belief; does it feel important enough to influence the way they will choose to behave.

Third, my empirical focus was on explicit mental models and attitudes. However, people hold also implicit mental models and attitudes, which often influence their behavior more than the explicit ones (Sloman, 1996; Wilson, Lindsey, & Schooler, 2000). Hence, it would have been relevant to find out whether or not the seminar influenced also implicit mental models and attitudes. I could have run, for instance, different content variants of the Implicit Association Test (Greenwald, McGhee, & Schwartz, 1998) to the participants before and after the seminar to see if their implicit attitudes were influenced by the seminar. Especially the question whether emotional arousal strengthens the effects of cognitive sensegiving on mental model and attitude change also at the implicit level is a relevant question for future research.

3.6   Contextual Limitations

In addition to the research design limitations discussed above, also the context of this study should be taken into account when considering how generalizable the findings are. Many contextual factors influence, for instance, the range of data that is analyzed, and the quality of many relationships between concepts (due to contextual moderators) (Rousseau & Fried, 2001). I focus here on six contextual factors and discuss how they might have influenced my findings and their generalizability. Table 7 summarizes this section.

Table 7: Six contextual factors that influence how the findings of this study can be generalized

Contextual factor	Relevant factors	Potential influence on the seminar dynamics
Finland	Low emotionality	Coach's display of emotion seemed shocking for participants Participants' reactions to emotional content not strong Salience of emotional dynamics in the seminar
Organizational renewal	Training framed as an element of org. change	Positive attitude toward and perception of need of the seminar
	Participants had heard about the content before the seminar	Higher change of accepting the cognitive content due to the familiarity bias
	Mandatory participation in the seminar	Participants could not leave the situation even when they felt strong, negative emotions and anger toward the coach
Participants	Low education level	Low acceptance threshold for cognitive content in terms of its factual accuracy and deepness Brutal language acceptable
Seminar hotel	Isolated location	Little reflection about the seminar content with outsiders during the three days; hence, no critical viewpoints Easier for the coach to keep the situation under control
The coach	Authoritative character	Participants more like to believe
	Working class-habitus	Participants more likely to identify with the coach
Seminar characteristics	Three days	The coach's arousal tactics remained "fresh" for the participants Arousal transfer dynamics a plausible explanation
	30 participants	Small enough to allow participation and debate

3.6.1 Finland

The first thing to note is that the study was carried out in Finland, whereas most published sensegiving studies have been carried out in the United States and the United Kingdom. There are some characteristics in the Finnish culture that are relevant for the analysis of emotional sensegiving. Mainly, open display of emotions is less common in Finland than in the US and the UK (Nummenmaa, 2010: 90). Consequently, the coach's use of emotional sensegiving tactics could have been more shocking to a Finnish audience than it would have been for an American or British audience. On the other hand, it is also possible that the Finnish people reacted less emotionally to the coach's emotional stories than American or British people would have.

The lack of emotionality in normal Finnish interaction also made the high emotionality in the seminar salient. I was able to recognize that the coach used more emotional tactics than was "normal" and the audience showed more emotional reactions than could be considered "normal." This allowed me to ask how this emotionality influences the sense-receivers' sensemaking. Consequently, I could theorize about the role of emotions in the process and, perhaps, explicate an important factor of successful sensegiving that has so far been taken for granted.

3.6.2 Training as a Part of Organizational Renewal

The seminars were not an isolated event but a part of a large, organizational renewal process. I studied the seminar in the context of three companies: the Milk Company, the Property Service Company, and the Sausage Company. These companies are briefly introduced in Table 8. My main focus evolved to be on the seminar held for the Property Service Company in March, 2006 (this seminar is referred to as "the seminar" in the thesis). The experiences of the Milk Company and Sausage Company provided valuable background and contextual information. The companies' larger change efforts and their (un)successfulness are considered only a contextual factor in this thesis which focuses on the process of emotional sensegiving during the seminar and its immediate effects on individual participants' mental models.

As the seminars were part of a larger organizational change program, participation in the seminar made sense and was even welcomed by many of the participants who did not have full certainty of the change process in the firm. This positive attitude (or at least perceptions of legitimacy) could have influenced the participants' attitudes toward the coach and the training, in a positive way. It should be noted also, however, that many participants were expecting to hear more concrete things about the new structure; some of them were surprised (some even disappointed) that the seminar did not directly talk much about teams.

The change process had been going on for three years in the Property Service Company when the seminar that became the core focus of analysis in this study took place. Consequently, some of the participants had already heard some things about the content of the seminar and about the coach's way of talking about the content. These participants might have, therefore, been less surprised by the coach's sensegiving and, thus, reacted in a weaker way than participants who had not heard anything about the

seminar before. On the other hand, the indirect familiarity of the coach's lessons could have made the participants more likely to accept and believe them.

Table 8: The seminar was studied in the context of three companies, with the main focus on a seminar held for the Property Service Company

	Sausage Company	**Property Service Company**	**Milk Company**
Revenue in 2006	~700M euro	~700M euro	~1 500 M euro
Main area of business	Meat based foods	Property maintenance, cleaning, and waste management	Milk based foods
Start of the change process	1999	Fall 2005	Fall 2004
End point of the change process	2004	Continued after I ended data collection in 2006	Spring 2006
Description of the change process	The company employed the change agent for over five years and transformed its strategy and structure during the process. Company's former CEO argued that the seminars had a fundamental role in transforming the organization from a near bankruptcy to a highly profitable organization	The company was satisfied with the seminars and was starting to implement structural changes. The company's development manager in charge of the process argued that the seminars had empowered the employees and that the company will continue to pursue the strategic transformation	Both the change coach and the company's development manager told that the company stopped co-operating with the change coach because the employees' expectations regarding empowerment grew higher than the company was able to implement

A third point to notice is that participation was mandatory for the employees. Hence, they were not able to leave the seminar early even if they had disliked being there. Consequently, the coach could push the participants hard and make them feel negative emotions, without the risk of losing his audience. In situations where sense-receivers do not have to listen to the sensegiving for a pre-determined period of time, this would not be the case. Instead, the sense-receivers might leave the situation before the sensegiver managers to cognitively reframe the emotional arousal and the sensegiving tactics discovered in this thesis might, therefore, fail in more open contexts. The fact that the coach casually mentioned that those employees who actively resist the change process can be laid off could also have amplified this effect.

3.6.3 Participants

The participants of the seminar were cleaning managers and property maintenance workers. The majority of them had not taken high school but started working directly after school or taken vocational education. Consequently, their conceptual skills and knowledge were relatively low compared to people with academic education. The factual accuracy and naivety of the coach's "theories" was, therefore, less critical for the success of the sensegiving. The participants were convinced by the cognitive content of the coach's theories, even though a critical reader can recognize factual mistakes and logical flaws in them.

It can also be speculated whether highly educated people would have reacted differently to the coach's tactics for increasing emotional arousal. He used brutal language and several curse words. It might be that these factors would reduce his credibility in the eyes of the academic audience and, therefore, also reduce any impact his speech would have on them.

The lack of logical rigor and factual accuracy in the content of the coach's lessons might have caused more educated people to react in a different way in the seminar. After being emotionally aroused by the coach's emotional content, the more educated people might have gotten angrier toward the coach, if the cognitive content was not believable for them. Note, however, that the basic idea of arousal transfer should still work for also highly educated people – the concrete tools for increasing arousal and cognitive reframing just need be different; suitable for their mental models and understandings of normal. For example, Professor Esa Saarinen, who is famous for his emotional lectures in Finland, uses high-culture elements, such as a video of the "three tenors," that apparently increases the participants' emotional arousal.

3.6.4 Seminar location

The seminar location is the fourth contextual factor that must be recognized and remembered when interpreting the findings of this study. The seminar was organized in a seminar hotel which was located in Southern Finland, 124 kilometers away from the capital, Helsinki. The hotel was in a small village of Hattula, about 20 km from the nearest town, Hämeenlinna. Hattula had 9,400 inhabitants when the seminar was organized. The seminar hotel itself was located in the periphery of Hattula and was

practically isolated from the outside world (Figure 8). The participants stayed overnight at the seminar hotel.
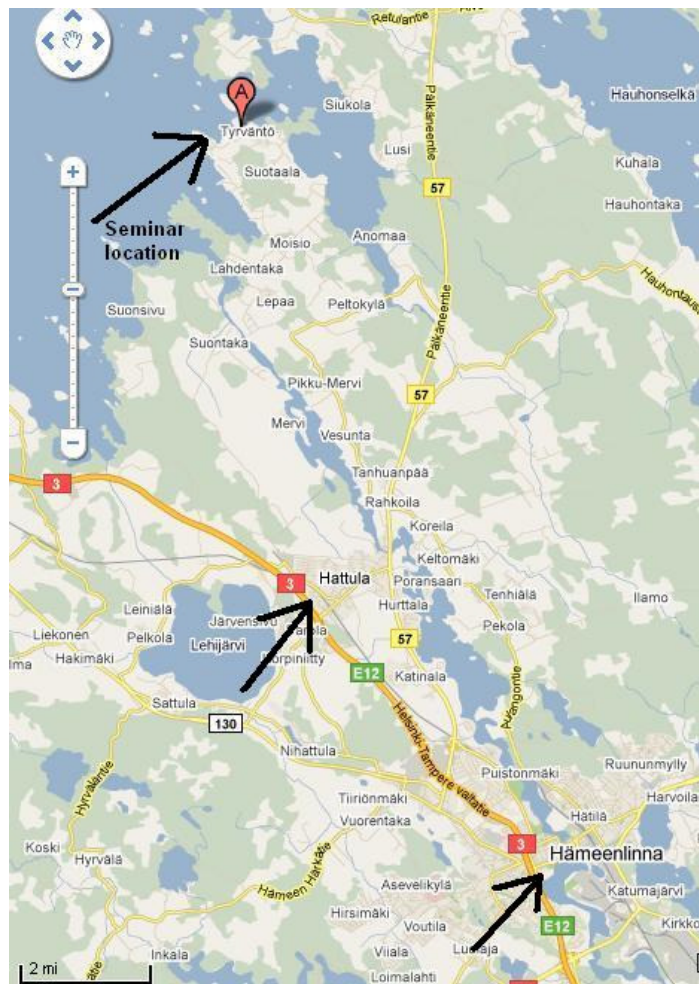
Figure 8: The seminar hotel was located in the periphery of the village Hattula and was about 20 km from the nearest town, Hämeenlinna

The isolated location of the seminar could have had effects on the participants' sensemaking. First, they were less able to critically reflect the content of the seminar because they had little alternative perspectives provided by outsiders. Even though many of them did have phone conversations with their spouses in the evenings, it is unlikely that they had deep, critical discussions of the seminar process and content. However, they did have time to discuss the seminar with the other participants. They

spent the evenings with each other, going to sauna and then to the bar of the seminar hotel (there were no other bars nearby and each participant was given four beers/ciders free of charge). During these evening activities they discussed the seminar content and its links to their work, in addition to other topics. Hence, the inputs were limited and they might have engaged in "encapsulated sensemaking" (Pratt, 2000; see also, Vuori, 2011a) which can be powerful in imposing a certain view of the world. This encapsulation might therefore have reinforced the effects of the coach's sensegiving.

3.6.5   Seminar characteristics

The duration and size of the seminar also might have influenced the sensegiving dynamics. First, the seminar lasted three days and was the only occasion where most of the participants interacted with the coach. Hence, the participants probably did not have time to get accustomed to the coach's idiosyncratic sensegiving tactics. Emotional reactions often emerge when events deviate from expectations (e.g. Fiske and Taylor, 2008; Weick, 1995). Consequently, this low familiarity and short time period cannot be ignored: the coach's tactics partly worked because they were novel to the participants. If managers would apply similar tactics in organizations to influence their employees regularly, the employees might develop resistance against such tactics and the tactics would therefore lose their power.

Figure 9: The seminar classroom and the coach

There were 30 participants in the seminar. On one hand, the seminar was small enough to allow (arousal and commitment increasing) interaction between the coach and the participants. These interaction patterns were further facilitated by the way the tables were organized into a U-shape (see Figure 9). On the other hand, the seminar was large enough to allow some levels of crowd-like behaviors. The potential effects of these factors should be considered when applying the tactics discovered here in other contexts.

3.6.6 The coach

Two features of the coach possibly increased his persuasiveness in the eyes of the audience. First, he had features displaying high authority: his physical size was big (tall and somewhat overweight), he had a strong, deep voice, he dressed in slightly finer clothes than the participants, and he had strong confidence in his own teachings. Previous research (summarized e.g., in Cialdini, 1993: Chapter 6) has shown that each of these factors increase the likelihood that persuasion will succeed.

Second, the coach had a similar background and general appearance as the participants. He emphasized that his background is in the shop floor work and that he has never been in a managerial position. He also used down-to-earth language and brutal expressions that highlighted this fact (especially compared to the firm's top management and other consultants). The participants were, therefore, more likely to like the coach and to identify with him and, consequently, to believe him.

Taken together, the coach had general authoritative characters and he displayed similarity with the participants. Earlier research has shown that both of these factors increase persuasiveness. Hence, when interpreting the coach's sensegiving tactics in the following sections, it must be remembered that they were successful partly because of what the coach was like and other contextual factors.

4 EMOTIONAL SENSEGIVING IN THE CHANGE SEMINAR

As illustrated in Figure 10 the coach's sensegiving consisted of four main elements in the change seminar.
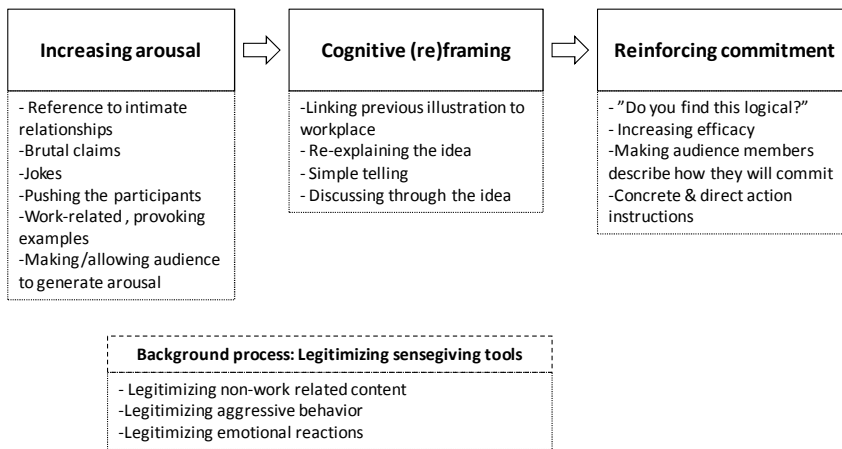
Figure 10: Elements of emotional sensegiving in the change seminar

The coach used the four main elements as follows. First, he often started teaching a new lesson by using a variety of tactics to increase the participants' level of emotional arousal. He had six different tactics for increasing arousal that included, for instance, jokes and references to his relationship with his mother. Second, after increasing the participants' arousal, the coach then cognitively reframed the situation so that the arousal was associated with work-related content. He used four different tactics for doing this. For instance, he often said that similar dynamics that he described in his mother relationship are present at the workplace and provided an example. In this way, he made the participants think about work-related content and construct a new work-related mental model, while they were still emotionally aroused by the unrelated content presented moments earlier. Third, the coach often concluded the micro-episodes with one of the four tactics that reinforced the participants' commitment to

the new element in their mental models: He, for instance, asked, "Does this sound logical to you?" and the participants provided affirmative answers, showing to themselves and others that they believed what the coach had just argued. Fourth, the coach also had a background process of legitimizing this somewhat unorthodox pattern of sensegiving. He explained, on a few occasions, why and how he will talk about work-unrelated content and why he will push the participants hard. He also encouraged the participants to show their emotions during the seminar.

The rest of this chapter proceeds from micro to macro, from defining the four main elements of the coach's sensegiving to describing how the coach combined them and sequenced them in time. I will first define and describe the four theoretical categories and their sub-categories that emerged from the analysis and illustrate them with data. Then I will describe and conceptualize a number of micro-episodes during which the coach first increased the participants' emotional arousal levels, then cognitively (re)framed the arousal, and finally increased the participants' commitment to the newly formed beliefs. The fourth main element, the background process of legitimizing emotions, was distributed throughout the seminar and, therefore, was not a tight part of any specific micro-episode.

4.1   Increasing Arousal

The coach usually started the description of a new topic or sub-topic with a tactic that increased the participants' emotional arousal. He used six different tactics. The tactics differed in terms of the valence of the arousal they created, whether or not their content was related to work, in their typical duration, and whether or not they required the participants' to actively engage in the construction of the tactic through speaking (Table 9). The content of these tactics, in a cognitive sense, was occasionally only loosely related to the work-related content of the seminar.

4.1.1   Reference to intimate relationships

I coded 134 instances where the coach referred to intimate relationships and the participants reacted emotionally during the three-day seminar. These instances and, hence, this tactic created mainly negative arousal in the participants. The coach told personal stories of his own marriages and his relationship with his mother and various generalized stories of similar relationships. The stories had no work-related content. They lasted from short, one-sentence references to elaborate examples that lasted

several minutes. The coach required no active participation from the sense-receivers but they only needed to listen to the coach for this tactic to work.

Table 9: The coach used six different tactics for increasing the participants' emotional arousal

Tactic	Increases arousal?	Valence	Content related to work?	Typical duration	Requires that participants speak
Reference to intimate relationship	Yes	Mainly negative	No	From 3 seconds to several minutes	No
Brutal claims	Yes	Mainly negative	Yes and no	2-5 seconds	No
Jokes	Yes	Positive	Mainly not	2-15 seconds	No
Work related, provoking examples	Yes	Mainly negative	Yes	5-60 seconds	No
Pushing the participants	Yes	Negative	Yes and no	From 5 seconds to several minutes	Yes
Making/allowing audience to generate arousal	Yes	Both positive and negative	Yes and no	2-15 seconds	Yes

References to intimate relationships can trigger emotional reactions in participants through four mechanisms. First, the stories themselves contained strong injustices and emotional events, which can directly provoke anger and sadness in people. Second, the suffering and anger described by the coach could have made the participants feel similar emotions via empathy. Third, the coach displayed emotions when telling the stories which could have induced emotions in the participants through emotional contagion (Barsade, 2002; Hatfield, Cacioppo, & Rapson, 1994). Fourth, some participants could have associated the stories to their own life experience and transferred emotions from their own personal memories to the seminar situation (see e.g., Damasio, 2003: Chapter 2).

There were two main relationships to which the coach referred often, his relationship with his mother and his relationship with his current wife. Already during the first hour of the seminar he described that his relationship with his mother was a difficult one. He told that his mother raised him with the principle, "the person who does not beat her children hates her children" and continued that "my mother did not hate me at all if

you believe in this principle. She lived her own chaotic life, and always released her anger and feelings of powerlessness on me. I was regularly beaten so badly that I was bleeding." The participants reacted emotionally to these stories. Each of the six participants that are visible on the video clip which shows the above reference to the coach's mother displayed cues of anxious and uncomfortable emotional reactions. They moved their trunk and head from side to side, readjusted their sitting position repeatedly in an unnatural way, and two of them also put their face down. (Tape 1, 34:26)

The coach regularly returned to his mother relationship and used it to amplify emotional arousal on various points during the seminar. The story did not evolve meaningfully but he always referred to the main point that the mother was tired and therefore beat him. For instance, during the fourth hour of the seminar, he again described the patterns of abuse and violence and concluded with a question, "Why? [pause] Why does a mother want to destroy his son?" (Tape 4, 35:34). The story and question also raised strong emotional reactions in the audience: a woman responds to the coach with a high-volume, low-pitch voice [as in anger; the content of words cannot be recognized from the video] and seven of the 25 people who are visible on the clip readjust their positions in an anxious and nervous way several times during the 10-second period which concludes the coach's point. (Tape 4, 35:59)

The coach also generalized his own mother relationship to discuss how children are abused in general. During the afternoon of the second day, he used powerful images: "In the name of raising children, many things are done to children that people would never do to adults. [5 sec pause] Humiliate. [2 sec] Abandon. [5 sec] Physically [2 sec] touch. [3 sec] Gibe. Insult. We do different kinds of things. Starting from school and kindergarten." Then he continued describing an example about how a mother had punished her children in an inhumane way. The video shows several emotional reactions to this sensegiving instance: already after the coach had said the first sentence, a fortyish male participant tilts his head down and shakes it from side to side. Several other participants also move their bodies in an uncomfortable way, readjust their positions, and shake their heads during the period. (Tape 10, 06:20)

References to the coach's marriage also started early in the seminar. When introducing himself, he said that he works together with his wife (Tape 1, 04:56). He also told how he found his wife from Kokemäki (a small town in Finland) and that "so, I have been

learning to live with her for twenty years now, in a new marriage. It's still a new marriage because I am so in love with her … I will tell how difficult it is, despite the love ... Guilt, fears" (Tape 1, 37:59).

More negative and provoking examples of the marital relationship soon followed the introductions. For instance, during the fourth hour of the seminar he told the following story:

> "In my own life, when there is sand on the floor of the summer cottage, I think that you should take that sand away immediately. […] If in our marital relationship, there is sand between us, you get hurt a bit by something, then the sand should likewise be removed instantly, we should discuss the injustice. […] People experience more injustices and get insulted more often that they realize […] all these injustices accumulate in the back of their heads. And, for instance, if we have sand on the floor of the cabin – or there is sand between me and [wife] – then it does not happen that [wife] gets the simple cleaning tools and asks that now [coach] let's discuss. Instead, she goes to the outdoor toilet, takes the large bucket that is full of shit and paints the whole cabin – that is, our whole life – with shit. So, when in the morning I was fully a lovable and fantastic person, then in the afternoon I am a total asshole. '**You have never done anything good for me! Not ever! I should have divorced you a long time ago!** [the coach shouts and waves his hands aggressively when he is quoting his wife] *You always just want to hurt and insult me* [tone becomes weaker, sounds almost like the coach is crying]. **You never consider me at all!** [shouting again]' [pause] Isn't this weird behavior? […] When she behaves like this, it is really incomprehensible for me. *How can somebody, with whom I have lived and whom I have loved and been kind to, suddenly feel that everything that we have ever experienced together, that all that is shit?* [again, the coach seems to be close to crying]." (Tape 4, 26:13)

Regarding the participants' reactions to the previous example, the video shows only the back of the heads of four participants. Each of them shakes their heads at the peak moments of the story, somewhat indicating emotional reactions. In addition, I used this clip in the first inter-coder agreement check which focused on recognizing the sensegiving tactics (not emotional reactions). One of the two coders reacted in a really strong way to this episode, first laughing but then getting more confused and serious. She also wanted to further discuss the content of the episode a few hours later, indicating that it had really had an impact on her.

Marriage examples continued regularly until the very end of the seminar. Even during the last hour of the seminar, the coach used his wife to make the participants more excited:

> "[My wife] lived her first marriage in the way that safety and predictability come first. She wanted to have her life so well organized that it will be so unvaried that nothing happens in life. So that it always is predictable. When you work for the municipal government, have a safe monthly salary, you follow the same rules and principles every day, don't kiss or hug during the day, and nothing unpredictable happens during the days. [Several audience members shake their heads as a reaction to these illustrations] Then, she thought, life is going well. But then she went and fell in love with me. [Audience members laugh gently] And I'm the kind of person who enjoys living on the edge. If I can hold on to the rope with just one finger and hang above the river, then I feel alive. And now [my wife] has to hang there with me." (Tape 14, 16:05)

There are three separate sources of evidence indicating that the participants' level of emotional arousal did indeed increase as the outcome of these intimate stories. First, several emotional reactions could be observed on the video as illustrated above. Second, some participants referred to the stories in the interviews that were carried out after the seminar and were still emotionally aroused. For instance, cleaning manager #4 said that the coach's "discussion about his mother relationship was too much because that can be too much for some people due to their own issues with their mother or daughter." Third, my own personal reactions were emotional when I heard the stories. When I was first exposed to the stories in my first seminar, I was especially aroused by the examples relating to romantic relationship and could recognize similar patterns in my own life. Even when I was recoding the video for the fifth or sixth time, after five years, I still felt some level of anger and sadness when I heard the stories.

4.1.2 Brutal claims

A second tactic that the coach used for increasing the participants' emotional arousal was brutal claims. Eighty-eight of such instances were coded in the material. Also these tactics created mainly negative arousal in the participants and did not require the participants to engage in conversation with the coach or each other. The brutal claims differed from references to intimate relationships in two ways. The use of this tactic required only a few seconds (as opposed to the longer stories about intimate relationships). In addition, some of the brutal claims were work-related.

The coach often started teaching a new lesson by making a bold statement either as the first thing he said or after a brief introduction to the topic. The bold statements were such as "When facing difficulties, a woman acts like evolution has made her act. [Pause] She acts like a martyr and complains that nothing would go well if she didn't exist" (Tape 1, 17:00). This kind of claims provoked protests and active confusion in the participants; as a reaction to the above comment, several participants coughed and shook their heads. In essence, the brutal claims increased the participants' level of emotional arousal and provoked them to protest and these protests created more arousal among the participants.

There are two mechanisms that explain why the brutal claims increased the participants' arousal levels. The first one is the unconditional nature of the coach's brutal claims: the coach said something against which the people could easily find an emotional counter example. This happened, for instance, when the coach said "I don't even accept penitentiaries" (Tape 9, 39:23) and "Punishments do nothing but increase defiance" (Tape 9, 39:49). A participant generated a counter example fifty seconds later and asked, with an intense voice, what the coach would do to pedophiles if not imprisoning them (Tape 9, 40:40). The idea of not punishing pedophiles made this particular participant angry, which is why the unconditional claim that punishments should not be used succeeded in increasing her level of emotional arousal.

The second mechanism is that some of the brutal claims directly violated the identities and self-esteem of the participants. Such direct identity and self-esteem threats can quickly trigger stress and defensive reactions, which are tantamount to increased levels of emotional arousal. For instance, when the coach said, "there are people who don't have the qualities needed for managerial work in the new system of self-discipline" (Tape 16: 20:01) it was a direct threat against all the cleaning managers present in the seminar. The comment was followed by a period of fear and tension and their release: people first stopped moving completely, looked downwards, and closed their bodies [in a similar way as one freezes at the sight of a dangerous animal]; then, after 11 seconds, four of the participants started readjusting their position, as if releasing tension and shaking away their fear.

The brutal claims tactic was often connected to a cognitive reframing that followed the brutal claims. Oftentimes, the coach first made the brutal claim which was followed by participant protests, and a consequent, more elaborate and nuanced re-explanation by

the coach, which also contained many disclaimers and qualifiers. For instance, during the third hour, he argued with a loud voice, "Good profits can be a really bad thing because they are used as an excuse to not fix bad management practices!" and referred to a specific unit in the firm (Tape 3, 02:15). This provoked several loud protests and questions from the audience, to which the coach reacted by re-explaining his idea with more elaborate details and examples (Tape 3, 02:25).

4.1.3   Jokes

Unlike stories about intimate relationships and brutal claims that mainly caused negative arousal, jokes triggered positive arousal in the participants. The coach had developed a long list of jokes and regularly complemented his sensegiving with them. I coded 61 jokes in the seminar. Oftentimes the content of the jokes was loosely related to the content of the current lecture and work. Hence, sometimes the coach could leverage the joke also cognitively in his subsequent teaching, whereas at other times it seemed that the arousal was the only relevant consequence of the jokes for the subsequent, cognitive sensegiving. The jokes usually lasted between two and 15 seconds. There is strong evidence that the jokes did indeed arouse the participants, as loud laughter can be heard from the video recording after most of the jokes.

There was a large number of jokes that did not relate to work. When the coach talked about communication patterns in romantic relationships, he told the following: "Men have one habit as well. Many men, for instance, get drunk on Saturday evenings and fix things. [Loud laughter from audience] That is the manly way, well, to start speaking only after one and a half bottles of Koskenkorva [Finnish vodka]. Start discussing with your wife a little about family business." The audience reacted by laughing out loud. (Tape 4, 25:55).[10]

Another set of jokes made fun of the coach and his seminar. For example, after explaining problems created by the organization's structure and emphasizing that the participants must get empowered, he concluded with "and this wouldn't be the first time when somebody comes back to work after the seminar and messes things up!" [loud laughter from audience]. (2, 59:14). In another one, he told about a guy who had

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[10] This tactic could have been coded as "reference to intimate relationship" as well. However, as the categories emerged, the emotional reaction produced by the sensegiving became one of the differentiating dimensions and, hence, this tactic, which created positive arousal and laughter, rather than negative arousal, was categorized as a joke rather than reference to an intimate relationship

just started working in the firm. "He had worked for three weeks and he came to my seminar. He participated in the first hour of the seminar and then he quit his job. [loud laughter from audience]" (Tape 2, 20:45).

There were also jokes that related directly to work and contained the cognitive lesson that the coach was teaching. When he was drawing the organization chart of the firm, he pointed to a seeming inconsistency or unnecessary complexity in the chart. He said, "Here is something that I don't understand, and the CEO could not explain it to me either." Again, the audience reacted with loud laughter. (Tape 3, 34:18). This joke amplified and reinforced the coach's message that the firm desperately needs to adopt the simpler, team-based structure that was an essential element of his teachings and the strategic renewal of the firm.

In everyday thinking, jokes in seminars are seen to be used to keep the participants awake. While I agree with this idea, I emphasize that the arousal that the jokes produce has a more substantial influence than that. Sense-receivers can associate the arousal created by jokes with the cognitive content described to them in the next moment.

4.1.4 Work-related, provoking examples

The coach also used a large number of wor- related, provoking examples to increase the participants' emotional arousal. I recognized and coded 81 of such examples during the analysis. The delivery of these examples usually varied between five and 60 seconds. The coach claimed that these examples were true stories from the Property Service Company and from other firms. The examples contained descriptions of questionable behaviors by both workers and supervisors and also more general descriptions of injustices and unproductive patterns. Hence, they created mainly negative arousal in the participants. The examples combined both emotional and cognitive sensegiving in that the stories were arousing but also contained cognitive content that was relevant for the coach's work-related sensegiving. The coach told the examples in a way that required no engagement in conversation from the participants.

Many of the work-related stories contained elements that could have made the participants feel frustration via empathy and association. When the coach was starting to speak about how organizational structures must be changed to increase productivity, he used a real-world example from the Property Service Company. He told how the firm had bought a small firm in Espoo. "Until they had been bought, the cleaners and

property maintenance workers had together taken care of the raking of leaves in the fall. When they became part of the Property Service Company they no longer could do it because the invoice system could not handle such a practice. They, therefore, had to abandon the smart way of working." (Tape 5, 28:00). The one participant that is visible on the video reacted by first fixing his posture up and then turning his head down.

Some of the work-related examples also directly attacked the top management of the firm. During the fourth hour of the seminar, the coach described problems in a specific unit. He also told that he had asked the top management to intervene with the problem but they had not. He concluded the description by saying, "Let me ask this from you. Why does the top management not go there when employees are asking that 'hey, we need help here! Things are not working here and we want to fix this unit.'?" This story and question made several participants comment with intense voices. Three of the ten participants that are visible on the video also moved their bodies back and forth, and up and down while the other participants were commenting on the coach's point. (Tape 4, 04:41)

The examples that provoked direct anger toward the top management of the firm seem to be risky and unproductive. How could a seminar that provokes conflict between workers and management increase collaboration and productivity? On one level, the stories undoubtedly describe interaction patterns and problems that need serious attention from the top management and, thus, illustrate to the participants that also the management is carrying its weight in the change process. The participants may consequently feel more willing to change their own behaviors also, following the logic of reciprocity. In addition, on another level, the stories provoke emotional arousal that can transfer to the lessons of how to fix the situations. Not surprisingly, the coach often described his ideal solution immediately after describing the problem first.

4.1.5   Pushing the participant(s)

The coach pushed the participants aggressively as a fifth tactic for increasing the participants' level of emotional arousal. To conceptualize this tactic, I recognized and coded 45 instances in the seminar video. The basic dynamic was that the coach used aggressive language and questions to make the participants admit that they had done something wrong at home, at the seminar, or at work. Hence, the tactic required active participation from the sense-receivers. The tactic created negative arousal: The participants often got seemingly angry at the coach while he was doing this, and often

raised their voices while providing their answers. On a few occasions, the participants also showed signs of sadness and seemed to be close to crying. The instances of pushing participants varied in duration from a few seconds to several minutes.

The following illustrates how a typical instance of pushing the participant(s) proceeded. The coach first described some content and then asked a participant: "Is the situation different? How would you negotiate with Pekka [an indifferent male prototype]? [5 sec pause] What would you Pekkas say? [coach looks directly at a group of male participants and walks toward them] Is the situation different?" The coach then walked directly in front of a participant and asked him: "How would it go with this Pekka, Kaapo?" The participant showed non-verbal signs of discomfort [he moved his upper body from side to side, as if to try to dodge the coach or circle around him] and answered with a disgusted tone that "it would not differ much from that." (Tape 5, 07:11) These non-verbal reactions indicate that the coach succeeded in increasing that participant's level of emotional arousal. After having pushed the participant, the coach moved on to discuss his points in a more lecturing way.

Sometimes the coach did not settle for brief moments of pushing but continued for several minutes. During the first hour of the third day, the coach talked about issues relating to working too much. He started by asking, "what do you think, what is the normal length of a working day for a cleaning manager at [your firm]?" (Tape 13, 19:09). Nobody answered this question for ten seconds and the coach continued, "For cleaning managers? [7 sec pause] Let's focus on this for a bit. Where is the limit for a humane working day? … Because we are dealing with Kerttus [a martyr-like female prototype], it's extremely important to set the boundaries. Seija, where do you think the boundary is?" (19:38) The participant (#A) did not provide a direct answer but let out indistinguishable utterances and then asked, "where?" The coach replied, "Yes, in this service industry. Where should it be?" (19:51) The participant answered, with a trembling, higher pitch in her voice, "eight hours." The coach acknowledged this answer but continued pushing, "But if you have to stay on duty or handle some things, then you will do more." Again, the participant let out indistinguishable utterances, this time in protests to the coach's claim. The coach interrupted her by saying, "but you keep answering your phone all day and night." (20:10). This comment made another participant (#B) join the discussion. Her voice was loud and low in pitch, indicating anger. Before she could finish her sentence, the coach started pushing her as well, "so,

what do you think, then, what's the normal length of a working day in this service industry?" (20:20) The coach then repeated these questions and started listening to the participant's answer. The participant answered by describing how she works significantly more than eight hours per day, "well, I keep my phone on and I do answer it. I cannot leave those people alone. I think I'm doing fine." This time her voice was low in volume and high in pitch, indicating fear rather than anger. The coach kept pushing her and then asked the audience, "So, is this the normal thing?" Another participant (#C) answered, "No." This last participant also described how "I'm never able to stop thinking about it [work]. I have no time for myself. In principle, I'm at work and available for 24 hours per day." (21:45) This triggered the participant #B to defend her position with a loud, high-pitch voice: "I think it's a personal choice, and everyone can choose how they want to … This is the way I want to work." (22:10). The coach acknowledged her comment but repeated that people must organize their work in a smart way and "the real question is that because this service industry is full of overnice people, martyrs, and Kerttus, who ruin the work culture, who continuously work for 15 hours per day, and live such a life that they don't have their own life at all anymore. These are the issues I want to highlight." (23:42) One more participant opened up emotionally as the coach kept pushing the participants during the discussion: she described with a trembling voice how, "I have cried for a few times, I've been thinking that I never have time for myself. That can this life really be like this?" (Tape 13, 26:34) Hence, the coach succeeded in emotionally arousing several participants during the third morning by pushing them hard to admit negative facts relating to their working hours. In this specific instance, it is also notable how the level of arousal incrementally and in an accumulative way increased as more and more participants became part of the discussion that was driven by the coach's aggressive, pushing comments. Yet, the key to the increase in arousal was, again, the pushing comments by the coach.

4.1.6 *Making/allowing the audience to generate arousal*

As the seminar progressed, the coach was no longer the only one whose actions increased the participants' arousal levels. I coded 29 instances where the participants said something that triggered arousal in the participants. The coach had a role in creating these participant actions, as he sometimes encouraged them directly; when he did not actively encourage them, he still passively promoted them by not interrupting the participants. This tactic resulted in both positive and negative arousal and

contained both work-related and work-unrelated content. The instances typically lasted between two and 15 seconds and required active, verbal participation from the participants.

The instances of audience generated arousal consisted of two main types: jokes and concrete illustrations from the workplace. The jokes provoked laughter and positive arousal. The concrete illustrations provoked both anger and empathy/sadness. The participants started making these comments because (1) as the seminar progressed, it became more emotional and these kinds of statements became a more natural part of it, (2) they implicitly started copying the coach's behaviors, and (3) they genuinely wanted to share some stories from their workplaces.

Usually the audience generated arousal with simple remarks. For instance, during the second afternoon, the coach was discussing the relationship between sales and production. At some point, one participant said that, "The sales can say that 'Listen, the competition is so tough that we need to sell like this. We will lose this customer because you are so damn negative.'" Another participant jumped in here and said cynically, "That sounds so familiar." Several audience members and the coach reacted by laughing. (Tape 12, 33:33)

At some points, the audience generated arousal also followed from more elaborated stories. For example, during the first set of presentations on the third morning, the issue of cleaning targets surfaced again. One participant [who was not presenting but commenting the discussion that was triggered by the presentation] said, "For example, we have this [Firm X] target, which is cleaned two times per week, for half an hour. And the monthly fee for them is 157 euro. That simply is not enough, already the gasoline will [cost more as the cleaning personnel needs to drive to the location]. It will never be profitable." This comment made several audience members comment in a loud voice. The words are not distinguishable on the video but the volume goes up and the pitch goes down, indicating anger, as they try to speak over one another. Some participants also laugh loudly at one point of the emerging debate. (Tape 15, 28:23) The debate continued for a while until the coach focused attention back to the presentation.

In summary, the coach used six tactics for increasing the participants' emotional arousal. Four of the tactics required no active, verbal participation from the sense-

receivers, while the latter two were dependent on the participants' active engagement. The tactics also varied in terms of duration, the valence of the arousal generated, and whether or not they had work-related content. The tactics are compared along these dimensions in Table 9 above. Further data illustrating each tactic is presented in Table 10 below. The main outcome of each tactic was an increase in the participants' level of emotional arousal.

Table 10 (1 of 4): Further evidence and illustrations of the tactics the coach used to increase the participants' level of emotional arousal

Reference to intimate relationships	Illustrative data Sensegiving [reaction]	*Number of codes in this category: 134*
	"I have myself lived in this kind of a relationship (with ex-wife) for seven years. In this relationship, my wife was not able to discuss difficult topics with me, unless she was angry and then insulted me. When she felt really bad. When the anger had accumulated. (…) There were three ways to communicate: insulting remarks, silent-treatment, or a fit of rage." [The reactions of seven participants are visible on the video: four of them keep their head down, indicating some level of sadness. Two of them tilt their heads and bodies from side to side several times at the peak moment of the story, indicating a more anxious reaction] (4, 20:39)	
	"I had to reflect, why am I so scary person that my wife is afraid to speak to me?" [The video shows the back of the heads of four participants. The only male participant visible moves his head, and apparently upper body, from side to side with strong movements] (4, 30:42)	
	"A Finnish man needs a mother (for wife) who will take care of him during daytime and make sure that all chores are taken care of and so on. And, for the night, a man needs a tiger who will tear his back with nails (during love making). Some have tried to find this kind of women from all over the world. But I don't know how successful that has been. My understanding is that such a combination does not exist." [several female and two male participants move their upper bodies and heads from side to side, indicating an anxious or uncomfortable reaction to this story] (1, 35:56)	
	"For instance, in a marriage situation, there is a need to bring up issues when one of the spouses has become an alcoholic. He denies that he has become an alcoholic. Then she does not have many other alternatives but to pack up her stuff and walk away. She sees a problem and he doesn't." [Four of the eight participants visible on this video section move anxiously from side to side and back and forth as a reaction to the coach argumentation] (10, 38:29)	

Table 10 continues (2 of 4)

Brutal claims	*Number of codes in this category: 88*
	"40 to 60 percent of the work that is done in your firm is pointless!" [Emotional reactions are not visible on the video clip but participants commented this claim powerfully in informal discussions during the following break] (1, 27:13)
	"To make profits, the firm screws both employees and customers!" [Each of the three participants that are visible on the clip shake their heads from side to side and back and forth as a reaction to this claim, indicating some level of anxiety] (1, 13:06)
	"The production unit is lying on its face on the floor. They are being too nice and crying like babies!" [The video shows all 30 participants. Three of them shake their heads aggressively from side to side, indicating disagreement and possibly slight anger. Two participants move their bodies in up and down, indicating a more anxious reaction] (2, 53:07)
	"The higher the proportion of women in the system, the more likely it becomes that they will not able to take care of the problem without external help" (Tape 14, 47:23) [the video shows no emotional reactions but the coach told that in an earlier seminar some participants had gotten extremely insulted by this "fact"]
	"A nice person destroys herself!" (4, 24:13) [The video shows 17 participants. One of them starts shaking her leg powerfully and readjusts her position with exaggerated movements. Seven other participants also readjust their positions with anxious movements, four of them moving their heads at the same time]
Jokes	*Number of codes in this category: 61*
	"Maintenance guys go look at the machinery [that is reported to be faulty]. They look at them and say, 'they have always functioned like this. It's impossible to make them any better.' Then, when women complain a bit more, the men say, "Well, it's again that time of the month." [audience laughs loudly] (1, 18:42)
	"After destroying my previous marriage with my own behavior, I realized that I need the most difficult person in the world to be my wife. Someone who will keep me under control. And then, when I looked into the mirror, I realized that this is not possible. I have to settle for the second most difficult person in the world." [audience laughter] (1, 37:25)
	"Like we know, women are usually so that they are 'with someone.' There are cliques. They build this kind of protective unit. You think that there is someone who is, like, how should I say, like, normal. And then the normal ones are together and gossip about the others." [loud laugher from audience] (4, 22:11)
	The coach first described how in another firm the employees had the possibility to collect credits by making initiatives and how one man was especially motivated to make initiatives. The credits would allow workers to get tangible rewards that included Iittala tableware. "His wife liked these tableware a lot. [audience laughter] You must understand that motivation was really high when he could get a double reward. Super-bonus (i.e. oral sex) at home [loud audience laughter] and and … [voice trails off] (14, 29:51)

Table 10 continues (3 of 4)

Work related, provoking examples	Number of codes in this category: 81
	"We have tried to establish teams to the Lahti unit for three years now. But when nothing has changed in management practices and in the organization of work, then, nothing but, should I say what, has followed." [Two of the six participants visible on video shake their heads from side to side as a reaction] (5, 23:49)
	"I find this situation in Imatra really interesting. The property maintenance workers have pushed this issue now for two months. On this Thursday something should happen." [A woman participant who is not visible on the video comments something with loud, high-pitch voice, indicating some level of anxiety] The coach continues, "The maintenance workers have cried for help. … The supervisors have done nothing." [Two female participants' faces are visible on this clip (10, 40:24): one of them has the corners of her lips down and cheeks pulled slightly up, indicating some level of sadness. The other one has pulled his hands in front of her face while her upper eye-lids are eye-brows are pulled up, indicating surprise or fear. In addition, several participants move their bodies and heads from side to side in an anxious way during the example] (Tape 10, 39:58)
	The coach spoke generally about how lack of a collaborative approach can lead to negative consequences. Then he reinforced his point by telling: "This kind of cases, we have so many of them. When you think, for example, the paper union negations form last spring. Remember what followed? And now, everybody is being really surprised that, oh my god, we lost 3,000 jobs." [Five of the seven visible participants mover their heads in anxious way as a reaction to this point. Two of them also move their bodies up and down] (Tape 10, 46:05)
	"When I first time went to the Lahti unit and raised this [injustice] point, it created quite a reaction. Several people resigned and started looking for other jobs. They genuinely felt that that some people in the unit had privileges and some had really unjust work portfolios." [four of the five participants visible move their heads back and forth and from side to side as a reaction to this point] (Tape 13, 49:12)
Pushing the participants	Number of codes in this category: 45
	Three participants are late from lunch break on the first day. The coach asks, "Well, what should we do with these guys?" [Several audience members provide excuses for them and defend them with loud, lower-pitch voice] The coach continues, "I haven't had even one seminar during which your people did not behave like this. [more defensive reactions from audience]. You know why I think it's extremely important? [more audience uproar] It's about the ability to respect other people." (3, 05:55)
	One participant said she disagrees with the coach's point. The coach then directly asked from the person, "Should we focus on developing productivity or on increase revenues?" The participant started answering [words are not distinguishable on the tape; pitch of voice goes high and volume increases]. As a response, the coach shouted loudly "No! No! No! No! No! No!" over the participant's answer and then re-explained his own theory. (1, 28:44)

Table 10 continues (4 of 4)

<table>
<tr>
<td></td>
<td>The coach was speaking about a new way to be more assertive with customers. Then he paused for a few seconds and said, "A wrinkle seems to have emerged on the forehead of Riita?" Riitta made an uttering sound in response. The coach continued, "Should I tell an example?" Riitta replied with loud, low-pitch voice, "No!" and also started saying something else but the coach spoke over her, "But I will tell it!" and Riitta said with lower volume, "well, OK, go ahead." (7, 35:29)

The coach lectured how bad work system can influence people's behavior at home after work. He described an imaginary scenario in which someone comes home tired after work and finds that kids have left their clothes and toys lying around the floor, instead of putting them to where they belong. He then asked directly from one participant, "will you behave like a responsible adult in this situation and treat your children with respect, or will your behavior shift here (points "external discipline" on a slide) and you will use the logic of external discipline?" The participant answered with low-volume, high-pitch voice that she would behave in a respecting way. The coach continued, "so there is no risk that you would start shouting or get angry?" and the participant said with a voice that had an even higher pitch that there would be no such risk. Then the coach said, "Well, it actually is more likely that it will go here (again points at "external discipline" on the slide) than here (points at "self-discipline" on the slide) if also the work culture is here (points at "external discipline" on the slide)" (6, 29:55)</td>
</tr>
<tr>
<td>Making/allowing audience to generate arousal

Number of codes in this category: 29</td>
<td></td>
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<td></td>
<td>An audience member describes how they would deal with a person who creates problems: "Beat him up at the Firm Christmas party (in the Finnish culture, the Christmas parties contain a lot of drinking and the idea of a physical fight is quite plausible)." [Each of the eleven participants visible on the video laugh gently and change their posture as a reaction to this comment] (3, 53:15)

The coach asked the participants what an overly-nice woman (Kerttu) could do to improve her situation in a work system of external discipline. Someone suggested that she could find a new job. The coach continued, "So, she could go to (competitor 1) or (competitor 2), well, I don't think that would help much." Then a male participant said something that is not distinguishable on the tape that triggered loud audience laughter and made several participants readjust their posture. (6, 12:28)

The coach first described some challenges between the production and sales in the firm. One male participant then commented this story by saying, "On the other hand, to defend us, I must say that at Tampere we have been working for six months on some targets that did not even belong to us." This story triggered loud audience and coach laughter. (5, 11:21)</td>
</tr>
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4.2 Cognitive (Re)Framing

Instances of increasing emotional arousal were often followed by instances of cognitive (re)framing in the coach's sensegiving. In this way, the coach was able to associate emotional arousal created by content that was often not related to work to work-related content and, thus, reinforce the persuasiveness and retention of his cognitive, work-related sensegiving. The tactics for cognitive (re)framing varied in terms of if and how they established continuity between the arousal-increasing tactics and the cognitive content, in their typical duration, and whether or not they required active participation from the participants (Table 11).

Table 11: The coach used four tactics to deliver the cognitive content of his sensegiving

Tactic	Link to arousal tactics	Typical duration	Requires active participation
Linking an example to work-content	Asserted or implied but not necessarily explained	2-10 seconds	No
Re-explaining with more nuances and qualifiers	Provides further information that alters the meaning of the arousing words	From few seconds to several minutes	Signs of disagreement or confusion trigger
Simple telling	Not established	From few seconds to several minutes	No
Discussing through the idea	Varied	From 30 seconds to several minutes	Active discussion or yes/no-answers

From a theoretical point of view, a notable difference between the different tactics for cognitive (re)framing is that the degree of cognitive continuity from increasing arousal to cognitive (re)framing varied from low to high. Sometimes there was a plausible link from the content of the preceding arousal tactic to the work-related cognitive content of the following sensegiving, whereas at other times it was difficult to see a connection between the two. In other words, sometimes the coach linked the content of the cognitive (re)framing to the content of the previous increasing arousal tactics by saying, for instance, that similar dynamics happen also at the workplace. However, at other times, he simply started talking about work-related content without explaining how it related to his previous anecdotes and jokes. This latter pattern is consistent with the claim that the coach used the arousal tactics mainly to generate emotional arousal, irrespective of its content, to reinforce the impact of his sensegiving.

4.2.1 Linking an example to work content

Many times the content of the tactics that the coach used to emotionally arouse the participants were loosely linked to work dynamics. I recognized 34 instances where the coach used these loose links to smoothen the transition from increasing arousal to cognitive (re)framing. He usually asserted or implied the existence of the link but did not explain it in a more comprehensive way. It typically took him between two and ten seconds to establish such links and this did not require active, verbal participation from the sense-receivers.

By applying this tactic the coach used the emotional arousal that the previous story, joke, or claim had created to support his next point, without seeming to jump to a completely different topic. Even though the connections between the two were often weak, they still somewhat legitimated jumping between, for instance, his marriage and the participants' behavior at the workplace. This partial legitimacy could have helped the coach to maintain his credibility in the eyes of the participants.

The simplest form of linking an arousing story to work was a simple assertion. For instance, after telling a long and arousing example about marriage dynamics, he concluded the example by saying, "a person makes herself look like a normal person so that she could criticize others' behavior. [pause] It goes like this [pause] also in the workplace. [Long pause]" Then he moved on to describe how similar dynamics explain how latent conflicts are not surfaced and solved at workplaces and how productivity and well-being therefore suffer. (Tape 4, 23:07)

Sometimes the coach also jumped from the arousing example to work content directly without explicitly linking the two. Yet, the connection could be seen, for example, from the way he framed his initial comment or rhetorical question when he started speaking about work content. For example, during the latter half of the fourth hour, the coach told how certain female behavioral patterns caused his wife to "huff, give silent treatment, and get anger attacks." Then, after a six-second silence, he asked "How do you negotiate with a person like this at the workplace?" (Tape 4, 21:19) and moved on to explain the patterns in a work context.

In sum, the coach linked the content that he used to increase the participants' emotional arousal to work-related content by using a few linking words or by just starting to speak about work content right after telling arousing content. In this way, he

smoothly transformed the situation to be about work content, while the participants were still emotionally aroused by the less work-related content. Hence, the coach made it possible that the participants associated the arousal with the work-related content.

4.2.2   Re-explaining with more nuances and qualifiers

The arousal tactics often created confusion and disagreement in the participants. Sometimes the audience members could not understand why the coach told a certain joke or a certain example of his personal life. The most common source of confusion was the brutal claims the coach used to provoke debate and emotional arousal among the participants. When such confusion and protests emerged, the coach re-explained his point more comprehensively. I recognized 34 such re-explanations. These re-explanations were less emotional and less provoking than the initial jokes, claims, or stories, and they contained more intellectual content and often also emphasized the external constraints on the participants' work behavior. The emphasis on external constrains might have reduced the direct insults the participants sometimes felt after the brutal claims. In this way the coach could reduce the participants' cognitive resistance to the claims (and make the valence of their emotions more positive), while still maintaining the arousal that was created by the earlier jokes, claims, and stories. The duration of the re-explanations varied from a few seconds to several minutes.

The coach's re-explanations were usually triggered by expressions of disagreement or confusion by the participants. For example, during the second afternoon of the seminar, the coach was speaking about ways to measure performance at work. He emphasized that outcomes should not be measured directly but that focus should be on measuring the quality of the work and work processes. This confused many participants and one of them described the measurement system in her unit and asked loudly, "I don't understand what you are trying to say, why is our system wrong?" (Tape 12, 59:32). The coach answered, "Yeah, yeah, that's a good question. I mean, you have this kind of problem in this management of work that the measurement of quality is such that we only measure the outcomes of quality. In other words, we are not measuring the quality of the work but its consequences." (Tape 12, 59:45) and further explained the difference between the two approaches. Hence, he managed to associate the confusion and related arousal that were created by his initial argument with the more elaborated description of how quality should be measured at work.

4.2.3 Simple telling

Simple telling refers to speech episodes where the coach simply described his content. I coded 328 of this kind of instances in the data. During these instances, the coach spoke in a similar way as teachers speak at schools, educating the participants with work-related content. He often also used visual aids during simple telling, mainly slides and a white board. The content of the simple telling varied from dry, non-emotional technical descriptions to somewhat more emotional content that described positive and negative consequences of different kinds of behavioral patterns and work practices. The coach also used repetition a lot and recapped his core points every now and then. These ways of simple telling and his clear speech ensured that the participants had the opportunity to develop a clear, cognitive understanding of the coach's message. The instances of simple telling lasted from a few seconds to several minutes. The coach rarely established any links between the content he described in simple telling and his earlier arousal-increasing words. The participants did not need to participate actively when the coach was doing simple telling but only listen.

The way the coach described the transition from Taylorist organization to team-based organization illustrates simple telling. He showed a slide which contained a diagram containing three lines and their trends over time: size of units, level of motivation, and performance. The graph showed that before the strategic renewal of the firm, the unit size had steadily increased, while motivation and performance had steadily decreased. The graph also contained a vertical line which symbolized the transition point created by the strategic renewal and the seminars. The unit size started decreasing after this point, while motivation and performance started increasing. The coach explained how the old way of organizing has led to negative interaction dynamics and individual reactions, and how the changes that were created would make the difference. The audience followed the coach without distinguishable movements or sounds. (Tape 2, 14:06)

Part of the content that the coach presented via the simple telling way had emotional content. For example, when the coach was explaining his idea that high effort is no longer the most important thing at work but smart ways of organizing is, he referred to Finnish wars: "The generation that rebuilt this country after the wars. Those who plowed the field, started cultivating land, and produced food. That generation certainly did not have a choice. They had to be hard-working and work long hours. But in

today's world, when we work, the effort we put in does not determine how things will go. Instead, how we communicate and coordinate matters much more." (Tape 1, 24:55) In this instance, the content that was emotionally arousing was relevant also in a cognitive sense for the coach's point. Hence, also the emotional impact of these words was large, even though the coach's focus was on the cognitive content.

4.2.4 Discussing through the idea

Discussing through the idea refers to situations in which the coach discussed with the participants the content of the seminar. Such discussions emerged when the coach directly asked the participants to contribute and sometimes when the participants spontaneously asked questions. The content of the discussions varied to a large extent and consequently also their linking to previous arousal-increasing tactics varied. I recognized 206 instances in the data that could be categorized into this second-order category. The duration of these instances varied from half a minute to several minutes.

The discussions constitute another standard mode of teaching new content to seminar participants. One of their strength was that in this way the coach could link his teachings to the participants' existing beliefs. The discussions also kept the participants a bit more active than pure lecturing and, thus, possibly helped in maintaining the arousal levels that had been created with the arousal-increasing tactics. The following dialogue illustrates how the coach asked many questions and in this way made the participants co-produce his description of the problems of interaction patterns at work (Tape 8, 05:16—06:57).

> Coach: "What does honesty mean? What is honesty in a Finnish work community? What does honesty mean at Finnish workplaces? What does it mean?"
>
> Participant: "You speak the truth."
>
> Coach: "You speak the truth. Does it mean that you say as you personally think how things are?"
>
> Participant: "Yes. That's how it should go."
>
> Coach: "Well, why doesn't it go like that?"
>
> Participant: "Because people get upset when you say how things are."
>
> Coach: "Well, what follows from that?
>
> Participant: "People look at you for a bit longer and despise you."
>
> Coach: "I mean, what follows from that you don't say things?"

Participant: "Oh, if you don't say things. Well, I don't know, people stop [does not finish the sentence]

Coach: "So, do we Finnish people tell each other how we think about things?"

Participant: "No"

Coach: "Why not?"

Participant: "You think of other issues."

Coach: "So, such behavior does not belong to the workplace? Why does it not belong there? Is it civilized behavior?"

Second participant: "I don't think it is."

Coach: "I genuinely think that not speaking what you think is seen to be civilized behavior. And it is related to the fact that we have power and control-based interaction systems. Hence, the person who behaves in the most difficult way gets power, everybody must act as he wants. From this follows that we learn the kind of interaction system that we lie as we are expected to lie."

After the dialogue, the coach continued, in a more monologue way to describe his own solution to the problem. Yet, by discussing through the idea with the participants he had grounded this idea to their own beliefs. Similar patterns of defining problems and solutions in interaction with the participants occurred several times during the seminar, as illustrated in the table below.

In summary, the coach used four main tactics for delivering his cognitive content after he had first increased the participants' level of emotional arousal. These tactics for cognitive (re)framing varied in terms of whether and how they linked the work-related content they contained to the content of the preceding increasing arousal tactics, in terms of their duration, and if and how they required active participation from the seminar participants (Table 11 above). Further empirical illustrations of each tactic are provided in table 12 below.

Table 12 (1 of 3): Further data illustrating the cognitive (re)framing tactics

Linking an example to work-content	*Number of codes in this category: 34*
	The coach first gave a long example of external-discipline based marriage and its problems and concluded it with, "Human interaction culture in marital relationships, for some couples, the interaction system is that of external discipline, while for others it is self-disciple." (4, 51:04) Then he continued directly by saying, "Work communities, some work communities have the interaction system of external discipline, some self-discipline." (4, 51:10)
	The coach first described how he had taught his wife to not clean up his messes but to assertively confront him and push him to clean his own messes. He concluded the example with "We had tens or hundreds of things like this. It may feel naïve and childish but it is a way through which you learn to respect the other one." Then he jumped, after 1 second pause, to ask "Do you know what is the largest problem in [your firm]?" and started describing interaction dynamics in the firm (10, 23:22)
	The coach first explained how people will abuse their spouses if they are not able to stand up for themselves. Then he said, "and when we go to work organizations, where issues like self-discipline are central, then it becomes impossible if there are people who are not able to say that 'stop, this has not been agreed with me.'" (4, 31:42)
Re-explaining	*Number of codes in this category: 34*
	The coach explained how people must learn to behave assertively in order to improve their own well-being and the general work culture. A participant commented the explanation. This comment triggered the coach to re-explain the same topic with new concepts: "Yes, yes, yes. But I think there is a new element in this whole thing. We are measuring, for example, in the whole process, this thing called systems intelligence [the concept of systems intelligence was not defined or brought up earlier], which means if a person is being nice toward the system … the system does not enable people to do their work in a smart way. And people should challenge the system [i.e. not be nice] to make the work practices smarter." (7, 26:13)
	The coach was talking about the interaction and collaboration between sales and operations in the firm. A participant contributed to the discussion by describing a challenging situation and a positive example. The coach answered, "Yeah, yes. Again, when we go to the Northern Finland, the guys are so tough that the negotiations are really tough [tougher than in the scenario that the coach told earlier], they will both tell you. But they both must still have the strategic vision that the production unit plans targets for the sales that they sell with good price and lists those that must not be sold at all." (12, 35:00)
	The coach used the phrase "shitty portfolio" [paskasalkku] to describe the situation of some cleaning managers who had to take care of challenging and unprofitable set of cleaning targets. Some participants indicated that they found this phrase insulting. The coach re-explained, "I still want to defend this phrase. I mean that those people who have received this kind of a portfolio have the right cry for help. … It's a product of the organization that has just been given to you. (11, 41:52)

Table 12 continues (2 of 3)

Simple telling	*Number of codes in this category: 328*
Telling unemotional content (260)	During the second hour of the seminar, the coach spoke 10 minutes about Taylorist organization. He started, "[Your firm] has been designed like Taylor built, at the beginning of the 20th century, a car factory; the so called Taylorism. Taylor's job was to, nearing the end of 19th century, to make uneducated people work efficiently. It was his job. He built the assembly line." He described more details and also provided concrete examples from the trained firm. (2: 28:00) During the second afternoon, the coach showed a slide titled "initial working group" and explained: "The working group must describe the task that will then be assigned to the actual team. First, it starts by defining the basic task of the team…" (12, 05:11) The coach continued describing several required sub-elements for several minutes.
Telling emotional content (49)	The coach started telling about his theory of work systems during the first hour of the seminar. He explained how some people sacrifice themselves and thus enact an unhealthy work system: "That woman works 20 hours per day. She even covers for her sub-ordinates and does their work as well. And she just puts more effort and then proudly tells about it to everyone. And this is why the firm has to do nothing for the shitty portfolios…" (1, 17:28) The coach then continued further explaining how people's behavior influences which kinds of changes are made in work systems. During the third hour of the seminar, the coach explained how increased productivity is the key to the longevity of firms. He then asked rhetorically, "What happens if productivity is not developed?" and answered, "Layoffs and bankruptcy. It will lead to layoffs. The paper industry is a good example of that. … Nobody wanted to see and fix the problems [in productivity] five years ago. Instead, they devalued markka [former Finnish currency] and thus financed their pay raises. Everyone else financed their pay raises. "(3, 19:06) Then he continued further explaining how he thinks workers should collaboratively develop their firm with management.
Recaps key points (19)	"I repeat this one more time. In today's working life, professionalism does not mean that you let the organizational system control you. In today's working life, professionalism means that you must influence those parts of the work organization that are not functioning properly." (8, 03:20) "We have now been discussing for two and a half days. We have developed understanding of work system things and now you know that your job at the work place is to influence things, not just follow orders." (16, 09:02)

Table 12 continues (3 of 3)

Discussing through the idea	Number of codes in this category: 206
	Coach: "Why do you think we need to do this thing exactly in this order? Why do we need to manage this in exactly this order?" Participant: "Because when the four and five [numbered steps on a slide], it's good that we already have done the others [numbered tasks]" Coach: "Indeed, if we are able to increase employees' competencies, they can better influence and be responsible of work." (12, 48:13)
	During the last hour of the first day, the coach asked the participants to discuss what self-esteem means for five minutes. Then he asked the pairs to share their thoughts and commented them. (6, 04:33-10:00)
	Coach: "They manage the work. To manage the work, how do these things [points words 'actions,' 'knowledge,' and 'understanding' on the white board] go? [5 sec pause] What should come first?" Participant: "Knowledge" Coach: "Good. So every member of the team must have knowledge of the team's responsibilities." (5, 31:52)

4.3 Reinforcing Commitment

The cognitive reframing allowed the participants to form new, tentative mental models in their minds. The arousal that they experienced while holding that mental model in their working memory increased the likelihood that they encode it into their long term memory and make it a lasting part of their mental model. In addition, the coach seemed to use a handful of more focused tactics to strengthen the participants' commitment to the newly learned idea. These tactics varied in terms of their duration, requirements for participant engagement, and the mechanism through which they likely increased participants' commitment to the ideas (Table 13).

4.3.1 *"Do you find this logical?"*

The basic idea in the tactic labeled "Do you find this logical?" is that the coach asked the participants to publicly affirm that they believe what he had just said. It usually took him between one and six seconds to ask this question. The public display of affirmation shows both to the person making the affirmation and others who see him or her affirm that they have believed the coach. Hence, the new element in the mental model is reinforced through the logic of cognitive dissonance (Festinger, 1957).

Table 13: The coach used four tactics for increasing the participants' commitment to the ideas they were hearing

Tactic	Duration	Mode of participation required	Theoretical mechanism
"Do you find this logical?"	1-6 seconds	Affirmative answer ("yes" or a nod)	Cognitive dissonance
Makes audience members describe how they commit to content	From one to tens of minutes	From few sentences of description to several slides and presentation	Cognitive dissonance
Increasing efficacy	From few seconds to couple of minutes	Just listening	Self-efficacy and group-efficacy
Concrete and direct action instructions for participants	From few seconds to couple of minutes	Providing and elaborating details; affirmation	Goal setting theory

The empirical material provides numerous instances where the coach used this tactic. Fifty-seven of them were recognized and coded to conceptualize this category. For example, during the fourth hour of the seminar, the coach first spent several minutes explaining that there are three ways of using power. He argued that two of them (being so difficult that no-one can deal with you and indifference to wrong doings) lead to negative outcomes, whereas the third way of using power (when the power is based on fair agreement between the parties) leads to positive outcomes. He then summarized his point and asked "don't you agree?" and the participants nodded to show their agreement. (Tape 4, 43:53) As Festinger (1957) explained, people often form or change their beliefs to match their own behaviors to reduce the dissonance between their behaviors and beliefs. The effect is even stronger when other people witness it (see e.g., Deutsch & Gerard, 1955). Hence, when the seminar participants showed publicly that they agree with the coach, it made them reinforce the beliefs that are consistent with the coach's message.

The coach also had a way of staying in control of the situation when the audience members did not provide the affirmation he was fishing for. In the 15 recognized occasions when this kind of rejection happened, the coach powerfully rejected their disagreement and aggressively re-explained his point. For example, during the third hour of the seminar, the coach drew the organization chart of the firm and argued that the position of one group of low-level managers was problematic. Then he asked, "Right?" and looked at the audience. One member seemed to disagree and the coach

said, "Somebody was shaking her head," pointed with his finger to that person, asked what was wrong and then aggressively re-explained his point. (Tape 3, 42:41) In this way he increased the likelihood that the participants will agree with him the next time. Furthermore, the coach's strong emotional reactions to critique might also have emotionally aroused the participants. This increased arousal could have built on top of the arousal that was generated earlier in an accumulative way and all the accumulated arousal could then have become associated with the focal, most recently heard, content of sensegiving.

It is also ironical to note that the coach's tactic of forcing the participants to eventually agree with him was in stark contrast with his general approach of promoting participation. As discussed below, in the legitimizing emotions sections, the coach encouraged the participants to share their views. However, when they did so, the coach attacked them powerfully. This pattern is consistent with the idea that the point of the debates was rather to amplify the emotional intensity of the seminar than to facilitative true dialogue and co-creation of shared understanding.

4.3.2   Makes audience members describe how they commit to content

In addition to using the "do you find this logical?" tactic, the coach used more elaborate tactics to leverage cognitive dissonance and make the participants describe how they will commit to his lessons. I categorized 39 first-order codes to belong in this second-order category. These tactics required more elaborate and active participation from the sense-receivers and their duration ranged from one to tens of minutes. For example, during the second afternoon, the coach asked the participants to first discuss in pairs what lessons they found the most useful during the seminar. After the pair discussions, the coach asked the participants to share their thoughts with the whole audience. As different participants had found different lessons the most important, the outcome was that several of the coach's lessons were reinforced by the participants. (Tape 10, 45:00 – Tape 11, 23:00). Again, following the logic of cognitive dissonance (Festinger, 1957), the participants were likely to get more committed to these ideas. When they explained publicly how they will behave, it made them change their own beliefs about their own behaviors.

The coach also asked the participants to carry out two group assignments and present their findings. The instructions for the assignments were direct and practically gave no alternative to the participants but to explain how they will implement the coach's

lessons in the workplace, even though the illusion of free choice remained. For instance, when the coach gave instructions for an assignment in which the groups were to develop a new assessment system for the firm, he said that "getting new customers for the firm because you get a special reward for that [3 sec] things like that are probably good indicators [for measuring the right behaviors which the participants should list in their presentation]" (12, 51:20). Consequently, the participants presented how they will change their behaviors in the workplace as the coach had taught. For example, one group argued that they will develop "healthy assertiveness, openness, and courage" as visible in Finnish in Figure 11 of their presentation slide below. Again, the publicly made commitments showed the participants that they believe in and are committed to the coach's lessons.
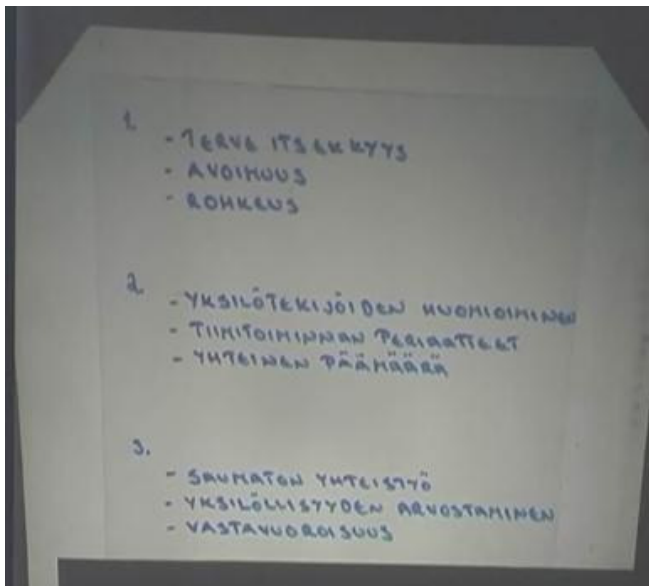
Figure 11: Group assignments made the participants describe how they will commit to behaving as taught by the coach

4.3.3　Increasing efficacy

This tactic refers to all the ways the coach used to convince the participants that the organizational change will indeed happen and that the participants can indeed change their own behavior and the interaction dynamics in their work units. Seventy-five instances were categorized under this tactic. The coach described different ways how and reasons why the participants should believe that they can succeed in implementing

the change. These descriptions lasted from a few seconds to several minutes. The participants did not need to engage actively but just listen.

The tactic of increasing efficacy increases the participants' commitment to the new mental model through increases in self-efficacy (Bandura, 1997) and group efficacy (e.g., Gibson & Earley, 2007). When people believe that they can enact a work system as described by the coach, they start to believe that the emergence of such a system becomes more likely. As their belief in the emergence of the new kind of a system becomes more optimistic, internalization of a mental model consistent with such a system becomes more reasonable.

The coach used several positive examples as the main method of increasing efficacy. He described, for instance, how "In Oulu, where we are now just starting the process, there are units in which people have gotten really active. There are many regional areas where things are going really well." (Tape 3, 27:46) Thus, he provided concrete evidence that the change he is describing can become reality. He concluded this example with, "It all depends on how actively the employees challenge the management" (Tape 3, 27:58) and, thus, further highlighted that the participants' own actions will determine the future. The increased belief in one's (team's) ability to influence one's (team's) future equals increased self-efficacy (group efficacy).

A second way the coach increased the participants' efficacy was the description of the support that will be provided. He, for instance, described how "the CEO is highly committed to this process. He has participated in this same seminar" (Tape 1, 14:33) and how he himself is also actively pushing the change in the firm: "I will take care of, absolutely, that the process will move forward" (Tape 10, 42:21). Hence, in addition to building a meta-level belief that they can enact the change, the participants could also believe that their change efforts will be supported from the top. Hence, it became even more likely in the participants' subjective beliefs that the lessons taught by the coach will become reality.

4.3.4   Concrete and direct action instructions for participants

The final way the coach increased the participants commitment to his lessons and the new, emerging mental model, was concrete action instructions. I recognized seven occasions where the coach gave a specific task for the participants to be implemented at the workplace after the seminar. He usually described the goals in between half a

minute and a few minutes and required some further details and affirmations from the participants. By describing these concrete actions, the coach showed to all the participants how the new ideas can be made reality by taking simple, concrete actions. In other words, he provided evidence that they can become real and concrete action steps of how to do it. The "how to do" made it less difficult and, hence, more plausible to commit to the idea. In addition, concrete goals create motivation (Locke & Latham, 1990) and, hence, commitment to new ideas. It is easier for people to commit to doing something if they concretely know what to do and how to do it.

The direct action instructions were triggered by the problems the participants shared during the seminar. For example, during the last hour of the seminar, one of the male participants described how the managers of his unit were not fully supporting the transition to team-based organizing, but were only paying lip service. The coach answered this:

> "[…] We need to solve these issues and you must surface the issue and make an explicit crisis out of it. You must do something about it. The same lesson applies to all units which have similar problems. Quit the whole thing [to protest]. And let everybody know about it, communicate as high in the hierarchy as possible, all the way to the top management. It's clear like that. It is the only way. If you cannot get help otherwise. This is the only way you can get help. … You have now received a homework assignment. Keep me updated. Please? [audience answers "Yes."]" (Tape 16, 21:35)

In summary, the coach used four tactics for increasing the participants' commitment to the ideas they had heard during the seminar and assumedly associated with high emotional arousal. The commitment reinforcing tactics lasted from one second to tens of minutes, required varying degrees of active participation from the sense-receivers, and relied on several well-known mechanisms. Further evidence of each of the commitment reinforcing tactics is presented in Table 14 below.

Table 14 (1 of 2): Further data illustrating the four commitment reinforcing tactics

"Do you find this logical?"	Illustrative quotes *Number of codes in this category:* 57+15
Asking and receiving affirmation (57)	"Does this sound strange?" → audience member: "no" → the coach: "It's exactly like this." (3, 54:06)
	"Do you, Kimmo, agree?" → "yes" (3, 29:42)
	"Was this a logical argument? Do you believe me?" → Affirmative nods and "yes" from audience members (3, 28:38)
	Coach: "If they don't have the resources, they are not able to do the things they are expected to do. These are pretty heavy words, don't you think? Tell, me, what do you think?" Participant: "Yes, I think it is. Nice people have all those features." (7, 25:46)
Reaction when participant disagrees (15)	Coach: "Who is responsible for ensuring that each deal will be profitable?" Participant: "The sales unit." [Coach tilts his head and upper body forward toward the participant and wrinkles his nose and eyebrows, as if to show that he is unhappy with the answer] Second participant: "They provide the service… [is interrupted by the coach] Coach: "No, it's the production unit that has the responsibility. The production unit is responsible that each sales deal will be profitable." [the coach continued elaborating his theory] (2, 35:42)
	During the third morning, a participant said that she does not believe that the coach's lesson about team based bonuses [as opposed to individual based] would work in her unit. The coach answered: "Why it would not work? You must justify your argument. What do think, why it would not work? If you have shared rewards, which reward you exactly from doing things together. So, why on earth you would not then collaborate." (13, 46:20)
(Makes) Audience members describe how they commit to content	*Number of codes into this category: 39*
Points made during general discussion	A participant said during the general discussion of the second afternoon: "I have said many bad things. I think I should look at the mirror and think what I say [to colleagues at work]" (11, 13:46)
	Another participant said during the same general discussion that she will start using the tool for developing shared understanding that the coach had spoken about earlier. She also showed the page from the course book on which the tool was described. (11, 18:20)
Presentation of group assignments	First group that presented the second assignment had written on the slides, for instance, that "we will challenge the old structures" and "the unit will build shared trust" (16, 24:18)
	Fifth group presenting the first assignment wrote, for example, that "we will continuously develop our ability to perform and our competencies" and that "we will act with the logic of self-discipline" (16, 06:07)

Table 14 continues (2 of 2)

Increasing efficacy	Number of codes into this category: 75
	"He was so lazy that he didn't want to do the same job over and over again. So, he decided to make an initiative of how to reorganize the task and make it better. He received 60.000 euro bonus." (14, 24:57)
	"The unit from Helsinki, when they were here in the seminar. It was the same seminar into which your CEO participated. They told how they had last year failed to receive annual bonuses because some people did not have time to fill the system. … Now, this year they have adopted a new way. Everybody will make sure that every member of the team has a stable workload. And they always ask each other, 'have you had time to do your tasks or do you need help.' They said that 'now we are in a totally new level when we noticed how we can help each other.'" (5, 25:30)
	The coach described how innovations emerge from the sub-conscious mind and ensured that everyone can do it: "I can always trust it [the sub-conscious mind]. That it will work. And, I believe that everyone can develop this capability. " (14, 35:45)
Concrete & direct action instructions for participants	Number of codes in this category: 7
	A participant described how people in her unit do not know how to behave as a team. The coach answered by lecturing for a while and then he said, "You must create things that the team has to do together. The supervisor must say that hey, this thing will be organized like this. You must first discuss all internal injustices. Then you can discuss and define how you will handle them. Better, together, helping each others in doing that. … You must find those issues on which you need to collaborate. You should also check the responsibilities of each person. Are they reasonable? Are tasks divided between you in a fair way?" (13, 47:36)
	During the second hour of the seminar, a participant described a problematic situation at her unit. The coach explained that she must confront the directors and push them to fix things. He concluded, "I am giving you a homework assignment when you leave [the seminar]. And I will control that you will do it." (2, 58:28)

4.4 Legitimizing Sensegiving Tools

I recognized three background processes—or meta-sensegiving tactics—that the coach used to legitimize the above described sensegiving tools and encourage emotional reactions to them. These meta-tactics were cold and cognitive but their inferred purpose was to explain to the participants that (1) the content that aroused them emotionally, but seemed to have no relevance for work, is still worth listening to, (2) the unusually aggressive way he treats the participants is necessary and acceptable, and (3) experiencing and showing emotions is acceptable and even desirable.

As illustrated in Table 15, the legitimization tactics differed from one another in two main ways: First, each of the three tactics focused on legitimizing a different element of sensegiving (content, coach's behavior, participants' emotions). Second, the tactics differed in terms of their frequency: the coach legitimized the cognitive content of the work-unrelated tactics only three times, his aggressive behavior about ten times, and participants' emotional reactions almost 40 times. The tactics did not differ in terms of the participation requirements or duration.

Table 15: The coach used three tactics for legitimizing his sensegiving approach

Tactic	Focus	Frequency	Duration	Participation required
Legitimizing work-unrelated content	Content of sensegiving	Very few	From few seconds to half a minute	No
Legitimizing aggressive behavior	Coach's behavior	Few	From few seconds to one minute	No
Legitimizing emotional reactions	Participants' emotions	Often (about ten times more than content and four times more that coach's aggression	From few seconds to one minute	No

4.4.1   Legitimizing work-unrelated content

The coach used content that was not related to or was only marginally related to work to increase the participants' emotional arousal. To avoid confused reactions from the participants, he needed to somehow legitimize the use of this kind of content. He did it by explaining that:

> "Social skills and the interaction culture under which the firm operates. They will determine everything. Because, through social interaction, we control the work. And it is in the interaction where all the mistakes are made. In my opinion, both technical mistakes and the mistakes you make at work [are made in interaction]. Also, in your firm [like in firms in general], the most crucial mistakes are not made in interaction with customers but in internal relationships and interaction. Internal communication is so much based on orders [rather than dialogue].The interaction is even abusive. [This causes] that people cannot commit to their work. [...] These interaction systems are exactly similar both at home and at work. (Tape 1, 34:07)"

The coach provided this kind of a clear, explicit justification only three times during the seminar. In addition, he implicitly provided it several times by linking a previous marriage example with a following work example by saying that the dynamics are similar in both instances. In any case, the lack of high frequency in this legitimization tactic does not invalidate its existence. The theoretical properties of a category can be inferred from a single instance (Glaser & Strauss, 1967: 23). Furthermore, comparison to its opposites—here the lack of the use of the tactic later during the seminar—can provide corroborative evidence. In fact, because some participants reported that they did not understand why the coach spoke so much about his marriage,[11] it can be argued that there was a need for more use of this tactic. On the other hand, if the coach had used this tactic more, the participants would have been better prepared to hear anecdotes with personal content and, consequently, been less surprised and emotionally aroused by them.

4.4.2 Legitimizing aggressive behavior

The coach also justified his own aggressive behavior during the seminar. He often pushed the participants hard in different instances. He warned them beforehand, during the first hour, that he will do so; and a few more times during the seminar. He explained that there are two main reasons for these displays of aggression: First, he argued that because he is teaching values and attitudes, he sometimes must break the defenses and sub-conscious resistance that people have by his aggression: "I will push you really hard. I am an attitude and value trainer. Whenever we are in any community, we really easily become unable or unwilling to see those problems that exist in that community. This makes life easier for us, especially if the problems are painful. That is why I will push you really hard." (Tape 2, 19:39)

Second, the coach justified his behavior by referring to his sad personal background and weak self-esteem:

> "I have been humiliated when I was a child. A strong defiance has been physically beaten into me. What has followed is that, hmm, I have a really weak self-esteem. I can't take it if I am at the same level with others. I'm not too nice or submissive; on the contrary, I will walk over people. I will push down everyone around me. I can spend remarkable amounts of energy to prove that I am right and win any arguments.

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[11] Two interviewees told afterwards that they thought the coach spoke too much about his mother. In addition, one participant wrote in the survey after the first day of the seminar that "I couldn't care less about the coach's mother!"

(Tape 6, 25:44) … In this [coaching] job, the weakness of my self-esteem is my professional strength. It produces the most important competencies for me to do my job. I will push harder and take a stronger stand and persist much longer than an average person." (Tape 6, 26:42)

By providing these justifications for his aggressive behavior, the coach made it more difficult for the participants to protest against the coach's behavior. Hence, the participants had to play along with the coach and allow themselves to be pushed. Consequently, they became more likely to be aroused by the coach's aggressive tactics and broke through personal defenses.

4.4.3 Legitimizing emotional reactions

The coach used various tactics to say that it is acceptable and desirable to show emotions during the seminar. He started the process during the first fifteen minutes of the seminar and the first 30 minutes were the most active time for this process. The coach kept reminding the participants throughout the seminar that showing emotions is acceptable and even desirable, and encouraged them to do show. At later phases of the seminar, the importance of this cognitive tactic of legitimizing emotions reduced as the participants started expressing emotions more actively and openly.

The tactics that legitimized emotional displays and reactions during the seminar can be categorized into two main tactics: (1) weakening resistance: those tactics that reduced participants' defenses to control their emotions (i.e. showing that it is OK to show emotions; displaying emotions is normal and does not lead to negative outcomes) and (2) push: those that encourage the display of emotions (i.e. direct encouragement to show emotions).

The most common way the coach communicated that showing emotions and reacting emotionally is OK was through examples from his own behavior. He described how he established his own company:

> "It was the year 1989 when it started. One industrial firm wanted me to train all their employees to this new collaborate approach. It was then when the situation led me to establish my company. I would have wanted to do the coaching as an employee for the union but they wanted to decrease my salary at the same time as I was generating extra profits for the union. And, as I was a sensitive and emotional man, I couldn't tolerate that. In this way they forced me to establish my company." (Tape 1, 08:45)

This story of the background of the coach and his company implicitly shows two things about emotional reactions. First, the mere fact that the coach has reacted emotionally tells that it is somewhat normal behavior. It is something that the coach has done and, by implication, that he would understand if someone else also behaved emotionally. Second, the story highlights that emotional behavior can lead to good outcomes. If the coach had not reacted on his emotional impulse but stayed as an employee of the union, he would not only have gotten an unjustified salary decrease but also would never have established his company. Both of these implicit messages in the story communicate that showing emotions and reacting emotionally is OK.

The coach also directly encouraged the participants to display emotions and react emotionally during the seminar. He said things like, "if you don't critique, challenge, and debate, this seminar will get boring" (Tape 2, 18:19) and that "You must have fun during the seminar" (Tape 1, 04:43). These encouragements essentially communicated that when the participants feel that the coach is saying something they do not like, they should react on that impulse and share their feeling. Likewise, if they see an opportunity for having fun, they should take it. Hence, the coach encouraged the participants to act on their emotions and take actions that amplify their emotions.

In summary, the coach used three tactics for legitimizing his sensegiving tools in the change seminar. The inferred purpose of these tactics was to counter participants' defensive reactions and withdrawal behaviors and to, instead, encourage full and emotional engagement in the seminar. Further illustrations of the three tactics are presented in Table 16 below.

Table 16 (1 of 2): Further evidence on tactics that legitimized the coach's sensegiving tools and emotions

Legitimizing work unrelated content	Illustrative quotes *Total number of codes in this category: 3*
	"Let's leave the organizational content for now and continue on it tomorrow afternoon. Now we will focus on social skills and the development of your personal identities because these are essential things for having you behave assertively at work." (5, 45:58)
	"People ask me why I keep talking so much about that [over nice women at home] and why I keep making them feel guilt. I do it because these people who participate in these seminars, they always bring it up. That they have this kind of problems [at work]" (13, 12:24)

Table 16 continues (2 of 2)

Legitimizing aggressive behavior	*Total number of codes in this category: 9*
	"My job is to push all the way, so that I provoke you! That is my job. I get my salary from doing that. It is because there are things that you have tolerated and bared and you have gone so far that you no longer want o acknowledge them. You want to deny them. My job is to is to go so far that I will provoke you." (13, 29:01)
	"Some people may feel that I make them feel guilt. I think that feeling guilt is a healthy reason for starting to make positive changes." (13, 15:52)
Legitimizing emotions	*Total number of codes in this category: 36*
Weakening resistance	The coach described his professional history, "Then, in 1982, I transferred to work for the workers' union. And, and, and, I did organizational development-related work there. I was a little like this kind of crazy person (kylähullu in Finnish). A special person. They took me there because I was special. They let the public see me when there was a need for weird and unexceptional speeches. And they carefully made sure that I was somewhere far away when some concrete things needed to be done. So that I would not disturb the normal operations. … They even had a special name for me; it was the 'red general.'" (1, 06:00)
	Three participants are late after the lunch break on first day. The coach notices this and starts speaking: "It would be good to let people know if you take such a risk and leave the location. It is a way of communicating. It is extremely insulting when people behave this way [being late]." (1, 07:26) When the three participants finally arrive, after two minutes, the coach says to them [and everyone else can hear this] that "Here we started getting a bit angry at you and were complaining because you were not here." (3, 09:30)
	"The food here is really good. You will get as big as I am if you spend a lot of time here. Even though I should control my eating, I cannot do it because I would lose my mental health." (1, 02:29)
Encouraging emotional reactions	"I will critique and challenge the way you and your firm are currently operating. You should acknowledge when you think I am right and challenge and criticize when I exaggerate and distort things in a wrong way" (2, 10:00)
	"Be critical … The more intensive the interaction between us [the coach and the participants], the better this seminar will be. If you don't critique, challenge, and debate, this seminar will get boring." (1, 18:13)
	"I will push you really hard. I am a trainer who teaches attitudes and values. … I will push you really hard. But, you don't have to agree with me. My job is start your thinking processes." (2, 19:39)

4.5 The Micro-Pattern of Arousal-(Re)framing-Commitment in the Change Seminar

In this section I show longitudinal data which illustrates how the sensegiving tactics conceptualized above were combined in the seminar. These combinations of the

sensegiving tactics over time periods of a few minutes clearly illustrate how the coach first increased the participants' emotional arousal, then used cognitive (re)framing tactics to describe his main points and, finally, used a third set of sensegiving tactics to reinforce the participants' commitment to the new ideas. These three micro-phases and their order are separable in the data, even though the coach sometimes moved iteratively back and forth between the different micro-phases. The data contained tens of such sequences. Three illustrations are provided in the text below and 12 additional illustrations are provided in Table 17.

4.5.1 *Building shared understanding among employees*

During the second hour of the first day, the coach started teaching a new lesson by telling a joke, "There was a new sales person in the firm. He had worked for three weeks and he came to my seminar. He participated in the first hour of the seminar and then he quit his job. [loud laughter from audience]" (2, 20:45) He continued elaborating the joke, "Quit after the first hour!" which triggered more audience laugher. Then the coach continued elaborating even more, "The CEO said to me, thought, that you are not that good," which, again, provoked more laughter. These three periods of loud laughter provide evidence that the coach had effectively aroused the participants at this point.

Once the laughter faded, the coach started talking about a work-related topic. He said, "Well, it is also important to have a right frame of mind when debating. When we work together, and when we transition to team-based organizing, it is important that we are able to form a shared understanding of what our problems are, what issues we should solve, how we should behave so that we will achieve our goals. And that we have a shared understanding of our goals." He then moved on to discuss theory of how beliefs are subjective and quoted an Eastern proverb, "The wise man knows that his knowledge are beliefs. The stupid man thinks that his beliefs are knowledge." He further elaborated in a simple telling style: "So, when I express my thoughts in a strong way, thoughts that relate to the Property Service Company or human behavior, they are my beliefs but they are not knowledge. But if we agree with Riitta, we are doing shared things, and then it becomes our knowledge. It only then becomes our knowledge. It is our best possible knowledge at that point in time." (Tape 2, 20:47 to 22:30)

After the simple telling part, the coach provided a joke-like illustration and, thus, again increased the participants' emotional arousal. He told an accumulating joke-like example about interaction difficulties, using one of the participants, Siru, as an imaginary partner in work interaction. He concluded the joke with, "then Siru says, 'I just cannot bear with him anymore. Fuck it!'" and the audience reacted with laughter. (Tape 2, 22:55)

After the joke, the coach continued to re-establish a high level of emotional arousal through a reference to intimate relationships. Note that while the jokes had created arousal with positive valence, this story created arousal with negative valence; that is, the valence of the arousal flipped to the opposite, whereas the level of arousal accumulated ever higher. The coach said, with a shaking, emotional voice, "I know many married couples who are really nice persons when they are not with each other. But even the devil will not tolerate them when they are together. When making fun of the other person, making him or her feel bad, is the sole purpose of the relationship. Some old holiday or something, when being right is the only thing that matters." One of the three participants visible on the video shook his head in a powerful way from side to side and back and forth as a reaction to this point. (Tape 2, 23:05)

Having again aroused the participants, the coach returned back to work-related content. He continued, without any linking phrases, that "It is essential that Siru and I try to form a shared understanding and that we both want to challenge each other [to find the best understanding]. This is what is important. It is not important to be the person who was right." (Tape 2, 23:22) He then provided some further clarifications and thus ensured that the participants had the opportunity to construct a new belief about interaction dynamics, subjective beliefs, and shared understanding—and have the new belief associated with the emotional arousal that was created by his jokes and references to marriage.

Finally, the coach concluded the micro-episode by using a tactic for reinforcing commitment. He asked, "Was that understandable?" Many audience members nodded and one of them elaborated the coach's point in a constructive, affirmative way. (Tape 2, 23:45) Again, the coach succeeded in making the participants publicly agree with him. Hence, the participants' commitment to the newly formed belief was reinforced.

In conclusion, this micro-episode illustrates how the coach iteratively moved from increasing arousal to describing work-related content, and then reinforcing the participants' commitment to the new content.

4.5.2 Loving interaction at the workplace

The last lesson of the first day also captures the arousal-(re)framing-commitment micro-pattern well. This episode was unique in the sense that the marriage example created a sense of positive urge to do things better, instead of negative arousal that the references to intimate relationships usually created or the general arousal that jokes created. This episode also illustrates well how arousal can accumulate over a ten-minute period and become extremely high.

The coach started the episode with several joke-like anecdotes that increased the participants' arousal levels in an accumulating way. He first told how, "Men skimp [pihdata] on interaction all day long. They say, 'I will let you know if there are any changes in me loving you.' And, then, the men beg for sex in the evening." [audience laughter] (Tape 6, 35:44) He then continued, "I have decided that I will never be so tired that I am not able to take care of home-related chores instantly when my wife asks me to. … Why do you think I behave this way? [Indistinguishable audience joke] In quest for rewards? [coach and audience laughter] … The way I behave toward the other one determines how she will behave toward me. … When I go home after work and my wife asks me to change the bathroom light bulb, I will do it without any fuss as soon as I can. And guess what follows from this? … When I go to sleep in the evening and put my hand like this [puts his hand vertically on his side, as if to show that there is a place next to him when he is lying on the bed], guess what happens? [loud audience laughter]. [Audience member makes an indistinguishable joke]. A tiger might just jump there!" [loud audience laughter]. (Tape 6, 37:22)

A third joke, a counter-example of the positive tiger anecdote, was the third phase of arousal increase: "If I say that, 'no I don't have the energy. I couldn't care less (about the bathroom light bulb).' [audience laugher]. She has this kind of extremely long pajamas [loud audience laughter] that she will put on and even tie a knot between the legs [more audience laugther]." (Tape 6, 38:30)

Once the laughter faded, the coach explained how unkind treatment causes people to sub-consciously deny their own needs for closeness and intimacy. He also said that

this leads to distancing behaviors and bad treatment. (Tape 6, 39:07) Then he concluded, "We do this to each other, every day, both at work and at home." (Tape 6, 39:31) Hence, he started linking the arousal created by the marriage anecdotes to work. He was silent for a few seconds, as if to allow the audience to think about his latest argument.

After the short pause, the coach jumped back to marital relationships and asked from the audience, "What do you think, what is love?" (Tape 6, 40:13). A long discussion of the properties of love and loving behaviors followed this question. The coach took inputs from the audience and also pushed his own definition of love. The outcome was a list of the defining properties of love. The list included the following: Being in love, taking care of the other one, justice in everyday treatment, respect, standing by, kindness and warmth, forgiveness, and loyalty. Two of the three participants visible on this clip moved their bodies powerfully from side to side several times as the coach was defining the properties of love. (Tape 6, 43:10)

Once the coach had defined love, he returned back to his previous teachings about work-related interaction cultures. He explained how an interaction system of external discipline produces bad behaviors that are the opposite of loving behaviors. Conversely, an interaction system of self-discipline, he says, produces the loving behaviors. (Tape 6, 43:26) Hence, he again was building links between the marriage-related arousal and work-related cognitive content.

Even though the situation was quite aroused already at this point, the coach added another layer of arousal with the following story. "When I got married, I realized, at the second time, what it means to say 'I do.'" [This made one of the three visible participants fix her position from being closed in to move upwards and then lean forward again, indicating increased excitement and interest] (Tape 6, 43:47). The coach also told how he had ruined his first marriage by selfish behaviors. He returned back to his second/current marriage: "Now I do these things [points at the properties of love] every day. I do them every day. More than my wife. … A few more kind words, a few more kind actions, showing more love. Then the whole interaction system (with the wife) becomes that of generosity and love. When you just do a bit more yourself than the other one does [the coach is smiling widely and looks authentic and happy]." He then elaborated the reasoning a bit further. (Tape 6, 44:25) The coach spoke these last sentences in such a personal and authentic sounding way that even the analyst

looking at the speech from the video felt that he wants to improve his own behavior in his marriage. I wrote in a memo while I was coding this section: "During the sixth hour, the coach describes a lot how he tries to be as good at his wife as he can. He describes many concrete behaviors (never too tired to fix the lamp; tries to show love behaviors every day and more than his wife). At least for me, these create a strong intent to improve my own behavior in my marriage. I want to improve and be a good, loving husband. […] It's amazing; I really have an urge to act better." (memo created on 2011-03-27).

Now, when the coach had increased arousal to high levels, he again shifted back to work-related content. Immediately after describing his marriage philosophy, he asked, "The question becomes, 'have you said more kind words and thanked more often than your colleagues, at the workplace?" (Tape 6, 45:20). "How would you describe a good work community?" Then he went to the whiteboard, on which the properties of love were listed. He asked, one by one, "does [this property] belong to the work place?" Every time the audience provided an affirmative answer. Most members visible in the video nodded in agreement. In addition, one member answered "yes it does" with loud, emotional voice to each question. [This person was cleaning manager #2 who was really affected by the training, see section "Evidence of mental model change in the seminar"; Table 18]. (Tape 6, 44:58) Hence, the coach not only associated the high arousal created with marriage examples with work-related content but also made people publicly affirm that they believe in the work content. In essence, he went through the arousal-(re)framing-commitment micro-pattern.

4.5.3 Removing structural constraints from cleaning managers

In some instances, the micro-pattern of arousal-(re)framing-commitment took a longer time period to become completed and the arousal almost got out of control. The coach increased the participants' level of emotional arousal at the beginning of the second hour of the second day by arguing that cleaning managers' work is bad:

> "Because we have temporary work contracts, it means that when you go to work, for example, when a young person goes to work in a place like that, then she must kiss her boss's ass repeatedly, otherwise it will not work. If you don't submit yourself to the system, if you get this shitty portfolio, there's nothing else you can do but smile and be nice. If you protest, they will pretty fast say that 'you don't fit into this profession.' In this profession, you must tolerate and submit yourself to others. If there are

problems, you are not supposed to speak about them. It is how cleaning managers work. We have these kinds of work communities." [There are four participants visible on the clip as the coach tells this point. The three women move their bodies and heads from side to side and back and forth during the episode in an anxious way. One of them also visibly moves her hands in an anxious way. The male participant that is visible shows anxious head movements from side to side but with lower intensity than the female participants.] (Tape 8, 08:00)

The coach further continued discussing how the firm must now improve these kinds of communities. (Tape 8, 08:05) In essence, having aroused the participants with a provocative work-related example and brutal claims, he moved on to cognitive (re)framing.

The coach moved on, lecturing his theory of different kinds of interaction systems and discipline. A new participant entered the seminar room and the coach spent several minutes discussing how she and the coach had already implemented some of the coach's lessons. The first signs that the arousal created by the coach was about to get out of his control are visible in the video during this discussion. Some of the cleaning managers had been insulted by the earlier brutal claim. Three cleaning managers seem to be openly discussing amongst each other, even though the coach and the new participant are having a public discussion that everyone is supposed to be following (Tape 8, 14:10). A few minutes later, one of them leans her forehead on the table, directly showing that she is not paying attention (Tape 8, 25:41). Another ten minutes later, when the coach is showing a slide about interaction culture, the same person sinks down in her chair, so that only her head and shoulders are above the table, again communicating disinterest (Tape 8, 34:03). While these behaviors are visible on the tape, the coach did not address them.

After four more minutes, when the coach was explaining a new point on the white board, he noticed the lack of interest by these participants [the camera is zoomed in on the coach so I cannot say how the participants protested]. The coach stopped his lecturing and was silent for 18 seconds, directly looking at the cleaning managers. Then he asked, "were you following me?" (Tape 8, 38:36). He also said that this kind of behavior is insulting toward him and gave an analogical example from the workplace. After that, he returned to the point he was lecturing and continued speaking about it for eight minutes.

After the eight minutes, the coach again noticed that the same participants were not paying attention to his lessons. He said sarcastically, "The amount of excitement that I can see on your faces is amazing. Some of you are so really engaged in the seminar. You are showing with your behavior that you could not care less." (Tape 8, 47:37) He then gave an emotional speech of how he is really committed to the seminar and how it hurts when people behave badly.

The coach concluded his commitment speech by asking if the participants have any further comments (Tape 8, 48:57). This question made several cleaning managers open up. They described with crying-like voices how the coach's arguments hurt. One of them said, "You said cleaning managers are doing a worthless job. You said that we are all worthless." Another one continued, "Because they don't have the rights to do things." Then several participants started simultaneously speaking with loud voices and the content becomes undistinguishable. (Tape 8, 49:15). The coach reacted to these comments by first apologizing, then thanking that they spoke up, and finally re-explaining his point how bad culture and resource constraints put the cleaning managers into an impossible situation. He further continued that this dynamic is why the organizational change and training are needed, so that they could improve the cleaning managers' situation. The cleaning managers seemed to be relieved and positive about the coach's re-explanation. They, for instance, commented on the coach's re-explanation in agreement when the coach asked them if they were happy with the re-explanation (Tape 8, 52:55). They also did not show any protest behaviors during the rest of the seminar and two cleaning managers (#1 and #2) confirmed later in an interview that they were satisfied about this episode; they also remembered the coach's re-explanation accurately and believed it. The outcome? The members now became to associate the high arousal with the coach's theory of cultural dynamics that prevent doing good work and the changes needed to make things better. This association was made even though the emotional arousal had been created by the brutal claim that the participants had initially perceived as a personal insult. Again, the coach had gone through the arousal-(re)framing-commitment pattern.

In sum, the three micro-episodes I have described in this section showed how the coach first increased the participants' level of emotional arousal by using tactics that created both positive and negative arousal. The valence of the arousal also flipped to the opposite during some of the micro-episodes. After having emotionally aroused the

participants, the coach moved on to describing work-related content. As the description of work-related content occurred immediately after the coach had increased the participants' level of arousal, the emotional arousal became associated with the work-related content. The episodes also showed how the coach used tactics for increasing the participants' commitment to the new ideas in several ways after he had first aroused them and described the work-related content. Table 17 below provides another 12 illustrations of the arousal-(re)framing-commitment episodes from the data.

Table 17 (1 of 8): Illustrations of sensegiving micro-episodes, during which all the three elements were intertwined and closely connected in time

Episode	Increasing arousal	Cognitive (re)framing	Reinforcing commitment
1.Assertive behavior	1. The coach has asked everyone to describe which content has so far influenced the participants most. On her turn, cleaning mgr#3 says with crying voice that "I am too nice … I just want to please everyone else. I have always thought that it would be a good thing." [Four of the visible 11 participants move their bodies in uncomfortable ways while listening to the first participant. Two others move their hands in anxious ways] (11, 19:20)		
	2. The coach comments, "do you remember how I said yesterday, I think that an overly nice person is also extremely mean towards the people closest to her" and describes several patterns [Four of the eight visible participants move their bodies from side to side. One of them aggressively, three others in more moderate ways. Two others move their heads] (11, 19:43)	3. The coach says: "The wrong kind of niceness, you must get rid of it. I repeat it again, the kind of organizational niceness, that there are people who think that being overly nice is normal [stops the sentence] I think those people are normal who challenge things and maintain good values" and continues describing the right kinds of behaviors (11, 20:00).	4. The coach gives an example of a person who learned to be more assertive by following the rule, "show this sign [paper which has the text 'no'] four times per day, every day" (11, 20:39)

5. Cleaning mgr#3 spontaneously reinforces the point: "As if my own effort would save the unit" (11, 21:27) and the coach affirms |

Table 17 continues (2 of 8)

2. Discussing problems is a good thing	1. The coach tells a long story of a work unit in which an employee wrote an anonymous letter about problems to management. The coach had emphasized that the focal manager should focus on confirming the existence of the problems and solving them, not on who had written about them. Yet, in the coach's words: "guess on what topic they focused on in the meeting? [audience member says 'finding who wrote it']. Right, after 15min, the guy finally turned read" [Audience reacted with loud laughs] (3, 55:14)		
	2. The coach says: "And guess what happened, the person was crucified right there. … It took over three months to fix that person emotionally and mentally" [two of the five visible participants pull their heads down] (3, 56:45)	4. The coach describes how it would actually be really good thing to be able to discuss problems and find solutions to them. (3, 58:21)	5. The coach says: "If zero conflicts and disagreements have been dealt at work place in five years, then things are pretty bad, don't you agree?" (3, 58:24) [the video is zoomed into the coach and does not capture participants' reactions]
	3. The coach tells a joke: "The supervisor ended the meeting by saying that if this kind of things are raised again, he will call the police."[audience laughs] (3, 57:39)		

Table 17 continues (3 of 8)

3. Male indifference	1. The coach says: "What happens to a man, at home, when his wife starts complaining when the man does do his chores, what happens to the man? [pause] Mia, what do you think? [audience member answers with laughter] . Well, not necessary, but the man increases his indifference, 'what the hell, what's the point of putting effort when I can survive with less!' [Audience members comment spontaneously]. If the wife keeps complaining at home, the man repositions himself to the couch. The body will lie there while the mind has gone somewhere else a long time ago. He watches more sports TV and goes out with friends. Buys a motorcycle. Goes to the summer cottage more often. This is what happens." [Three of the four visible participants shake their heads from side to side with moderate intensity] (1, 19:35)	2. The coach continues directly, "At the property maintenance unit, this means that, if things don't go as they are supposed to go, [many details], then coffee breaks get longer, men start walking slower, do lower quality work, get less done. Men always increase indifference when things go bad. (1, 20:39)

3. The coach gives several more examples from industry and the focal firm (1, 21:20) | 4. The coach says: "There wasn't anything familiar in these examples, was there?" [both audience and the coach laugh, indicating agreement in addition to increased arousal] (1, 22:27) |
| *4. Importance of fair treatment* | 1. The coach says: "When I first time went to the Lahti unit and raised this (injustice) point, it created quite a reaction. Several people resigned and started looking for other jobs. They genuinely felt that that some people in the unit had privileges and some had really unjust work portfolios." [Four of the five visible participants move their heads as a reaction; two of them also move their bodies] (13, 49:12) | 2. The coach explains his theory of how unfair treatment has a negative influence on mental health and mood. "It's the most challenging situation when a new cleaning target is received. Then people can get upset if you don't have shared understanding of how to handle the issues." (13, 50:02) | 3. The coach says: "It's not like that you would have these kinds of discussions at your work place, is it?" [It's not clear from the video whether participants agreed or not] (13, 50:33) |

5. *Kerttu (a woman who is too nice and therefore abused)*		1. The coach asks audience members to read the description of Kerttu from textbook (4, 15:42)	2. The coach says: "Have you seen a person like this in your firm?" [Affirmative answers] (4, 17:14)
	3. The coach says: "Believe or not, this story is actually over 20 years old. … I want to help women. I have had to work really hard with myself to understand why my mother loved me in a so strange way. … This has been kind of therapy for me on how I can forgive my mother. This way I can learn to live better." [Six of the 30 visible participants move their bodies back and forth and up and down as a reaction. Two others move their hands in anxious ways.] (4, 17:30)	4. The coach discusses Kerttu in work context (4, 18:14) 5. The coach tells an example of how Kerttu is not able to stand up for herself and negotiate with supervisor (4, 19:37) 6. The coach tells another example of Kerttu at work and summary (4, 20:05)	
	7. The coach tells a Kerttu example from his previous marriage, told with emotional tone [The coach seems to be about to cry; the video shows seven participants. Two of them move their heads from side to side in powerful ways; three others move their heads in smoother but still somewhat anxious ways] (4, 20:39) 8. The coach tells a generalized marriage example [Four of the seven visible participants pull their heads down] (4, 22:28)	9. The coach continues the previous example with, "this happens also in the work place" and explains details (4, 22:50)	10. The coach says: "Do you think standing up for herself is part of Kerttu's repertoire?" [audience shake heads + more discussion with audience] (4, 23:31)

Table 17 continues (5 of 8)

6. External discipline vs. self-discipline	2. The coach says with intense voice, "It's absolute. If you are not afraid, you will not do what I say. I must scare and humiliate you so that you will be afraid of me. … It's about teaching fear." (4, 42:25) [Two audience members react by commenting with loud, low-pitch voices. Several members also move their bodies in anxious ways]	1. The coach outlines the difference between external-discipline and self-discipline (4, 41:41)	
	3. Audience is confused about the concepts and several members raise their voice (4, 42:51)	4. The coach re-explains his point and answers audience questions (4, 43:34)	5. The coach summarizes the core features of external discipline and its negative outcomes, then asks, "right?" and audience members nod (4, 43:53)
	6. The coach continues after further description of the concepts, a few minutes later, "Human interaction culture in marital relationships, for some couples, the interaction system is that of external discipline, while for others it is self-disciple." [Three of the three visible participants move their heads from side to side] (4, 51:04)	7. The coach continues directly from previous sentence: "Work communities, some work communities have the interaction system of external discipline, some self-discipline." (4, 51:10)	8. The coach says: "The question becomes, which kind of interaction system we want, do we want a system where we respect each other or one that is full of fear, humiliation, and insults?" [The coach is is silent for several seconds to allow audience reflect] (4, 51:20)
7. Reward system and behavior in interaction	1. The coach says: "These problems emerge because lower level cleaning managers do not get performance based bonuses while higher level managers cleaning do get them." [several audience members protest with loud voice; also aggressive hand and body movements are visible] (8, 54:48)	2. After discussing with the audience, the coach thanks them and re-explains how the system rewards wrong kinds of behaviors and therefore causes systemic problems (8, 55:25)	3. The coach concludes his re-explanation by asking "Do you agree?" directly from one audience member who says, "yes, we agree with you." (8, 57:17)

8. *Handling of violations*	3. The coach says: "The more you punish, chasten, and humiliate, the worse the counter reaction. A strong defiance has been beaten to me during my life (by mother). It has been the biggest challenge in my life." [5 second silence, audience members keep their heads down, as in sadness] (4, 53:10)	1. The coach discusses how people should react in civilized ways when somebody breaks rules. He emphasizes that humiliation and retaliation are not proper ways. (4, 51:55)	2. The coach says: "What should we do in a situation like this [somebody broke the rules]? Humiliate? [audience replies 'no'] Chasten? [audience replies 'no'] Punish? [audience replies 'no']" (4, 52:43)
	5. The coach says with intense voice: "If my wife always cleans my mess, it means that she wants to make me so helpless that she can complain that she 'must live with a pathetic loser like that'" [participants are not visible on the video] (4, 53:48)	4. The coach continues directly from the arousal sentence, "the most important thing is that the one who makes the mess, cleans the mess" (4, 43:16). Then he describes the idea that how it creates a negative pattern if people don't assertively demand that everybody follow the shared rules	
		6. The coach defines the word "vastuuttaminen" which refers to a specific way of behaving when rules are violated (4, 54:18) and provides several examples and answers audience questions (4, 55:26)	7. The coach recaps the basic idea of "Vastuuttaminen" (4, 56:48) and asks, "Do you find this logical?" (4, 57:28) [audience members answer "yes" and nod their heads]
9. *How supervisors should support the newly formed teams*	1. The coach says: "When teams are established, I would compare that to skiing with my grandson. Who has never done downhill skiing before and is four years old. I take him on top of the hill with the lift. Put on the little skis to his feet and take away the rods…" [Four of the six visible participants lean their bodies to one side, as if they were feeling warm feelings and listening empathically](12, 23:40)	2. The coach says: "Developing a team is similar [to teaching the grandson ski]. The coaching supervisor must help the team to take their first steps. So that the team learns to do those things that I have taught here" [continues describing content] (12, 24:31)	3. The coach says: "That's the message I want to convey [5 sec pause], isn't this right, Seija?" → The audience member makes "mmmhhh" sound to indicate agreement (12, 24:55)

Table 17 continues (7 of 8)

10. From subjective understandings to honesty and creative problem solving	1. The coach tells a provocative, work–related example about bad interaction patterns. He concludes with a provocative claim, "people who behave this way destroy the whole work community." [The video shows five participants. Four of them move their bodies back and forth and from side to side in short movements. The fifth one moves her body back and forth with long, strong movements] (8, 29:27)		
		2. The coach tells in a simple telling style about the way conflicting views should be reconciled in the firm (8, 31:01) He also discusses this tool with the audience (8, 32:25) and re-explains it with another slide (8, 33:27)	
	3. After explaining his idea conceptually, the coach gives an arousing, work-related example from the firm about how major changes were communicated only via email, without asking the employees opinion [A cynical laughter is audible on the video; the video does not show the participants] (8, 34:14)		
	4. The coach says: "It is, at least in marriage, sometimes really annoying when you are telling something really important and notice that the other person says 'yes, yes' but does not pay any attention." [three of the four visible participants tilt their heads backwards as a reaction; also mild, gentle laughter is audible on the video.] (8, 34:55)	5. The coach re-phrases his points: "Situations where people are abused or where communication is not handled properly should no longer happen." (8, 35:49) and elaborates a bit more	6. The coach concludes by asking, "do you find this logical?" (8, 37:15) and "What do you think, Raila?" (8, 37:27). [Both questions provide affirmative answers]

Table 17 continues (8 of 8)

11. The purpose of team based organizing	1. The coach says: "Raise your hand if you belong to a team. Or let's say like this, those who belong to an entity that is called a team." [Many audience members raise their hands. While this act is not an emotional reaction, physical activity can increase the level of arousal; see chapter 6] (2, 01:41) 2. The coach says: "I don't believe that there are many functional teams" [15 of the 30 participants visible on the video pull their bodies backwards as an immediate avoidance-reaction; Several audience members also protest with loud voices] (2, 01:53)	3. The coach re-explains and elaborates the previous claim that provoked strong reactions: "Yes, yes, I don't mean that teams could not work if they are not called teams (examples and concrete behaviors)". (2, 02:30) 4. The coach refers to a critical newspaper article the participants have placed on office information board and explains that the purpose of team work is to create an organization that is better for the employees, not to make more profits by abusing them (2, 03:01)	5. The coach recaps the positive goal and says that they will together try to reach it [goal setting + increasing efficacy] (2, 3:41)
12. Principle of increasing productivity	1. The coach describes practicalities and schedule: "Then we will have a break and you will empty your rooms—from your own property [audience laughter] " (13, 31:42) [Many participants join in joking about stealing stuff from the hotel rooms and audience laughs loudly] (13, 32 :11)	2. Once the laughter fades, the coach says, "Good. The first and most important thing that I keep repeating here is that we are doing this through the development of productivity" (13, 32:30) and continues lecturing with a slide for two minutes	3. The coach concludes the episode by increasing efficacy: "We will continuously do things so that we need to put less effort tomorrow, we learn to control this service process better, we will take care of the holistic management of the work. We will have higher well-being for employees who are better in anticipating things. In this way things will get much better." (13, 34:55)

5 EVIDENCE OF MENTAL MODEL CHANGE DURING THE SEMINAR

Above I have described and analyzed the tactics the coach used to influence the change seminar participants' emotional arousal and mental models. In this section, I describe evidence that shows that the participants' mental models did indeed change as the outcome of the above described sensegiving. The evidence is presented in four parts. The first part summarizes evidence from the interviews that were carried out with ten seminar participants one to two weeks before and after the seminar. The second part consists of Likert-type surveys that the participants of two seminars filled before and after the seminars. The third part reports retrospective reflection of the effects of the seminar by five participants of a seminar in which they participated five years before the interview. The fourth part consists of the retrospective reflections of four change leaders who used the coach's seminar to support the implementation of strategic change in their firms. Each type of evidence shows that the participants' mental models did indeed change during the seminars.

5.1 Evidence from Interviews Carried Out Before and After the Seminar

Ten persons were interviewed before and after the seminar in which they participated. This was the same seminar which was video recorded and analyzed in the previous chapter. In the interviews, I asked questions relating to the interviewees' everyday work behaviors and the way they thought about their work and role in the firm. The same questions were asked both before and after the seminar. This allowed recognizing if and how the interviewees' thinking had changed during the seminar. There was strong or moderate evidence of change in the thinking of seven interviewees, weak evidence of change in the thinking of one interviewee and there was no evidence of change in the thinking of two interviewees. The evidence is summarized in Table 18 below.

Table 18 (1 of 3): Interview evidence of cognitive change during the seminar

Interviewee	Thinking before training	Thinking after training	Comment (change, evidence)
Cleaning manager #1	"I would be allowed to leave from work after 7.5 hours but I am a workaholic and I work even on weekends. […] I work really long days. I just cannot say 'no'." "I am always friendly to everybody but then my husband suffers at home [because I'm tired after work]" "Even on my summer cottage I wave to the firm's cars, as if it was my best friend."	"I came home yesterday at 1:30 pm and my husband said: 'Oh, you really left your bad habits back at the training venue.' I was surprised myself of how I did not go back to the office even though somebody had asked." "The training was really good […] Now I have communicated clearly to my employees that they must take more responsibility and that I will not be the one who will constantly cover for their lazyness." "A nasty person is not a strong person, like I previously thought, but has a weak self-esteem. Previously I avoided confronting nasty persons but now I have been more assertive and things have worked better."	*Strong evidence of change **** The person seems to have been overcommitted to her work prior to training, realizing that it's harmful for her well-being but feeling powerless to change anything. After the seminar she has found conviction to start acting differently, and reports to have done so The person was contacted second time by phone two months after the seminar and she said her behaviors still were different due to the seminar, most importantly she "had learned to say 'no,'" as taught in the seminar
Cleaning manager #2	"I should learn to say 'no.' Otherwise I will break down but a human being cannot be tough. […] There is nothing that I can do to my deeper nature."	Tells an example of how she was assertive with an employee and said, "here is your job. Do it and stop crying."	*Moderate evidence of change *** This person recognized the damaging effect of her lack of assertiveness on her well-being but also said it's impossible to change. After the training she has found more agency, believing that she can act differently in these situations (and has also done so; she confirmed in phone that the effect had lasted also two months after the seminar)

Table 18 continues (2 of 3)

Cleaning manager #3	"My strength is that I get along with customers well […] I always put others' needs in front of mine." "I help my colleagues a lot. Also this week I have carried out the work of others all the time. I haven't had time to do my own job, again." "If a colleague does not take care of something they have promised to do or they are supposed to do, then I will take care of that job myself."	*Strong evidence of change **** Before the seminar this person was proud to be too nice and did as others told me to do. Now I have expressed my opinion more assertively." After the training she has realized the problems in such a pattern and is committed to changing her behavior Two months after the training, the person is still excited about the training and says that it has helped her to set boundaries at work
Maintenance worker #1	"My job influences, well, mainly on customers […] perhaps also to my supervisor, […] customers complain and he needs organize" [does not mention colleagues at any point] "I don't see any personal threats in the workplace […] I haven't recognized any weaknesses in [the firm]."	*Moderate evidence of change *** The person seems to have developed new beliefs about his own influence on his colleagues He also seemed to have developed a bit more critical view towards the firm's current practices
Maintenance manager #1	[No statements that would have been revised in the post-training interview]	*Weak evidence of change* Comparison of pre- and post-training statements did not reveal changes. However, the person argued in the interview after the seminar that he had changed his thinking in two ways

Additional quotes in second column:

"I noticed that I am behaving exactly as that Kerttu. I learned that I have to have the courage to say 'no'. I said already there that the firm's profits will not get any better even if I work 15 hours per day and kill myself doing so."

"I still think that my job influences customers and supervisors, and also my colleagues"

"When I heard all the stories […] quite large problems exist. Even though a large firm, many things are still really badly done "

"The idea of taking more personal responsibility was important for me. I have tried to apply it now."

"The example of the too nice woman was illuminating. It made me think what I could do differently so it would not happen to me."

Table 18 continues (3 of 3)

Maintenance worker #2	"If somebody would be rude without a reason toward me, I would give the same treatment back" "[my job influences] the customers, who live in the houses that I maintain. Well, maybe also the managers, they get lot of crap if I don't do my job well. The customers and managers, no-one else, that's my opinion."	*Moderate evidence of change* ** The person seemed to have started thinking differently about interpersonal conflicts and interdependencies at work
	Described how he realized that he should not be rude back when people are rude but try to deal the situation in a more constructive way [from my notes, recording of the interview failed] Mentioned how his work activities also influences colleagues [from my notes]	
Maintenance worker #3	[No statements that would have been revised in the post-training interview] "There was not really nothing new, what I didn't know otherwise … There was all this about helping colleagues and such but that's what I have always been doing. I have helped colleagues even without the seminar."	*No evidence of change* This person's mental model of work was similar to the model presented in the seminar. It is possible that the old beliefs about good behavior were reinforced but there is no qualitative evidence of this
Cleaning manager #4	[No statements that would have been revised in the post-training interview] "But those are self-evident things [that the coach was teaching]" "When you have the responsibility, you just have to do the job. This is not being too nice but reasonably flexible"	*No evidence of change* This person had over 20 years of experience and she saw that the training provided no new knowledge. In fact, she reflectively disagreed with the coach on the point about being too nice vs. flexible
Cleaning manager #5	"[One weakness] I have is that I take too much stress from things that don't belong to me … I should focus on my own tasks … Basically, I'm not using my supervisor power enough" "Earlier I spend a lot of time cleaning my subordinates' messes but now I have started to require them to take care of their own messes by themselves … The training probably encouraged me on this"	*Moderate evidence of change* ** The person has reinforced her belief about assertive behavior
Higher level cleaning manager #1	"We have dialogue for that purpose [handling disagreements]. Two people talk and explain their views." "This was what I copied already there [a framework for constructing shared understanding], I have these cleaning managers and they have disagreements. In the future I'm always going to use [the frame-work] … We will start meeting together more often. We met on Friday and it went really well."	*Moderate evidence of change* ** The person elaborated her mental model of conflict resolving process

The strongest evidence of change came from two cleaning managers. They both changed their thinking in two ways: (1) from seeing assertive behavior as impossible to seeing assertiveness as possible and (2) from thinking that sacrificing their own well-being for the good of other employees is a good thing to thinking that the sacrificing behaviors are bad. Before the seminar, both training manager #1 and #3 were helping their colleagues a lot, at the expense of their own work and well-being. Both of them recognized this tendency and took pride of it, listing it as their strength: "I help my colleagues a lot. Also this week I have carried out the work of others all the time," cleaning manager #3 said, with pride in her voice. However, after the seminar, both of them had recognized that their way of working was not a sustainable solution for themselves and not useful for the workplace either (the other employees were abusing them, leaving their work to the managers). They consequently had decided to change their behavior and also reported specific instances where they had acted according to the new belief. Most concretely, cleaning manager #1 told how she had "come home yesterday at 1:30" when her 7.5 hours of work were done, even though someone had asked her to handle an extra task at the office. She had told the person that he or she should handle the task independently and this had gone fine. These two persons also confirmed in a phone interview carried out two months after the seminar that they had maintained the new behaviors.

There was moderate evidence of cognitive change in the mental models of five interviewees. Many of the changes related to the recognition of additional interdependencies at the workplace. For instance, before the seminar maintenance worker #1 said that his work only influences customers and his immediate supervisor. After the seminar, he added his colleagues to the list and explained how his actions can make their work easier or more complicated and how his behavior influences the mood of the co-workers and the atmosphere of the whole working place. Another way the participants added concepts to their mental models related to ways of handling interpersonal conflicts: two of the interviewees [maintenance worker #2 and higher-level cleaning manager #1] recognized new ways of behaving in situations where parties disagree strongly and may even use offensive language.

An important observation is that many of the interviewees understood their job as taught in the seminar already before the seminar. That is, their basic understanding of how their own behavior and their job are connected to other things and their basic

attitudes toward work and interpersonal relations were consistent with the coach's teachings. Consequently, there were little new ideas in the seminar and there was therefore no evidence of the addition of concepts in their mental models or changes into believing opposite things. As one of the maintenance workers described: "He taught really basic things, how you should behave with the customer and so on. It was really simple things, like common sense. It is obvious that you should behave that way." However, there was tentative evidence that the strength of some beliefs reinforced in two interviews. Cleaning manager #5 and higher-level cleaning manager #1 reported that the seminar did not really provide new ideas but they still spoke in a clearer and more convinced way of the themes that had been discussed during the seminar. The quantitative survey responses discussed in the next section provide further evidence indicating that even though some participants did not develop new beliefs or flip to believing the opposite, they still reinforced some of their beliefs.

5.2 Evidence from Likert-Type Surveys Filled before and after the Seminar

A second source of evidence of change comes from Likert-type surveys the participants of two seminars filled before and after the seminars. The first of the two seminars was the seminar analyzed above and the second seminar was organized about one month later for the same Property Service Company in Oulu. The surveys contained questions that were designed to measure the participants' beliefs and attitudes relating to content taught in the seminar. They were used to assess changes in the strength of beliefs. Quantified surveys are suitable for this purpose as they assess the answerers' degree of agreement with a certain claim on a quantitative scale. Hence, they can be seen to measure the strength of a certain belief rather than its existence or quality.

The data shows that the participants' answers to most of the survey questions changed into the direction the coach's sensegiving was supposed to change them. The small sample size limits the ability to make strong generalized inferences; yet, the overall patterns do provide support for the claim that the seminar participants' mental models changed during the seminar to be aligned with the sensegiver's message. There were 23 questions and answers to 19 of them changed into the anticipated direction, consistent with the claim that the coach's sensegiving in the seminar influenced the participants' mental models.

5.2.1 Data from Petäys seminar

Table 19 shows data from the survey collected in the seminar held in Petäys in March 2006. This is the same seminar that was analyzed in the previous chapter. Averages to several questions changed substantially during the seminar. Questions #1 and #5 measured the participants' beliefs about the legitimacy of revenge and showed a large (-.35 & -.68 on scale from 1 to 5) decrease, aligned with the coach's teachings. Related questions #10, #12, and #16 further discussed interpersonal and emotional dynamics in the work community and the answers changed (+.65; +.16; and -.29) as taught by the coach. Question #7 focused on problem awareness. The answers to it increased on average .35 points, consistent with the training. Question #11 assessed if the participants identified personal consequences with the company's success and there was an increase of .26, again aligned with the coach's teachings.

There were also three questions in which there was a nontrivial change in the opposite direction of what the coach had taught. The coach taught that people's emotions do not result from other people's actions but that people can independently determine how they will feel. It seems that the participants got a counter reaction to this lesson of the coach and reinforced the opposite belief (question 14). However, note that this negative change does not invalidate the main argument of this dissertation which assets that emotional arousal reinforces the effect of sensegiving—emotional arousal can indeed reinforce also the negative/defensive reaction if the content of the actual sensegiving message is not convincing. It is also possible that people emphasized others' influence on their emotions because the coach spent most of the time describing interdependencies between people and interaction dynamics that cause negative emotions.

Similar changes in the unexpected direction can be seen in answers to questions 8 and 11. In question eight, the change in average suggests that people got de-motivated during the seminar. However, it can be seen that only five out of the 30 participants gave a lower score the second time and that only a few participants could have given a higher score because most participants had given the highest score already when they answered the survey before the seminar. A similar situation of high initial scores explains the unexpected changes in the answers to question 11.

Table 19: Changes in participants' answers to questions relating to the content of the seminar held at Petäys in March, 2006 (N=30).[12]

Question	Scale	Average Before	Average After	Average Change	N change*
1. If a colleague makes a mistake that harms me, I have the right to yell at him/her (negative change expected)	1…5	1.97	1.61	-.35	-9 +2
2. Imagine that you are certain about something but your supervisor disagrees. How convinced you would be to think that "the supervisor is wrong" (negative change expected)	1…5	3.65	3.54	-.10	-9 +6
3. I am interested in my work	1…5	4.58	4.74	.16	-4 +7
4. You cannot influence your own emotions (negative change expected)	1…5	2.26	2.35	.09	-8 +10
5. If somebody insults me verbally, I have the right to insult him/her back (negative change expected)	1…5	2.52	1.84	-.68	-5 +15
6. I am able to recognize when someone has done something intentionally (negative change expected)	1…5	2.90	2.90	0	-8 +10
7. There are problems in my work community	1…5	3.13	3.48	.35	-3 +14
8. I want to do my work well	1…5	4.94	4.77	-.16	-5 +1
9. My own work influences the success of the firm	1…5	4.65	4.61	-.032	-5 +4
10. I have to demand my colleagues to behave better if they are constantly in a bad mood	1…5	3.87	4.52	.65	-2 +18
11. The success of the company matters to me	1…5	4.48	4.74	.26	-3 +9
12. If there are problems at the workplace, it is useful for me to talk about them with the person in charge	1…5	4.52	4.68	.16	-3 +8
13. The way I talk with my colleagues influences my work	1…5	4.68	4.81	.12	-2 +5
14. Others' actions determine my emotions (negative change expected)	1…5	2.65	3.10	.45	-4 +11
15. It is beneficial for me to make my colleagues happy	1…5	3.97	4.13	.16	-6 +10
16. It is better to not stand up for yourself so that others will not consider you as a difficult person (negative change expected)	1…5	2.06	1.77	-.29	-14 +5

* The last column shows how many participants gave a lower answer (numbers beginning with "–") or a higher answer ("+") after the seminar

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[12] Small sample size makes using statistical tests somewhat inappropriate and I have therefore not reported T-test in the table. For those interested, a one-tailed pair-wise t-test would have shown the following p-values: Q1: .047*; Q2: .30; Q3: .18;Q4: .35; Q5: .0045**; Q6: .5; Q7: .039*; Q8: .048*; Q9: .37; Q10: .00069***; Q11: .036*; Q12: .067⊥; Q13: .11; Q14: .025*; Q15: .16; Q16: .076⊥; (*** $p<.001$, ** $p<.01$, * $p<.05$, ⊥ $p<.10$)

5.2.2   Data from Oulu seminar

Table 20 shows answers from the seminar held for the Property Service Company in Oulu on April, 2006. This seminar was similar to the one analyzed above in terms of the content and process of the seminar and provides complementary evidence of the effects of emotional sensegiving on sense-receivers' mental models. As can be seen in the table, the averages changed in the predicted direction in each question asked from the participants.

Table 20: Changes in participants' answers to questions relating to the content of the seminar held at Oulu in April, 2006 (N=24)[13]

Question	Scale	Avrg. Before	Avrg. After	Avrg. Change	N change*
1. If my supervisor does not do his or her job properly, I must intervene	1…7	5.73	6.31	.58	-4 +13
2. I deserve better than what the situation currently is at my workplace	1…7	4.73	5.19	.46	-4 +11
3. I am lucky to work in this firm	1…7	4.58	4.77	.19	-6, +9
4. In this firm, my supervisors and I have shared goals that benefit us all	1…7	5.62	5.69	.077	-7 +7
5. This can change for the better only if the management takes the initiative (negative change expected)	1…7	3.54	2.65	-.88	-14 +5
6. I must comply to all customers' requests even though they harmed the firm and were repeated (negative change expected)	1…7	3.04	2.15	-.88	-13 +3
7. It is beneficial for me to be interested in other people at work and ask how they are doing	1…7	5.65	5.73	.077	-4 +7

* The last column shows how many participants gave a lower answer (numbers beginning with "–") or a higher answer ("+") after the seminar

The change was largest for questions #5 and #6 and large for questions #1 and #2. Questions #1 and #5 assessed beliefs about the role and responsibility of managers vs. employees in ensuring effective functioning of the firm. The coach emphasized that employees should and can take more responsibility. As can be seen, the employees seemed to change their beliefs to be more aligned with this idea. Question #6 assessed the employees' attitude toward 'complicated' customers. The coach taught that the employees should teach the customers to behave better so that the overall productivity of the value chain would be increased. Thus, the employees should not comply with

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[13] The results of a one-tailed pair-wise t-test would have shown the following significance levels Q1: .013*; Q2: .064$^{\perp}$; Q3: .26; Q4: .42; Q5: .016*; Q6: .0012**; Q7: .38; (** $p<.01$, * $p<.05$, $^{\perp}$ $p<.10$)

the most exotic demands. As can be seen, this message was also well received. Question #2 assessed the employees' desire for change by asking if they believed that they deserve their workplace to be better than it currently is. The coach emphasized that they indeed do deserve better and it seems that the employees reinforced their desire for the better. The remaining questions assessed the employees' satisfaction with working in the firm, perceptions of shared goals, and the importance of showing interest to other employees.

5.3 Anecdotal Reflection from Individuals Who Participated in the Seminar Five Years Earlier

One way to assess whether a seminar has any effect on participants' mental models is to assess whether they remember the seminar and its content several years later. While this method does not directly measure change, it can be used to assess whether or not sense-receivers have stored some sensegiving content in their long term memory. If sense-receivers do not remember any content of a seminar held a long time ago, it can be concluded that they did not encode any content in their long term memory during the seminar. Conversely, if they do remember some content, it can be concluded that it is plausible to believe that they did encode some seminar content in their long term memory. Of course, it is impossible to say if the participants remember the actual seminar or whatever corporate communication that has been carried out after the seminar to reinforce the change message. Yet, in combination with the prospective data presented above and the anecdotal data presented below, data showing that the participants did indeed remember the content of the seminar also several years after the seminar provides corroborating evidence for the claim that their mental models changed during the seminar.

As can be seen from Table 21 below, each of the five interviewees remembered some content from the seminar. The memories of the three employees were related to interdependencies and interpersonal relations at work. They remembered that the training had emphasized the importance of understanding others' needs and behaving in an assertive and respectful way toward them. The two supervisors remembered that the training had had an effect on the behavior of other participants but not on themselves. The first supervisor felt that the effect of the seminar was positive on the thinking and behavior of the production organization even though it had less impact on product development. The second supervisor felt that the effects of the training on the employees' thinking and expectations were negative because the new content was somewhat decoupled from the reality. In sum, however, these five interviews provide further support for the claim that the seminars influenced the participants' mental models.

Table 21: Participants remembered some seminar content five years after participating in it

Interviewee	Quotations	Comment
Employee #1	"I remember the example about feeding the Kerttu [when you don't finish your job, an overly nice person will finish it for you and suffer]. Everybody should do their own job well"	One major addition to this person's mental model was the increased understanding of interdependencies at work and how his own actions influence the well-being of others
Employee #2	"After the training, I started paying more attention to interpersonal relations at work"	This person also seems to have extended his mental model regarding interpersonal dynamics by recognizing new links between himself and others into his mental model
Employee #3	Reports that he has ambiguous feelings about the seminar: "really good thoughts but they do not work in practice." Content-wise, he remembers "the example that you should go to the hallway to calm down when you are about to get pissed off."	While the person does not believe in the feasibility of the new ideas taught in the seminar, he seems to have maintained some of them in his mental model
Supervisor #1	Says that the seminar had no major influence on herself because she was in product development but "for the people in the production organization it clearly created a new way of thinking."	No evidence of the effects of the seminar on the mental model of the interviewed person. Indicative evidence that the training changed others' mental models
Supervisor #2	"The hysteria that [the coach] caused is not good, he criticized supervisors too much … he gave the wrong image to the employees by emphasizing employee autonomy too much"	Remembers that the training emphasized employee empowerment a lot and sees that the effect was negative for the company

5.4 Anecdotal Evidence from Change Leaders

I interviewed four change leaders from three companies who had used or were using the coach's services. The three companies were the Property Service Company for which the seminar analyzed in the previous chapter and the third seminar in which I participated were held, the Sausage Company from which the five persons described in the previous sub-section who had participated in the seminar five years earlier came from, and the Milk Company for which the first of the three seminars in which I participated was organized. The interviewees included the development managers of each of the three companies and the retired CEO of the Sausage Company.

The purpose of these interviews was to assess if the companies perceived whether the training had an effect on the employees' thinking and behavior. Each of the four interviewees was convinced that the seminar had a major impact on the participants' beliefs and attitudes. They also emphasized that the organizational context is a major

factor influencing whether the mental model change that is created in the seminars transforms into organizational success. Obviously, this data does not prove conclusively that the seminars influenced the participants' mental models, as it only describes the perceptions and interpretations of four individuals (who may suffer from bias because they had an active role in hiring the change coach). However, the data provides ecological validity for the claim in the sense that it shows that practitioners found the seminar useful in promoting organizational change; and combined with other sources of data, it increases confidence in the claim that the seminar did indeed cause the participants' mental models to change.

The development manager of the Property Service Company was positive that the seminar had had an influence on the participants' mental models. She recognized two main strengths in the coach and seminars. The first was the level of standardization: "The three-day seminars are always exactly alike. The examples and everything are exactly the same. We know that each employee will get the same new basic understanding." The second strength "is [the coach's] ability to convince people. He is a strong communicator. He says things in a persuasive way, and they become reality. They become reality, for example, for maintenance workers." She also told that "you can see from the seminar feedback, from the answers to open-ended questions, that for some individuals the seminar has been a really powerful experience; it has awoken them in terms of both work and life."

The retired CEO of the Sausage Company was convinced that the seminar was effective. He said: "I indeed think that [the coach] was the right person to handle our case, he had the ability to create the change." He described how the company was in a desperate need for change because employee commitment and trust between employees and management were low: "At the beginning [of my term as a CEO], the situation was horrible. I remember how one union representative told me that 'it would be good if [our company] went bankrupt; that there would always be someone else who wants to produce food.' – This was the level of commitment to the firm." However, the firm's employees went through the seminars and the seminars had a major role in changing their thinking: "The employees reacted positively to the seminars … I'm confident that many of them changed their attitudes instantly." He was also confident that the coach's special style had a major role in explaining why the seminars were so successful: "Because it does not help if consultants, wearing white

shirts and ties, come here and, and, and, they come here and speak nicely and leave … It was really an insightful moment for me when I got to know [the coach]. … His habitus is such that you can't really call him a gentleman."

The development manager of the Sausage Company, who had a major role in the implementation of the organizational change program, shared the same positive view of the coach with the company's former CEO. The development manager emphasized that "The role of the seminars is to energize the company-wide change [by making employees understand and excited about the new way of organizing]. … The basic training sets the starting point [for organizational change]." He also provided concrete examples of how the seminar had fueled the company-wide change process. The number of employee initiatives increased from zero to over 2000 in four years, and "there was this woman who had been on maternity leave for five years. When she came back, she said 'this is like a new company.'"

The development manager of the Milk Company also saw that the seminar succeeded in changing the thinking of the participants. The main concern for his company was, however, that they were not able to change the structures of the organization fast enough to be consistent with the employees' new way of thinking. Consequently, what happened was that the employees changed their understanding of work in the seminar and developed high expectations but then experienced major disappointments when things did not go as they expected after the seminar. He stated:

> "Our employees have reacted positively to the seminar, it goes really well. The big problem for us has been the pacing. […] We haven't been able to adapt the organization. […] After the seminar, employees have big expectations, that now things will rapidly change. […] The employees have been expecting more organizational changes than we have been able to design and implement."

Despite the challenges caused by the high expectations, the milk company's development manager still maintained that the "overall effect of the seminar was absolutely not negative. It gave us a shared language and a shared understanding, [that was] really good. Shared understanding of where we are now, what we should do, what the role of each individual is."

Overall, the four change leaders were all convinced that the seminar influenced and changed the thinking of the seminar participants. The development manager of the

Property Service Company saw that the seminars were really powerful in changing how the participants understand their work and even life. The former CEO of the Sausage Company emphasized its impact on employee attitudes and commitment and the development manager of the same company highlighted the positive expectations the new understanding developed during the seminar created. The development manager of the Milk Company stated that the seminar creates a new shared understanding of a better future.

6   A PROCESS THEORY OF EMOTIONAL SENSEGIVING

Emotional sensegiving is defined in this thesis to refer to sensegiving that leverages emotions during the process of sensegiving to create a stronger cognitive change and to associate more affect on the new cognitions. When the empirical findings described in the previous chapters are combined with the existing literature, a theoretically generalizable process theory of emotional sensegiving can be created.

At a macro-level, the process of emotional sensegiving consists of dozens of three-phase micro-sequences that ultimately lead to changes in sense-receivers' mental models (Figure 12). The three micro-phases are increasing arousal, cognitive (re)framing, and reinforcing commitment. The arousal created in the first micro-phase decays slowly and becomes associated with the cognitive content delivered in the latter two micro-phases, increasing their effect. Each three-phase micro-sequence creates one change in beliefs in mental models. Dozens of micro-sequences will change and reinforce several beliefs in mental models and, thus, lead to a mental model change.
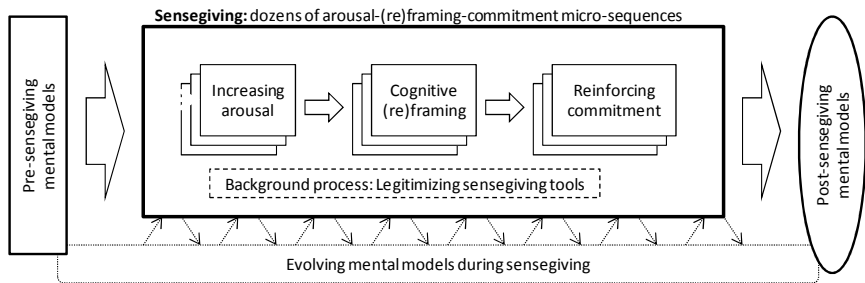
Figure 12: A macro-level view of emotional sensegiving

The micro-sequences of arousal-(re)framing-commitment are supported by a background process of legitimizing sensegiving tools. This background process justifies the ways a sensegiver is going to influence sense-receivers. This helps in countering the sense-receivers' resisting and defensive reactions to unorthodox, surprising, or uncomfortable sensegiving tactics. For instance, in the empirical material

of this thesis, the sensegiver explained that he will provoke and push the sense-receivers because that is his job. In this way he countered in a pre-emptive way any resistant reactions to his tactics that were to increase emotional arousal. In addition to this kind of meta-communication provided during sensegiving, the sense-receivers' mental models influence how they will respond to sensegiving acts. For example, the same sentence can make one person angry if it conflicts his mental model while another person may not react to it because it is consistent with her mental model.

The nano-dynamics inside the micro-sequence of arousal-(re)framing-commitment explain why and how increasing emotional arousal before cognitive (re)framing and reinforcing commitment increases the effectiveness of sensegiving. Each sensegiving act has an influence on both the sense-receivers' emotional state and their cognitions, as indicated by the two arrows starting from each of the three sensegiving cubes in Figure 13 below. In the figure, one of the two arrows starting from each sensegiving cube indicates the influence of the sensegiving act on the sense-receivers' emotional state and the other arrow indicates the influence of the sensegiving act on the sense-receivers' conscious thinking (the three cubes marked with "S" in Figure 13 below refer to sensegiving and correspond to the three rectangles in Figure 12 above).

6.1   Micro-Phase 1: Increasing Arousal

Sensegiving tactics for increasing arousal refer to the ways sensegivers try to increase the sense-receivers' emotional arousal. Any tactic ranging from jokes and provoking stories to more exotic means illustrates such tactics. In the empirical part of this study, I recognized six tactics that the sensegiver used to increase the seminar participants' emotional arousal. These tactics were references to intimate relationships, brutal claims, jokes, pushing the participants, work-related provoking examples, and allowing/making participants generate arousal. Other potential tactics for increasing emotional arousal are discussed below in the section "Additional factors in the emotional micro-process."

Sense-receivers' working memory

Sensegiving tactics

Sense-receivers' emotional state

Increasing arousal

Work-unrelated cognitions

Work-related cognitions

Work-related cognitions & intentions

Cognitive (re)framing

Reinforcing commitment

High, peaking emotional arousal

Incremental increases in emotional arousal

Incremental increases in emotional arousal

High total arousal co-occurs with work-related cognitions

High total arousal co-occurs with work-related action intentions

Work-related content replaces work-unrelated content in working memory

Work-related content is elaborated further in working memory

Arousal decays slowly. Reframing tactics add increments to the arousal that is still left from earlier moments

Arousal decays slowly. Commitment tactics add increments to the arousal that is still left from earlier moments

1. Work content de facto triggers high emotional arousal (due to antecedent events) and is therefore better remembered and incorporated into mental models, and has a stronger influence on future sensemaking

2. Work content de facto feels highly emotional and is therefore more likely to influence future choices and decision making
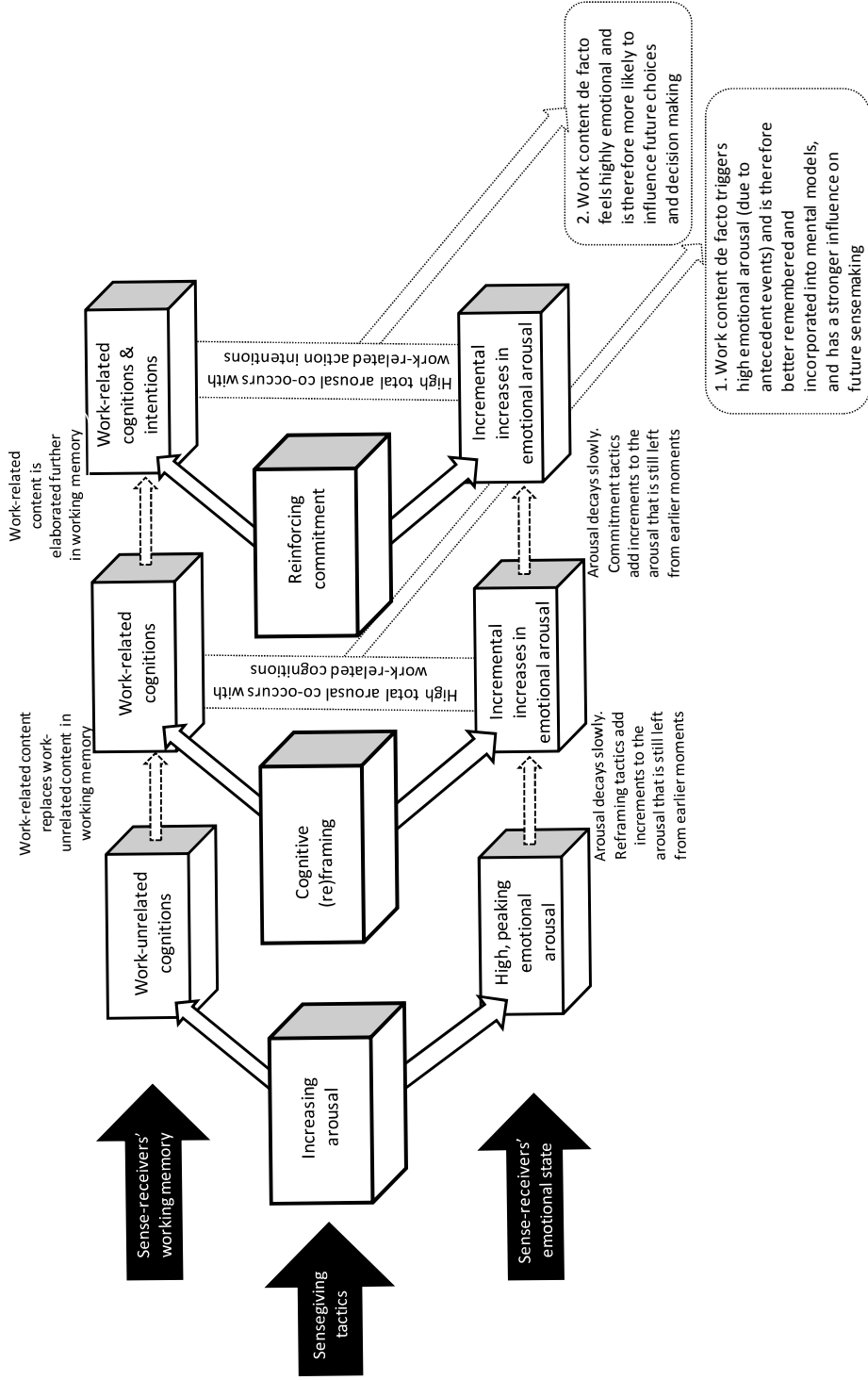
Figure 13: The micro-process of emotional sensegiving

Sense-receivers' emotional reaction to the increasing arousal tactics is increased emotional arousal, as illustrated by the arrow from cube S1 (S=sensegiving) to the cube E1 (E=emotional reaction) in Figure 13. High emotional arousal refers to a "state of the central nervous system experienced as a subjective feeling and peripheral correlates" (Russel, 2003: 154) where the subjective "feeling is one's sense of mobilization and energy" (p. 148). The state of the central nervous system refers to specific images in the brain that are influenced by both messages from the body and the brain itself (Damasio, 1994: Chapter 7). In the empirical part of this study, the observation of the peripheral correlates of emotional arousal in the sense-receivers— laughter and crying, body movements (de Meijer, 1989), changes in the pitch and volume of voice (Sobin & Alpert, 1999), and facial expressions (Ekman, 2003)— provided evidence that their emotional arousal increased as a reaction to the sensegiver's tactics.

A central characteristic of emotional arousal is that it decays slowly (e.g., Fiske & Taylor, 2008: 319). Once the level of emotional arousal has been increased, it will usually take several minutes before the level of arousal becomes low again. Damasio's work (1994: Chapter 7; 2003: Chapters 3; see also, Bechara & Damasio, 2005) provides a physiological explanation of why it decays slowly. Emotional arousal causes the brain to send hormones and nerve signals to the body which cause physiological reactions such as increased heart rate and circulation. The brain will also receive nerve and hormonal signals from the body and construct images of the body. These images are essentially images of emotional state. The images will also cause further activation in the body, constructing a circular loop between body activation and brain images of the body. This causes that emotional states can become self-reinforcing for short periods of time.

The behavioral manifestations of the slowly decaying arousal can be illustrated in many ways. The laboratory studies discussed in the literature review showed how arousal created by one source transferred into the next moment and became associated with something else; for example, sexual arousal was turned into anger (Zillman, 1971), fear was turned into sexual arousal (Foster et al., 1998), and chemically induced arousal into specific emotions (Schachter & Singer, 1962). Everyday experience also provides an illustration of how arousal tends to decay slowly: when one is scared by a

near car accident, it usually takes several minutes before his or her heart stops beating rapidly after the incident.

Taken together, the physiological qualities of emotional arousal and the dynamics of emotional arousal revealed by the laboratory studies and everyday experience have an explanatory role in the process theory of emotional sensegiving. Tactics that increase emotional arousal in the first phase of the micro-sequence of emotional sensegiving will influence the base level of emotional arousal for the duration of the whole few-minute-long micro-sequence. Once the level of arousal has become high, it will remain high for several minutes.

Sense-receivers' cognitive reaction to tactics that increase emotional arousal is to start thinking about the content that was used for increasing arousal. This content can be work-unrelated and a typical cognitive reaction to the increasing arousal tactics is, therefore, the thinking of work-unrelated thoughts, as indicated by the arrow from cube S1 to cube T1 (T=thinking) in Figure 13. For example, if a sensegiver tells a story of his mother to emotionally arouse sense-receivers, like the coach analyzed in the empirical part, it is likely that the sense-receivers will start thinking about the sensegiver's mother or their own mothers.

However, unlike emotional arousal, conscious thoughts in people's working memory can disappear or change quickly. The capacity of the working memory for conscious thinking is limited and new thoughts can replace old thoughts in a relatively straightforward way (e.g., Miller, 1956). The content of the increasing arousal tactics does not, therefore, extensively constrain the set of thoughts that can be thought during the micro-process of emotional sensegiving.

6.2   Micro-Phase 2: Cognitive (Re)Framing

Sensegiving tactics for cognitive (re)framing refer to the tactics a sensegiver uses to change the way sense-receivers think of any relevant (typically work-related) issues. Cognitive (re)framing is a conscious and reflective process which involves making arguments and providing justifications, illustrations, and evidence. In the empirical part, I recognized four tactics that the sensegiver used for cognitive (re)framing. These tactics were linking previous illustration to work, re-explaining an earlier argument, simple telling, and discussing through the idea. Existing sensegiving research has also recognized a large number of tactics that are used for delivering the cognitive content

of sensegiving (e.g., Dunford & Jones, 2000; Fiss & Zajac, 2006; Foldy, Goldman, & Ospina, 2008; Hill & Levenhagen, 1995; Rouleau, 2005; Rouleau & Balogun, 2011; Sonenshein, 2006).

Sense-receivers' emotional reaction to cognitive (re)framing is less extensive than to the tactics for increasing arousal. Even though the main purpose of cognitive (re)framing is to influence the cognitions of the sense-receivers, they still react also emotionally. This reaction is illustrated by the arrow from the cube S2 to the cube E2 in Figure 13. Almost everything humans hear or see triggers some emotional reaction in them (Damasio, 2003: 60-61). These reactions can be so small that they do not reach conscious awareness; for example, when an argument made by a lecturer is slightly interesting or annoying. However, the marginal increases in emotional arousal produced by cognitive (re)framing build accumulatively on top of the arousal that was created by the increasing arousal tactics. This happens because emotional reactions always change the current state rather than aim at a certain absolute state (see Bechara & Damasio, 2005; Damasio, 2003: Chapter 2). Hence, the cognitive content heard during cognitive (re)framing produces a relevantly high emotional reaction if it is preceded by tactics for increasing emotional arousal.

The level of emotional arousal will be quite high after the incremental increases but not necessarily as high as it was immediately after the use of the increasing arousal tactics. The incremental increases in arousal may not lead to higher levels than the initial arousal because the level of arousal decays constantly. Still, even if the emotional reaction to cognitive (re)framing was approaching zero, the level of emotional arousal after hearing the cognitive (re)framing message will be substantially higher than zero due to the slowly decaying arousal left over from the previous moments. This pattern is illustrated in the Figure 14.
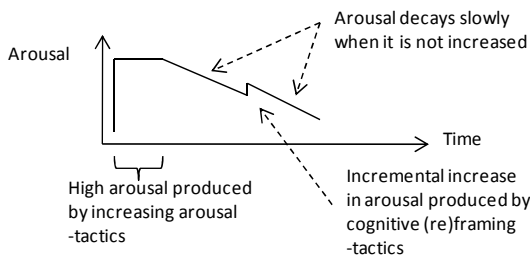

Figure 14: Cognitive (re)framing produces incremental increases in decaying emotional arousal

In my empirical material, this pattern of emotional reactions to marginally arousing content could be seen from the sense-receivers' reactions. The sense-receivers felt strongly about work-related content that was delivered to them seconds and minutes after they had first been emotionally aroused. Conversely, the external coders, whom I used for validity checks, who viewed the same episodes without having first been emotionally aroused, did not perceive these clips as emotionally arousing.

Sense-receivers' cognitive reaction to cognitive (re)framing is to start thinking about work-related cognitive content, as illustrated by the arrow from cube S2 to cube T2 in Figure 13. The ideas that the sensegiver communicates during cognitive (re)framing will occupy most of the working memory of the sense-receivers. When sense-receivers hear the words spoken by the sensegiver, the words already take up some working memory capacity. In addition, when the sense-receivers process the words, the new content will consume even more working memory capacity. Consequently, there will be little capacity left for the previous, work-unrelated thoughts produced by the increasing arousal tactics. Hence, work-related content replaces the work-unrelated content in the working memory during cognitive (re)framing.

Consequences of the simultaneous emotional and cognitive reactions to cognitive (re)framing preceded by increasing arousal are what makes emotional sensegiving effective. Emotional arousal has a positive effect on how well the content of sensegiving is internalized into mental models. The words that sense-receivers hear during sensegiving are temporarily maintained in the working memory. Some of the content of the working memory is encoded into the long term memory, where mental models reside (Carlston, 2010; Smith & DeCoster, 2000). Emotional arousal enhances this encoding of content from the working memory into the long term memory (Finn & Roediger, 2011; MacKay & Ahmetzanov, 2005; Phelps, 2006) and, thus, into mental models.

Laboratory studies have verified the effect of arousal on memory in behavioral terms (Finn & Roediger, 2011; MacKay & Ahmetzanov, 2005) and the process can be explained in neurological terms. The amygdala is a central part of the brain for both memory and emotions (Phelps, 2005). Emotional arousal results in amygdala activation; the amygdala in its turn, enhances hippocampal processing and this increased processing leads to enhanced storage of the processed information (Phelps, 2006: 34). These dynamics inside the brain explain why and how emotions provide a

gateway to cognitions, and how and why emotional arousal can improve the process of adding new beliefs to mental models.

The importance of enhanced encoding from the working memory to the long term memory can be illustrated by comparing two hypothetical cases. Let Case Low Arousal refer to a sensegiving situation with no emotional arousal and Case High Arousal refer to a sensegiving situation with high emotional arousal. Let us first consider the case of low arousal (Figure 15).

The situation in the Case Low Arousal starts with the sense-receivers being in a low arousal state. At moment "Time 1", the sensegiver speaks thoughts "a, b, c." These thoughts occupy the sense-receivers' working memory and they think about them in a conscious way. Some of the thoughts are also automatically encoded into mental models in the long term memory. However, the fraction of thoughts encoded into the long term memory is likely to be small because the sense-receivers are in a state of low emotional arousal, meaning that the amygdala is inactive and not promoting hippocampal processing. Then, at "time 2," the sensegiver moves on and speaks thoughts "x, y, z." These thoughts again occupy the sense-receivers' working memory. Importantly, the new thoughts, "x, y, z" replace the older thoughts, "a, b, c" in the working memory due to its limited capacity. A small fraction of the new thoughts "x, y, z" is, again, encoded into the long term memory. Crucially, however, most of the thoughts "a, b, c" have now been forgotten—they were replaced by the new thoughts in the working memory and only a small fraction of them were encoded into the long term memory. Hence, at a later "time N" in the workplace, when the situation would call for action "b" taught by the sensegiver, the sense-receivers are not able to recall and implement such behavior because it does not exist in their mental models.

Case Low Arousal

Time 1   *Time 2*   ....   *Time N*

Sense-giving

a, b, c

x, y, z

Situation calls for specific response "b"

1. Sensegiving puts a first set of thoughts into sense-receiver's working memory

3. Sensegiving puts a second set of thoughts into sense-receiver's working memory

Specific work situation

7. Actions described by sensegiver cannot be recalled or implemented because they are not part of mental model in LTM

Sense-receiver's working memory

a, b, c

x, y, z

...

2. Few of the thoughts from working memory are encoded into long term memory

4. The new thoughts replace the old thoughts in working memory
5. Few of the thoughts from working memory are encoded into long term memory

Sense-receiver's long term memory

a

a, x

a, x

6. Majority of the first set of thoughts are forgotten as they are neither in working memory nor in long term memory
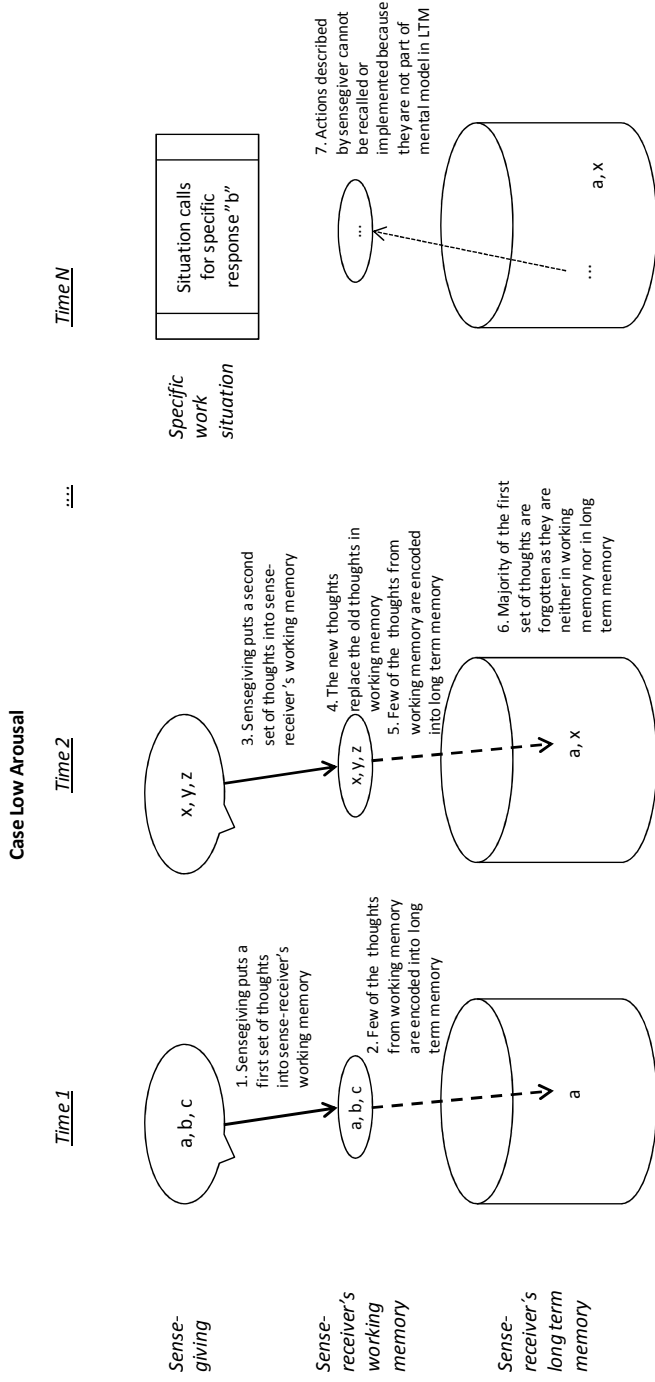
Figure 15: Low arousal causes that only a small fraction of sensegiving content is encoded into mental models in the long term memory for future use

The case of high arousal differs from the case of low arousal in a substantial way (Figure 16). At "Time 1," the sensegiver's words ("a, b, c") again put thoughts ("a, b, c") into the sense-receivers' working memory. However, this time a large portion of these thoughts is automatically encoded into mental models in the long term memory, as illustrated by the thick arrow from the working memory to the long term memory in Figure 16 below. This happens because arousal activates the amygdala which enhances hippocampual procsessing which encodes thoughts from the working memory to the long term memory (Phelps, 2006: 34). Then, at "Time 2," the sensegiver's new words, "x, y, z" again replace the old thoughts in the sense-receivers' working memory. However, because the old thoughts have already been encoded into the long term memory, they are not forgotten. In addition, also the new thoughts are encoded into the long term memory, again due to high arousal. Consequently, when a future situation, at "Time N," requires a specific action "b," described by the sensegiver at "Time 1," it is likely that this thought surfaces into the sense-receivers' consciousness from their mental models and they implement the thought.

In addition to making it more likely that the required, specific thoughts surface consciousness at "Time 3," the arousal associated with the thoughts also has another positive effect. As people's choices are based on their affective reactions to choice alternatives (Bechara & Damasio, 2005), those thoughts that trigger affective reactions are more likely to be implemented than thoughts that do not trigger affective reactions. Hence, thoughts that are associated with high arousal during sensegiving and encoding are (1) more likely to be remembered at later times and (2) more likely to influence choices when they are remembered. (In addition, contents of the long term memory can have a subconscious influence on behaviors; see Smith & DeCoster, 2000; Strack & Deutch, 2004; Carlston, 2010).
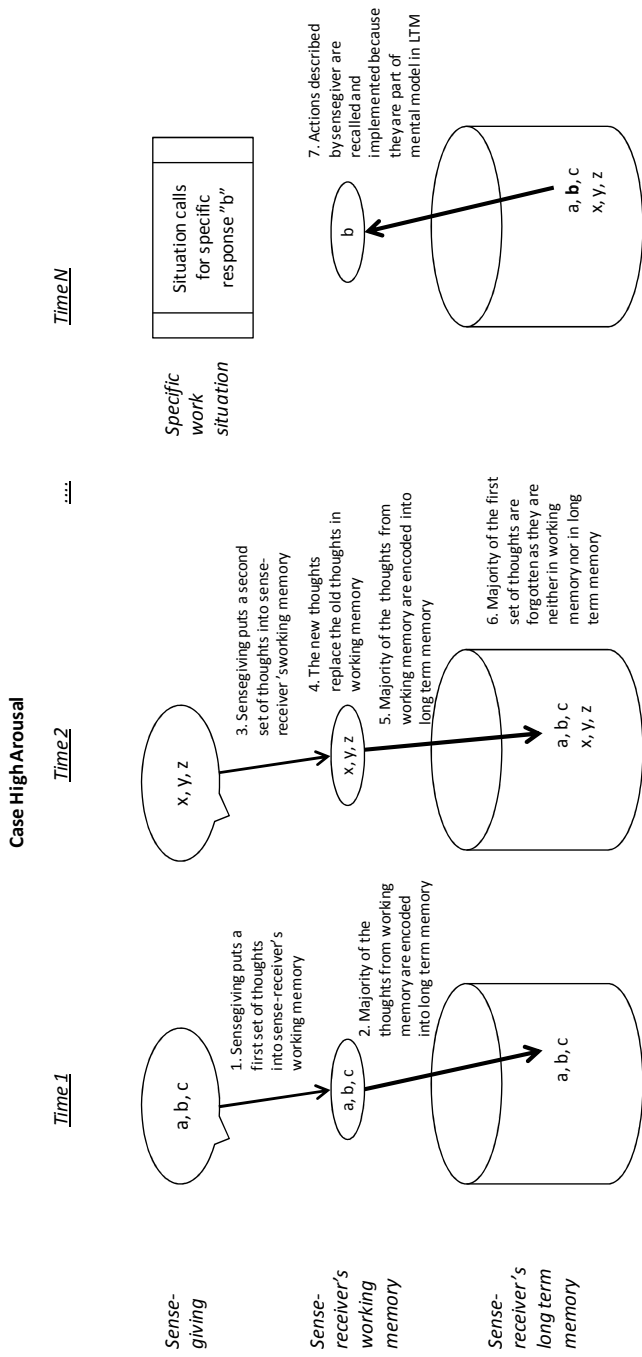
Case High Arousal

Figure 16: High arousal causes that much of the sensegiving content is encoded into mental models in the long term memory for future use

One potential limitation of the emotional arousal approach to sensegiving needs to be discussed here: It will take some time to build up emotional arousal before the "Time 1" discussed above. The process theory of emotional arousal is based on the assumption that this extra time pays off because much less repetition is needed during cognitive (re)framing for making a lasting change in the mental models in the long term memory. Arousal can be increased rapidly, within seconds or minutes. However, the question of balance between the time invested in increasing arousal versus cognitive repetition is an empirical question, open for future research.

In conclusion, the co-occurrence of emotional arousal and work-related thoughts increases the effectiveness of sensegiving. New thoughts and beliefs that are heard during cognitive (re)framing will be better internalized into mental models if they are accompanied by high emotional arousal triggered by increasing arousal tactics than if they are not accompanied by such arousal. Likewise, new thoughts and beliefs are likely to have a stronger influence on sensemaking in future situations if they are associated with high arousal than if they are not.

6.3   Micro-Phase 3: Reinforcing Commitment

Sensegiving tactics for reinforcing commitment refer to tactics a sensegiver uses to make sense-receivers more committed to thinking and acting in ways as the content provided during cognitive (re)framing indicates. These tactics should produce intentions to act and think according to the new cognitive content of the sensegiving. I recognized four tactics in the repertoire of the sensegiver analyzed in the empirical part of this study. These tactics were the question "do you find this logical?", making sense-receivers describe how they will act on the ideas, increasing efficacy, and direct action instructions. While these four tactics capitalized mainly on cognitive processes of commitment building, also more emotionally focused tactics could be used, as discussed below in the section "Additional factors in the emotional micro-process."

Sense-receivers' emotional reactions to tactics for reinforcing commitment are similar to their emotional reactions to tactics for cognitive (re)framing. The reinforcing commitment tactics trigger emotional reactions in sense-receivers that build in an accumulative way on the slowly decaying emotional arousal that is still left from previous moments. This effect is illustrated by the arrow that goes from cube S3 to

cube E3 in Figure 13. While the emotional reactions to reinforcing commitment tactics were incremental in the empirical part of this study, the sense-receivers' emotional reactions could be higher if sensegivers used more emotional tactics, discussed in the section below.

Sense-receivers' cognitive reactions to tactics for reinforcing commitment include the repetition and elaboration of work-related thoughts, and the development of new efficacy beliefs, meta-cognitions of one's beliefs and attitudes, and specific action intentions. These effects are illustrated by the arrow from cube S3 to cube T3 in Figure 13. In the empirical part of the study, the verbalizations of the previously heard sensegiving content illustrated how the sense-receivers were recapping and also elaborating the ideas communicated by the sensegiver. Likewise, the way the participants showed agreement to concrete instructions illustrate how they developed intentions to think and act in certain ways in the future. The public displays of agreement were also likely to generate meta-cognitions in the participants that reinforced the change message: as they heard what they said, they became more likely to believe that they think and feel that way (cf. Festinger, 1957).

Consequences of the simultaneous emotional and cognitive reactions to reinforcing commitment tactics are similar to the consequences of the cognitive (re)framing phase—a higher likelihood to think and act in the specified ways in the future. The high emotional arousal produced by the increases that build on top of the slowly decaying earlier emotional arousal co-occurs and co-exists with action and thinking intentions. This co-occurrence has similar consequences as does the co-occurrence of work-related thoughts and high arousal during cognitive (re)framing. The co-occurrence makes it likely that the individuals will associate the high arousal with the action and thinking intentions. Hence, they are better remembered and more likely to resurface into consciousness (e.g., Phelps, 2006). Furthermore, the intentions to think and act in a certain way will feel important. This feeling makes it more likely that they are implemented when they do occur in mind because people's choices are much influenced by their affective reactions to their knowledge (e.g., Bechara & Damasio, 2005; Damasio, 1994).

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One micro-sequence of increasing arousal, cognitive (re)framing, and reinforcing commitment is likely to create one change in mental models: the process can add one belief in a mental model, add an invalid tag on a belief in a mental model, or strengthen a belief or link between concepts in a mental model. When dozens of micro-sequences are carried out, the whole mental model will transform since many of its elements have been transformed. Hence, successful emotional sensegiving consists of dozens of micro-sequences of arousal-(re)framing-commitment that follow the nano-dynamics discussed in the pages above. This process should be supported by tactics for legitimizing the tools that sensegivers use during each micro-sequence. In addition, the participants' mental models should be taken into account when thinking which kinds of sensegiving tactics to use.

The model described above outlined the basic elements of the process theory of emotional sensegiving. The following sub-sections will elaborate and further expand this basic model. The sub-sections will recognize some boundary conditions, introduce potential moderators into the model, and discuss various qualitatively different tactics for carrying out the different phases of emotional sensegiving.

6.4 Emotional Micro-Process

The most fundamental insight in the process theory of emotional sensegiving is that emotional arousal that is created with one content can transfer to the next moment and influence how sense-receivers internalize the information provided during the next moment. Existing laboratory studies show that arousal can indeed transfer from one situation to the next one (Dutton & Aron, 1974; Zillmann, 1971) and that arousal indeed has a positive effect on the internationalization of information (Finn & Roediger, 2011; MacKay & Ahmetzanov, 2005). The empirical data analyzed in this thesis showed that the sensegiver used one type of content to increase the participants' emotional arousal and described other, work-related content to them immediately after that. Hence, the sensegiver used the ways emotional arousal behaves and influences the internalization of information to increase the effectiveness of his sensegiving. No other study has recognized this kind of way of using and leveraging emotions in sensegiving.

6.4.1   Valence of the arousal

The valence of emotional arousal can vary from extreme negative to extreme positive (Russell, 2003). In my empirical material, the coach balanced between positive and negative arousal but favored negative arousal; he created positive arousal by telling jokes, whereas his other tactics mainly created negative arousal. This triggers two questions, why did the coach use mainly negative arousal? And how do negative and positive arousals differ in terms of their dynamics and effects?

One reason why the coach used more negative than positive arousal can be that negative arousal is easier to generate than positive arousal. People tend to react to negative information and events more strongly than to positive information and events (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Rozin & Royzman, 2001). This tendency is generally explained by evolutionary terms: strong reactions to threats have ensured the survival of the species (see e.g., Damasio, 1994). Hence, when the goal is to produce emotional arousal in people, the negative route produces a higher payoff for any level of effort than the positive route.

The valence of the arousal also influences how people interpret information, however. Several laboratory studies have shown that positive mood tends to make people more open-minded and creative, whereas negative moods make people think more critically and less creatively (Fredrickson, 2005). The main implication of this effect is that positive valence should be used when sensegivers try to make sense-receivers internalize complex, new thoughts. Conversely, if sensegivers try to make sense-receivers internalize relatively simple thoughts, the narrowing effects of negative valence are acceptable.

The desired effects of negative and positive arousal can also be combined. As was shown in the literature review, there are findings that "the valence of the prior experience is irrelevant; only the arousal transfers" (Fiske & Taylor, 2008: 320). Hence, it might be possible that sensegivers first create high levels of emotional arousal by delivering negative content and then flip the valence of that arousal into positive by telling jokes or using other types of tactics that have positive elements. This positive arousal could then be used to ensure that sense-receivers are open-minded enough to accept the cognitive content of sensegiving. In addition, the positive arousal would become associated with the cognitive content of sensegiving and, hence, increase its impact.

There might be more fine-grained limitations to which emotions can flip into which emotions, however. For instance, Bechara & Damasio (2005) noted that some emotional states are physiologically different from one another. At the same time, the empirical studies that have demonstrated that negative arousal can transfer into positive have studied specific combinations of emotions, such as from anger to urge (Brehm, 1999), from fear to sexual arousal (Dutton and Aron, 1974), and from neutral arousal to some specific emotions (Schachter & Singer, 1962). Hence, there might be some plausible emotional paths that can be used, whereas other combinations of negative and positive emotions are less likely to work. The recognition of plausible paths remains a question for future research; at this stage it can be said that some level of continuity between different phases of the process is probably needed.

6.4.2   Intensity of the arousal

The increase in the level of emotional arousal is a fundamental part of emotional sensegiving. The intensity of this arousal—exactly how high arousal is created—will influence how sensegiving will unfold. While quite high levels of emotional arousal are needed to produce the positive effects on memory, too high levels of arousal can be harmful for sensegiving for two reasons.

The first risk of extremely high arousal is that people can lose control over their behavior. When they are in a highly aroused state—when emotions and emotional impulses are extremely strong—it becomes more and more difficult for them to control their own behavior. Hence, highly aroused people may start reacting emotionally and, for instance, leave the sensegiving situation in an angry outburst or even act violently. The arousal levels should therefore not be increased higher than the specific sensegiving context allows controlling.

The second reason why extremely high levels of emotional arousal can hinder sensegiving is that high arousal reduces cognitive capacity (Strack & Deutsch, 2004: Thesis 3; Yerkes & Dodson, 1908). Cognitive capacity refers to available cognitive resources, especially the working memory that people can use for holding information in their consciousness and reason with it (see e.g., Smith & DeCoster, 2000). When cognitive capacity is low, people are unable to construct complex thoughts or process much information in a deliberate way. Hence, sensegiving can fail due to extremely high arousal if it prevents people from understanding the content of the sensegiving.

6.4.3   Duration of the micro-phases

Emotional arousal typically decays in a few minutes. The purpose of the micro-sequences of arousal-(re)framing-commitment is to associate the arousal generated in the first micro-phase to the cognitive content delivered in the second micro-phase and further reinforce this association in the third phase. It is therefore essential for the success of emotional sensegiving that the duration of the micro-sequences is not longer than a few minutes. Especially, the duration of the second phase, cognitive (re)framing, should not exceed the time that is needed for the arousal to decay. Instead, the second micro-phase should last only for a few minutes before it is concluded with tactics that reinforce commitment.

It might also be possible to delay the decay of the emotional arousal created in the first micro-phase. The delivery of the cognitive content of sensegiving can be complemented with emotionally arousing content. Such content can directly relate to the cognitive content of sensegiving or casually refer to earlier, arousing content. Such minor re-establishments of emotional arousal might make it possible to keep sense-receivers' arousal levels high for extended periods of time. In the empirical material, the sensegiver often used this kind of a tactic as he enriched the delivery of the cognitive content with emotionally arousing examples or interactive periods. However, such longer sequences of high arousal without conclusion can be especially consuming and, hence, shorter micro-sequences might therefore be more effective.

6.4.4   Tactics for generating emotional arousal

In the empirical material, the coach mainly used words to generate emotional arousal in the participants. He used four word-based tactics to generate the arousal effects: references to intimate relationships, brutal claims, jokes, work-related provoking examples; and two interaction-based tactics: pushing the participants and making/allowing the participants to generate arousal. These tactics constitute only a mere illustration of possible tactics that could be used for increasing sense-receivers' emotional arousal. Different kinds of word content and interaction patterns might work equally well or even better. For example, dream building (Pratt, 2000) can produce strong positive excitement and discussions of world politics might provoke anger and fear.

Word-generated emotional reactions are not the only way to influence people's core affect. According to Russell (2003), core affect consist of the two dimensions of valence and arousal. Some arousal states are currently labeled as emotions whereas others are not. However, from the point of view of core affect, all arousal is similar; for example, a person who is feeling sleepy is low in arousal and a person who is doing intense physical activity is high in arousal. Even though these states are not conventionally considered emotional, the basic neurological state of arousal is still similar to emotional arousal (Russell, 2003: 148). Hence, in addition to telling emotionally provoking stories and jokes, sensegivers could use music, videos, physical activities, different chemicals, and oxygen levels and ionization of the air to generate arousal in sense-receivers.

Music and video clips are the least extreme ways of generating emotional arousal in sense-receivers. Music (e.g., Kenealy, 1988; Pignatiello, Camp, & Rasar, 1986), images (e.g., Lang, Bradley, & Cuthbert, 2005), and video clips (e.g., Tice, Baumeister, Shmueli, & Muraven, 2007) are routinely used in psychological experiments to induce emotional arousal in research subjects. In addition, even a casual observation of many presentations, self-management, and religious seminars shows that sensegivers routinely use these kinds of tools in their sensegiving. They might not have an explicit theory of emotional arousal transfer and memory effects on their minds when using the tools, yet they seem to have a practical understanding that such tools work. Some of them might even explicitly recognize that videos and music give energy to the seminar and make people more active. I have theorized in this thesis why such tactics work and how they could be applied even better in practice (few managers and consultants can directly apply the manipulations used in the laboratory experiments).

Physical activities constitute a bit more unconventional method for increasing arousal than music and videos. For example, self-management seminars (consider the self-help guru Anthony Robbins[14]) illustrate how using physical activities is possible and can increase arousal. The basic forms of physical activity are simple, such as clapping hands and jumping, but also more complex forms can be envisioned. For example,

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[14] see http://www.tonyrobbins.com/ [accessed 2011-05-25]. The video clips of the seminars that are available on this website as well as in YouTube show how people are jumping and clapping their hands during the seminar

different games that consist of running around a seminar room or making more complex physical gestures might be considered (depending on the context, of course).

Exotic forms of influencing arousal levels include the use of chemicals. Caffeine is a commonly used chemical for manipulating arousal levels (see e.g., Sawyer, Julia, & Turin, 1982 on the physiological and psychological effects). Other easily imaginable chemicals include sugar, nicotine, and alcohol. Sensegivers could intentionally time the delivery of the most important content so that the positive effects of such chemicals can be harnessed. The systematic use of these and other chemicals for sensegiving should also be studied further. As an extreme example, some researchers have recently studied the applicability of LSD in therapy (see, Griffiths & Grob, 2010, for a generic discussion).

In addition to chemicals, also the oxygen and ionization levels of the air constitute exotic ways of manipulating emotional arousal. A high supply of oxygen and high ionization of air make people more aroused (see Russell, 2003). The opening of windows during lectures is a conventional way of utilizing these effects. Again, also more systematic ways for leveraging the effects of air on people's arousal levels in sensegiving could be envisioned, applied, and studied further. For example, extra oxygen might be pumped into the room during the most important phases of sensegiving or the persuasiveness of counter-perspectives might be reduced by shutting down the ventilation system during their presentation.

6.4.5   Tactics for reinforcing emotional commitment

The process theory of emotional arousal also contains the element "reinforcing commitment." In the empirical material, the coach used mainly cognitive tactics for increasing the participants' commitment to the ideas he had already told. Specifically, he capitalized on cognitive dissonance (Festinger, 1957), efficacy (Bandura, 1997), and goal-setting (Locke & Latham, 1990). However, also emotional tactics for reinforcing commitment could be envisioned.

One potential way for increasing emotional commitment to ideas is "savoring". In another study (Vuori, 2011b), I recognized that some teams reached an agreement of what the team was to do about 20 minutes before ending their meeting. They then spent the remaining 20 minutes discussing the positive outcomes of the idea and repeating how good the idea and the plan were. They were also showing positive

emotions. I theorized that this kind of practice made them associate positive emotions with the idea and, therefore, increased their faith and commitment to it. Sensegivers in general could apply a similar approach; once they have told the sense-receivers their message, for example, about a new organizational direction, they could spend some time describing, in an emotionally appealing way, the positive consequences of the idea.

In addition to using savoring and other word-based tactics, sensegivers could also leverage the other ways of generating arousal when increasing sense-receivers' emotional commitment to new ideas. For instance, they might make sense-receivers sing songs whose lyrics describe the desired content. To illustrate the feasibility of this idea, consider how it is currently used by military organizations: the official song of the US Army[15] contains: "First to fight for the right, / And to build the Nation's might, / And The Army Goes Rolling Along," supporting the military ideology. Likewise, the Finnish Jäger March[16] contains similar elements: "it is sweet to pass the fates of war. / A new tale of Finland is to be born, / it grows, it rushes, it wins."

6.5 Cognitive Micro-Process

The main contribution of the process theory of emotional sensegiving is in describing how emotional arousal can be used to increase the effectiveness of sensegiving. Several important factors influencing the success of this process were discussed above. In addition, there are cognitive factors that influence the unfolding of the process and, hence, the success of emotional sensegiving.

6.5.1 Cognitive continuity

Cognitive continuity is defined here to refer to a perception that two pieces of content are related to each other. The opposite of cognitive continuity is a perception that a latter piece of content has no relation to a previous content; this kind of a situation produces a perception of discontinuity or an illogical jump. For example, there was some degree of cognitive continuity in the seminars that I analyzed: the coach argued that the interaction dynamics he described in his marital relationship were similar to those that occur at work. Consequently, most of the seminar participants did not get a

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[15] http://www.hampton.lib.nh.us/hampton/history/military/legionpost35/armedforcessongs.htm [Accessed, 2011-05-25]
[16] http://www.gridcogames.com/HOI%20Stuff/Jaakarimarssi_lyrics.htm [Accessed, 2011-05-25]

feeling of discontinuity when the coach suddenly jumped from describing his marriage to describing work processes.

Some level of continuity between arousal tactics and the actual content of sensegiving is needed to make emotional sensegiving successful. Cognitive continuity is needed because if there is no link between two phases, sense-receivers can get confused or think that the sensegiver is mentally instable and, consequently, stop paying active attention to the sensegiver.

To generate the necessary cognitive continuity, sensegivers should develop arousal-increasing tactics that are somehow related to their actual cognitive message. The link can be loose, as was often the case in my empirical material. For example, when the main purpose of sensegiving is to help the company react to a competitive threat, any images of war as a tool for increasing arousal might be sufficiently close to the following organizational content.

In addition to loose links, meta-communication provided by tactics that legitimize the emotional sensegiving approach can provide cognitive continuity. For example, the coach that I analyzed told the seminar participants at the beginning of the seminar that he will talk a lot about his marriage because he thinks that it is relevant for work. Regardless of how relevant the marriage stories are for understanding work-related content, this statement generated an abstract bridge from the marriage examples to work. Hence, it made it look like the two contents are related.

When building cognitive continuity by using legitimizing tactics, there is a risk of ruining the effect of surprise. If a sensegiver provides several warnings that he will describe some type of content, the emotional impact of that content might be weakened. Sensegivers should therefore not overdo the justification of their sensegiving content. The fact that the coach that I analyzed explicitly justified the references to intimate relationships only three times during the seminar is consistent with this warning.

6.5.2 Sense-receivers' mental models

Sense-receivers' mental models have an active role throughout any sensegiving process (see e.g., Balogun & Johnson, 2004; Balogun & Johnson, 2005; Mantere et al., in press and the sub-section "cognitive maps" in the literature review). Even though change is often analyzed by comparing before-the-change and after-the-change states

(here, mental models), the actual changing happens between those states (Tsoukas & Chia, 2002). For instance, in the empirical context of this study, the seminar participants' mental models existed throughout the seminar and changed incrementally during every hour of the seminar. Moreover, mental models also constantly influence the sensegiving process itself in many ways.

In terms of cognitive continuity, it is ultimately the sense-receivers' mental models that determine whether the perception that two pieces of content are related to each other emerges. Mental models consist of elements and relationships between those elements. If the first content described by a sensegiver activates elements in sense-receivers' mental models that are linked to elements in their mental models that are activated by the sensegiver's second content, then sense-receivers will perceive a link between the two contents described by the sensegiver. (Note that the sensegiver may have established the links in the sense-receivers' mental models by using legitimizing tactics only minutes earlier). Conversely, if sense-receivers' mental models do not contain a link between the elements activated by a sensegiver's content, then they will not perceive cognitive continuity. The unfolding of sensegiving is therefore influenced by the sense-receivers' mental models: if a sensegiver relies on associations that do not exist in the sense-receivers' mental models, the sensegiving process is more likely to suffer from the sense-receivers' perceptions of discontinuity. Hence, sensegivers should rely on associations that already exist in sense-receivers' mental models or build such associations before using related arousal tactics.

Sense-receivers' mental models also influence how they will affectively react to a sensegiver's words and actions. What is extreme and unacceptable for some people can be normal and acceptable in others' mental models. For instance, the Danish cartoons about Mohammed published in 2005[17] produced a wide range of reactions. Those people whose mental models maintained Mohammed as sacred and any funny images of him as blasphemy got extremely angry. Conversely, people who did not possess such beliefs did not react in an emotional way.

Similar to the reactions to the Mohammed cartoons, different organizational groups and individual members can react differently to different kinds of arguments. For

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[17] Original images from the newspapers' website have been removed. However, the episode is well documented in Wikipedia: http://en.wikipedia.org/wiki/Jyllands-Posten_Muhammad_cartoons_controversy [accessed 2011-05-26]

example, it can be imagined that labor union activists are more likely to react strongly and negatively to news about financial bonuses for CEO's who have laid off people to ensure company profits than business school students would react. Any arousal tactics must therefore be matched with the sense-receivers' mental models.

Also the acceptability of sensegivers' arguments is influenced by sense-receivers' mental models. People are more likely to believe arguments that are consistent with their mental models or conflict them only in minor ways (see e.g., Crano & Prislin, 2006). In addition, the deepness of the arguments, compared to the deepness of mental models will have a central role: People are able to internalize thoughts that are slightly more complex and advanced than their current understanding; if the new ideas are too difficult to comprehend in light of the old mental model, people are likely to reject them (Gardner, 2004: 59). Likewise, people who are knowledgeable in a certain area may react negatively if a sensegiver's arguments show a lack of deep knowledge in the area. These considerations should be taken into account when planning which kind of cognitive content is to be delivered through cognitive (re)framing in emotional sensegiving.

6.6   Generalizability of the Theoretical Model

Qualitative research typically aims at analytical generalizability (Eisenhardt, 1989; Glaser & Strauss, 1967; Yin, 2003). This means that the theoretical logic of how things unfold can be generalized to other settings. The understanding of the mechanisms of how one thing leads to another thing is assumed to remain consistent in different settings. Analytical generalizability is not to be confused with statistical generalizability which refers to inferences that population characteristics are similar to sample characteristics when the sample is representative of the population. In this thesis, the idea of generating and transferring emotional arousal to enhance the effectiveness of sensegiving is to be analytically generalized. I am not arguing that concrete sensegiving dynamics in other seminars are similar to the seminar that I analyzed. However, I am arguing that similar causal mechanisms exist in a latent way in other settings as well; regardless of whether the other sensegivers are actually leveraging emotional dynamics now, they have the potential to do so and the effects and dynamics of emotional arousal would follow the mechanisms recognized above. The above extensions of the basic empirical finding likewise can be applied in other settings as well, like the many illustrations above indicate.

Even though the mechanisms of the process theory of emotional sensegiving are generalizable, the specific context should be considered when applying the empirical findings of this thesis in other settings. Each of the coach's sensegiving act might have had a different effect depending on the national culture, organizational context, sense-receivers' education level, relative isolation of the sensegiving location, sensegiver characteristics, and seminar size and duration (see section "Contextual limitations"). Each of these factors creates boundary conditions that need to be considered in sensegiving. For example, a tactic that might arouse people in one context might be considered lame and boring in another one. Analyzers and practitioners must understand the context in which they are operating when thinking which kind of tactics would work best. Again, this note applies to the applications of the empirically observed tactics as well as to the theoretically developed extensions of the model.

Despite the contextual boundary conditions, a healthy human brain works in the same way in different contexts; this means that emotional arousal will always transfer from the first moment to the next one and that amplifying arousal should always have a positive effect on memory. The actual tactics for generating arousal, cognitive reframing, and commitment building, as well as for legitimizing the sensegiving process might vary in different contexts, however. Scholars and practitioners should therefore generalize the abstract idea of the arousal-reframing-commitment process from this thesis rather than the concrete tactics the specific sensegiver analyzed used. The ideas that I have discussed provide starting points for envisioning what might work best in any particular setting.

7 IMPLICATIONS FOR THEORY AND RESEARCH

Gioia and Chittipeddi (1991) created the concept of "sensegiving" 20 years ago. Their seminal paper has inspired plenty of research and the understanding of organizational sensegiving has become ever deeper and richer. Nineteen years after the original sensegiving paper was published, Gioia et al., (2010) combined their inductive findings with the existing literature and recognized three dimensions that are fundamental to the process of identity construction and, by implication, to sensegiving. The dimensions they recognized are (1) a cognitive dimension, (2) a verbal or discursive dimension, and (3) an action dimension. Gioia et al. also argued (p. 41) that "important phenomena in the social domain are rooted in the interplay of cognitive, verbal/discursive, and action-oriented processes. These deep processes are common to many, and perhaps any, human organizing phenomena."

The three dimensions recognized by Gioia et al., (2010) describe the state of the sensegiving research well. Scholars studying sensegiving have recognized three important dimensions influencing the outcomes of sensegiving and they have developed ever deepening understanding of these dimensions. For example, it has recently been discovered that (1) framing historical continuity increases the effectiveness of sensegiving [the cognitive dimension] (Brunninge, 2009), (2) managers' discursive competence consists of several sub-elements [the discursive dimension] (Rouleau & Balogun, 2011), and (3) making employees donate money increases their commitment [the action dimension] (Grant et al., 2008). However, a fourth dimension—emotions—which is fundamental to human perception, reasoning, decision making, and social behavior (Damasio, 1994; Elfenbein, 2007; Hodgkinson & Healey, in press; Loewenstein et al., 2008) has so far been largely ignored. The purpose of this thesis has been to explore how the fourth dimension could be integrated with our current understanding of sensegiving.

7.1 The Process Theory of Emotional Sensegiving

The process theory of emotional sensegiving shows how sensegivers can change sense-receivers' mental models effectively by making them go through a series of micro-sequences during which their emotional arousal is first increased through a variety of tactics; then the cognitive sensegiving message is delivered, and finally reinforced. The smooth flow of such micro-sequences is supported by a background process which legitimizes the tools the sensegiver is using and counters resistance towards them in a pre-emptive way. The emotional arousal the sense-receivers experience will become associated with the cognitive content of sensegiving through arousal transfer and misattribution and, hence, increases the impact of the cognitive sensegiving.

The process theory of emotional sensegiving addresses the gap recognized in the existing sensegiving literature. The model describes an emotional basic mechanism that can increase the effectiveness of sensegiving as well as several factors that can further influence the quality of emotional sensegiving. The model constitutes a starting point for a theoretical and empirical research program that increases the understanding of the fourth dimension of sensegiving in organizations, emotions.

7.1.1 "Increasing Emotional Arousal" as a Sensegiving Tactic

As the previous chapter showed, giving a central role to emotional arousal in sensegiving makes one see several current practices in a new light. Several everyday practices received a new meaning when their emotional impacts were considered: it can now be understood that seemingly irrelevant stories, music, jokes, coffee, physical activities, and fresh air can have a major role in explaining the effectiveness of sensegiving. Sensegiving is an emotional and even embodied (physical arousal) process, not merely a cognitive one. Tactics that increase sense-receivers' emotional arousal reinforce the impact of sensegiving, regardless of anyone's intentions or conscious awareness.

Factors that influence emotional arousal influence the outcomes of sensegiving. This realization changes the current, cognition-centered understanding of sensegiving in a radical way: the set of factors influencing the process becomes significantly larger. We can envision an ever larger repertoire of tactics for increasing emotional arousal as a part of sensegiving, as was discussed above. Future research can further investigate

which kinds of tactics and things might be used to increase emotional arousal during sensegiving and compare their effects. As the clear goal of increasing arousal has now been defined for a subset of sensegiving tactics, researchers can focus their efforts and make remarkable advances in our understanding of sensegiving.

7.1.2   Nuances in the Process of Emotional Sensegiving

The process theory of emotional sensegiving also pointed to several more detailed factors that can influence the success of sensegiving but have not been considered by previous research. The emotional tone of sensegiving can vary from positive to negative; a negative tone is likely to narrow down the thinking of individuals, whereas a positive tone can be good for more open-ended and complex situations (cf. Forgas, 1992; Fredrickson, 2005). While the basic insight about the narrow effects of threat perceptions (a form of negative state) has been recognized in terms of managerial sensemaking (Staw, Sandelands, & Dutton, 1981), the insight has not previously been considered in the sensegiving context. If leaders want to change the direction of their organizations by using negative images, they should first ask if they can afford the narrow-mindedness produced by the negative emotions they are about to produce. Given that negative content is more efficient in increasing emotional arousal (Baumeister et al., 2001), finding a suitable trade-off between positivity/lower-arousal/open-mindedness and negativity/higher-arousal/narrow-mindedness can be difficult.

The pacing of sensegiving actions can also be seen from a new angle due to the process theory of emotional sensegiving. A central physiological fact is that emotional arousal normally decays in a few minutes (e.g., Damasio, 2003). Hence, when aiming to leverage emotional arousal, sensegivers should deliver their most important content within minutes after having first emotionally aroused the sense-receivers. Further content can be delivered after the few minutes but then it should be recognized that the effects of arousal have already diminished. On the other hand, arousal can be kept high by using arousal-increasing tactics every few minutes. None of these more detailed implications of the arousal decay nor the arousal decay itself have been discussed by the existing sensegiving theory. By having described these effects and constraints, I have increased our understanding of the phenomenon of sensegiving.

7.1.3 Empirical opportunities provided by the process theory of emotional sensegiving

The process theory of emotional sensegiving can be corroborated or falsified empirically. Even though it is slightly against the convention, I will discuss in detail how different empirical settings could be used to test and advance the theorizing carried out in this thesis. I believe this discussion will help in evaluating the testability of my argumentation and in planning for future research.

Controlled laboratory studies provide the most robust way of testing the main causal assertion made in the model; that emotional arousal transfers from the first moment to the next moment and then reinforces the impact of cognitive sensegiving. One could have two groups—a condition group and a control group—in an experiment. The condition group would first watch an emotionally arousing video and then a cognitive sensegiving video explaining causal dynamics and a conclusion supporting an issue. The control group would first watch an emotionally neutral video and then watch the same cognitive sensegiving video as the condition group. The mental models of both groups would be measured before and after watching the two videos. If the emotional arousal produced by the first video for the condition group indeed reinforced the impact of the cognitive sensegiving—as assumed in the process theory of emotional sensegiving—then the mental model change should be larger for the condition group than for the control group.

To ensure that the emotional arousal indeed transfers from the first video to the second video, the research subjects' heart rate and skin conductance could be measured throughout the study. If the condition group's HR and GSR were higher during the cognitive sensegiving video, it could be concluded that the arousal did indeed transfer to the next moment. It would also be possible to accurately determine how long time delays between the generation of arousal and the delivery of the actual cognitive message are plausible. To further test the claim that high arousal reinforces the impact of cognitive sensegiving, the correlation between the arousal level and mental model change could be calculated. If this correlation was positive, it would indicate that the higher the emotional arousal experienced, the higher the effect of cognitive sensegiving on mental models.

Besides verifying the basic idea of the process theory of emotional sensegiving, laboratory studies could be used to elaborate the details of the model. The effect of

different emotions on the impact of cognitive sensegiving could be investigated. This could be done by varying the video that is to produce emotional arousal in the experiment: for instance, one could compare whether anger-provoking, sad, happy, or sexually arousing videos have the strongest impact. Furthermore, one could also vary the cognitive content of the second video and investigate whether some emotions are better suited for some content while other emotions are better suited for other types of content.

Also "emotion paths" could be investigated empirically. This would make it possible to test the idea that in addition to leveraging the arousal provided by a previous moment, a sensegiver might actually flip the valence of that arousal from negative to positive. For example, research subjects might first watch a sad video, then an angering video, then a funny video, and finally, a video containing the cognitive sensegiving content. It might be that the combination of these emotions produces a stronger positive arousal than a funny video alone and, consequently, has a stronger reinforcing effect on the cognitive sensegiving as well. Also several other combinations of emotions could be studied in a similar way.

Even though laboratory studies are important, the real value of this dissertation has been in describing how emotions can be leveraged in sensegiving in real organizational situations. This focus on the live settings can also be maintained in the future. Scholars can use qualitative methods and investigate how different managers, change agents, and consultants generate and leverage emotional arousal in a variety of settings ranging from casual conversations on hallways to team meetings and conference presentations. Several new tactics of emotional sensegiving can be recognized in this way. Collaborative research approaches can further generate totally new ways for increasing arousal: researchers can first develop some ideas through conceptual reasoning and then have some managers try them out in real settings and researchers can then observe their effects and further develop the tactics.

The recognition and development of alternative arousal-increasing tactics would also make it possible to compare their effects, either in the field or in the laboratory. There are several relevant dimensions along which different arousal-increasing tactics could be compared. The first one is feasibility: how feasible is the given tactic for organizational actors who must carry out their sensegiving in normal situations in normal organizations? Further dimensions include the strength of the arousal that can

be created with a given tactic, how much cognitive damage (cf. identity threats) the tactic creates, and how easily sense-receivers develop tolerance against the tactic. Cues regarding each dimension can be collected through qualitative field studies and more controlled research designs can be used to develop more accurate estimates of each parameter.

7.1.4   Further theoretical expansions

The process theory of emotional sensegiving can also inspire even broader expansions in sensegiving research. To understand how emotions can be generated, someone could study the aesthetics of sensegiving. There are several areas in the fields of arts and entertainments in which the management of emotions is central. Sensegiving scholars could investigate the tacit and explicit knowledge of the process possessed by, for instance, TV comedy writers, striptease dancers, opera performers, and rock stars. How do they ensure that their audiences will be fully engaged in the performance and experience the strong emotional reactions that keep making them come back for the next show? Can organizational sensegivers leverage those ideas? And can the formal theory of emotional sensegiving be expanded to include some of these factors?

The understanding of sensegiving that goes beyond conscious cognition to emotions could also be expanded to other non-conscious cognitive areas. The recent developments in the areas of social cognition (Deutsch & Strack, 2010), social-cognitive neuroscience (Lieberman, 2007), and neuro-economics (Loewenstein et al., 2008) have all pointed to the importance of sub-conscious processes on human behavior. For instance, subliminally presented stereotypes (Banaji, Hardin, & Rothman, 1993) and goals (Latham, Stajkovic, & Locke, 2010) have a significant influence on people's behavior. Likewise, different priming tactics, such as giving a warm cup of coffee (vs. cold, iced coffee) to a person can make him or her like (dislike) a person because of warm (cold) feelings toward that person (Williams & Bargh, 2008). It might be possible to leverage these kinds of sub-conscious effects on human information processing in sensegiving in a more systematic way. The ultimate outcome could be a process theory of "full-brain" sensegiving. This theory would include the emotional effects discussed in this thesis and complement them with other non-conscious cognitive dynamics.

7.2   Identity-Based Sensegiving Theory and Research

The identity-based ideas in sensegiving research start with the assumption that identity void or confusion is needed to facilitate cognitive change. It is seen that sensebreaking (Pratt, 2000) or ambiguity-by-design (Gioia & Chittipeddi, 1991) are necessary first steps in sensegiving. The extant theorizing assumes that when people lack clear meaning due to a void or too many meanings, they are more likely to accept a new meaning. When theorized in this way, factors influencing the process are cognitive, even though the scholars have recognized that it has emotional consequences and side effects: sensebreaking can trigger strong negative emotions (see, Ashforth et al, 2008: 329 on how identity threats create strong emotional reactions) and the whole process can ultimately lead to emotional commitment to a new idea after sensegiving (see e.g., Pratt, 2000).

However, the identity scholars have not discussed the possibility that the emotions triggered by sensebreaking can have a more fundamental role, instead of just being a side effect of the cognitive process. If communicating new ideas is closely associated in time with sensebreaking, sense-receivers can be emotionally aroused due to sensebreaking when hearing the new ideas. It is possible, then, that what seems to be a cognitive effect of sensebreaking on the persuasiveness of the new ideas is actually an emotional effect. Emotions created by sensebreaking can have a reinforcing effect on the internalization of the new ideas independent of the cognitive identity considerations. It might just be that sensegivers have learned to use identity threats through trial and error but that they work because they create strong emotions. Retrospective theorizing, based on the words remembered or recorded, has then generated a cognitive, meanings and identity -centered explanation of the processes.

The existing sensegiving studies report activities of identity breaking and then activities of sensegiving that are supposed to fill the meaning void created by identity breaking (see e.g., Ashforth et al., 2008; Corley & Gioia, 2004; Mantere et al., in press; Pratt, 2000). However, they do not describe in detail the time delays between the different activities; it is not clear from the reporting of the findings whether the delivery of new content was often preceded by reminders of identity threat or not and whether sensebreaking was often followed by the description of new content. It might be that in the original cases, sensegiving was often preceded by minor reminders of identity threat. If this is the case, the emotional reactions that result from identity threat

would be a plausible explanation for the effectiveness of sensegiving. Note that the reminders of identity threat might only consist of a few words or even non-verbal gestures that point, for instance, to luxury watches (the dreams in Pratt, 2000). A half-a-second finger point at one's Rolex would remind others that they have not yet reached their dream of being rich, hence causing negative emotional arousal or excitement about the dream. Such small reminders might be easy to miss when making field notes or analyzing data. The possibility that the main emphasis shifts over time from sensebreaking to sensegiving in organizations can make observing the small reminders of identity threat even more difficult: a researcher is likely to focus on recognizing the main phases when aggregating and abstracting data.

Due to the lack of detailed description of the time-delays in the pacing of sensebreaking and sensegiving, the data reported in the existing sensegiving studies is consistent with both identity and emotional arousal explanations. The existing studies have recognized that sensebreaking preceded sensegiving and that sensebreaking also caused some emotional reactions. The studies have not reported whether sense-receivers were emotionally aroused when they were exposed to sensegiving or not. However, given the other facts the studies have reported, the assumption that they were emotionally aroused during at least occasionally during the sensegiving is plausible. Consequently, both the identity void and the emotional arousal explanations are plausible for explaining why sensegiving reported in these studies was effective.

The data analyzed in this thesis further shows that in addition to identity dynamics, sensegiving processes contain significant emotional dynamics. Some of these emotional dynamics observed, such as jokes, had no relation to people's identities. These observations mean that the identity perspective does not explain the sensegiving analyzed in this thesis comprehensively. The emotional perspective provides a rationale why the tactics for increasing arousal might be instrumental in sensegiving. When one also takes into account the laboratory findings on the memory effects and transfer dynamics of emotions, the emotion-based theory seems like a plausible explanation. The emotion explanation is as simple as the identity explanation and it explains more facts than the identity-based explanation does.

However, more research is needed to determine whether the identity and emotion-based views are alternative or complementary explanations. It might be that only emotional arousal caused by identity threats is instrumental in sensegiving.

Alternatively, it might be that the identity-based view explains macro-level patterns whereas the emotion-based view is more suitable for explaining micro-level patterns. Future studies can contrast these alternatives by envisioning designs in which differing theories provide different predictions.

7.2.1   *Contrasting identity and emotional arousal explanations empirically*

Again, even though it is somewhat unconventional, I will provide detailed ideas of how my arguments could be tested by future research. In addition to facilitating theory development, the concrete experimental settings described below show how it matters concretely in practice whether and how identity and emotions are alternative or complementary explanations.

Future studies can develop experimental settings that provide an empirical answer to the question of whether identity, emotions, or both best explain the effectiveness of sensegiving. A study could contrast situations in which emotional arousal is produced by identity threat (condition group) or by identity-unrelated means (control group). The arousal should then be followed by cognitive sensegiving. The effects could be measured by assessing sense-receivers' mental models before and after the treatment. If identity dynamics do not matter, there should be no difference between the two groups. Conversely, if identity threats and voids are needed for increasing the effectiveness of sensegiving, then the identity/condition group should show a larger change in mental models.

The most straightforward way of carrying out the above described study would be a laboratory test. However, also field settings can be envisioned. Two groups of managers could be recruited from an organization(s) that is (are) undergoing a radical change. Both manager groups would receive training in sensegiving: one group would be taught identity-based arousal tactics and the other group would be taught identity-unrelated arousing tactics. The managers would then apply these lessons in their daily work as promoters of organizational change. Researchers would measure the mental models of the employees who work for the managers. This measurement would be conducted at two points in time and assess change in them. Also other relevant factors, such as work satisfaction, could be measured. Comparison of the effects of the two forms of sensegiving (identity threat generated arousal vs. non-identity related arousal) would show which explanation better explains sensegiving dynamics: if there were no difference between the two groups, then arousal alone would be a sufficient

explanation; if the identity group showed better results, then it should be chosen as the better explanation. This kind of a research design would also allow evaluating the size of the negative effects of identity threats compared to identity-neutral sensegiving.

The effects of identity threat and emotional arousal could also be compared by studying if the effects of an identity threat are the same regardless of whether people are emotionally aroused or not. If an identity threat has the same effect on the effectiveness of sensegiving regardless of emotional arousal then it can be concluded that emotional arousal does not explain why identity threats improve the effectiveness of sensegiving. The problem with this kind of a setting is, however, that a successful identity threat always causes an emotional reaction; it is the threat that triggers the emotion (Ashforth et al, 2008: 329). Time delay between creating the identity threat and delivering the actual sensegiving message might be one solution to this problem but it remains uncertain how much the arousal produced by the memory of the identity threat influences information processing during the second moment. Alternatively, arousal reducing medicine might be used to keep emotional arousal low. If this approach was chosen, special attention should be put to the choice of the medicine: it should reduce arousal but have no effects on cognitive processing. Given that emotion and cognition are intertwined (Damasio, 1994), this may not be an easy task. Despite the challenges of studying identity threat without emotional arousal, this kind of studies might provide valuable information and complementary evidence.

The potential complementary effects of identity threats and emotional arousal could also be investigated. If the two perspectives do indeed complement each other, it is most likely that the identity perspective explains the macro-structure of sensegiving whereas the emotional arousal perspective explains micro-level dynamics. To test if the combination of these two ideas is more effective than either one of them alone, researchers should carry out the following experiment: they should first create a basic sensegiving episode for the experiment. The macro-structure of the episode should first create an identity threat and then fill the emerging identity void with new cognitive content. At the micro-level, sensegiving should consist of arousal-(re)framing-commitment cycles. This basic combination should be compared to situations in which the same macro-structure is maintained but at the micro-level, the arousal effects are replaced by non-arousing sensegiving content during the micro-sequences and to situations in which the identity threat is removed at the macro-level

and replaced by neutral cognitive content, while the arousal-(re)framing-commitment micro-sequences are maintained. Again, participants' mental models should be measured before and after the sensegiving episode. If it turns out that the research subjects' mental models change more in the first condition that contains both identity and emotion dynamics than in the conditions in which either emotions or identity are removed, it can be concluded that the identity and emotional arousal perspectives complement each other.

If a series of experiments provides evidence that the emotion-based view can replace the identity-based explanations of sensegiving, sensegivers need to cause less existential suffering in the future. Instead of generating emotional arousal by breaking the sense-receivers' identities, managers could produce emotional arousal through other means, such as music and physical activity, as discussed above. The research on positive organizational scholarship (Cameron, Dutton, & Quinn, 2003) and appreciative inquiry (Cooperrider & Srivastva, 1987) has shown that at least in some instances these kinds of more positive approaches are possible. On the other hand, if the identity and emotion perspectives turn out to be complementary, emotional arousal can be used to increase the effectiveness of sensebreaking and subsequent delivery of the cognitive message. For instance, when convincing their followers that the firm is on a burning platform, managers could first increase the employees' arousal levels through work-unrelated ways. Consequently, the impact of the actual identity threatening communication could be more effective.

7.3 Relation to Existing Emotion-Related Ideas in the Management Research

While the majority of sensegiving research has not given a central role to emotions, there are a handful of publications in which emotional dynamics have been discussed in contexts that are relevant for sensegiving. As I will show below, these studies have recognized the importance of emotions but not considered emotional dynamics from the same perspective as I have done in this dissertation. The main purpose of this sub-section is to show that my findings and the emergent theoretical model are unique and add to the existing research. I will describe the existing ideas and then explain how my arguments differ from them.

The first set of publications suggested using metaphors and concrete illustrations. Hill and Levenhagen (1995) suggested that sensegivers should use metaphors because they

trigger emotions and, hence, commitment to ideas. Essentially, they suggest delivering both the emotional and cognitive content through the same message—the metaphor. Likewise, in a practice-oriented book, Heath and Heath (2010) suggested communicating the content of sensegiving in an emotionally appealing way to make it more effective. They emphasized the importance of identity links and concreteness in making the message emotionally appealing.

In contrast to Hill & Levenhagen and Heath & Heath, I am arguing that sensegivers can trigger emotions with one content and then deliver the cognitive message with different content. This is a fundamental insight as it simplifies the sensegiving task significantly. One does not need to be able to generate a message that simultaneously produces strong emotions and communicates the core idea in a clear way. Instead of trying to satisfy the two difficult goals at once one can first mainly focus on the first one and then on the second one. One can first maximize the impact on emotional arousal and then maximize the impact on cognition. The need to make compromises diminishes substantially.

The second set of studies has focused on matching the emotional tone of sensegiving with the mood of the sense-receivers. DeSteno et al. (2004) found that people tend to overvalue those justifications that are consistent with their emotional state when hearing and considering the justifications. They do this because they overestimate the likelihood that those consequences that match their own emotions will occur in the future. For example, when people are sad, they estimate it to be more likely that not increasing taxes will lead to sad outcomes such as health care problems and unnecessary deaths. Sad people therefore are more supportive of a tax increase than, for example, angry people who hear and process the same message. The implication of DeSteno's research is that sensegivers should read the sense-receivers' mood and emphasize justifications that are consistent with their mood. A similar idea has been applied in the management context. Rouleau (2005) found that middle managers tended to match their emotional tone with the emotions of sense-receivers when trying to give sense to them.

A straightforward difference between this thesis and the studies by DeSteno et al. and Rouleau is that my research puts less emphasis on reading the sense-receivers' mood and more emphasis on manipulating their mood. I found a set of concrete tactics that the sensegiver used and abstracted mechanisms and several principles that sensegivers

can use to increase the participants' level of emotional arousal. Hence, my focus was on how sensegivers can generate emotional arousal to make things happen, whereas DeSteno et al. and Rouleau focused more on how sensegivers should adapt to sense-receivers' emotions.

The idea of emotional balancing constitutes the third segment of existing studies that have somehow linked emotions and sensegiving. Huy (2002) investigated how middle managers carry out emotional balancing. The basic finding was that successful units had both managers who pushed for new behaviors and managers that emphasized the change-related negative emotional reactions. The units that balanced between pushing and empathy were successful. When reflected against the identity-based sensegiving studies, it can be argued that Huy described a successful way of coping with the emotional side effects of cognitive change; one must address the negative emotions but not kill the change momentum. However, the possibility of leveraging the negative emotional arousal remained unexplored. It should also be noted that the focus of Huy's paper was not on sensegiving per se, but rather on coping with and managing organizational change.

Fourth, the idea of showing "the right" emotions as a sensegiving tactic has emerged most recently. Huy & Zott (2010) described tactics that sensegivers used to generate trust in stakeholders. Unfortunately, their paper suffers from the same methodological limitation as most sensegiving papers: it analyzes words written on paper rather than the actual events those words are used to describe. The difference is that this time these words contain descriptions of emotional dynamics. However, they are still retrospective accounts of events that have contained much more than people can consciously recognize, let alone remember in an interview. Despite these limitations, the core idea of the paper is worth discussing here.

Huy & Zott (2010) found that entrepreneurs tried to show, for instance, confidence and passion to stakeholders. They argued that the entrepreneurs' emotional displays made the stakeholders perceive them as more entrepreneur-like and, consequently, make them more willing to give resources to the entrepreneurs. In essence, then, the core idea of Huy and Zott is that the showing of some emotions can be considered as a sensegiving act: when you show that you are feeling the right emotions, others can conclude and trust that you will succeed. The sense-receivers take their perception of the emotional display as an additional data input for their cognitive sensemaking. In

contrast, I was studying how sensegivers generate emotional arousal in sense-receivers; and how emotional arousal felt by sense-receivers influences their sensemaking processes non-consciously and reinforces the effect of cognitive sensegiving. In my theorizing, the emotional state of the sensegiver is not taken as an input for a rational process; rather the emotion induced by the sensegiver in sense-receivers influences how the sense-receivers will interpret, internalize, remember, and act on the information provided by the sensegiver.

Fifth, Hodgkinson and Healey (in press) argued that creating emotional commitment to strategy is essential for seizing new opportunities. In their conceptual paper, they grounded the discussion on how to create such emotional commitment on the current identity-based ideas. In this thesis, I have shown an alternative, emotional arousal - based way of increasing emotional commitment. In this way, I have built on top of Hodgkinson and Healey's key argument and increased our understanding of how the desired outcome could be reached.

7.4   Using Video for Analyzing Sensegiving

I argued that methodological reasons partly explain why previous sensegiving studies have overemphasized the content of words at the expense of emotions. Previous studies have relied on field notes and interview transcripts when analyzing sensegiving and, consequently, concluded that identity and meanings are central to explaining what happens during sensegiving. Drastically differing from the previous studies, I used video to analyze sensegiving which allowed me to identify the emotional dynamics of sensegiving. This allowed me to pay attention to the way the words were said, the emotional expression and tone of the sensegiver, and to the emotional reactions of sensegiving. This methodological advance over the previous sensegiving studies allowed me to recognize previously ignored but fundamentally human and extremely relevant emotional dynamics in sensegiving.

I used the video to analyze the sensegiver's and the sense-receivers' emotions in an unstructured way. However, future research can use more systematic ways for analyzing emotions. Video can be used to code emotions from facial expressions using the Facial Action Coding System (Ekman & Friesen, 1978). This coding system recognizes all muscle movements in the human face and, thus, provides a relatively objective way for determining emotions. Other opportunities for systematic coding of emotions include some bodily gestures (e.g., de Meijer, 1989) and the volume and

pitch of voice (e.g., Sobin & Alpert, 1999). Management scholars have also started to investigate how physical location and gestures could be recognized from video (LeBaron, unspecified; Whittington & LeBaron, 2010). This dissertation has only taken a preliminary step in the direction of using these possibilities for understanding sensegiving. I hope that this dissertation will contribute to the research practice by encouraging more researchers to use video in their work.

The use of video recording instead of field notes or voice recording provides some additional complications in the data collection phase. First, getting participants' consent can be more difficult because some people do not want to be recorded on video even if they were OK with voice recording. I initially planned to video record my interviews also but I had to abandon this idea because of these kinds of reasons. Second, even if people give their consent, they may still be more self-conscious than usual when they know that they are being video recorded. This issue must be dealt with on a case-by-case basis. One option for solving the problem is locating the video camera in a hidden or non-intrusive place, like I did in this study. A third challenge relates to mobility: a lot of sensegiving happens on the road, for instance, in hallways and through a series of meetings and phone calls. Being able to capture such "moving sensegiving" with video will be more difficult than recording a physically stable setting, as I did.

Analyzing data is the most central phase in theory building qualitative research. Many people have access to vast amounts of qualitative data (basically everyone who works in organizations) but only few people are able to generate theory from that data. This basic principle applies also to video analysis. Based on my experience, the most central thing to do in video-based analysis is indeed to analyze the actual video, not a transcript of the video. Being used to having interviews transcribed, my initial impulse was to also have my video transcribed. However, I soon realized that the act of transcribing the video would reduce the data to mere text on paper whereas my goal was to analyze rich audio-visual data on what happened in the sensegiving instances. I, therefore, chose to analyze the video itself and add my first-order codes directly to the video. This required digitizing the video and using software that allowed doing this.

The final phase in theory building is reporting the findings. When the main data is on video, transforming it into text can be difficult. It becomes challenging to verbalize all the non-verbal cues that are used to understand what is going on in the situations

analyzed. I tried to cope with this challenge by describing several non-verbal behaviors, such as facial expressions, the tone of voice, and body movements in my text. In addition, I used some screenshots from the video to provide a sense of the data behind the text. While these are preliminary steps, I believe that future research will develop ever better ways of describing video-based data in text.

8   CONCLUSION

This dissertation has aimed to do to sensegiving research what Damasio (1994) and Loewenstein (e.g., 2008) have done for decision making research—bring in emotions in a way that transforms our understanding of the phenomenon under study. Previous sensegiving research has been over-focused on cognition, mainly in identity and the meanings of words. This focus has ignored large parts of the human brain that influence information processing, memory, choices, and actions. By theorizing and illustrating empirically how sensegivers can leverage the emotional dynamics that happen in human brains, in the subjective experience of people, and between people, this dissertation has expanded our understanding of sensegiving as a phenomenon.

I developed a process theory of emotional sensegiving to fill in the emotion gap in the sensegiving research. It contributes to our understanding of sensegiving as a phenomenon in two main ways. First, the recognition that sensegivers may indeed try to influence sense-receivers' emotional state in the first phase of sensegiving (and not their cognitions) allowed one to see several new aspects in sensegiving. Many tactics that seem to not make sense from a cognitive point of view indeed do not have a cognitive meaning—they are carried out to influence the sense-receivers' emotions, not cognitions. The emotions generated in a first moment in time can influence how sense-receivers respond to information communicated in a second moment in time.

Second, the process theory of emotional sensegiving shows how sensegivers can change sense-receivers' mental models through a sensegiving process which consists of dozens of cycles of increasing emotional arousal, cognitive (re)framing, and reinforcing commitment to (re)framed ideas. Emotional arousal that is produced at the beginning of each micro-sequence transfers to the next moment and becomes associated with the cognitively (re)framed content. The additional tactics for reinforcing commitment further strengthen this association and commitment to the idea. To ensure that sensegivers will not reject the whole sensegiving approach, the micro-sequences must be accompanied by a background process which sufficiently

justifies and legitimizes the sensegiving tools the sensegiver is using. In addition to describing these basic elements of the process theory of emotional sensegiving, I also theorized how the valence and intensity of the emotional arousal, time delays between different micro-phases, different combinations of emotions, perceptions of cognitive continuity, and sense-receivers' mental models all influence how well emotional sensegiving will succeed. Each of these nuances, as well as the basic dynamics of the process theory of emotional sensegiving increased our understanding of how emotions are a central part of sensegiving. I envisioned a large research program that can examine the effects of each of these variables and also further expand the process theory of emotional sensegiving.

In addition to increasing our understanding of sensegiving as a phenomenon, the process theory of emotional sensegiving has implications for the currently dominating theories. The current sensegiving theories assume that identity has a central role in sensegiving; most importantly, they basically argue that some sorts of identity threats are necessary for the success of sensegiving. I argued that identity threats may be instrumental because they generate emotional arousal, not due to their cognitive effects. I showed that there might be cases where such identity threats are not needed but sufficient results can be achieved by using identity-neutral emotional arousal. I described several research designs through which future research can further examine to what extent identity and emotional arousal views are alternative explanations and to what extent they complement each other.

I was able to make my empirical findings because I used an analysis method that is new to sensegiving studies. Instead of relying on interviews and field notes that emphasize the content of words spoken at the expense of everything else, I relied on video recording. By capturing and analyzing video, I was able to better theorize what went on in the sensegiving instances at the emotional level. Mere words tend to overemphasize cognitions, meanings, and identities whereas video provides a more balanced representation of verbal and non-verbal communication. This alternative methodological approach seems promising and future research will hopefully further develop video-based analysis approaches for studying sensegiving.

In sum, this dissertation has tried to incorporate emotions into our current understanding of sensegiving. I developed a process theory of emotional sensegiving and discussed its implications for our understanding of sensegiving as a phenomenon

and for the current identity-based sensegiving theories. I also discussed how video can be used to capture more non-verbal sensegiving dynamics than field notes and interviews do. These have been early steps in a research program that considers the ways managers and other actors can leverage emotions to increase the effectiveness of their sensegiving.

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Emotional Sensegiving

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