

Thesis for the degree of Doctor of Philosophy

‘Getting’ it Together  
In  
Joint Directed Action

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## Abstract

This thesis is focused upon investigating how come activities in organizations are sometimes not aligned with an objective at hand, be it a project goal, safety, quality or other. When something goes wrong, where are the answers to be found? In the pursuit to examine these questions further, the aim of the thesis has been to *investigate meaning making in action* as this can increase an understanding of how actors may continuously align their actions, collective and/or individual, with a common goal – this process here being called Joint Directed Action (JDA). Studying the relational aspects in the two-way process of meaning making and action is claimed to be a neglected area in the research of how actors make sense of their realities. As such much could be gained in terms of understanding how actions unfold by focusing upon these issues.

This thesis illustrates how meaning and action constitute a two-way process unfolding in a continuous interpretational-relational process that needs to be given attention in the pursuit of JDA. By being aware of how meaning and action are intertwined, actors can naturally become attentive to contextual cues and how management ‘systems’, such as Quality Assurance Systems, in their enactment become co-authors shaping the organizational landscape. These are important issues in the pursuit of JDA.

This thesis provides a method for facilitating meaning making in organizations. Knowledge Overlapping Seminars (KOS) — a conversational tool based upon facilitated reflection and dialogue — is presented as a means to increased awareness of different interpretations of e.g., a project goal due to local realities and identities within an organization. KOS is a method with the aim of increasing efficiency and reliability in organizations by e.g. delimiting misunderstandings and bridging knowledge gaps between local identities. In this thesis KOS has been applied and evaluated in a Six Sigma project.

Based upon findings from the studies it is clear that actors, in the pursuit of JDA, are aided by being aware of how they ‘see things’ differently due to local interpretations. It is further argued that actors can pursue JDA by being able to ‘relate’ to one another. The ‘relating to one another’ is based upon an awareness of how the organisational landscape is continuously shaped and re-shaped due to the reflexive relationships among meaning making, identity creation, emotional activities and action within the flow of conversational activity. And so it is contested here that in the co-authoring of relational landscapes characterized by an interrelating which is heedful, attentive and conscientious actors can ‘‘Get’ it Together’ in the continuous pursuit of Joint Directed Action.

**Keywords:** quality sciences, meaning making / sensemaking, Joint Directed Action, interpretational-relational, relational landscape, language / discourse, identity, emotion, action.

To  
Elsa and Gustav

## ACKNOWLEDGMENTS

This is often the last and maybe to some extent the most difficult part to write, as it is the only thing many people read when opening a thesis.

However, I will make it simple:

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relational activities in understanding how actions unfold and shape our realities has deepened considerably through my interactions with you all.

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*Finally...*

Karin – thanks for just being you and being my friend and thanks for all your help with the children!

My mother – thank you for helping out! I’m sure you are happy I’m done now — at times you seemed more stressed over my work than I was.

And Stefan — without your loving support in so many ways this journey would never have been completed, I am sure of it. Now it’s your turn ☺

And at last my wonderful children Elsa and Gustav. You have (from the moment you were born) been a continuous source of inspiration and happiness, and there is nothing better than a stomach flu to ground you from the spheres of abstract thinking! Elsa, ‘the book’ is now done and I can finally come and play. And Gustav: I promise I will not open my computer anymore when I watch Bolibompa with you.

At my kitchen table in Mölndal a typical November afternoon in the year of 2009.

Christina Mauléon

# DISSERTATION

This thesis is based on the work for the following papers. The papers will be referred to in the text either by their names or by Roman numerals as follows:

## **Paper I**

Mauléon, C. and Bergman, B. (2009): Exploring the epistemological origins of Shewhart's and Deming's theory of quality: influences from C.I. Lewis' conceptualistic pragmatism. *International Journal of Quality and Service Sciences* Vol. 4, No 1. pp. 77-89.

## **Paper II**

Mauléon, C., Bergman, B. and Alänge, S. (2003): Common concepts for Common Action: Sense Making or Senseless Making in Organizations? *Proceedings from the EGOS Colloquium (European Group for Organization Studies)*, 3-5 July 2003, Copenhagen.

## **Paper III**

Gauthereau, V. and Mauléon, C. (2009): A Pragmatist Framework for Promoting a Safety Culture in Health Care. *Submitted for publication*.

## **Paper IV**

Mauleón, C. and Cronemyr, P. (2009): Knowledge Overlapping Seminars: A Conversational Arena for Facilitating Co-construction of Shared Understanding in Projects. *Submitted for publication*. (Earlier version in *Proceedings from Quality Management and Organizational Development (QMOD) International Conference*, 9-11 August 2006, Liverpool.)

## **Paper V**

Mauléon, C. and Ollila, S. (2009): The drama of co-construction — exploring what 'goes on' in a conversational arena. *Submitted for publication*. (Earlier version in *Proceedings from the EGOS Colloquium (European Group for Organization Studies)*, 2-4 July 2009, Barcelona).





## DISTRIBUTION OF WORK IN PAPERS

### **Paper I**

This paper is an equal effort by the two authors regarding reading and analyzing the literature investigated; however, I wrote most of the text.

### **Paper II**

For this study I developed the project, collected all empirical data, transcribed it, analyzed and wrote the paper. However, the two other authors supported me somewhat in analyzing the data.

### **Paper III**

The initiative for this paper came from Gauthereau, who had collected and analyzed the empirical data used. However, both authors have contributed equally to writing the paper.

### **Paper IV**

A first draft of this paper was presented at QMOD (*Quality Management and Organizational Development (QMOD) International Conference, 9-11 August 2006, Liverpool*) and was a joint effort where both authors collected data and jointly held Knowledge Overlapping Seminars. We also divided the transcription of the work. However, after review comments I am now the principle author as I have re-written most of the paper, added new theoretical perspectives and re-analyzed the findings.

### **Paper V**

This is a joint effort in analyzing and writing the paper, although I was mainly responsible for collecting and transcribing the empirical material.



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**PAPER II** — COMMON CONCEPTS FOR COMMON ACTION: SENSE MAKING OR SENSELESS MAKING IN ORGANIZATIONS?

**PAPER III** - A PRAGMATIST FRAMEWORK FOR PROMOTING A SAFETY CULTURE IN HEALTH CARE.

**PAPER IV** — KNOWLEDGE OVERLAPPING SEMINARS: A CONVERSATIONAL ARENA FOR FACILITATING CO-CONSTRUCTION OF SHARED UNDERSTANDING IN PROJECTS.

**PAPER V** - THE DRAMA OF CO-CONSTRUCTION — EXPLORING WHAT ‘GOES ON’ IN A CONVERSATIONAL ARENA.

# FOREWORD

*As we relate together so do we construct our future.* Kenneth Gergen, 2007

My hopes for this thesis are not humble, and my ambition has been high throughout my research journey. In fact my desire with these pages is to invite you -the reader- to a reflectional journey about how actions unfold.

It is difficult to set words to something that has become an integrated part of one's life, and my only hope is that I, in some way, can give justice to my research journey in this text. In addition I also wish to make a note that my background, my nationality, my gender, and my belonging to the generation born in the 70's have undeniably colored the research at hand. I live an advantageous life in relation to the majority of humankind today, which has definitely influenced the way I have conducted my research. However, I believe that the phenomena here studied can be found anywhere, as what I am interested in is the fundamental ways we co-author our realities which, I believe, we need to get a better understanding of, as this understanding not only shapes the lives of ourselves but also others.

It was my need to 'understand' that set me off into pursuing a PhD. What better context than the research environment if one wants to profoundly begin to make sense of something? And the 'something' I have in this thesis is trying to make sense of how come actions sometimes are not aligned with a common objective. How come practices in organizations change and seemingly suddenly are completely transformed, with at times detrimental outcomes? How come things happen despite the implementation of management systems to 'ensure' that they will not happen?

I believe that by trying to 'understand' and make sense of something we can add another piece of the puzzle in explaining an event. Understanding, if only in the slightest sense, gives us a glimpse of possible future actions. However, by understanding I do not wish to propose excuses for 'bad' choices of action or simply inaction, I simply want to shed some light upon how come these choices of action or lack of choices are made. And hopefully by investigating some of the underlying reasons for these choices, new ways of action can be chosen when facing a similar situation in the future.

As I believe that we continuously co-author our realities by making sense of experience through interpretation and in our relational activities, we are both singularly and collectively responsible for what we create. It is our responsibility to act, if only humbly, whenever confronted with 'evidence' that something is wrong. Just as I believe in my own capability of making a difference, I am equally convinced that everyone else can too, in whatever context we are involved in. We need, at the end of the day, to understand this responsibility of our own *and* our collective actions, as this is "How we can go on" (Gergen, 2007, prologue) together.



# PROLOGUE

Times online

September 10, 2008

Battered baby left with his mother, court hears

Adam Fresco, Crime Correspondent

---

A baby was murdered by his mother and her boyfriend after initially suffering a catalogue of injuries including fractured ribs and a broken back that had left him paralysed, a court heard.

The 17-month-old boy was subjected to “a course of assaults of increasing violence” over many months at his North London home, despite being on a council’s at-risk register, the Old Bailey was told yesterday.

He was examined many times by doctors, seen by a health visitor and social workers and listed on Haringey’s child protection register for nine months as being at risk of neglect and physical abuse, the jury heard.

---

This is the tragic story of a little baby boy called Baby Peter in the press. This little boy died, in the most horrific way, at the hands of his caregivers, his mother, a stepfather and another man. Children being killed by their caregivers are always a tragedy, and we will unfortunately every now and then hear other such stories. However, the majority of us do not accept this, which is why we as a society have organized social service systems with the purpose of safeguarding children at risk. And it is here this specific tragedy opens out. Baby Peter was registered on Haringey’s Social Services at-risk register, and was seen by professionals 60 times, the last one being a medical exam 2 days before his death. He had also been put into care twice in his short life. Despite these facts we hear that he was repeatedly failed by the social service system. How could this happen?

BBC news

September, 2008

Ed Balls, Secretary of State for Children, Schools and Families, UK says:

---

Baby Peter had been subject to a child protection plan from 22 December 2006, following concerns that he had been abused and neglected. He was still subject to this plan when he died [9 months later, author's comment]... That is the most serious failing of all. We will not rest until we have the very best child protection arrangements in Haringey and across our country.

---

But reading the following statement it seems they already had the best child protection arrangements in Haringey.

Times online

December 2, 2008

### The Real Lessons of Baby Peter

---

Haringey's management of child protection was clearly a shambles. Yet it was "compliant" with many of the systems put in place since the horrific death of Victoria Climbié. Last autumn Ofsted, newly appointed as the children's inspectorate, delivered a glowing verdict on Haringey's child protection services, awarding that department its highest rating of three stars. Ofsted said that "thorough quality-assurance systems are in place".

---

What is striking here is the remark that the child protection services were awarded the highest rating and had a thorough quality assurance system in place. What does this imply? What went wrong? After all, with the highest ratings and a thorough quality assurance system in place one should expect that Baby Peter would not have come to harm.

We do not know yet what happened in Haringey; what we do know is something went terribly wrong and a baby was left in a harmful environment and subsequently beaten to death.

The case of Baby Peter illustrates a tragic example of an outcome in a setting that was created to safeguard children at risk. Although he was registered on the 'at risk list' within the system of child protection services — Baby Peter was tortured to death. What happened here? How come these officials weren't attentive to Baby Peter's situation? How come they ignored the signals given when seeing Baby Peter that something was terribly wrong in his situation? It seems that the officials involved in the case of Baby Peter simply failed to act upon the information they had. How come?



## CHAPTER 1 - INTRODUCTION

This thesis is focused upon investigating how come activities in organizations sometimes are not aligned with an objective at hand, be it of e.g. a project goal, safety, quality or in Baby Peter's case — his wellbeing. I am curious as to why things happen despite our having implemented management systems to ensure that we take action so that they will not happen. When something goes wrong, where should we be looking for 'answers'? In my pursuit to examine these questions further, the aim of the thesis has been to *investigate meaning making<sup>1</sup> in action* as this can increase an understanding of how to pursue Joint Directed Action (JDA) — in this text denoting a continuous pursuit of all actors aligning their actions, individual and/or collective, with a common objective. JDA describes how separate and/or collective actions continuously can become aligned through an attentiveness of how meaning making and action are intertwined, one is the origin of the other. Although targets can be reached despite actions not consciously being aligned in the same direction, it is here argued that increased efficiency and reliability could be gained by being attentive to the processes of meaning making in organizations (Weick, 1995; Weick et al., 2008).

Within organization studies we find a lot of research having a focus upon what organizations could become if people were able to use their capabilities more efficiently (Addleson, 2006). Having a focus upon the individual and his/her capabilities is often presented within the cognitive school (Tsoukas, 2005; Gauthereau, 2003; Tomicic, 2001, Czarniawska, 1997), which also assumes that the way the individual organizes information and makes it meaningful is through interpretation (Weick, 1995; Lewis, 1929). Having a cognitive perspective upon organizational behavior<sup>2</sup> and change is often represented within Quality Management. For example, within Six Sigma we find how it is through the identification of so-called champions that the single individual is seen to be the key to organizational transformation, learning and development (<http://www.isixsigma.com>). By having extraordinary organizational skills, the champion is responsible for bridging any difficulties

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<sup>1</sup> Throughout this thesis I will alternate between 'meaning making', 'making sense of' or 'sense making' these here denoting the same thing. I have a relational-interpretive perspective upon the process of meaning making which will be further described in the theoretical chapter.

<sup>2</sup> In this thesis behavior and action are seen to be the same thing which is intentional action. Behavior and action cannot be without intent as they are always situated in some context (Czarniawska, 1997).

between Six Sigma Projects and the ‘regular’ top-level organization. The same goes for Six Sigma Black Belts within North American Six Sigma literature. Here Black Belts are considered to be iconic problem solvers who use tools and methodologies initiated by Shewhart in 1931 in their problem solving practices. Thus a cognitive perspective upon improving organizations is about good leadership, where individuals have the capacity to ‘lead’ others into the ‘right’ direction (Addleson, 2006).

Having a cognitive perspective upon organizational behavior also has implications for understanding ‘failures’ within organizations. The recipe for disaster when having this perspective upon organizational behavior is often “...let’s get this quality thing behind us”. (Weick, 1995, p. 187). Where quality is seen as something that can be fixed once and for all by implementing e.g Quality Assurance Systems (QAS) — and when something goes wrong the analysis is often that people do not know these systems well enough, and the solution becomes to provide more education on how to work with them (Weick, 1995). But what is ignored by having a cognitive perspective upon organizational behavior is an awareness of how the enactment (Weick, 1995) of these management systems are *not only* the result of individual interpretations of the ‘systems’ (Weick et al., 2008; Weick, 1995; Lewis, 1929) but are *also* the result of how actors make sense of them in relational activities such as conversations (Gergen, 2007; Shotter, 2002; Cunliffe, 2001, Bakhtin, 1986).

Although we, within the field of quality management literature, find Deming’s (1993) description of profound knowledge that argues for the importance of having a systems perspective upon organizations where understanding the nature of variation, knowledge and psychology are key aspects in managing for quality; Deming still focuses upon the individual and does not acknowledge how relational activities and action are intertwined. Consequently, we can speculate as to how a lack of understanding of these issues can explain reported superficial implementations of Quality Management Systems (Giroux & Landry, 1998) or TQM ‘failures’ (Weick et al. 2008; Park Daahlgard, 2000; Kroslid, 1998).

Today we can find within the Scandinavian application of Six Sigma (see e.g. Cronemyr, 2007) and quality management in general (Bergman and Mauléon, 2007) a first few fumbling attempts at understanding how relational activities and action are intertwined. However we still find little evidence in existing quality science research as to describing the way relational activities and action are intertwined and as such shape not only the enactment of quality management systems but also the organizational landscape. As such it is here proposed that by adding a relational perspective upon how actions unfold (see e.g. Gergen, 2007; Shotter and Cunliffe, 2006; Shotter, 2008; 2002; Cunliffe, 2001) much could be gained in the pursuit of Joint Directed Action in organizations.

In this thesis a relational-interpretational perspective upon meaning making, mediated through language, is presented to illustrate how meaning and action are intertwined. Having a relational-interpretive perspective upon meaning making, we find how management ‘systems’ are continuously made sense of and enacted (Weick, 1995) through interpretation *and* relational activities simultaneously. These processes are not separable: one is the origin of the other and so on in a forever ongoing process. By adopting this perspective upon how actions

unfold it is here argued that actors can avoid the trap of having complete confidence in management 'systems', expecting 'them' to ensure anticipated outcomes. Having a relational-interpretive perspective upon organizational behavior, management systems are further not only seen to *describe* a certain action but are also understood to be *part of* action and as such become co-authors (Shotter and Cunliffe, 2002) of the organizational landscape (Gergen, 2007).



## CHAPTER 2 - CONCEPTUAL FRAMEWORK

*...knowing begins and ends in experience, but it does not end in the experience in which it begun.*

- Clarence Irving Lewis

### ESCAPING DUALISM WITH REGARD TO MEANING MAKING

To describe the relational-interpretive perspective upon meaning making more clearly, I will first describe the classic debate of dualism within sociology, as it is from this debate that the relational-interpretive perspective originates. This debate concerns the separation of individual and society, later named structure and agency, micro versus macro levels, body versus mind, and product versus process. Researchers have been seeing it as a matter of taking sides. Both social constructionism (Berger and Luckman, 1966) and critical realism (Bhaskar, 1989; Archer, 1988; 1995; Giddens, 1987) later argued against this dualist approach and talked about focusing upon the *interplay* and *interconnectedness* between the two.

Archer (1988) proposes that we examine the interaction between structure and agents, operations and actions, individuals and society rather than seeing them as one forming the other, because the whole point of analytical dualism is to be able to investigate the relations between them. The duality aspect Archer challenges is what Bhaskar claims: “If society is the condition of our agency, human agency is equally a condition for society, which in its continuity, it continually reproduces and transforms. On this model then, society is at once the ever-present condition and the continually reproduced outcome of human agency: this is the duality of structure” (Bhaskar, 1989, p. 123).

However, describing *interplay* and *interconnectedness*, Sztompka (1991) argues is simply not enough in describing the relations between structure and agency. Sztompka (1991) has elaborated upon this matter and argues for a third direction that utilizes the insights from both sides. He does not want to treat ‘structure in operation’ and ‘agents in actions’ as analytically separable nor as mutually reducible. He describes a third intermediate, and in my interpretation, relational level where he gives the following examples of his idea:

“...anything that is actually happening, is it not always, without exception, a fusion of structures and agents, of operation and action? Show me an agent which is not enmeshed in some structure. Show me a structure which exists apart from individuals. Show me an action

which does not participate in societal operation. Show me a societal operation not resolving into action. There are neither structure-less agents nor agentless structures. At the same time structures do not melt away into agents nor agents into structures.” (Sztompka, 1991, p. 92).

Following this line of reasoning, we find Sztompka (1991) describing our way of thinking of or treating something abstract as if it existed as a real and tangible object. He calls this the “...illusion of reification... “(p. 93). What he argues against is that we think of states, bureaucracies, economies, political regimes, social systems etcetera as a super-individual, standing above us, distant from us, independent of our will and still controlling our lives. But this is only an illusion. If social objects are super-individual at all, it is only in their material, physical form, as for example buildings, offices, courtroom, prisons, hospitals, airplanes and so forth. Their truly social, institutional nature consists entirely of people and their actions. They exist only so long and only so far as individuals fill the material shell with actions.

What Sztompka (1991) therefore says what truly exists in society, in the ontological sense, is ‘the unified socio-individual field’, the third level of reality between traditionally conceived levels of totalities and individualities. He argues that the concept ‘socio-individual field’ overcomes the opposition of the individual versus society. Sztompka (1991) perceives the individual as having a ‘free’ will with the proviso that her/his actions are acted out in a constrained environment such as our social contexts. “In taking action directed at a constraining environment the individual is reflectively influenced by its limitations, has to adapt to them by changing his/her actions and even in the long run, curbing and reshaping the very tendencies to act his/her immanent drives. The individual thus modifies her/his actions and also changes her/himself under the impact of the ‘clash’ with ‘hard’ realities” (Sztompka, 1991, p. 66). What is found here is the continuous intertwining and shaping of the local reality, that is the socio-individual field, and identity.

The tension between the agent’s (in this thesis further called actor) free will and the constrained environment is what Sztompka calls agency. Agency is the “...really real reality...” of the social world (Sztompka, 1991, p. 96). It is where structures (capacities for operation) and agents (capacities for action) meet in “...a fusion of structural circumstances and agential endowment.” (Sztompka, 1991, p. 97). Agency is thus doubly conditioned: from above by the balance of constraints and limitations, resources and facilities provided by existing structures; and from below by the abilities, talents, skills, knowledge, attitudes of societal members and the organizational forms in which they are pooled together in collectives, groups, social movements and so forth. But it is not reducible to either (Sztompka, 1991).

By adopting a relational interpretive perspective of meaning making I wish to depart from the perspective of *either/or*, that is seeing meaning as a result of *either* interpretation *or* being socially constructed. The perspective of meaning making in this thesis is seeing meaning, mediated through language, being continuously shaped in the fusion of interpretation and relational activities and as such shapes our realities.

## **PRESENTING A RELATIONAL-INTERPRETIVE PERSPECTIVE**

To get closer to understanding how meaning is continuously shaped in the fusion of interpretation and relational activities, I will in the following present the conceptualist pragmatist C.I. Lewis and his theory of knowledge where he describes interpretation as part of meaning making. Lewis is a pragmatist who profoundly influenced Shewhart and Deming in their development of a theory for quality (for more see paper II or Mauléon et al., 2003). Following this a presentation of different relational theorists such as e.g. Shotter, Cunliffe and Gergen, and their perspective on how meaning is located within relational activities is given. Thereafter conversation as a medium for meaning making is presented. I will here describe how meaning making, action, emotions and identity, are intertwined in conversational activity shaping the organizational reality.

### ***MEANING AND INTERPRETATION***

Meaning, Weick (1995) argues, is a retrospective process, but how can we know this, if meaning is shaped in the situation as relational theorists (such as Shotter, 2002; Cunliffe, 2002a; 2002b; Gergen, 2007) claim? Then retrospectively we cannot know this. Here we find how the ideas of the conceptual pragmatist Lewis (1929) can help us. He describes how meaning is shaped through reflection of previous experiences, interpretation of present experience and anticipation of future experiences (Lewis, 1929). This means that actions are the result of reflections of the past, which influence interpretations of the present and anticipations of the future. One could also describe it as: our reflections of the past influence our interpretations of the present and thus shape future actions. Thus following a pragmatist view we get past the duality of seeing meaning as a retrospective interpretation process or a socially constructed process in the present — it is both and more.

Lewis (1929) describes this clearly in his development of a theory for knowledge, where he describes the interpretation process which he also refers to as the learning process, in detail. To Lewis, knowledge in general is about experience. It is through the process of interpretation of experience in which knowledge is generated. Interpretation of experience is done through our ‘a priori’<sup>3</sup>. Where the ‘a priori’, in Lewis’ (1929) definition, is simply the instrument that our mind imposes upon experience in order to interpret it. The ‘a priori’ is built upon a conceptual framework which in turn is built upon our categorization and classification of experience. It is through the system of categories we can interpret, interrogate, comprehend and understand experience. But there is a difference between categories and concepts. For example the word ‘disease’ is a category but the meaning of it is its concept. And concepts, that is the meaning of a category is determined by the social context. Therefore Lewis remarks do our categories usually remain the same but the concepts may change over time.

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<sup>3</sup> Could be likened to mental models (Senge, 1994).

What we find here is how the process of interpretation is not only determined by a cognitive process but also in the social.

Given the above, experience in part is a product of our mind since experience is interpreted by our ‘a priori’ with its conceptual modes (Lewis, 1929). However the ‘a priori’ is also intertwined and shaped by experience in a forever ongoing spiral of knowledge building. It is therefore not possible to clearly separate ‘mind’ from ‘experience’, since whatever experience may bring, our mind will impose upon it its ‘a priori’ in order to structure and interpret it. Our mind therefore is the origin of experience and experience is the origin of mind and it is from this intertwining action unfolds.

The pragmatic element, in Lewis’ (1929) theory, is found in his explaining how we have a possibility of selecting our ‘a priori’. As the ‘a priori’ is created by our mind so can we also alter it and this is done through reflection and reflection is the only way to become aware of and to know our ‘a priori’. Lewis further describes that without the awareness of our own ‘a priori’ we cannot possibly understand another person’s perception and action. As such is reflection not only necessary to know our own ‘a priori’ to be able to understand and change our way of action but it is also necessary in order to understand others actions and to be able to cooperate (Lewis, 1929).

Lewis further describes how “Our common world is very largely a social achievement – an achievement in which we triumph over a good deal of diversity in sense–experience” (Lewis, 1929, p. 93). And he illustrates how we need to create ‘common concepts’ if we are to be able to cooperate where “congruity of behavior”(Lewis, 1929, p. 30) is the ultimate practical test to see if there exists common meaning (common concepts). Here Lewis acknowledges how “‘Speech’ is that part of behavior most significant for common meaning and understanding and most useful for securing human cooperation” (Lewis, 1929, p.90). However, he does not elaborate *in depth* how the relational activity of ‘speech’ (Lewis, 1929) is intertwined with meaning and action and as such shapes our realities.

While Lewis acknowledges the social intertwining with meaning and action, my interpretation is that he primarily has a cognitive focus through the act of interpretation. Limited by this focus upon the individual, the possibilities of understanding more specifically how meaning is also shaped in relational activities such as conversations passes us by. Here we can find assistance by adding relational perspectives (see ex. Shotter, 2002; 2008; Cunliffe, 2002a, b; Gergen, 2007).

### ***MEANING – A RELATIONAL PERSPECTIVE***

Seeing meaning as shaped in our relational activities means that it is shaped *in* our coordinations, co-actions or ‘joint actions’ (Berger & Luckmann, 1966; Shotter, 2002; Gergen, 2007). It is not hidden in someone’s head, but occurs in the ceaseless flow of living, language-interwoven relations between ourselves and others (Wittgenstein, 1953; Shotter, 2005) or ‘othernesses’ (Shotter, 2005). It is situated within our ‘joint action’ or what Shotter (2002; 2006) in later writings calls ‘dialogically structured’ activity. These ideas are influenced by



Bakhtin's (1986) 'responsive dialogical' approach to language, where he describes how the word cannot be assigned to a single speaker, "...the speaker has his/her own inalienable right to the word, but the listener has her/his rights and those whose voices are heard in the word before the author comes upon it also have their rights" (Bakhtin, 1986, p. 121-122); therefore "The relation to meaning is always dialogic" (Bakhtin, 1986, p. 121).

In this statement by Bakhtin we find how speech (talk, conversations) is intertwined with meaning and thus we find how in the very saying of something we are also performing an action. Related to this we find Gergen (2007) claim that utterances have a performative function and as such is part of action. In this realm we further find Vygotsky (1986), who focuses upon speech as action. Like Bakhtin, Vygotsky (1986) describes how it is *within* the complex internal relations, characteristic of a living whole, where the possibility exists for a meaningful use of our words that go on shaping, directing and organizing people's action. Meaning thus, in a relational perspective, is not solely a result of interpretation, but is located *within* the action two or more people engage in (see e.g. Gergen, 2007; Vygotsky, 1986). Meaning is created in the 'dialogical reality or space' (Bakhtin, 1986) people construct in their joint actions (Shotter, 2002). Observe, however, that Gergen (2007 referring to Bakhtin, 1986) reminds us that the actor in her/his performance always carries "...a history of relationships, manifesting them, expressing them" (Gergen, 2007, p. 133). And it is here we find the connection to Lewis (1929) when he describes how these histories of relationships shape our 'a priori' and as such are part of shaping meaning. What is noteworthy here is that the relational perspective seems to neglect how future anticipations also are part of shaping meaning and action, as was described in Lewis (1929; for more on this see e.g. Guia et al., 2009).

## **ON LANGUAGE, MEANING AND ACTION IN ORGANIZATIONAL STUDIES**

*Language is increasingly being understood as the most important phenomenon, accessible for empirical investigation, in social and organizational research.*

- Mats Alvesson & Dan Kärreman

In this thesis I have described how meaning is mediated through language (Guia et al., 2009; Tsoukas, 2005), which is why I now present a brief description of language studies addressing meaning making. Today we find how the study of language as a means to understand the shaping of meaning is locked in a current debate between two different perspectives upon language. One perspective views language as "...as a means of constituting reality" (Cunliffe, 2002a, p. 129), in which communication is a 'relational-responsive action' that sustains the unbroken flow of conversation (Shotter, 2008; 2002). Language within this perspective is seen as being a medium of communication (Chia and King, 2001; Guia et al., 2009) where

meaning is shaped through social transactions that are mediated by language (Guia et al., 2009). Language use in this perspective is seen being intertwined with how action unfolds. The other, more traditional, perspective views language as being ‘referential-representational’ (Shotter, 2008); this addresses how language *describes* realities of the others, from an outside, expert stance. In this perspective, meaning and the significance of actions are seen as separate from those interpreting and using external theoretical frames (Shotter, 2008). Stated simply, in a ‘relational-responsive’ perspective, language is seen as being part of action, whilst in a ‘referential-representational’ perspective, language is seen as an object that describes action.

Examples of organizational studies with a ‘referential-representational’ perspective upon language and meaning can be found within the cognitive school, which has its roots in information processing theory, and cognitive psychology (Tsoukas, 2005; Tomicic, 2001). The cognitive perspective rests on the assumption that the way individuals organize information and make sense of it is dependent upon individual knowledge structures that could be likened to ‘a priori’ (Lewis, 1929), mental models (Senge, 1994), or context models (Van Dijk, 2008). It is the assumed link between thinking and acting that makes shared values, beliefs and opinions of interest for organizational theorists with a cognitive perspective. Although a cognitive perspective highlights shared meaning of values, beliefs and opinions as the foundation of agreements and action, most studies of cognition have targeted the level of the individual actor and how he/she through interpretation of past experiences creates meaning and thus acts (Weick, 1995). In my interpretation, even though Weick (1995) and also Lewis (1929) describe how meaning is shaped through a socially learned interpretation process (Addleson, 2006), they still mainly focus upon the individual act of interpretation in meaning making. Little evidence is found within their research, as in other more cognitive oriented research, of how relational activities are part of shaping meaning.

Today we find scholars, in particular organizational researchers practicing a relational perspective upon organization studies (Shotter, 2008; Gergen, 2007; Chia and King, 2001; Cunliffe, 2002a,b) criticizing the cognitive perspective. They argue the need for adopting a relational perspective within language studies in organizations, by seeing how meaning is rooted in the social situation, or in Bakhtin’s (1986) words, in our dialogic practices such as our everyday conversations (Shotter and Cunliffe, 2002; Shotter, 1998, 2002; 2008; Cunliffe, 2002a,b). “Language does not describe action but is itself a form of action” as Gergen and Thatchenkerry (2004, p. 236) put it. However Gergen (2007) reminds us how Bakhtin (1986) still sees the individual mind as central to the production and interpretation of meaning “...as it is the individual who carries past dialogues into the present, who thinks in dialogue, and is born afresh within ongoing dialogue” (Gergen, 2007, p. 131).

However, Fairclough (2008), one of the developers of Critical Discourse Analysis<sup>4</sup>, argues that simply seeing how meaning is shaped in our conversational realities is not enough to understand behavior in organizations. We need to understand how these conversational realities are constrained by our social structures. Here we can compare Fairclough's (2008) reasoning to Sztompka's (1991). Fairclough (2008) describes how language, or what he calls discourse,<sup>5</sup> is both shaped and constrained by social structures, for example "...institutions such as law or education, by systems of classification, by various norms and conventions of both discursive and non-discursive nature" (Fairclough, 2008, p. 64). He describes how specific discursive events such as e.g. meetings, conversations, or others vary in accordance to their relation to a particular social domain or institutional framework or community of practice (Lave and Wenger, 1991) in which they are generated. However, he also claims that discourse is socially constitutive; here he refers to Foucault's (1972) discussion of the discursive formation of objects, subjects and concepts.

Language or discourse Fairclough (2008) describes contributes to the shaping of all "...those dimensions of social structure which directly or indirectly shape and constrain it: its own norms and conventions, as well as the relations, identities and institutions which lie behind them. Discourse is practice not just of representing the world, but of signifying the world, constituting and constructing the world in meaning" (Fairclough, 2008, p. 64). What we find here is how Fairclough combines the two different perspectives upon language, that is seeing language as both representing/describing the world and also shaping it. In my interpretation, Fairclough (2008) describes two things: when viewing language or words as something that can describe and represent our world, there exists some kind of interpretation of the words, through 'systems of classification', for them to mean something. On the other hand he claims that language shapes our realities. Given this we cannot understand action by seeing meaning making as *either* individual interpretation *or* as a relational activity. We need to understand that meaning and action are intertwined and are simultaneously and continuously shaped in the fusion of interpretation and relational activities.

To understand the intricate processes of meaning making we can investigate how meaning and action are inextricably intertwined with conversations and language use. Here we find little support within Critical Discourse Analysis, as Van Dijk (2008), another foremost figure within Discourse Analysis studies objects. "Lexical variation is eminently context-sensitive and one would expect it to have been extensively studied in stylistics, sociolinguistics, CDA, and other socially oriented studies of language, as well as in other disciplines. Nothing is further from the truth. By the words they use, speakers show their social identities, participant

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<sup>4</sup> CDA - a perspective that is gaining more attention on studying language and meaning in understanding organization behavior (Fairclough, 2008)

<sup>5</sup> In the following I will use the terms *discourse* and *language* synonymously; meaning talk and text in context (Van Dijk, 1998).

relations, adaptation to their audience, moods, emotions and values, opinions, attitudes, aims, knowledge and the kinds of (in)formal or institutional situations in which they are talking or writing.” (Van Dijk, 2008, p. 172).

## **CONVERSATIONS, MEANING MAKING AND ACTION**

*Conversation flows on, the application and interpretation of words, and only in its course do words have their meaning.*

- Ludwig Wittgenstein

Recapitulating the discussion of how the studies of language within organization studies are currently locked in a debate between seeing language as *describing* action or *being part of* action (Gergen and Thatchenkerry, 2004; Shotter, 2002) we find that the former does not support studies of organizational behavior when desiring to understand what really ‘goes on’ in our activities such as conversations (Shotter, 2002; 2006). Shotter (2008; see also Cunliffe, 2001; Chia and King, 2001) claims that seeing language as describing action fails to account for *how* language is inextricably intertwined with action. Following this line of reasoning, Bragd et al. (2008) show in one of their cases how language is a co-constructor of our realities. They describe, in this particular case, how language set “...the tone of meetings and raised language barriers for new personnel, foreigners, women and observers” (Bragd et al., 2008, p. 204). The use of language is thus a part of shaping the way we see our surroundings, the world we live in and consequently also the kind of action we execute within it.

Seeing the conversational role of how language works in the shaping of social groups capable of coordinated action is impossible if we simply see language as describing the world (Shotter, 2008; Shotter and Cunliffe, 2006). In the process of the shaping of groups we find how language use also shapes the identities of its participants (Akan, 2002; Bragd et al., 2008; Van Dijk, 2008). For example, the use of language can be a way of including or excluding others (Akan, 2002; Bragd et al., 2008; see also Gergen, 2007) and as such shapes the identities of ‘others’ by excluding them from ‘us’, and the identity of ‘I’ by including ‘I’ in a certain group using a certain language. Thus “Language transformation can be a pathway to behavioral transformation” (Weick, 1995, p. 109). Seen in this perspective, language is the medium for interaction (Potter and Wetherell, 1998), and as such, through relational activities such as conversations, it can influence people to pursue Joint Directed Action. Conversations thereby can create opportunities for cooperation (Cunliffe, 2001; Styhre et al., 2001) as interactive moments are unique, and part “...of an unfolding and ongoing process in which we respond, try to connect with others, shape meaning, and create opportunities for action in the unfolding flow of conversation”. (Cunliffe, 2001, p. 352). Gergen (2007) explains this as how, by relating to one another, we construct our future together.

But in understanding ‘what goes on’ in conversation, we must make the subtle processes in our momentary events in conversations lucidly visible, as they are crucial to understanding action (Shotter, 2005). However, these can easily pass us by “...and be ignored as trivial and unimportant, sometimes with the most unfortunate consequences” (Shotter, 2005, p. 115). Emotions are an example of a ‘subtle process’ that is often ignored or ‘passed by’ when studying organizational behavior.

### ***EMOTIONS INEXTRICABLY INTERTWINED - SHAPING ORGANIZATIONAL LANDSCAPES***

Frijda (2005) describes how emotions influence readiness for changes in action. However, this readiness does not come about spontaneously; it is initiated by events as interpreted by the actor, and emotions are the products of this interpretation. Having a cognitive perspective upon the nature of emotions, Frijda (2005) describes how emotions arise from the interplay of an individual’s concerns and previous interpretations of experience and current experiences (Frijda, 2005; Weick, 1995). Emotions result from the interpretation of experience as being relevant — being either harmful or beneficial to one’s concerns (Frijda, 1986; Oatley, 1992; Stein and Trabasso, 1992). “No concern, no emotion” (Frijda, 2005, p. 54) — hence no change in action.

However, having a relational perspective upon emotions means that emotions exist *between* people — where thoughts and feelings fluctuate in a continuous pattern of change (Fogel, 2005; Gergen, 2007). Fogel describes how “...emotions are one way of discovering the meaning of a relationship for the self and, hence, the unique position of the self in the relationship” (Fogel, 2005, p. 93-94). Continuing on this we find how emotions not only are a way of discovering the meaning of a relationship for the self or ‘I’, we also find how emotions shape our sense of self. “I used to think we have movements and feelings and language inside us...but we are in them: in the movements, in the feelings, and in the language. And we do not shape them, they shape us” (Anderson, 1996, p. 122). Having a relational perspective upon emotions, means that they are not the private possessions of the individual mind but are the property of relationships (Gergen, 2007).

What is interesting here is how Frijda (2005) and Fogel (2005) describe how we through understanding our emotions in a situation can gain information about ourselves, and thus change our actions. If we seek to understand the spontaneous responsive relations to others and ‘othernesses’ (Shotter, 2005) in our surroundings, understanding how emotions are inextricably intertwined in our relational activities makes it possible for us to influence them through the use of words and thus also shape action.

Seeing the conversational use of language in a relational-interpretive perspective upon meaning gives us the possibility of understanding how words in their utterance, that is in talk, give rise to emotions (bodily feelings, Shotter, 2008). With this perspective we can focus our attention on how language use that can give rise to emotions shapes reality (Cunliffe, 2001; Cunliffe, 2002 a, b; Addleson, 2006; Bakhtin, 1986; Shotter, 2006; Vygotsky, 1986). And

recapitulating Bakhtin (1986), Frijda (2005) and Fogel (2005) above we can, by emphasizing talk and our utterances, our acts of voicing, our words and the emotions they arouse in others and ourselves, support an understanding of the intricate social processes which are inextricably intertwined in the shaping of our realities.

The reasoning above is supported by George (2000), who describes how management of emotions can lead to more flexible planning, and generate a more open attitude towards multiple alternatives that can provide broader perspectives upon problems in the specific situation/setting. She describes how feelings are intricately bound up in the ways that people think, behave and make decisions. Interpersonal relationships are laden with moods and emotions and as such influence our relational activities such as conversations.

George (2000) further describes how an organization's identity derives from and is a consequence of its culture. It is through the organizational culture the individual develops a collective identity embodied with meaning. Organizational culture is here seen as embodied in shared ideologies containing important beliefs, norms and values. Values, George (2000) continues, and to a lesser extent norms and beliefs are emotion-laden, as conceptions of what is desirable or sought after evoke and appeal to emotions. "It is difficult or even impossible to determine what is desired or preferred in an emotional vacuum" (George, 2000, p. 1045; referring to Damasio, 1994; Goleman, 1995). Beliefs about how things transpire are also intimately connected to emotions because it is impossible to separate feelings from beliefs: both are the origin of each other. Firmly held beliefs are often firmly held because of their emotional content and appeal (George, 2000). "Violations of norms and values in culture result in strong emotional reactions" (George, 2000, p. 1045). Management of organizational behavior is thus, in a sense, also management of emotions (Van Maanen and Kunda, 1989).

Therefore, to maintain a meaningful collective identity, managers need to be attuned to their own and other's feelings, and express and embrace norms and values in a way that will appeal to and generate strong feelings (George, 2000). Conversations here can provide a fertile ground for exploring emotions and shaping 'coordinated target oriented action' (Peters and Kashima, 2007); this as collective identity is manifested in language (Bragd et al., 2008), which helps actors make sense of and identify organizational reality. Thus through the attentive use of language in conversations managers can manage emotions and as such become practical co-authors of a relational landscape (Shotter and Cunliffe, 2002).

### ***RELATIONAL LANDSCAPES AND JOINT DIRECTED ACTION***

A relational landscape is characterized by engaging in relational activities such as 'rhetorical responsive dialogue' Cunliffe (2001; 2002a), conversations (Bakhtin, 1986) or 'Genuine dialogue' (Buber, 1965). All in essence referring to a way of communicating with each other in which "...individuals may grasp the very essence of their human identity, which itself is constantly reconstructed through social interactions" (Simpson et al., 2004, p. 47). Co-authors of a relational landscape may use metaphors and stories to support bridging diversities between actors with different local identities to make sense of and identify organizational

reality (Cunliffe, 2001; 2002 a, b; Shotter, 2005; 2006; Simpson et al., 2004). By relating (Gergen, 2007) to one another through conversations (Bakhtin, 1986; Cunliffe; 2001, 2002a; Simpson et al., 2004.), actors can become aware of and attentive to momentary events in the present (Shotter 2008; 2005), events which are crucial to knowing their way around and ‘how to go on’ (Gergen, 2007) in an ongoing practical activity (Shotter, 2008). This awareness allows actors to act (Cunliffe, 2001; 2002; Simpson et al., 2004; Alvesson, 1993) with an understanding of how they are co-authors of relational landscapes (Shotter, 2005, Gergen, 2007; Cunliffe, 2001; Shotter and Cunliffe, 2002) where Joint Directed Action can continuously be pursued.

We find Morgan (1997) claiming that the fundamental task facing organizations in today’s competitive environment is to make use of organizational managers to create “appropriate systems of shared meaning that can mobilize the efforts of people in pursuit of desired aims and objectives” (Morgan, 1997, p. 147). This is done by having an awareness of how they can move others to begin to relate (Gergen, 2007) to one another by talking and acting in different ways through their dialogical practices (Cunliffe, 2001 p. 1). With the perspective of the importance to support actors ‘relating’ to one another (Gergen (2007), managers can support the co-authoring of a “shared dynamic, relational-landscape for action” (Shotter and Cunliffe, 2003, p. 18), where actors “elaborate themselves into a ‘mutually enabling community’, in which instead of obstacles to each other’s projects, [they] can come to see each other as resources, as resourceful conversational partners” (Shotter and Cunliffe, 2002, p. 18).

Shotter (online article) gives an example of a co-authoring process of a relational landscape where actors made sense of their reality. Here we find how scientists in the early stages of their research created a relational landscape by relating (Gergen, 2007) to one another via dramatizations and reflection of their understandings of their own and other’s work. Referring to Ochs et al. (1994), Shotter (online article) explains how it was within these ‘scientific dramas’ that the participants in the conversation took on different roles: that of the set designer, author, director, actor, protagonist and audience. And how it was in the unfolding of these dramas that the participants in the research community “...work(-ed) out between themselves, by testing and checking their understandings of each other’s utterances in the course of their ongoing involvements, as to whether they are communicating with each other in an un-confusing manner” (Shotter, online article, p. 4). Shotter (2005) continues and describes how unless actors understand how others manifest or exhibit crucial aspects of themselves, “their ‘inner’ lives to us through their surety and confidence, their uncertainty or humility, their pomposity and arrogance, their respect or contempt for us and so on in the present moment of their action we cannot so to speak relate to them” (Shotter, 2005, p. 116). We find how actors in their relating to one another (Gergen, 2007), by understanding how ‘others’ exhibit themselves towards each other (Shotter, 2005), in the relational activity of conversation (Bakhtin, 1986) actors co-author a relational landscape.

Shotter (2005, referring to Wittgenstein, 1953/2007) sketches a method for supporting the co-authoring of a relational landscape, in which all actors can be supported in their relating (Gergen, 2007) to one another. Shotter (2005) describes how, by relating to one another,

actors can improve their everyday practices by *noticing in practice*. This could be as simple as saying, Stop! Look! Listen to that! which would enable actors to deconstruct others routine ways of responding (Shotter, 2005). Actors can also mirror others talk (Ollila, 2000) simply by saying, ‘when you say this and this do you mean...?’ Shotter (2005) and Cunliffe (2002a, b) further describe how we by suggesting new connections and relations by using new metaphors, new possible connections and relations can be revealed.

In the pursuit of shaping a relational landscape, actors need to continuously ‘walk the talk’, being where things happen — on the shop floor or elsewhere — so they can continuously gather concrete examples. At the same time they also need to ‘talk the walk’ (Weick, 1995), meaning how they have to make their actions plausible and comprehensible for all others around them. They need to become clear in their conduct and actions, which can support the continuous movement of shaping a reflective environment (Shotter, 2005). Shotter (2005) further describes how it is not through education actors learn new principles and are moved in new ways. They need to really *see* what goes on then they can view a complicated network of similarities overlapping and criss-crossing (Shotter, 2005 referring to Wittgenstein, 1953/2007 no 66) and correspondingly change their action. Only when they walk the shop floor or go out into the field will they get a sense of the real complexities. By making comparisons or using metaphors, actors can bring order to their experiences and thus create a surveyable landscape where they see what lies before their eyes.

In taking these steps actors can identify new possibilities to move themselves “...from mindless, dead, and mechanical routines. Towards re-enlivening /their/ activities, towards acting for yet another first time, time and time again” (Shotter, 2005, p. 129).

What Shotter (2005) describes here is how actors can become mindful in the moment of action, meaning how they are attentive, alert and aware in the present, where they continuously respond to contextual cues (Roberts and Bea, 2001; Weick and Sutcliffe, 2006 ). It is having a rich awareness of discriminatory detail and a capacity for action which supports JDA. It is as much about what people do with what they notice as it is about the activity of noticing itself (Weick et al., 2008) which supports JDA. Thus the social conduct of actors shaping a relational landscape is characterized by heedful interrelating where they are attentive to ‘othernesses’ (Shotter, 2008) and relate to one another in conscientious and considerate ways (Roberts and Bea, 2001; Druskat and Pescosolido, 2002; Styhre, et al., 2008). Relational landscapes are thus characterized by mindful actors who interrelate with benevolence, conscientiousness, awareness and openness towards differences and thereby continuously can pursue Joint Directed Action.



## CHAPTER 3 - FINDINGS AND INITIAL REFLECTIONS

### THE SETTINGS OF THE STUDIES

The specific setting for my research is within quality and project management in as much as project leaders are interviewed and Knowledge Overlapping Seminars (KOS) with observations and follow-up interviews were conducted within the framework of a Six Sigma Project<sup>6</sup>. Before the findings are presented I will first portray the three studies and their settings as this can provide a more colorful picture of the illustrated findings. For a more general account of methodological reflections see Appendix 1. It needs also be noted that the findings presented in here are re-interpretations of the empirical material upon which the appended papers are based; however, the analysis of the findings illustrated here expands the analysis of the papers.

The *first study*, which is the basis for paper I and in part also paper III, is a literature study with the aim of uncovering the philosophical origins of Shewhart's and Deming's development of their theory for quality. The study focused upon the philosophical influences the conceptual pragmatist C.I. Lewis had upon Shewhart and Deming, and their ideas about variation and how to understand variation not only in production processes but also in human (social) systems. What was identified was how Shewhart and Deming were influenced by Lewis in his description of the importance of finding some common ground in using certain concepts within organizations as a way to delimit misunderstandings and increase efficiency. With this background, Deming presented his idea of operational definitions (1993). In Shewhart's writings (1931; 1939), we find traces of Lewis' influence in the way Shewhart describes how we cannot see quality as something constant. In my interpretation he meant that we need to be aware that the definition of quality both changes through time and also depends upon the single individual and his/her interpretation of quality. Shewhart describes the necessity of understanding human variation as we interpret and act differently. The pursuit of studying meaning making in action and how this shapes the organizational landscape first arose from these literature studies and can be further studied in my Licentiate thesis "Recapturing the Spirit of Quality" (Mauléon, 2003, or papers I - III).

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<sup>6</sup> For methodological reflections see Appendix 1.

The *second study* is a sequel of the first where in particular the notion of ‘common concepts’ (Lewis, 1929) or what Deming (1993) called ‘operational definitions’ were focused upon. The aim here was to investigate how the findings from the first study can be traced in organizations today. To investigate the issues raised in the literature study above, five in-depth interviews were conducted in 2002 with experienced project managers who also were undertaking their PhD studies at the same Swedish university while working in various external organisations. For the purpose of the paper, their real names were suppressed, and the fictitious names ‘Chris’, ‘Mike’, ‘Peter’, ‘Eric’, and ‘Tom’ were and are used to designate the five respondents. The organizations they represented were 2 telecom companies (Chris and Eric), a pharmaceutical company (Peter), an automotive company (Mike) and a union (Tom). I had taken doctoral courses with all of the respondents and therefore knew them personally.

The interviewees were asked to discuss various issues regarding the role of common concepts in their organisations. The study utilised open-ended interviews to encourage the interviewees to speak as openly as possible of their personal experiences and to create narratives of the phenomena being investigated (Czarniawska-Joerges 1992; Kvale, 1997). What is intriguing in this study is to reflect upon how the interviewees’ answers may have been colored by their involvement in a PhD program. Paper II and in part paper III are developed from this study and are also part of my Licentiate thesis (Mauléon, 2003).

The *third study* is based upon the findings concluded in the Licentiate thesis (papers I- III) where the aim became to investigate ‘from within’ and facilitate a meaning making process in which actors in a Six Sigma project collectively made sense of the project goal. This was done through working with and further developing Knowledge Overlapping Seminars (KOS), a reflective conversation method where a facilitator supports the meaning making process where the actors co-construct a project goal (see paper IV).

A KOS has three objectives: (i) to stimulate people within a project team to talk about domain-specific knowledge with the purpose of identifying how their own domain knowledge is related to the tasks of the whole team; (ii) to enable team members through dialogue to create shared understandings of common concepts used in the organization and thus delimit detrimental misunderstandings; and (iii) to enhance an awareness of differences in interpretations of common concepts due to local realities (Sztompka, 1991) within the organization. The KOS has the following people involved: a guide, a facilitator and participants.

The setup of the KOS is to first let the guide talk about his or her domain-specific knowledge in relation to the common project goal. It is important that the guide is the only person present from his or her domain, as this ensures that: (i) the presentation does not include domain-specific details that are beyond the comprehension or interest of the other participants; and (ii) the guide does not have to justify his or her description of the job or domain to a person within the same domain who might have a different view (thus avoiding issues of intra-domain ‘prestige’).

The role of the facilitator is to provide guidance and assistance to the seminar by asking apparently simplistic ‘how come’ questions. The facilitator thus steers the conversation towards acquiring a profound understanding of the activities taking place concerning the project and at the same time is not sounding accusatory. By asking these questions, the facilitator also ensures that all participants are given the opportunity to understand what the guide is describing. It is also the role of the facilitator to be observant as to keeping the conversation on a level at which the participants can be involved and create an understanding of the guide’s role and domain. He or she can be an internal or external consultant, but should not be a manager of the guide or the participants, again as a way of trying to avoid prestige or political games.

The participants should all be from the same knowledge domain so they can relate to each other’s questions; however, their knowledge domain must be different from that of the guide (as noted above). Although they are from different knowledge domains, the guide and the participants should have some kind of boundary object (Star and Griesemer, 1989), i.e. something particular that can bind their conversation together. It could be a project goal, or a certain strategy or something else. This ensures that the topics discussed in KOS are always related to the domain-specific knowledge needed in relation to this boundary object.

The setting for this KOS study was at Siemens Industrial Turbomachinery AB in Finspong (Sweden). The Finspong company develops, sells, manufactures, and maintains gas and steam turbines—which involves several highly specialized knowledge domains. These domains come together in different settings, including product development and process development. Since 2001 the firm has utilized the Six Sigma method<sup>7</sup> for process development and improvement.

The purpose of the Six Sigma project chosen for the KOS application here was to investigate the root causes of a problem with so-called ‘modification orders’. These orders were issued by the gas turbine engineering department and sent to the service department for execution at customers’ sites; however, these modification orders were not being reported back to the engineering department as having been ‘carried out’. It was unknown whether the orders were executed but not reported, or whether they were simply not executed at all. There were also varying opinions about the process itself that did not match the official terms of the process.

During the ‘define’ and ‘measure’ phases of Six Sigma, it was established that people involved in the process of modification orders did not know what they should do, or how they should do it; moreover it was apparent that conflicts and apportioning of blame were

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<sup>7</sup>Six Sigma is a structured way of solving problems in an existing process by analyzing factual process data. It is often referred to as ‘DMAIC’, which is an acronym for the successive phases of the Six Sigma process—‘define, measure, analyze, improve, and control’.

occurring among the actors involved. There was also confusion about the respective roles of ‘modification orders’ and so-called ‘service bulletins’ (a derivative of ‘modification orders’).

There were nine participants in the KOS introductory meeting (KIM, paper V) — the project manager, six persons from the three domains (of which two were not original members of the Six Sigma team, although they were identified as contributing important domain-specific knowledge to the project), and the two authors of the present study. Two of the persons who subsequently participated in KOS were not present at the KOS introductory meeting. These two had to be informed of what had been said and done at the KIM; this was done by one of the attendees of the KIM, and she was meticulous in her description of what had been unfolded in the KIM. However I can only speculate as to how this may have influenced the meaning making process in the KOS.

The present study was undertaken through questionnaires, semi structured interviews and observations of the KIM (paper V) and KOS (paper IV). In this case it is also important to acknowledge that the second author of paper IV had been employed by Siemens for thirteen years and has actively been involved in change programs within this company. Therefore the second author naturally had the role of an action researcher whilst the first author had the role of a participative observer with an ethnographic approach (Silverman, 2005; Czarniawska-Joerges, 1992; Geertz, 1988) conducting observations during the KOS Introductory Meeting (KIM), (see paper V)

## **MEANING MAKING IN ACTION**

I will here present empirical findings connected to the aim of the thesis, which is to *investigate meaning making in action* as this can increase an understanding of how to pursue Joint Directed Action — in this text denoting a continuous pursuit of all actors aligning their actions, individual and/or collective, with a common objective.

The findings presented here illustrate how meaning making is a relational-interpretive process. Following this findings that illustrate how language use is a co-structor shaping the organizational landscape are presented. In these illustrations we find how language use, identity, emotion and action are inextricably intertwined shaping the organizational landscape. We further find how reflection is seen as a way to support an awareness of different interpretations. Due to the intricate intertwining of the issues described here it has been difficult to put adequate headings in this chapter thus may the close reader find other interesting connections.

The final illustration presents a meaning making process in a Six Sigma Project. Here a Knowledge Overlapping Seminar Introduction Meeting (KIM, see paper V) is illustrated. This illustration portrays how language use, identity, emotion and action are inextricably intertwined in the process of meaning making. It is here illustrated how actors can be supported by a facilitator in the process of meaning making where she/he can support the

actors co-authoring a relational landscape in which they become aware and open to different local interpretations.

### ***MEANING MAKING — A RELATIONAL-INTERPRETATIVE PROCESS***

In the following, findings illustrating how meaning is shaped in a relational-interpretational process are presented. The following illustrations describe how local interpretations in local realities (Sztompka, 1991), can cause misunderstandings, fuzziness and/or ambiguities in projects. These illustrations further describe how ambiguity can be seen as being detrimental to a product development process, yet also as a creative force in this process. We further find how the interviewees describe how reflection can increase an awareness of these issues in organizations, which they all describe as beneficial to the organization in order to enhance the chances to making the right decision by having been given more knowledge about the situation through reflection.

#### **Illustration 1**

Eric, a project manager interviewed in the second study, gives an example of the current situation in their organization where they don't have an awareness of different interpretations of seemingly the same concepts. He describes how this awareness could be pursued through reflection, which also could support bridging differences in interpretation. However, he claims that lack of time in projects is constraining for the reflection process.

"The difficult thing is that you don't think you have cultural differences if you sit close to each other or are sister divisions or something but that is what is dangerous, you see there are differences everywhere! And where they aren't obvious they often become a trap..."

Long silence

"I mean if we are to work with the Japanese, well then we realize that that is another problem situation, then we have to take a course. But if we are to work with another city, with Swedes, the same company. It is obvious that it is the same language. Of course it is the same culture! (said with sarcasm), NO WAY! We have totally different, nuances so to say which can cause just as big problems or even bigger problems!"

"Different companies within the same group have different routines, have different development models etc., we keep on at the same terms but mean different things!"

Eric talks about reflection and how it could help communication processes in the organization but says with resignation:

"...but most often you are in a too much of a hurry to give feedback and ask 'was it like this you meant?'. You don't have time for that instead it's like..." 'yeah yeah I've got it!' ... 'well you know...you know how it is?' ... 'no' ... 'well' ... sure you know how it is...' ... 'no I don't know how it is explain it to me!' ... 'yeah but yeah' ...but it's like, you know!"

"No I get so tired! They don't even have the energy to think for themselves, it's just...'yeah you know!', a 'yeah yeah' jargon! No bastard had any idea about anything but

they talked commonly anyway (said with sarcasm) It probably creates lots of misunderstandings and stuff!"

What we find here is Eric's frustrations over the lack of awareness or even attempts to try and understand one another to see that differences occur everywhere within an organization. He claims that too little time is given to reflection, which he sees is necessary to become aware of these issues. Eric describes how the actors presume that they have the same interpretations, the same perspectives and thus 'see' things the same way, and how this lack of awareness, this presumption, can create tensions in collaboration and organizational outcomes.

## Illustration 2

The following example by Mike in study 2 is one to which many people can relate concerning what goes on in many organizations. In this illustration Mike describes what local interpretations, here that of the management team and that of a sub-group, have of the concept 'communication'. We find in this illustration how actors in their respective local reality shaped local interpretations, which resulted in clashes and causes a conflict. Mike further illustrates how local interpretations are necessary for creating a local understanding connected to the local realities of the sub-groups. He also describes how different perspectives should be allowed to meet without being criticized for being right or wrong.

We've found that it is very easy to create a situation where you agree on an abstract level, about certain concepts, but when you look at the local perspective, in this case vertical then and in the hierarchy, then these common concepts meant very different things! And our interpretation of this was that it was totally different situations.

In a larger change process that we conducted ... one of the more overall change ideas or concepts was communication and there existed a profound consensus, both horizontally and vertically in the organization, in the dialogue that communication was important, so there we were in agreement in the specific case then, the communication perspective within product development meant for management- 'that we should gather very many people together for an intense dialogue' and that was their perspective of this. But in one of the groups in one of the cross functional development teams *their* interpretation of this was connected to *their* situation. They needed a fax machine! They needed a fax to be able to handle communication with the supplier which couldn't be on site. That was *their* analysis of improving communication.

When their (the subgroup) perception met management's perception, well then this became a conflict. In a way where management argued that 'this is not about faxes!', 'It's about something bigger than that!', 'It's about enhanced communication between people and you can't reduce this big purpose to something as banal as a fax!', 'then you haven't understood the problem!'

...and the sub- group experienced of course the exact opposite...they *had* understood the message, they *had* worked within their context and found a solution and then they went to their management and said 'we want more faxes'.

...we all work with product development, then there exists on the abstract level some concepts which we can relate to and agree on together that these concern us all. But every local level needs to thereafter do their own interpretation of the concept in order to

understand it ... so it's important that these different perspectives are allowed to meet, without being criticized, as right or wrong! ... there needs to be an acceptance that different contexts have different perspectives on concepts ... and secondly ... it's important to talk about them, you need to talk about them in order to enhance a common understanding for what it is.

What is interesting in this example is the seeming lack of awareness of different interpretations due to different levels of needs concerning communication within the organization. What we find here is a discrepancy between what management talks about on a macro level and what the sub-group needs on a micro level. Here management seems unaware of the fact that to be able to communicate at all, certain crude needs have to be fulfilled; they needed a fax machine before they could go on to talk about the more intricate details of what communication *is* within the organization. The two levels here simply do not have a shared reality. This is interesting and somewhat ironical, as management talks about the *need* to understand what communication is but has not been able to 'describe' what they mean by it and why this is necessary. We find how Mike describes how reflection and an acceptance of different interpretations are necessary if they are to be able to meet in their differences.

### **Illustration 3**

Tom, interviewed in the second study, gives an example of how within his organization they discuss the definition of 'Information Technology' (IT) companies. The different actors involved in the project of measuring customer satisfaction within IT-companies are not agreed as to what organizations they should target concerning measuring 'customer satisfaction' when they talk about IT company. Due to the confusion of the definition of IT-company and which organizations should be counted as IT companies they just don't know 'what' they should measure and the risk becomes as follows.

If you ask Magnus or Pia out here. Magnus might say 45000-50000 members are IT-companies and Pia says 35000 are IT-companies and I would say 75000.

Well then it becomes quite difficult in setting up goals and measuring goals! We could end up in a very precarious situation if our goal is set up at 10% of my 75000 in relation to if you estimate 35000. Then we would get a lot of problems in allocating resources to reach targets. And then we would get into serious trouble when we don't come close to what was said.

Tom continues the discussion about the difficulties of defining concepts and measurements and concludes with an example of honorary concepts within his organization

Satisfaction, loyalty, image and so forth, where we can define them very differently and measure them in a enormous amount of different ways, and then you can end up in a lot of trouble!"

What Tom argues for here is that if they don't know what they are supposed to measure, as they don't know who their customer is, then they cannot know if they are meeting customer demands, and if they don't know who the customer is, then naturally they cannot measure customer satisfaction. So they might end up measuring 75000 companies with the resources for 35000 when they really should target 45000 companies. Tom describes how they have discussed the definition of an IT company for hours, and failed to come up with a good enough answer to which all agree upon.

#### **Illustration 4**

Eric, in study 2, has a similar example as Tom where he describes his project and the problems they encountered when different departments involved in the production of a base station had different interpretations of temperature and time operation, 2 key factors that needed to have been clearly defined at the start of the project but that had not been. In this illustration we find how the actors involved assumed they had the same definition of 'time operation' and 'temperature', which caused a huge financial loss for the organization. Due to the different definitions of time and temperature Eric says:

We realized we couldn't reach customer demands and we had to redesign it and then we had a 3 month delay.

It costs to deliver the wrong thing! It's not only material work costs to develop it, it should also be delivered, installed, send assemblers out on site.

That's costly!, To stop and dismantle a base station, close down a base station , how much isn't that?

In this illustration we find how important it was for the actors from the different local realities (knowledge domains/departments) involved in the project to have beforehand defined together a shared understanding of certain crude characteristics in the product they were to collectively develop. As it were the organization faced a huge financial loss due to something as simple and ordinary to define as 'time operation' and 'temperature'.

#### **Illustration 5**

In the following example also given by Eric (but involving another project than the one described above) we find how the definition of the product was shaped throughout the product development process. The product was even named after it had been developed. It was then called 'the world's smallest base station'. This illustration is an interesting example of how meaning is shaped in the process of development and illustrates how collective action can also be achieved without having a shared understanding of what is to be done.

In this illustration Eric describes how they created the meaning of the product as they produced the product and he describes how he sees this as being part of a product development process. What he suggests here is that different interpretations may sometimes act as driving forces for change and development. The concept "the world's smallest base station" was something new and no one knew what it was, but Eric explains how they created



the meaning of it within the development process. This is an interesting illustration as it shows how people can make sense of a product while developing it.

In product development it always works this way: we decide to make a new product with certain crude characteristics, certain pictures etc, but it's a long way to go and everyone accepts this, there isn't anyone who says 'well yes but I need to know all the details before we begin to develop', no one says that because that's part of the development work process.

Well if you allow development, if you don't ... then you will only have copy-paste (Eric talks in regard to just taking a concept from another organization and using it in their own) ... to make the process work well you need to modify the attitude towards consensus a bit, to say that there is not one (emphasis) interpretation of this, but there may exist many different perspectives and that there is a value in that these perspectives are allowed to be different and to meet in the discussion until the final solution.

However he also describes the difficulties of accepting different interpretations as the most common approach is the urge to drive for some kind of consensus.

But what is problematic here is that you are not open enough for someone else's perspective that can cause problems. I experience that there is an exaggerated belief in consensus; consensus is 'the name of the game' that becomes an obstacle for understanding and the possibility to choose the right thing.

Eric describes how actors need to be open to other perspectives and how this can be a driving force in product development. He describes how actors sometimes are too quick in trying to find consensus, which can lead to difficulties in understanding of e.g. a project goal, as a too fast negotiation for consensus may result in nobody 'recognizing' her/himself and her/his work in this goal.

When comparing this illustration with illustration 4 we find how Eric contradicts himself concerning what needs to be defined in a product development process. In illustration 4 he describes how there was a need to have defined certain crude characteristics before they began to develop the product, and in this illustration he describes how not defining a product should be seen as part of the product development process. What is interesting is how these illustrations describe the difficulties of keeping a good balance within a project as to how much time should be set aside in defining and presenting different perspectives and how much time should be set aside to 'let it go' and define in action or even define a product retrospectively as in this illustration. In any of these cases these would have been important issues to discuss, as it can become very costly to identify important differences within the project further down the development process. As such simply by being aware of differences in interpretation seems advantageous for actors in a product development process.

## **Illustration 6**

The following illustration in a way encompasses the complexities of the process of making sense of a product in a project. We find how Chris (study 2) is frustrated over the multitude of

different interpretations of what an intranet was in their project, which was to develop an intranet. She describes how the different interpretations of the actors became obstacles in developing an intranet. Although she is aware that sometimes action is the means to define something, she believes that she might have been too consensus seeking in this project and therefore action taken towards shaping the product was delayed; this illustration thus also describes the complexities of handling ambiguities in projects. In the following we find how Chris speculates about their product development process and is clearly frustrated when saying:

Every individual had different 'fillings' for this concept, intranet, you see, and that was something that became totally problematic. I think we were at it, well not for 8 months but very well 6 months, very much was in defining the concept. People couldn't understand why we didn't manage to develop an intranet, everybody thought, 'well you've got lots of time to develop the intranet', and we, 'yes, but we don't know what it is'; we don't know what it stands for, of course it's a concept, but we don't know what it means'; we haven't filled it'. For us it became much of connecting function and definition all the time.

When do you recognize ambiguity? When do you recognize that now there isn't any idea to discuss anymore, now we need to make a practical choice? How do you test this? Among all these perspectives [regarding the intranet] there came a problem of choosing. And it wasn't always possible to discard this or that on the basis of them being [obviously] 'wrong'. I think that it took too long. It is best not to spend too much time in consensus seeking.

In our case you could say that it seemed like the active choice was facilitated by the fact that we discussed something concrete, that we could begin to do something, that we got something tangible, something to refer to, so I think that when we got something and could say 'this is an intranet and that isn't' and then to test these definitions, not only in verbal terms but also in physical representations, so that we could act in some way! I think action is very important to being able to understand.

If there had existed a process so that we could have reduced this chaos which we felt, so that I could act in the beginning, in this case it would have meant that management would have had to push in more money early on in the project, for us to sit and define, through action. As, as soon as you begin to do something a lot of things begin to happen!

I think to be aware that there is a variety of interpretations of concepts; that was what we had with intranet. That was problematic for us, it wasn't uncertainty but ambiguity. We had so bloody many definitions of the same concept (frustrated).

Management needs to be aware of the fact that there are multiple interpretations of concepts and it was problematic for us, it wasn't uncertainty but ambiguity, if we would have gotten active support, had the opportunity to reflect to speed up the process, but now instead we were yelled at.

This example describes how Chris and her team wanted active support by management by being given time to reflect and make sense of what an intranet was. Although we find how they took a lot of time in trying to find some kind of consensus, as no perspective was right or wrong, it could be speculated that the 'yelling' caused increased tensions within the group that

made the sense making process of what an intranet was supposed to be even more difficult. This example describes how the actors involved clearly had different perspectives of what an intranet was and how difficult it was for them to agree on a shared understanding of what it was and commence to produce it.

### **Illustration 7**

In the following illustration by Peter, in study 2, we find how he describes the complexities of balancing reflection and action in projects. He further reflects upon what shared meaning is and describes how meaning is continuously shaped and re-shaped through a relational-interpretation process. This illustration also gives an example of how a ‘system’, here a ‘map’, in its enactment becomes a co-author shaping the organizational reality.

“When you need to have shared understanding or when people have different interpretations I don’t mean it isn’t good or that you can’t do a lot to create shared meaning, but what *is* shared meaning? I mean if I draw a map then we all interpret this differently but it may still be something which helps us go ahead anyway...the finesse is to continuously go back to the map and ask ‘what did we mean by this?’ as the map or picture looks different a couple of hours later.”

“Then the manager is important who should shape it, but I also think people overestimate consensus. Where they keep on asking ‘do we think alike now?’, ‘should we do it this way?’, I get sooo frustrated! I mean we can’t go on and do this forever! Some managers have sometimes been too afraid of making decisions and keep on asking everyone what they think, feel and so on.”

Peter continues and describes how he has been working with personal reflection in his role as a project leader as opposed to always having collective reflection in a project which he sees can become hazardous and stealing too much time.

“When you’ve worked with yourself and understood what it means to reflect over one’s actions, then you realize you can do this in action, but you need to have reflected a bit before you come to a meeting. People almost get religious in projects so you need to as a manager to have decided what to work on today before the meeting, so it just doesn’t get too ‘fuzzy’ (swe: flummigt) and something you just feel is exciting for yourself.”

What is interesting in this illustration is how Peter describes how managers at some point need to make a decision as to which way to go. However he also describes how important it is to continuously reflect, but argues how this is a process managers should do ‘at home’ before coming to a meeting, for this risks becoming a ‘revival’ meeting. There exists a balance to keep the project on track and not get too involved in keeping everyone ‘in the loop’; in a way, it is necessary to keep focusing upon the objective.

Finally, what we find as the common denominator in the illustrations presented above is the need to be aware of how actors within local realities shape local interpretations that shape the outcome of e.g. a project. We also find how there needs to exist an awareness that when the actors from these local realities meet, misunderstandings, fuzziness or ambiguities can arise

that can create tensions within projects and organizations. However, we also find how ambiguities are seen as driving forces, so what seems to be needed is to have an ongoing dialogue within the project/organization as to how local realities shape local interpretations and keep a balance between reflection and action. We find how creating an awareness of these issues can be done through reflection.

### ***LANGUAGE SHAPING ACTION***

In the following, findings that illustrate how the use of language shapes action are presented. The illustrations further give examples of how language use shape both local and collective identities and as such shape the organizational landscape. We for example find how the introduction of new words or changing words within an organization instigates identity debates between actors in the organization and how this creates tensions. We also find illustrations describe how the use of a certain vocabulary can be a way to include or exclude 'others' and as such shape local realities which further shapes local identities and so on.

#### **Illustration 8**

In the following, Tom illustrates his perception of how the use and choice of words activates processes of introspection of both self and the collective identity of the organization. He illustrates how he identifies two different tracks concerning the use and choice of language in organizations:

One track is about how organizations create an identity through a certain chosen language. Another track is about how the organization can run into problems when a language comes in from a different culture and those problems are both related to some kind of understanding of concepts.

Regarding the first track about how organizations create an identity through the use of words, Tom talks about how actors within his organization define the organization through the use of a certain language.

Concepts we talk a lot about right now are concepts which show how we organize ourselves. However when a new word is introduced into the organization people may feel resistant and may ask 'what is this?' before they develop them and make them their own.

Tom also talks about culturally alien concepts and how their use can create collaborative difficulties. He describes how:

...some kind of business concept which doesn't belong here can create a feeling of alienation within the organization.

Examples of culturally alien concepts within Tom's organizations are 'project leader', 'marketing communicator' etc., concepts that to some departments within his organization feel completely alien while to others they do not. This feeling of alienation, Tom claims, can create gaps between the different departments in the organization.

## Illustration 9

Tom gives another example of how the choice and use of words can create turbulence within an organization. He describes how the discussion of the concepts ‘members’ vs. ‘customers’ when they were introducing the SIQ model<sup>8</sup> refueled an already ongoing debate within his organization as to what type of organization they were. In this case management had chosen to change the concept ‘customer’, as described in the SIQ model, to the concept ‘member’ a word traditionally used within his organization. Tom describes the situation:

The problem was that we didn't have customers we had members and that is a great difference! A customer you sell something to a member takes more part of the services but is also our employer (swe:uppdragsgivare) and are the ones who in the end control what we do. It's quite interesting how many organizations want to change their customers into members in order to create stronger bonds. You create relationships through memberships.

We've had a lot of discussions here, not openly, but in every single office for many years now: should we be a mass movement (Swe:folkrörelse) or should we be an insurance company? and this builds upon the discussion whether we engage people who control what we do or are we simply the providers of a service? And if so **then** the definition of customer could strengthen this insurance picture.

Depending upon what local identity they had, either ‘member’ or ‘customer’ would fit the organization better. If they wanted to be perceived as an insurance company, the concept ‘customer’ seemed adequate, but if they wanted to be perceived as a ‘service provider’, the concept ‘member’ might have been more appropriate. The debate as such concerned the core identity and values of the organization and as such became emotional.

The following illustration describes another situation where local identities and the core values of these identities clash within Toms organization.

## Illustration 10

Tom describes how the concept ‘loyalty’ became a hot topic in his conversation with a local chairman at a union congress. In their conversation Tom presents to a local chairman how he wants to measure loyalty amongst their members by asking the following questions in an inquiry:

If you were to chose union again which union would you choose?', 'in relation to other unions what ...?' and here one of the more radical chairmen got angry, he got really pissed off! He said: loyalty can't be measured in that way! 'As if our members are some

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<sup>8</sup> SIQ = The Swedish Institute for Quality.

kind of cattle, to ask them if they are ready to pay their fee again?', 'What you are supposed to measure is their readiness to go out on strike! (swe: konflikt beredskap).

This example is interesting in how the discussion regarding the concept loyalty and how to measure it evoked an emotional response. This could be explained by the different local interpretations of loyalty Tom and the chairman had, which could be traced to their different interpretations of the core identity and values of the organization since the chairman belonged to the so-called 'old school' and Tom to a more contemporary one.

### **Illustration 11**

The following illustration by Tom is yet another example of how local identities and different interpretations of the organization and the use of words clash and can create internal difficulties. Tom describes how "...organizations create an identity through a certain language", which he illustrates by how a campaign sanctioned by management created tensions within his organization. The conflict arose as some actors within the organization felt that the core identity and values of the organization were challenged by this campaign. This situation created tensions within the organization that could be traced to actors identifying the organizations identity differently.

We had a campaign here a couple of years ago which caused a lot of turmoil, it was tested against target groups etc according to all the rules and it was this idea which was the best: 'the union for you who doesn't want to be in a union'. It was targeting those who were lonewolfs (swe: frifräsare) or younger people and what I know is that this campaign worked well towards the targeted group. But *internally* we got problems. People were wondering 'what idiots up on the 7'th floor came up with campaigns which in principal go against what we stand for?' 'We can't go out and say it's wrong to be a member of a union' can we?' This resulted in cooperation difficulties!

### **Illustration 12**

The following illustration further clarifies how the use of language is closely connected to how local realities and local identities can be shaped. Tom describes how individuals within his organization actively use language as a way to define themselves and as a way to influence others to define them a specific way. He describes how three letter abbreviations and certain concepts are used within his organization as a means to include and exclude individuals, as way to create a local identity such as belonging to a certain group and create a feeling of belonging.

The clearest thing with language is that you can separate between those who are so-called 'insiders' and those who are 'outsiders.' The short term dictionary or short terms (abbreviations) are widely used here. I argue we never have to classify any document as long as we keep the abbreviation list safe! (Tom).

You can tell who understands the organization by seeing if they understand these concepts ... I have a picture that there exist those who think it is quite a good way to show that you are part of the inner circle by using these abbreviations, to show off a little (Tom).

I guess it's not that uncommon that you 'spice up' your creations with stuff that people don't understand. I think this can have a greater impact upon how **they** perceive the person who has written the message.

I mean not the least in our external communication can these concepts become nuisances and become questionable. I get a picture that there are those who think, by using our internal language code, that it is quite a good way to show that you are a bit trendy and that you know how to use these short terms and show off a bit!

It's a bit like, 'I am really one ... who understands the internal code', however at the same time the fact is that you disturb communication by using it!

Tom is here frustrated over the fact that the actors involved seem to neglect the fact that in their use of abbreviations they disturb communication.

### **Illustration 13**

Closely connected to illustration 12 we find how Peter describes how he uses words as a way to move people in a desired direction.

I think a lot about words especially when I'm preparing myself so I kind of write what I shall do and then I think. And there is a lot of strength in thinking of what words I use, to write this message or when I write an e-mail.

It's a lot about selling things to management! And this is important, words are extremely important and I actually can manipulate sometimes and use words which I know will bear fruit.

I always go to my boss beforehand and talk about whatever and then listen to what he/she says and then use those words when I write a proposal. I do this quite unconsciously when thinking about it. And when they recognize themselves they think 'oh this is nice' (Peter smiles).

That's how you do it and the same goes for when you talk to people so it's conscious choices!

It is interesting to see how illustrations 12 and 13 show how the specific use of certain words can be a way to define yourself in relation to others, or defining others. It is further interesting how the use of language familiar to someone can be a way to try and 'move' this person into taking actions in a desired direction.

The use of language is also illustrated here as a way of projecting a picture you wish to present of yourself — and can also be used as a way to define a group through excluding and /or including others. Language use can thus be a way to create communities.

In illustrations 8-13 we find different examples of how the use of language shapes organizational realities as actors in these examples raised questions within the different organizations as to what the core identity of the organization really was; due to different uses of language, we also find how emotions are inextricably intertwined in this process.

## ***WHAT ‘GOES ON’ IN A MEANING MAKING PROCESS?***

I have here identified how local interpretations in organizations can create misunderstanding, fuzziness and ambiguities in projects, and as such shapes action. I have also identified how attentiveness to these issues could be achieved through supporting continuous reflection, and how language usage is part of shaping organizational realities — through the possibility of raising questions concerning identities, both personal and collective, and how these issues are inextricably intertwined with emotions. The presented findings also describe a necessity of understanding these issues when wanting to understand action.

In this final part of the results chapter an illustration describing how emotions and identity are inextricably intertwined in meaning making and how these processes can be facilitated is presented. The following illustration comes from the KOS introduction meeting (KIM) and can be further studied in paper V.

### **Illustration 14<sup>9</sup>**

We find throughout the turns in the conversation in KIM how different interpretations of the project goal become visible for the actors. The following illustration describes how the process of meaning making can become highly emotional, and how this seems to be connected to the actor’s local identities (knowledge domains).

#### **The emotional twist of sense making**

The meeting begins with Pete, the facilitator, showing a power point slide stating “How to avoid misunderstandings between people from different backgrounds in a team”, he then proceeds talking about the purpose of the KOS Introduction Meeting (KIM). He talks about what they need to go through at this meeting and why this needs to be done; he also describes the KIM as an open forum where no questions are perceived as being “trivial” questions. He then introduces the research team and goes on to describe the aim of this meeting and the forthcoming Knowledge Overlapping Seminars (KOS).

Pete also describes how a group with a shared background, such as for example Technical Support, can generate a domain specific language. He thereafter briefly introduces the definition Knowledge Domain as being for example a discipline or a department with a specific language built upon specific knowledge. He talks about how a domain specific language can be a source of misunderstandings in projects, as projects mostly consist of different members from different parts of the organization or from outside the organization, everyone bringing their own domain specific language to the project. He then talks about how fewer misunderstandings can be achieved by creating a shared language in a team, which can be facilitated through conducting KOS’s. He also describes the benefits KOS’s have in relation to other types of meetings. He thereafter goes on to describing how a KOS is conducted. Now all participants introduce themselves.

Paul: Product Service Engineer (PSE)

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<sup>9</sup> In the following illustration the numbers in the illustration before a comment match the numbers in paper V.



Fred: Product Service Engineer (PSE)

Samuel: Black Belt in Six Sigma Project presented here (BB)

Calvin: Application Engineer (AE)

Pat: Application Engineer (AE)

Mathew: Project Manager Sales Engineer (SPL)

Lisa: Service Production Manager (SPM)

Pete: Facilitator (working as project manager in the organization and action researcher)

Christina: Participative Observer

After the presentations, Calvin directly starts by asking what a knowledge domain is. The participants talk about different potential definitions and implications:

01 Calvin: Could you call domain – occupation?

02 Lisa: Role descriptions are important in order to understand.

03 Paul: We are not supposed to understand, just do [emphasis on do, chuckles]

04 Lisa: Area of responsibility //swe: ansvarsroll// is domain [emphasis on is].

05 Pete: Yes, maybe

Although the group was confused as to how to describe the concept ‘knowledge domain’ the atmosphere in the meeting was at first open, friendly and humorous. We find that the emotional activities such as the laughter and the openness to listen to each other is part of the sense making process with regard to the meaning of the concept ‘knowledge domain’. The group does not seem to have any difficulties as to creating a shared understanding of this concept, which could be due to the fact that no party has any connection to this concept. It is thus open to all to have any interpretation of it. The concept was not laden with history.

However, something changes in the atmosphere when the conversation turns to talking about misunderstandings in the project and how these may not only be due to different knowledge domains being part of the project. Here the conversation turns into talking about management and the need for good leaders. One of the participants is clearly frustrated over this matter.

06 Mathew: Are you talking about knowledge overlap in the *team* only? [emphasis on team]

07 Pete: Yes

08 Calvin: But isn't there a more general problem behind misunderstandings? That our leaders are not leaders [frustrated]

09 Pete: This is not a leadership problem. It is not about leadership.

10 Calvin: I don't mean Carl (the CEO) but more in general. I don't mean [interrupted by Pete]

- 11 Pete: Leaders also need Knowledge Overlapping Seminars [laughing]
- 12 Calvin: No, but our managers are not leaders. They don't lead the work [undeterred by Pete's interruption, surly and irritated]
- 13 Pete: That depends on how you view leading [calm voice]
- 14 Calvin: Yes, but if you lead a soccer team you need to be clear! [provocatively]

Observer comment: The meeting has been going on for about one hour and now something happens in the group. They seem frustrated, tired, stressed and a bit uncomfortable. They move around in their chairs. And two persons say they need to leave the meeting. Lisa says that she is going to Germany. Paul states that he has only booked until 14 the others argue against him and say it was until 15. The group is agitated and you can almost touch the tensions in the group. The meeting seems close to a collapse. This reaction seemed to stem from the discussion about leadership and the disagreement Calvin had with Pete concerning what leadership is.

Pete cuts in and reminds the members of what is at stake here.

- 16 Pete: Let's focus on what we need to do. We are supposed to identify misunderstandings! [firm voice]

Observer comment: It is obvious that Pete has the mandate to calm the group, as they settle down. The two member of the group who said they needed to leave stay.

What is interesting in this excerpt of the conversation is how some of the participants of the meeting do not want to have anything to do with discussing management. This seems to be a 'hot' topic. The meeting seemed close to a collapse and if the facilitator, Pete, had not shown them what was at stake, the meeting might have ended.

When the group settled down, we find how the next turn in the conversation was commenced. It was as if when they had gotten through this 'crisis' in the meeting people became more courageous in encountering each other's differences, and emotions did not seem to threaten the meeting anymore. The conversation became more intense and energetic, and people didn't seem as vigilant as they had been in the beginning. The group talked about the different roles in the project, lack of commitment and leadership. They argued, negotiated and presented their perspectives as seen in the following excerpt.

#### **Illustration 14 cont.**

- 17 Paul: The project is in a seasick situation. (relating to the Six Sigma Project)

Observer comments: The group starts, intensely and energetically, to talk about conflicts. There are so many discussions going on and I have a hard time to take notes. They talk about the different roles in the project, lack of commitment and leadership. And who is doing what or at least is supposed to do it.

- 18 Calvin: What are you doing with the MO's (modification orders)? [a question posed directly to Paul]

19 Paul: That is a very good question and now I want to explain! [cynical and frustrated]

20 Pete: Ok let's stop here [interrupting Paul]

21 Paul: The specific problem we see in our group is /...details.../ and this is not solved in 10 minutes! [frustrated and loud]

22 Samuel: Do you see any other knowledge domains?

Observer Comment: Samuel cuts in and interrupts the discussion between Paul and Pete. He seems to want to calm the situation and get everyone involved in the meeting again.

Pete doesn't respond to Samuel's question and presents a slide illustrating the four knowledge domains to be involved in the KOS's. These are: PSE - Product Service engineer; SPM - Service Production Manager, AE - Application Engineer and SPL - Project Manager Sales Engineer.

23 Mathew: Who is the SPL?

24 Pete: That's you! [surprised]

25 Mathew: Oh ok one of those who actually *does* something [cynically laughing]

Observer comments: The way people speak sounds less humorous and a bit more cynical. The group starts to talk about the Six Sigma project and they do not agree upon the process flow in the project. Samuel tries to calm Calvin who still seems to be irritated about leadership and responsibilities.

26 Samuel: How do you feel about that? [question posed to Calvin]

27 Calvin: So so. Shouldn't X and X be a part of the game and isn't it the responsibility of the project leaders? Isn't there a problem there [referring to the project leaders]

28 Mathew: What are you saying *now*? [agitated question posed directly to Calvin]

29 Calvin: What I'm saying is (giving details). [irritated voice]

30 Mathew: But I *am* doing that! [provoked, irritated voice]

31 Calvin: Yes but you're only one in 13-14 people doing it [irritated and loud]

32 Mathew: Yes but that concerns the delivery project managers [irritated voice]

33 Calvin: Yes, but it is also concerns the service project managers [irritated voice]

34 Paul: But the delivery project managers haven't been given the education [in a soothing voice]

35 Calvin: But the fact still remains and that is that we should get all modification orders (MO's) reported!

The facilitator supports the actors throughout this process, avoiding getting into ‘name blaming situations’. The actors further presented their different interpretations of who is doing what or at least who they think was supposed to do what. Now seemingly being comfortable in their emotions, emotions ran high in the defending of-, arguing- and in the creation of a shared understanding of the various roles and their objectives to support the common goal of the project as such the actors shaped a relational landscape. The atmosphere further on in the process was open, although pretty rough, which needed to be balanced every now and then by the facilitator. When they finally were narrowing down to defining a common goal upon which all could agree, the group found themselves in another emotional loop.

#### **Illustration 14 cont.**

##### Observer comments:

Although having had the chance of describing their personal interpretations previously in the meeting, the members still found the task of creating a shared understanding of the project goal very difficult. The conversation became intense and rapid, some of the members gave suggestions of the common goal and others consented or rejected the suggestion depending upon whether they recognized *their* interpretation of the project goal in the suggestion or not. As they seemed to get stuck in their personal day-to-day level in their description of the project goal, the proposed common goal became more and more abstract.

What is interesting here is how easy it seemed to create shared meaning on an abstract level, but how difficult it is to do so on a more concrete ‘how to’ level. Therefore Pete, the facilitator, had to cut in and work with the group to create a more actionable goal. This process was very tough and frustrating, but the group, seemingly having become more confident and relaxed after the previous discussions and emotional activities in the process, finally agreed upon a definition of the project goal. The general atmosphere when this was done was one of exhaustion, relief and general contentment.

What is interesting in this process is how we can see the emotional intertwining in the sense making process. We find how emotions are connected to the different local identities (knowledge domains) of the participants in the project (for more see paper E).

Throughout this meeting and also in the following KOS we find how Pete in his role as facilitator was active in keeping the actors ‘on track’ and not getting into any name blaming situations or changing the subject when things got difficult. We find in the evaluations after the conducted KOS (see paper IV) how the participants claim that the role of the facilitator was important in supporting the sense making process, as Pete helped them keep the conversation going and supported them into daring to getting in on ‘hot’ topics. This illustration shows how Pete supported the co-authoring of a relational landscape in which all local interpretations were recognized without being criticized for being right and wrong. The actors also describe how Pete was there to support the flow of the conversation in keeping them attached to a topic longer than they might have otherwise. Through his involvement

there were many so called “light bulb moments” as one of the participants described it, moments that might have been missed if they had not lingered on a certain topic.

The Black Belt of the Six Sigma project analyzes the different KOS and describes how the different groups ‘dialogued’ differently, and how certain constellations of people seemed to need more support by the facilitator and how others might have done well on their own. He also describes how he thinks this might have to do with how well people know each other and can relate to one another. However, if there are different knowledge domains that don’t know what the others are doing, then the facilitator’s role is “... to keep it on a civilized level, then. So that no personal attacks or stuff are committed, but instead making sure that the focus is upon what the different tasks are.” (Black Belt)



## CHAPTER 4 - DISCUSSION

*Both organization and sensemaking processes are cut from the same cloth. To organize is to impose order, counteract deviance, simplify, and connect, and the same holds true when people try to make sense*

- Karl Weick

### **‘GETTING’ IT TOGETHER IN JOINT DIRECTED ACTION**

I raised a couple of questions in the beginning of this thesis, in essence asking how come actions in organizations are sometimes not aligned with the objective at hand, e.g. a project, safety, quality or other. And when something goes wrong, where are the ‘answers’ to be found? In my desire to examine these questions further, the following aim of the thesis became to *investigate meaning making in action* as this can increase an understanding of how to pursue Joint Directed Action — in this text denoting a continuous pursuit of all actors aligning their actions, individual and/or collective, with a common objective.

This chapter will illustrate how Joint Directed Action (JDA) can be pursued by an increased attentiveness to the inextricably intertwined processes of, meaning making, action, language, emotions and identity. It will also be illustrated how actors by relating to one another co-author a relational landscape and as such simultaneously pursues Joint Directed Action. Finally a reflection concerning how management systems such as Quality Assurance Systems in their enactment become co-authors of the organizational landscape is presented. This awareness supports actors being attentive to the outcome of these ‘systems’ which further supports JDA.

### ***LOCAL REALITIES, LOCAL IDENTITIES AND LOCAL INTERPRETATIONS***

In illustration 1 we find how Eric is desperately tired by the fact that people don’t stop and think about what they are saying, or reflect over what others might be meaning with what they are expressing. He calls this having a ‘yeah yeah’ jargon where nobody seemed to be bothered to really understand what others were saying and simply trusted that they all have the same interpretation upon experience. Lewis (1929) describes how this is impossible because experience is inseparable from our mind, so that every experience is unique to every actor. Although actors within Eric’s organization are aware of how different local realities

(Sztompka, 1991) shape local identities (see ex. Bragd, et al., 2008; Van Dijk, 2008; Gergen, 2007; Shotter, 2006; Akan, 2002; George, 2000; Bakhtin, 1986; Czarniawska-Joerges, 1992; Sztompka, 1991), and can have different interpretations to certain issues, they simply don't recognize that these differences exist everywhere.

In many cases, local interpretations may not be a problem for collaboration. This is suggested by Bragd et al. (2008) where they refer to an example by Corvellec (1997) in which he describes how three managers working in the same company but come from and work in three different countries, probably had three different interpretations of a meeting they all attended, which in all probability caused misunderstandings (Corvellec, 1997). However, in Corvellec's illustration we find how the three managers not only had different local identities due to their different local realities but *also* belonged to a local identity which pursued 'performance'. Although they may not have shared an understanding of *how* to pursue 'performance' due to their, what I would call 'primary' local identities they still could pursue performance in respective manners. As such were their respective actions aligned with the objective of 'performance', despite the possibility of having different interpretations of how to achieve this. This is closely related to something Eric (illustration 5) describes in a project which was aimed at creating a 'new base station'. In this project all actors involved shaped their interpretation of what it was supposed to be whilst developing it. As such did the actors not only shape the local reality of the project but also a local identity. (Van Dijk, 2008; Bragd et al., 2008; Akan, 2002; George, 2000; Sztompka, 1991). What is interesting in Eric's illustration is how we find how meaning making, action, and identity creation are intertwined.

In Eric's illustration (5) the lack of shared meaning concerning what the goal of 'a new base station' was, did not become a hindrance aligning their actions with this goal. However Eric also gives an example (see illustration 4) of a project which became burdened with huge costs due to not having defined some crude characteristics that needed to have been defined before they commenced to produce this product. What we find based upon Eric's illustrations 4 and 5 is that although it may not be necessary to create shared meaning in all situations, it still is more efficient to understand how different interpretations exist everywhere and to act from this knowledge rather than, which is often the case today, to act as if there exists shared meaning. Not only does an awareness of how different interpretations exist everywhere support efficiency and reliability (Weick et al., 2008), but it can also support actors engaging in relational conduct characterized by attentiveness, conscientiousness and consideration when relating to one another's differences (Gergen, 2007) and as such co-author a relational landscape (Shotter, 2005; Shotter and Cunliffe, 2002).

The differences in interpretations, or what Eric (illustration 1) calls 'nuances' of interpretations, of management systems can become problematic if actors e.g. have different interpretations of what to measure in key figures. Not being aware of this can become not only problematic but also hazardous and inefficient. This is something Tom illustrates (illustration 3) where there existed different interpretations of the target group IT company in the project of measuring customer satisfaction. The number of targeted companies in this project ranged from 35000 to 75000 due to different interpretations of what companies should



be defined as IT companies. In a project such as this, different local interpretations can cause a lot of financial trouble if actors involved are not aware of these differences. And Eric describes how his project (illustration 4) was delayed by three months and was further burdened with both dismantling and reassembly costs, all due to the different interpretations of time operation and temperature by the local identities involved in the project.

Mike (illustration 2) gives an explanation of how different interpretations are locally constructed due to actors belonging to local realities (Sztompka, 1991) within an organization. And it is in these local realities (Sztompka, 1991) actors shape a local identity (see ex. Shotter, 2006; Akan, 2002; Gergen, 2007; Bakhtin, 1986 Bragd, et al., 2008; Czarniawska-Joerges, 1992; Van Dijk, 2008) through relational activities, such as a certain language used in conversations (Bragd, et al., 2008; Akan, 2002; Van Dijk, 2008; Fairclough, 2005: 2008; Shotter, 2006; Akan, 2002; Gergen, 2007; Bakhtin, 1986 Bragd, et al., 2008; Czarniawska-Joerges, 1992; Van Dijk, 2008).

In Mike's illustration we find how local interpretations of the word 'improving communication with customers' created a conflict between management and a subgroup within his organization. When studying one of the local interpretations, this was completely different from what management meant by 'improving communication...'. In this example the sublevel pursued 'improving communication...' by identifying the need of a new fax machine; this was *their* local interpretation of 'improving communication with customers'. But this interpretation seemed provocative to management, who saw it as a way to trivialize (see ex. Bragd et al., 2008) the issues of 'improving communication...'.

But Mike explains how "local levels need to do their own interpretation of the concept in order to understand it". It needs to be domesticated (Bragd et al., 2008). What we find here is how management were not attuned with the realities and needs (George, 2000) of the local level (or local identity) concerning how to improve communication with customers and consequently failed to meet this local interpretation without criticizing it (Shotter and Cunliffe, 2002) but instead accused them for trivializing (Bragd et al., 2008) the issue. Mike (illustration 2) claims that there needs to be an increased awareness of these issues within organizations and argues the need for managers to continuously talk about how different interpretations exist everywhere. What he describes is how managers need to become practical co-authors shaping a relational landscape (Shotter and Cunliffe, 2002; Shotter, 2008; 2006; 2005) in which actors become continuously attentive to the existence of different interpretations everywhere.

### ***LANGUAGE, LOCAL REALITIES AND LOCAL IDENTITIES***

What is often forgotten (or neglected) in a change process where the import of alien words or change of words is involved (see illustration 9), is the need to support the domestication (Bragd et al., 2008) of these words within the organization before the change, as tensions may otherwise result (George, 2000). What Tom describes in illustration 11 concerning the campaign they had is how management seemed not to realize how the way words are

inextricably intertwined in the shaping of local realities and local identities (Bragd et al., 2008; Van Dijk, 2008; Fairclough, 2008; 2005; Shotter, 2008; Shotter and Cunliffe, 2006; Akan, 2002; Czarniawska -Joerges, 1992) in their organization.

Tom further describes (illustration 9) how management, in their use of the SIQ model, chose to replace the word 'customer' with the word 'member', a word used by tradition within their organization. What is interesting here is how one could expect that the replacement of the word 'customer' by the word 'member' would not create tensions within the organization. Management chose to change an 'alien' word ('customer') to the 'familiar' word ('member') in their use of the SIQ model. However, what happened is that the replacement of the word 'customer' by 'member' refueled an already ongoing debate within the organization as to its core identity. This resulted in emotional tensions between groups (Fogel, 2005), which could be explained by how the discussions of the words 'customer' and 'member' in a way symbolized the debate of the core values within the organization. Actors 'connected' certain values to either word.

How words symbolize core values and identities (George, 2000) is further evident in Tom's illustrations 10 and 11. Where he, in illustration 10, describes how the word 'loyalty' and how to measure it created tensions between himself and a local chairman. What can be speculated here is how Tom seemed to belong to a more contemporary local identity or discourse community (Bragd et al., 2008) within his organization while the local chairman belonged to the 'old school'. And in illustration 11 we find how the campaign they had to 'lure' new members created a conflict within the organization. Tom explains this by how he sees how "organizations create an identity through a certain language" (see also Akan, 2002 and Bragd et al., 2008). Relating this to the campaign (illustration 11), it was explicitly stated that some of the actors within the organization felt betrayed by management for letting a campaign use a phrasing that "in principal goes against what we stand for". People became agitated, upset and felt betrayed by their colleagues up "on seventh floor" and by management.

What is interesting in the illustrations presented above is how language use is inextricably intertwined in the shaping of, local realities, local identities and action. This can be explained by how the actors in these illustrations brought their local identities (Bragd et al., 2008; Van Dijk, 2008; Fairclough, 2008; 2005; Shotter, 2008; Shotter and Cunliffe, 2006; Akan, 2002; Czarniawska -Joerges, 1992), into situations where the different interpretations made in their local realities 'clash' with those of other people and their local interpretations made in their local realities (Sztompka, 1991).

### ***LOCAL IDENTITIES AND MEANING MAKING***

To describe a 'clash' between local identities we can study the sense making process in the KIM (see illustration 14). Here we find how people in responding to one another's utterances in their attempt to link their practical activities with those of the others around them, was a tough and emotional process. Weick (1995) describes how meetings in which sense making takes place are challenging by nature. Gergen (2007, referring also to Bakhtin, 1986) explains

this by how actors always carry their history of relationships into a 'new' situation as the individual carries the past into the present. What Gergen (2007) describes is how actors bring their local identities shaped in their history of relationships (Gergen, 2007; Bakhtin, 1986) in different local realities (Sztompka, 1991) to a meeting and when the values (George, 2000) of these local identities are questioned by other local identities, emotions stir (Frijda, 2005; Fogel, 2005; George, 2000).

In this 'clash' local identities may become re-shaped (Simpson et al., 2004; Sztompka, 1991). But the 'clash' can further strengthen and enhance local identities. We find Fogel (2005) claim that actors through emotional activity can become aware and discover "the unique position of self in the relationship" (Fogel, 2005, p. 93-94). Thus may local identities also take on their meaning in relation to other local identities; just like words take on their meaning in relation other words (see ex. Bakhtin, 1986). As such it is necessary to be attentive to 'what goes on' (Shotter, 2006; 2008) in this 'clash' as it may be detrimental to Joint Directed Action. Managing emotions therefore is necessary when pursuing JDA which George (2000) further claims can generate a more open attitude towards multiple perspectives as actors are supported in their relating (Gergen, 2007) to one another. Managing emotions is thus part of co-authoring a relational landscape. Managing emotions can be done by using metaphors or stories (Shotter, 2005; Shotter and Cunliffe, 2002; Gergen, 2007) which moves the actors from their respective 'standing points' towards more 'neutral' grounds in which they can begin to relate to one another, instead of contesting each others interpretations.

By becoming aware of how language use can create tensions and so shape action (Frijda, 2005; Tsoukas, 2005; George, 2000) actors may also become attentive to how language further can be a way to shape action moving in a desired direction (Cunliffe, 2001). This is something Peter in illustration 13 thinks about in his day-to-day communication with other actors. In line with this we find Bragd et al. (2008) describe how a certain language chosen in quality instructions at a company, by using military metaphors, may have excluded individuals who do not understand these metaphors. As such it may be speculated how this shaped the enactment of these quality instructions within this organization.

Tom (illustration 12) gives a similar example as Bragd et al., (2008) when he describes how actors within his organisation by using abbreviations 'exclude' others such as customers or suppliers as they disturb communication by this. He also describes how these actors may wish to create a feeling of belonging to a certain group by using words that define them as being part of this particular group (for more see Akan, 2002; Bragd et al., 2008; Shotter, 2008; Cunliffe, 2001; Chia and King, 2001) but neglect to see what consequences this gives for the organization. As such this use of abbreviations function as a co-constructor of the work situation (Bragd et al.'s, 2008), which in my interpretation is the same as the local reality (Sztompka, 1991) of the actor. Tom (illustration 8) further elaborates upon the issue of the use of words and how this shapes action. He describes how his organization 'imports' words from other settings. And when these are words to which actors within the organization cannot relate, they "can create a feeling of alienation within the organization". As in the example

above by Bragd et al. (2008) it may here also be speculated how this feeling of alienation further shapes actions within the organization.

In the illustrations here presented we find how attention paid to the dynamics of language use can give a better understanding of how actions unfold and shape the organizational landscape. Although these are not novel findings (Bragd et al., 2008), they still seem challenging and difficult to pursue in organizational contexts. But it is here argued that by shaping relational landscapes an increased awareness of the inextricably intertwined processes of meaning making, language use, identity creation, emotion and action, is supported and as such also Joint Directed Action.

### ***RELATIONAL LANDSCAPES AND JOINT DIRECTED ACTION***

To become aware of the intricate intertwined processes of meaning making, language, identity, emotion and action, Knowledge Overlapping Seminars (KOS, see paper IV), can be helpful as this is a conversation method characterized by facilitated reflection in which actors are supported in their relating to one another. KOS as such is a method which can support the commencement of co-authoring a relational landscape (Shotter, 2008; 2005; Gergen, 2007; Shotter online article).

In the KOS, actors are supported in their conversations to begin to see each other as relational partners who can bring new insights and revelations, rather than seeing them as contestants. In a KOS, actors, with the support of a facilitator, collectively and structurally make sense of their different local realities and local identities (called knowledge domains in paper IV and V) and how these are connected to the goal of the project (see paper IV). To facilitate the process of sense making in the KIM (paper V or ill. 14) the actors needed to be supported in the ‘clash’ of their different local identities. We find in illustration 14 (paper V) how the emotional activity in the KIM may have been essential for the sense making process in this project as emotional response Weick (1995) argues, shapes the process of sense making.

Throughout the KIM, Pete, the facilitator, was attuned to the momentary events such as the rise of emotions and he continuously balanced between being a ‘reader’ and a ‘repairer’ (Shotter 2005) of the situation. Pete supported the participants in their emotional activities and kept a balance between pushing the participants forward or keeping them on topic and defusing tensions. If he had moved on without recognizing or avoiding the ‘clash’ between the local identities represented, the opportunity to jointly make sense of the project goal may have been lost. Instead, Pete actively supported sense making by inviting the actors to joint action (Shotter, 2002) in ways that legitimized their expressions of emotions and where these became appreciated for the role they played (Gergen, 2007) in the process.

By explaining how the conversations in the KIM (illustration 14; paper V) and KOS (paper IV) were important for revealing any potential misunderstandings, Pete supported actors in their co-authoring of a relational landscape where they began to see each other as resourceful conversational partners (Shotter & Cunliffe, 2002). But the process of sense making was difficult (see also Weick, 1995). On the one hand we find in the beginning of the meeting how

the actors discussed different views of what a ‘knowledge domain’ was supposed to represent, was it related to the job specification, educational background or other? At this moment in the meeting diverging ideas to what knowledge domain was, was approached with humor, laughter and a willingness to listen. It could be argued that the emotional activity going on at this moment had to do with the fact that none of the actors felt an ‘ownership’ of the word ‘knowledge domain’. As such there could not be a ‘clash’ between different interpretations as none of the actors represented in the meeting had any history (Gergen, 2007; Bakhtin, 1986) of the word; as such no one had to defend, contest or negotiate the definition of it (George, 2000).

But further on in the meeting, when the participants began to talk about knowledge overlap, something happened: tensions arose. We follow how Pete and Calvin present their perspectives regarding misunderstandings in relation to knowledge overlaps. Here Calvin puts forth his perspective of the origin of the misunderstandings in the project and how he saw this as a leadership problem. Here Pete tries to keep the actors on track regarding the subject and seems not to want to get into the discussion of what leadership is. He clearly states that in this case misunderstandings are not about leadership. At this moment in the meeting tensions arise and the emotional aspect can be explained by how Calvin and Pete firmly held to their beliefs (George, 2000). However, by explaining what was at stake in the project Pete was able to defuse the tension in the group. In his role as a facilitator, Pete, became the practical co-author of a relational landscape (Shotter and Cunliffe, 2002; Shotter, 2008; 2006; 2005) in which he facilitated the emotional process, which thus did not become a threat to the sense making process but rather became a driving force (see also Weick, 1995).

### ***CO-AUTHORS OF ORGANIZATIONAL LANDSCAPES***

What has been described above is how conversation and action are intertwined (Shotter, 2002; Shotter and Cunliffe, 2002; Cunliffe, 2001; 2002a,b; Gergen, 2007; Vygotsky, 1986; Bakhtin, 1986), but what has not fully been uncovered is ‘who’ the conversational partners involved in the shaping of the organizational landscape are. In the pursuit of Joint Directed Action actors need to recognize that their co-authors are not only others, as in other individuals, but are also the structural constraints and/or enablers (Fairclough, 2005; Sztompka, 1991) such as Quality Assurance Systems or other management ‘systems’.

It is here argued that actors need to understand how management ‘systems’ in their enactment (Weick, 1995), through a relational - interpretive process of meaning making, become co-authors (see ex. Bakhtin 1986; Vygotsky, 1986; Shotter, 2008; Cunliffe, 2002a,b) shaping the organizational landscape. By being aware of these issues actors can become continuously attentive to how the ‘output’ and ‘input’ of these systems are intertwined and as such they may also become continuously vigilant to the outcome of these ‘systems’. Attentiveness to this two-way process further supports the pursuit of JDA.

In Peter’s illustration (7) we find how he sees management systems being co-authors of the organizational landscape. “I mean if I draw a map then we all interpret this differently but it

may still be something which helps us go ahead anyway. The finesse is to continuously go back to the map and ask ‘what did we mean by this?’ as the map or picture looks different a couple of hours later”. Seen in the perspective that the organizational landscape is continuously re-shaped due to the reflexive relationships among meaning making, language, identity, emotion, and action, it would be advantageous for actors to become aware of ‘who’ the co-authors are shaping the organizational landscape (Shotter, 2002; Shotter and Cunliffe, 2002; Cunliffe, 2001). By stimulating reflection, it is here argued that actors can become mindful in the situation and interact heedfully (Roberts and Bea, 2001; Weick et al., 2008; Styhre et al., 2008). This meaning how they are attentive in the moment, to contextual cues and act conscientiously, and with consideration towards one another in their relational activities (Roberts and Bea, 2001). As such is a relational landscape shaped. And as people engage and relate (Gergen, 2007) within the flow of conversational activity, seminars such as KOS can be one way to support the continuous shaping of a relational landscape in which actors can become aware of how actions unfold (Cunliffe, 2001; 2002a,b). In the pursuit of supporting the co-authoring of relational landscapes conversational methods such as KOS also supports the pursuit of Joint Directed Action.

What has been described here is by being attentive to the inextricably intertwined processes of meaning making, language, emotions, identity and action actors co-author a relational landscape in which Joint Directed Action is pursued. By using a method such as KOS managers can support this attentiveness by encouraging actors in relating to one another in ‘new’ ways; where they begin to see each other as resourceful conversational partners rather than contestants and where they are able to recognize how management systems in their enactment are co-authors shaping the organizational landscape.

## CHAPTER 5 - PRACTICAL AND THEORETICAL REFLECTIONS AND IMPLICATIONS

*I have a couple of examples where language can have double meanings which can create problems for us ... where we've lost in efficiency because we don't know what the different things means.*

- Tom, a project leader

By investigating the intricate mechanisms involved in meaning making, I believe we can gain information as to how come actions unfold in the ways they unfold and sometimes deviate (Vaughan, 1996) from what they are 'supposed to be'. It is here argued that by focusing upon 'what goes on' (Shotter, 2005; 2006) in the relational activities in meaning making (Shotter, 2005; 2006; 2008), actors can understand them better, and thus engage in 'new' ways of navigating towards a relational landscape in which JDA is pursued.

### **PRACTICAL REFLECTIONS AND IMPLICATIONS**

#### ***SHARED UNDERSTANDING OF WHAT?***

Peter in illustration (13) asks, what is shared understanding? And what I would like to emphasize here is that shared understanding can be seen from two perspectives when studying the findings in this thesis. These different perspectives are related to Weick's (1995) differentiation of ambiguity and uncertainty, where ambiguity can be seen as something productive and not necessarily detrimental, whereas uncertainty can create tensions.

In this thesis we find on the one hand how it may be necessary to establish shared understanding in certain situations. In illustration 4 Eric describes the problems they encountered in a product development process where two different departments had different understandings of the concepts time operation and temperature. (This is also something I have heard illustrated in other contexts where it is not uncommon to mix measurements in centimeters or inches.) When illustrating shared understanding from a measurement perspective, which could also be called an operational level, we find that it is very important to be clear about what is supposed to be measured, or the outcome could be adding apples and

pears into the 'system' which could result in detrimental outcomes. Organizations often have a shared statistical control tool, but actors often fail to define the exact 'object' they want to measure, so one department may have put one definition into a certain measurement and another department a completely different one. This problem is clear in Tom's illustration where we find their problems of defining IT companies (see ill 3). From this perspective the definition or 'common concept' (Lewis, 1929) needs to be clearly defined if targets are to be reached. Here ambiguities or 'fuzziness' can become detrimental for the outcome.

On the other hand, we find that shared understanding can also be something very different. In certain situations, common concepts for common action (Lewis, 1929) are not necessary in achieving goals. Eric in illustration 5 describes how they did not need a shared understanding of what the product was supposed to be in order to produce it. In this project they created the meaning of it as they went along. He describes how ambiguities "are part of the product development process". Relating to this, we can consider the well-known study of Star and Greisemer (1989) and their illustration of the creation of a museum.

What we find in Star and Greisemer's (1989) illustration is how one person (the curator) was able to gather all the different actors, with their local identities', actions towards the goal of creating a museum. The curator (or project leader) managed this by domesticating (Bragd et al., 2008) the boundary object (the goal) by using a language in which all actors from the different local realities recognized themselves. However, it cannot be claimed that the curator co-authored a relational landscape (Shotter and Cunliffe, 2002) as he *alone* coordinated the actions of the different actors' towards creating a museum. The actors did not collaborate nor work jointly together. Their activities were targeted towards the goal through the action of the curator. It was he who as such continuously aligned the different actor's actions with the objective.

What separates the case of Star and Greisemer (1989) from the ones presented in this thesis and the definition of Joint Directed Action is that the different local identities involved in this project seemed to have never met. This is not the reality of the projects illustrated in this thesis. As organizations increasingly work towards being project oriented (see paper IV), we find how local identities continuously meet in new situations and in new constellations both intra-organizational and inter-organizational. And these new situations constantly demand day-to-day negotiations between the local identities represented in the situation (George, 2000). That is why these negotiations and 'clashes' between local identities are part of organizational realities and need to be attended to in order to pursue JDA.

Finally, instead of pursuing e.g. projects with a common belief that everyone has a shared understanding of the project, actors need to do a 180 degree turn and approach the project with an awareness that different perspectives exist, and that they exist *everywhere*. Hence a whole new range of behavior may be adopted as actors begin to relate to one another in a whole different way (Gergen, 2007) and as such can pursue JDA.



## ***WHAT IS GAINED BY UNDERSTANDING THAT DIFFERENT INTERPRETATIONS EXIST?***

What has been illustrated in this thesis is that most people are unaware of how they are co-authors of the organizational landscape and thus cannot recognize other co-authors. Therefore it is here argued that there is a need to support actors in their relating to one another as this not only creates an awareness of other co-authors but also shapes a relational landscape that pursues JDA. It is further argued that by being aware of how meaning making, language, emotions, identity and action are inextricably intertwined, actors can shape a relational landscape.

The following conversation with a practitioner illustrates the practical implications and benefits for managers supporting and co-authoring a relational landscape in understanding how meaning making being a relational-interpretive process shapes the organizational landscape.

Practitioner (P): What benefits are there by adopting this perspective?

Me (M): Well what this perspective highlights is that there are differences *everywhere* and we need to become aware of them to become more efficient in our day to day practices.

P: So what you mean is that we should have a whole different attitude when we have meetings? To go there and expect that we have different perspectives?

M: Yes, you could say that you should start the meeting at another 'end', that is go to the meeting expecting that you do not have the same interpretations and as such the 'floor' opens up to a whole different set of conversations.

P: What do you mean by this?

M: Well these conversations may be more characterized by asking questions that get to a more profound level of understanding one another. You may ask: When you say this, do you mean...? Have I understood you correctly when...? And so forth.

P: But what is gained by all this?

M: Well I see the gain in many ways but maybe what's most clear in this thesis is that an increased attentiveness to the existence of differences everywhere can support Joint Directed Action. We often find a focus within organizations of how to support collaborations, but what is neglected is the importance of directing *all* actions towards the same goal whether people collaborate or not. Most often this is not a problem and targets are met, but I argue that having this perspective can increase both efficiency and reliability within organizations. However, when collaborations take place, having this perspective further supports the 'clash' of different local identities, which again supports efficiency, reliability and Joint Directed Action.

P: Ahh yes of course it is more efficient if we understand each other better, but does this mean we always need to conduct KOS? That seems like a lot of work and maybe isn't so cost efficient always. I mean do we need a KOS for everything, do we really need to create shared understanding on every level?

M: No of course not, what I argue is that simply by being attentive to how meaning and action are intertwined actors can know *when* it is necessary to create some kind of shared understanding as their whole take on a situation is different than from when they believed that they all had the same interpretation.

P: So if I understand this correctly, if we have a better understanding of how meaning making is intertwined with, language, emotions, identity and action we can become more efficient in our actions, well that's seem reasonable. But how can we get past people going around and using a language that others don't recognize?

M: Well supporting communication in which actors relate to one another, clarifying questions need not become so prestigious. But of course it is not easy.

P: But how do you get past prestige?

M: If managers support and are actively involved in co-authoring a relational landscape, emotions may not become a threat, and as prestige in my interpretation is an emotion I believe actors through such a support may get past this. We need to understand how emotions are mixed up in our everyday interactions and as such need to be recognized. If we understand and are attentive to how meaning making, emotions, identity, language and action are intertwined, I believe relating to one another becomes easier.

P: But what I find problematic in some of our factories is simply that people just do not want to do things a certain way.

M: This is difficult, but do you know in what way they do want to proceed?

P: No, but I don't think a KOS is the right way to start; it seems a little too complicated and maybe it would be difficult to handle the emotional processes as there obviously are great differences and obstacles to overcome.

M: Yes, you're probably right, but I think one way is to open up for a dialogue and simply ask them what they want to do and how they want to do it; and to start from there and then later maybe go on to something like a KOS?

P: Ok, I get it: understanding that different interpretations exist everywhere can support us becoming more efficient and can help us aligning actions towards a set goal or direction. But what do you mean when you say that management systems are co-authors of our realities?

M: What I mean here is that there needs to be an attentiveness to how these 'systems' in their *enactment* become co-authors. And the enactment of the 'systems' is a result of the actors making sense of them in a relational-interpretive process. This further gives that focus upon the 'result' from these 'systems' is naturally traced back to the actors. When we understand this it is natural to be aware of how these 'systems' are enacted differently throughout an organization, which can create huge disturbances and difficulties. With this awareness an increased attentiveness to the outcomes of these systems is also created, as is an increased attention to what is 'put into' these 'systems'.

P: I see! Well of course, and I agree oftentimes people 'blame' the system without any further notice. But considering all what you've described, it just doesn't seem like very complicated stuff. But then why is it so hard?

M: I think it is the complexity of it all. But I think that just by becoming more aware of and attentive to these issues is a good start as this may change our perspective to believe that we 'see' things the same way. And with this change a whole new way of relating to one another may be commenced.

## **THEORETICAL REFLECTIONS AND IMPLICATIONS**

The theoretical contributions of this thesis lie in adding empirical findings to a field that has mainly been treated on a theoretical level, which is the field of discourse analysis in organization studies (Van Dijk, 2008). Another theoretical contribution is introducing the relational-interpretive perspective of how actions unfold within the field of Quality Sciences, which can support an understanding of how management systems such as QAS, are enacted (Weick, 1995).

Further contributions are in the area of studying how emotions are inextricably intertwined in the shaping of organizational realities. Emotions have previously in organization studies been ignored, but are now beginning to be seen as important for understanding organizational behavior (Mangham, 1998). Following this, Peters and Kashima (2007) describe how talk provides the fertile ground for emotion sharing and coordinated target-orientated action. Consequently, studying relational activities such as the sense making process in the KIM (paper V) provides further knowledge to this field. We also hear Gergen (2007) describe how studies of seeing actors as relational beings is still in its infancy, as such this thesis further contributes to this field.

Furthermore, the theoretical implications of adopting a relational-interpretive perspective gets past the duality of seeing meaning making as either a result of interpretation or a social construction, as has mainly been done previously in studying organizational behavior. Adopting this perspective we find how actors both individually and collectively can take responsibility and be held responsible for not only their own but also collective actions. This perspective also takes temporality naturally into account, as meaning and action are seen to be inextricably intertwined and as such are continuously shaped and re-shaped through a relational-interpretational process of experience.

By highlighting the issues described in the theoretical contributions above we find how Joint Directed Action can be pursued. The notion of Joint Directed Action can be said to be both the first and final theoretical contribution of this thesis. As to date I have not found other research describing a continuous pursuit of all actors aligning their actions, individual and/or collective, with a common objective. The whole idea of Joint Directed Action appears to be quite novel.

## FUTURE RESEARCH

*...required of the organization scientist then is an expanded means of enhancing generative interchange between the organization and the academy (Gergen and Thatchenkery, 2004, p. 243)*

In future research it would be interesting to see additional investigations and empirically based studies that can increase an awareness of the implications of meaning making upon the pursuit of Joint Directed Action. It would further be interesting to see added to this research how the adoption of a relational-interpretive perspective upon how actions unfold can support an understanding of the way practices slowly can transform within organizations. By taking this perspective, quality practitioners, for example, may become increasingly aware of how quality management systems in their enactment become ‘co-authors’ of the organizational landscape and as such ‘work with them’ differently.

It would also be interesting to see researchers further investigate how organizations can pursue and sustain reliability by adopting a relational-interpretive perspective upon meaning making and action in understanding how actions unfold. What is claimed in this thesis is that co-authoring a relational landscape characterized by reflection can support mindful behavior and heedful interrelating core activities for reliability (Roberts and Bea, 2001). But it is necessary to go further, and we can add interesting research from the field of High Reliable Organizations (HRO).

Another interesting research project is to further explore a relational-interpretive perspective upon continuous learning and knowledge creation in organizations. It would be very interesting to see how Vygotsky (1986) and his idea of the zone of proximal development could be ‘used’ as an analytical ‘tool’ in describing how learning and actions unfold in organizations. It would be further interesting to compare Vygotsky, Bakhtin and Mead, and their ideas of how meaning and actions are intertwined as we here might find ‘new’ paths to understanding how actions unfold which can support JDA in organizations.

One final interesting and important area of research would be to follow up on one of the findings illustrated in this thesis (and to which I have in part dealt with here) which is to study how the enactment of e.g. Quality Assurance Systems or Customer Satisfaction Indexes unfolds shape the organisational landscape (see also Spante, 2009). Actors enact management ‘systems’ to ensure that they are doing the ‘right’ thing, going in the right direction. These ‘systems’ are implemented in organisations to consolidate actions, but how can actors ensure that these systems do not consolidate deviant or unwanted action? We often find how measurements count as evidence and are granted a powerful role in validating knowledge. Measurements are oftentimes also considered irreplaceable as witnesses and arbiters in disputes (Knorr-Cetina, 1999). Therefore it is here argued that actors need to increase their awareness of their enactment of these ‘systems’ and as such become clear on what it is they *want* to measure and what it is they *are* measuring — and finally, for what reason are they

conducting these measurements? To increase an awareness of these issues, further studies within this area are needed.



## EPILOG

### Getting back to Baby Peter.

In the case of Baby Peter we find that despite getting the best ratings through their Quality Assurance System, the social service system still failed him. How come? When we talk about how systems fail, here being the social service system, what is it we are talking about, *what* is it that failed?

When reading the serious case report after Baby Peter's death we find:

Baby Peter Serious Case Review  
22 May 2009

Executive Summary  
Statement from Graham Badman

- 
- A failure to identify children at risk of immediate harm.
  - A failure to act on evidence.
  - An overdependence on performance data, which was not always accurate.
  - Agencies working in isolation from each other.
  - Poor gathering, recording and sharing of information.
  - Inconsistent quality of frontline practice and insufficient evidence of supervision.
  - Insufficient oversight of the assistant director of children's services by the director of children's services and chief executive.
  - Incomplete reporting of the management audit report by senior officials to elected members.
  - Insufficient challenge by the local safeguarding children board to its members and also to frontline staff.
  - Poor child protection plans.
- 

What we find here is how the actors involved were not attentive to and did not act upon the contextual cues given in Baby Peter's case. If they had been, this tragedy might have been prevented at the first serious incident. Given that all actors involved in Baby Peter's case had all the evidence needed to intervene, and given that all actors involved believed that his

injuries were non-accidental, the greatest failing of all was their lack of urgency and thoroughness in the actions they took (SCR).

Based upon what has been presented in this thesis it seems that in Baby Peter's case the actions taken for this child were anything but attentive to his needs. What would have been appropriate in this situation would have been an active pursuit of Joint Directed Action concerning children's welfare. This seems not to have been the situation here.

It may be speculated that the outstanding results from the QAS reinforced 'deviant' behavior such as lack of urgency and poor attentiveness to his needs. This could be explained by an over confidence in technological systems, which Weick (1995, p. 3) describes as "The more advanced the technology is thought to be, the more likely are people to discredit anything that does not come through it". What may have happened in Baby Peter's case is that the actors within Haringey's social service system were falsely secure in their routines, because if they had been deviant the QAS in place would have 'warned' about this. Since it did not — all is good.

What has been argued in this thesis is that with an awareness of how they make meaning, actors can shape relational landscapes in which they are attentive to and mindful of contextual cues. Such actors also are aware of how actions unfold and are thus able to continuously align their actions with the common objective. Another implication of being aware of the processes of meaning making suggested here is an attentiveness not only to how other individuals are co-authors of the organizational landscape, but also to how QAS in their enactment become co-authors of this. Then a healthy skepticism of the output of these systems is in place. In co-authoring a relational landscape, Shotter (2005) describes how actors move from engaging in mindless activities and move towards mindful activities where they interact with conscientiousness, attentiveness and consideration— in short in heedfulness (Roberts and Bea, 2001; Weick et al., 2008). And it is as such Joint Directed Action safeguarding children at risk may be pursued in the future.



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## APPENDIX 1 - METHODOLOGICAL REFLECTIONS

*The presence of confusion can be a sign of active sense making that is moving toward more profound simplicities.*

- Karl Weick

### MY PERSPECTIVE UPON QUALITATIVE RESEARCH

The power of Wittgenstein's (1953 no. 89) methods of inquiry is, to Shotter (2006), the fact that they do not seek out new facts; the essence is rather that we do not seek to learn anything new by using them. We want to understand something that is already in plain view. For this is what we seem in some sense not to understand. In other words, it is not a matter of acquiring some new information or data, but of redirecting or reorienting our attention, to noticing things that 'no one has doubted but which have escaped remark only because they are always before our eyes (Wittgenstein, 1953 no. 415), things which in Garfinkel's (1967) words are continually "seen but unnoticed" (p.36), where it is in our very seeing of them, in our spontaneous reactions to our seeing them, that a kind of responsive understanding becomes available to us with living forms that are much less readily available than dead forms (Shotter, 2006). As such "We do not address inquiries to nature and she does not answer us. We put questions to ourselves and we organize observation and experiment in such a way as to obtain an answer" (Bakhtin, p. x, 1986).

This description is close to the use of narratives in organizational studies, from which my research is inspired. The narrative approach tells about actors' intentions and their actions that take place in time and space. The narrative studies give priority to the interviewed person's providing a personal account of their own lives and experiences (Czarniawska, 1997; Frank, 1995; Nicholas & Gillet, 1997; Sköldböck, 1994). This means that interviews are seen as a way to understand how the interviewees relate to things; it is not a way to gain 'new' information or 'new' data. As such a narrative approach does not seek to present generalized knowledge; it aims to present contextual narratives of human endeavors in an attempt to support sense making of complex and ambiguous realities (Habermas, 1968; Guignon, 1997). And this is what I propose in my text, it is up to the reader to 'domesticate' (Bragd et al., 2008) this text and do these generalizations for her/himself. Having a narrative approach further gives that credibility (often an important issue considered in research) of the research lies with the reader (Czarniawska, notes from lecture in narrative course, 2005).

The benefits of having a narrative approach in organization studies "The narrative form of reporting will enrich organization studies themselves, complementing, illustrating and

scrutinizing logico-scientific forms of reporting. By relinquishing some aspirations to power through the claim of factuality and one-to-one correspondence of theory and the world, organization studies can open their texts for negotiation and thus enter in a dialogical relationship with organizational practices (Czarniawska, 1997, p. 17). Hence are issues like validation, reliability, generalizations or credibility not concerned within the narrative approach to organization studies. These are all issues for the reader to conduct (Czarniawska, 2004).

As qualitative research is an approach rather than a particular set of techniques (Morgan and Smircich, 1980), its appropriateness derives from the nature of the social phenomena explored. In this thesis the meaning making process has been focused on as a way to gain a better understanding of how actors can pursue Joint Directed Action. Having described the ontological, epistemological basis in the theoretical chapter, I will not delve into these matters again. But having a relational-interpretive perspective presented in the theoretical chapter naturally means that I have pursued this research from a standpoint that it is not possible to separate the researcher from the context of study: they are inextricably intertwined.

## THE WRITING PROCESS OF THE COVER PAPER

The way this thesis has been pursued is related to the hermeneutic and pragmatist (Lewis, 1929; 1934) idea of how knowledge is generated in a spiral manner, where “the meaning of a part can only be understood if it is related to the whole” (Alvesson & Sköldbberg, 2000, p. 53), where the process of conducting the journey between the parts and the whole over and over again constitutes the creation of knowledge (Alvesson & Sköldbberg, 2000; Kvale, 1997). Applying these ideas to the process of writing this thesis can describe how, throughout my research journey, I have continuously gone ‘back and forth’ between studying my findings and studying and adding ‘new’ theory. This has naturally resulted in many changes and revisions, and there are in particular three in the writing of this cover paper I would like to mention here.

First, the headings in the results chapter in this thesis are a result of my sense making of the findings and of the writing process of my discussion. As I have pushed forward in the writing process, it seems that the writing itself supported my own sense making of what it is I have pursued, and hence the headings or sub-groups into which I have put my findings have changed throughout the writing process. Secondly, while writing the discussions chapter, I identified how it would benefit from adding a little more theory. These are not previously unknown theories, merely a ‘deepening’ of what already existed. However, instead of adding ‘chunks’ of new theory in the discussion chapter I chose to re-write part of the theoretical chapter, for the benefit for the flow of the text. And thirdly, the choice of putting my methodological reflection chapter as an Appendix is precisely for the same reasons as the previous one. For the benefit of the flow of the text, I chose to have this chapter as an Appendix, as these stories within stories can sometimes become main characters, which I

wished to avoid here. I would further like to claim that all these choices are made in a pragmatist spirit, the main idea being ‘it simply works better’.

## DATA COLLECTION AND DATA ANALYSIS

In the following, the data collection and data analysis issues are presented. The settings of the studies have previously been described in Chapter 3.

### ***STUDY 1 - LITERATURE STUDIES FOR A THEORETICAL BASE***

In the paper “Exploring the epistemological origins of Shewhart’s and Deming’s Theory of Quality...” (paper I), the aim was to explore the origins of Shewhart’s and Deming’s ideas concerning a theory of quality and its connection to knowledge theory, because we maintain that the quality movement originated not solely from insights about variation but also from philosophy. This paper was the first paper I wrote however it has been re-written several times throughout my research journey and has in other versions been presented at two different conferences. The version in this thesis is the final and published version.

The way the study for paper I was pursued was first to conduct thorough readings of Deming’s books “Out of the crisis” (1986) and “The New Economics” (1993), and then pursue Shewhart’s writings “Economic Control” (1931) and “Statistical Method from the Viewpoint of Quality Control” (1939), as Deming clearly was influenced by these. It was through the readings of these texts, except Shewhart’s (1931) “Economic Control”, that references to Lewis could be found: references that seemed to have had great influence upon the forming of some of both Shewhart’s and Deming’s ideas. It thus became intriguing to read the original work, and therefore a study of Lewis’ (1929) book “Mind and the World Order” (MWO) was pursued. The reading of Lewis became a great challenge, as the reasoning in it is circular, which Lewis himself acknowledges when commenting upon his writing the book: “in writing this book, I encountered a considerable difficulty of exposition: with whatever one of these I should begin, the others would be more or less anticipated.” (Lewis, 1929, p. xi) It is therefore well-known among the readers of Lewis that this book is not one of the easiest to pursue (see e.g. Wilcox, 2004).

The pursuit of Lewis’ writings was first to examine the chapters Deming (1993) advises the reader to study in his book “The New Economics”. The chapters Deming refers to are 6, 7 and 8 in Lewis’ “MWO”. Chapter 6 concerns ‘The relativity of knowledge and the independence of the real’, Chapter 7 ‘The a priori - traditional conceptions’ and Chapter 8 ‘The nature of the a priori and the pragmatic element in knowledge’.

After an initial reading of these chapters I cannot claim that I had understood very much. Hence, a return to the work was needed, and therefore a study of the other chapters in Lewis’ (1929) ‘MWO’ was commenced. Thus, my studies had met those same difficulties about which Lewis himself had cautioned the reader. The chapters are interlinked, and it is difficult

for a novice to enter the text, whether it be by pursuing it from the beginning or in choosing selected chapters. In my case the readings of Lewis' 'MWO' became circular, and with every new turn small pieces of the puzzle fell into place.

However, not unlike other investigations, the studies of Lewis were like opening Pandora's box; the more that was unraveled, in the search of original scholars and their influence upon Shewhart and Deming, the greater the necessity of delimiting my readings. I therefore had to, at least for a while, let go of my studies of pragmatist philosophy and focus upon how to apply the ideas found in paper I into present day concerns in organizations that resulted in papers II and III.

But before I present paper II I wish to describe the conduct of paper III, which also mainly is a literature study but with an example based upon empirical findings collected by Gauthereau (Gauthereau, 2003). In this paper (paper III) we analyze a portion of the literature about the concept of safety culture, and propose a view based on conceptual pragmatist philosophy that manages to combine different strands of current safety research. From this we propose a pragmatist perspective upon safety management that describes how actors need to continuously pursue safety by giving continuous attention to safety issues in health care. We claim that this could be done through continuous reflection on, for example, organizational values. This paper can thus be said to be a first attempt to understand how meaning and action unfold through a continuous relational-interpretation process and need to be given attention as such. In this paper we claim that the process of creating a shared understanding (which I today call the meaning making or sense making process) of the word 'incident' was the important input to consider when pursuing safety in health care and not the final description of 'incident' itself.

The original idea of seeing how meaning is continuously shaped and re-shaped in a relational-interpretive process was first developed during the work with papers I and III; however it was still in an embryonic state regarding understanding the relational perspective. The original paper III was written in 2003, but has now been partly re-written, and it is this later version which is appended in this thesis.

## ***STUDY 2- COMMON CONCEPTS FOR COMMON ACTION***

The study regarding Lewis' (1929) claim for 'common concepts for common action' (paper II), was a follow-up of the findings from the first study. The aim of this study was to see if we could create deeper insights and understandings of problematic occurrences in organizations by applying Lewis' ideas to events in organizations today. I was curious as to whether these ideas were still a helpful source in understanding meaning and action in contemporary organizations.

Five open-ended interviews (Czarniawska-Joerges, 1992; Kvale, 1997) were conducted in 2002 with experienced project managers who were also undertaking their PhD studies at the same Swedish university as myself, while working in various external organizations. The

organizations they represented were 2 telecom companies (Chris and Eric), a pharmaceutical company (Peter), an automotive company (Mike) and a union (Tom). Eric was the first interviewee I chose for the study as he was the one providing an example in one of our courses that I saw was related to what we had studied in paper I. The other four were simply chosen as being representatives from the other various companies in the Fenix Research program to which we all belonged. At the time of writing the paper I had an idea that this was merely a way to have a more representational sample size. However today I do not think this has any relevance, as every story is unique concerning how actors make sense of their realities. And as I have not had any intention of comparing different organizational contexts or what I might today call different organizational discourses (Bragd et al., 2008), this issue is not a matter here either, an interesting one but not within the scope of this thesis.

I had taken doctoral courses with all of the respondents and therefore knew them personally. Having a narrative perspective upon organizational studies, this relationship can be seen as being supportive in our relating to one another as we have shared experiences (Czarniawska, 2004) through our studies together. This can make “it easier for the interviewer to visualize the stage on which the reported events are taking place, which greatly enhances understanding” (Czarniawska, 2004, p. 50). The relationships here in my opinion made it easy for me to understand the rather complex material when later analyzing it. Where the complexity of the material I believe has to do with how the interviews were open-ended. However through my relationship with the interviewees I could ‘place’ the individual in the material so to speak. This I think may have helped me gain a ‘thicker’ understanding of the material (Geertz, 1988).

In reanalyzing the material for the cover paper it is interesting how many times when talking about the responses my supervisor and I referred statements from the interviewees to their person as a way to make sense of the material. My supervisor who also knew these individuals personally knew without looking at their names in the interview documents, who had answered what. What implications this has for the analysis of the material I can only speculate about, but it is an interesting thought to be further elaborated upon in the future.

The interviewees were asked to discuss their experience of having or not having common concepts, and the implications they saw this had upon action. The study utilized open-ended interviews to encourage the interviewees to speak as openly as possible about their personal experiences and to create narratives of the phenomena being investigated (Czarniawska-Joerges 1992; Kvale, 1997). Each of the interviews, which were conducted in Swedish and thereafter translated into English, took 60–90 minutes. The interviews were tape recorded, transcribed and analyzed, and the analysis of the material generated a number of categories and themes, all of which were developed on the basis of the interviews (rather than from the extant literature). The interviewees were then presented with the results of the analysis to provide them with an opportunity to comment and give feedback.

One observation regarding these interviews is the interesting thought of analyzing the interviewees themselves. In their role as action researchers, being part-time PhD students and

working part time within their organizations, it would be intriguing to understand how the process of being involved in managerial research studies shaped their responses in the interviews. What is further intriguing is that when reading the transcription of the interviews it is clear how the interviewees made sense of their realities as they illustrated their examples to me. Another interesting thought concerning the PhD students' roles within their respective organizations: is how the benefit these organizations get by supporting PhD studies perhaps do not lie in the knowledge 'produced' in a PhD thesis but rather in the 'change' of mind of the PhD student. Might this perspective provide a whole different take upon supporting PhD students in industry?

### ***STUDY 3- KNOWLEDGE OVERLAPPING SEMINARS***

The KOS studies (papers IV and V) were developed in accordance with the methodology of Action Research — 'collaborative action inquiry' as described by Lewin in 1946. According to 'collaborative action inquiry' (Lewin, 1946; Westlander, 1999) social science knowledge is integrated with organizational knowledge for the purpose of generating scientific and actionable knowledge simultaneously (Reason & Bradbury, 2001). The researcher has a close identification with the activities and direction of change of the object being studied (Westlander, 1999).

What distinguishes the collaborative inquiry (Westlander, 1999) process from traditional research is that it involves the organizational members, and all involved in the process share the responsibility for the effort (Shani & Bushe, 1989). It also has the basic assumption that working with the organizational members as co-researchers stimulates a self reflective process that triggers action based on the knowledge that is created (Shotter, 2002; Eden & Huxham, 1996). The choice of collaborative inquiry in the KOS studies (papers IV and V) is thus based upon the idea that the only way to gain relevant actionable knowledge and to accomplish change is through dialogue, reflective thinking and all participants acting (Schön, 1983; Weick, 1999; Shotter, 2002). The research context in which this study was carried out is characterized by the idea that knowledge is created where it is used (Adler & Norrgren, 1995; Styhre et al., 2001).

In this study the second author of paper IV had been employed by Siemens for thirteen years and had actively influenced the changes that had taken place in the organization. It is also the second author who originally designed the Knowledge Overlapping Seminars and tested them in a case in 1999 (Cronemyr, 2007). However, to improve the design of KOS and to further investigate what 'goes on' (Shotter, 2006; 2008) within the sense making processes in KOS, collaboration with the first author (me) was initiated. This was done as I have a background as a social scientist. Being part of the company and the project being studied, the second author naturally had the role of an action researcher while I had the role of a participative observer with an ethnographic approach (Silverman, 2005 Czarniawska-Joerges, 1992; Geertz, 1988), conducting observations during the KOS Introductory Meeting (KIM) and the two first KOS conducted. The choice of having an ethnographic approach was made as it is suitable when one wants to study complex or unfamiliar phenomena and/or processes (Czarniawska-Joerges,

1992). Having an ethnographic approach was chosen as the study was aimed not only at identifying research findings that could directly influence organizational change (as the focus is within Action Research), but also investigating and collecting ‘thick descriptions’ (Geertz, 1988) from ‘within’ (Shotter, 2006; 2008) the meaning making process in the KOS; this to get a better understanding of the intricate mechanisms involved in meaning making.

In the study, evaluation questionnaires were handed out before and after each seminar. Semi structured interviews (Westlander, 1999) of about one hour with each of the participants and guides were conducted one month after the KOS. These were audio recorded and thereafter transcribed. The results from these interviews and evaluation questionnaires were used in the first draft of paper IV. However, the questionnaires are excluded from paper IV as the sample was too small.

One important issue concerning the planning of this study was that the original idea was to conduct the KOS (in which KIM is included) and do interviews as a way to further develop and evaluate KOS. But as soon as the KIM began I noticed how ‘something’ happened in the room, and on the spur of the moment I chose to conduct an improvised observation of the meeting. Emotions arose, which intrigued me, and I wished to ‘add’ these processes to the study. The observation resulted in field notes (Schwartzman, 1993) that described not only the conversations of the actors but also the emotional activities of the meeting; these field notes were later discussed by both researchers. However, the improvised observation I conducted at the KIM had not been cleared with the second author (Cronemyr) of the paper, and we had to discuss this after the KIM was done. But after studying the field notes from this observation we chose to continue my observation at the following two KOS the next day. However, these latter observations are not presented in the thesis or in the papers. The reason for this is simple. In paper IV the focus was to present and evaluate KOS as a process for creating shared understanding of a project goal by increasing an awareness of different interpretations and delimiting misunderstandings and knowledge gaps between knowledge domains; where we had planned to use the interviews as a way to evaluate the process. Although it would have been interesting to add the findings from the observations in paper IV, for lack of time we simply could not do this. What we could have gained by adding these would have been highlighting the emotional activity going on in the KOS and how Pete facilitated it, and thus added value to further developing the KOS method. But this has been addressed in this cover paper, as I argue that KIM, as an introduction meeting to the KOS, is part of the KOS. The sense making processes in KOS are a continuum of the sense making process begun in the KIM. And seeing it this way further explains why we chose to stay with the observation in KIM in paper V; the material here was more than ample to suit our purposes of trying to understand what ‘goes on within’ a sense-making process.

Paper V is thus based upon the observation conducted in the KIM. As the idea of this paper came long after the follow-up interviews were conducted, questions relating to the emotional activity going on in the process were simply not asked. This would have been done if we were to conduct such an observation again, as would the addition of tape recorders and preferably also video recordings. Not having audiotaped or filmed the observation in the KIM could

explain the abrupt ending of the observation in the KOS concerning the common goal. At this moment in the meeting, we find in the field notes how I had a hard time keeping up with the activity going on in the meeting. These are lessons learned for the future.

In paper V we wished to pursue an increased understanding of ‘what goes on’ in the co-construction process of shared meaning, which we call the sense-making process in paper V. The KIM took place on a Monday afternoon starting at 13.00 in a conference room at the company site. The empirical material consists of field notes (Schwartzman, 1993) from the participative observation of this meeting. In this meeting I observed how the team members were collectively making sense of the project goal, thereby gaining insights into the activities taking place at the KIM. At this meeting, field notes were taken as I sought to identify critical events and central concerns addressed by the project team members. Some of the communication included highly esoteric language filled with technical terms, arguably very difficult for an outsider to fully digest and understand. However, as I had been engaged in research together with the facilitator of the KIM, I had gained knowledge of the environment in which the project took place.

The analysis of the material in paper V has proceeded from a perspective called discursive pragmatism (Alvesson and Kärreman 2000a, 2000b; Kärreman and Rylander, 2008), meaning that the analysis was primarily based upon discursively produced outcomes such as conversations but also strove to understand what went on within the dialogue of the interlocutors (Shotter, 2006). Hence the field notes are scattered with observations about tensions, emotions, indicators when something stirred in the room, how people moved around in their chairs and so forth, to achieve thicker descriptions of what went on within the sense-making process.

## REFLECTIONS OVER THE JOURNEY NOW DONE

“...Knowing begins and ends in experience; but it does not end in the experience in which it begins” (C.I. Lewis, 1934, p. 134).

In this thesis my point of departure was within conceptual pragmatism (Lewis, 1929; Shewhart, 1939). It thereafter transcended into a post-modern relational perspective (Gergen & Thatchenkery, 2004; Shotter, 2008), and ends to date in a form of critical realist social ontology (Sztompka, 1991; Fairclough, 2005; 2008). And it is within this sociological perspective I have applied a relational-interpretive perspective upon meaning making. This is not to say that along this journey I have departed from conceptual pragmatism; rather I have merged new insights with previous ones. However, I have been warned to tread carefully between these domains as “...people take their research seriously!” (Cautionary remark by Alexander Styhre in final seminar.) So if any misinterpretations have been perpetrated here I wish to apologize.



Still, I would like to claim that the thesis you hold in your hand is an interdisciplinary creation. I have continuously navigated between the worlds of engineering sciences, social sciences and behavioral sciences, finding bits and pieces here and there that helped me develop a model for understanding how action unfolds through the relational-interpretation process of experience.

Finally I dare say that my own research and writing process is a textbook example of a continuous sense-making process. Over the years I have continuously made sense of what my research really is about through constant dialogue with my supervisor and others. Even up until the last day of writing, I have had this nonstop dialogue and had to reflect upon what it is that I actually am studying. This sense making has been going on for many years now, and I have had the opportunity to ‘travel down’ many different roads to end up here. With this I wish to thank you for your attention and say goodbye with the following poem by Robert Frost, which in a way epitomizes the very spirit of my research journey:

### **The Road Not Taken**

By Robert Frost

TWO roads diverged in a yellow wood,  
And sorry I could not travel both  
And be one traveler, long I stood  
And looked down one as far as I could  
To where it bent in the undergrowth;

Then took the other, as just as fair,  
And having perhaps the better claim,  
Because it was grassy and wanted wear;  
Though as for that the passing there  
Had worn them really about the same,

And both that morning equally lay  
In leaves no step had trodden black.  
Oh, I kept the first for another day!  
Yet knowing how way leads on to way,  
I doubted if I should ever come back.

I shall be telling this with a sigh  
Somewhere ages and ages hence:  
Two roads diverged in a wood, and I—  
I took the one less traveled by,  
And that has made all the difference.

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## **Paper I**

Mauléon, C. and Bergman, B. (2009)

Exploring the epistemological origins of Shewhart's and Deming's theory of quality: influences from C.I. Lewis' conceptualistic pragmatism.

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# Exploring the epistemological origins of Shewhart's and Deming's theory of quality

## Influences from C.I. Lewis' conceptualistic pragmatism

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### Abstract

**Purpose** – The purpose of this paper is to explore the epistemological origin of Shewhart's and Deming's ideas in their development of a theory of quality.

**Design/methodology/approach** – The approach takes the form of a literature review.

**Findings** – Walter. A. Shewhart's and W. Edwards Deming's ideas concerning a theory of quality originated not solely from insights about variation within statistics but also from the field of philosophy, particularly epistemology. Shewhart and Deming, both seen as quality pioneers, were strongly influenced by the conceptualistic pragmatist Clarence Irving Lewis and his theory of knowledge. This is, and has often been, a neglected connection; however, in today's competitive business environment knowledge and competence have become crucial success factors. Thus, the epistemology-related origin of their theory of quality has become increasingly interesting and important to explore. First, a summary version of Clarence Irving Lewis' theory of knowledge will be presented here as expressed in his work *Mind and the World Order: Outline of a Theory of Knowledge* (1929). Second, examples of some important connections between Lewis, and chosen parts of Shewhart's and Deming's theory of quality will be given, for example the plan-do-study-act cycle, operational definitions and profound knowledge. It will also be indicated how the social element in knowledge is emphasised in the works of Lewis, Deming, and Shewhart.

**Originality/value** – By exploring the epistemological background of Deming's and Shewhart's ideas of a theory of quality, it might be able to better comprehend the profound ideas they left behind and improve the understanding and use of their theory of quality today.

**Keywords** Quality concepts, Pragmatism, Knowledge processes, Epistemology, Management gurus, Business history

**Paper type** Literature review

### 1. Introduction

Walter. A. Shewhart's and W. Edwards Deming's ideas concerning a theory of quality originated not solely from insights about variation within statistics but also from the field of philosophy, particularly epistemology. Shewhart and Deming, both seen as quality pioneers, were strongly influenced by the conceptualistic pragmatist Clarence



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Irving Lewis and his theory of knowledge. This is, and has often been, a neglected connection; however, in today's competitive business environment, knowledge and competence, have become crucial success factors. Thus, the epistemology-related origin of their theory of quality has become increasingly interesting and important to explore.

Walter A. Shewhart, being the inventor of the control chart, is oftentimes seen as one of the founding fathers of the quality movement (Cunningham, 1994; Lovitt, 1997; Towns, 1997; Petersen, 1999; Wilcox, 2004). And by being Deming's mentor, he is said to have had the greatest single influence upon him (Blankenship and Petersen, 1999; Wilcox, 2004). The two met at the end of 1927 and became close friends and colleagues (Kilian, 1992). In the following remark, Deming acknowledges his everlasting debt to Shewhart:

One can say that the content of my seminars [...] and the content of my books, *Quality, Productivity and Competitive Position* and *Out of the Crisis* are based in large part on my understanding of Dr Shewhart's teaching (Deming in Kilian, 1992, pp. 176-7).

W. Edwards Deming is best known for his important contributions to the quality movement, and is often acknowledged of having influenced the dramatic shift in quality thinking and management first seen in Japan and later in the USA and Europe (Cunningham, 1994; Towns, 1997; Petersen, 1999; Wilcox, 2004). Particularly, his ideas concerning continual improvement as symbolised by the learning-cycle (the plan-do-study-act cycle – PDSA-cycle) and his system of “Profound Knowledge” has gained worldwide recognition.

As a result of Deming's and Shewhart's collaboration, Deming became the Editor of Shewhart's (1939) book *Statistical Method – From the Viewpoint of Quality Control*. In reading this book one will find a number of references to publications by Lewis, and the attentive reader will find the same references in Deming's (1994, 1986) books *The New Economics* and *Out of the Crisis*. In particular, Deming's sub-chapter, “Theory of knowledge” in *The New Economics*, is based upon Lewis' (1929) book *Mind and the World Order: Outline of a Theory of Knowledge*.

This awakens the curiosity of the researcher. One wants to lay the hands on the original work, which so profoundly influenced Deming and Shewhart in regard to their understanding of a theory of knowledge and consequently their theory of quality. However, after reading a few introductory pages in Lewis' (1929) *Mind and the World Order*, one begins to understand the difficulties first encountered by both Shewhart and Deming when reading Lewis. As Deming remarked:

I had the unusual difficulty with it, and I recall saying to Dr Shewhart at the end of the seventh reading that so far it had meant nothing to me. “Stay with it” he said, “I read it 14 times before it began to mean anything.” I wonder how he came upon it in the first place, and how he knew how important it was that he should pursue it (Deming in Kilian, 1992, p. 90).

In this paper, we will explore Lewis' theory of knowledge and how this influenced Shewhart and Deming in their development of a theory of quality. The structure of the paper is as follows: first, we present a summary version of Lewis' (1929) theory of knowledge as expressed in his work *Mind and the World Order: Outline of a Theory of Knowledge*. Second, we will give examples of some important connections between Lewis, and chosen parts of Shewhart's and Deming's theory of quality, for example the PDSA-cycle, operational definitions and profound knowledge. We will also indicate



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how the social element in knowledge is emphasised in the works of Lewis, but not as explicitly acknowledged in the works of Deming and Shewhart. Finally, we present some concluding remarks.

## 2. Clarence Irving Lewis and his outline of a theory of knowledge

Clarence Irving Lewis (1883-1964), Professor in Philosophy at Harvard University, called himself a conceptualistic pragmatist belonging to the main school of American Pragmatism[1] (Lewis, 1929, preface). His theory of conceptualistic pragmatism originated partly from his study of modern logic and partly from the influences of Royce and he was contemporary with the classical pragmatists W. James, C.S. Peirce, J. Dewey, and G.H. Mead, to which the first three mentioned he felt indebted (Lewis, 1929; Haack, 1999, 2006). However, he differs to the mentioned pragmatists in several ways; in particular, his notion of the “*a priori*”, which, pragmatically chosen, influence “the interpretation of the ‘present’ to ‘predict the future’ in a ‘systemic’ epistemology” (Wilcox, 2004, p. 153).

Knowledge, Lewis believed, is possible only where there is a possibility of error. According to Lewis, epistemological problems are a matter of a person’s subjective interpretation, which are made on the basis of his/her sensory experiences as interpreted from his/her “*a priori*.” The only possible certainty is that provided by what Lewis calls terminating judgment, which involves a statement about reality that has been empirically verified (Lewis, 1929; *The Cambridge Dictionary of Philosophy*, 1999; Wilcox, 2004). It should also be emphasized that Lewis’ (1929, p. 85) theory of knowledge is strongly action oriented: “the ruling interest in knowledge is the practical interest of action.”

Within epistemology, Lewis’ (1929) book *Mind and the World Order* is considered his most significant work (Cunningham, 1994; Wilcox, 2004) and it is from this book his influence upon Shewhart and Deming can be traced. Hence, a further investigation, of Lewis’ ideas about a theory of knowledge as described in *Mind and the World Order*, is both interesting and challenging. In the following paragraphs, we will study Lewis’ (1929) *Mind and the World Order* and through quotations give examples of his writings. These are presented with bracketed page numbers.

### 2.1 Acquirable and possible knowledge

Knowledge is, according to Lewis, derived from learning caused by the interaction between the “[...] a priori [...]” (p. 272) with its conceptual modes and “[...] the sensuously given” in “[...] experience [...]” (pp. 272, 391). He says that it is “[i]n this middle ground of trial and error, of expanding experience and the continual shift and modification of conception in our effort to cope with it” (p. 272) that learning takes place (p. 391). Furthermore, it is the possibility of the intentional choice of the “*a priori*”, which, according to Lewis, represents the pragmatic element in knowledge (p. 272).

In our attempt to make Lewis’ theory of knowledge comprehensible, we will now closely describe his understanding of the “*a priori*” and “experience.” To Lewis, knowledge in general is about “experience” (p. 34). He says that in all “experience” as such there is “[...] the sensuous-character [...]” (pp. 48, 49, 66) since our whole world of “experience” is constructed by thought from sense-data[2] (pp. 29, 57). This means that “experience” in part is a product of our mind (p. 34). Lewis continues his argument by stating that it is not possible clearly to separate “mind” from “experience” (p. 25),

as whatever experience may bring, our mind will impose upon it our "*a priori*" in order to structure and interpret experience (pp. 89, 230, 275).

In brief, the "*a priori*" is simply the instrument which our mind imposes upon the sensuously given in experience in order to interpret it (pp. 89, 230, 275). And Lewis says:

In experience, mind is confronted with the chaos of the given. In the interest of adaptation and control, it seeks to discover within or impose upon this chaos some kind of stable order [...]. Those patterns of distinction and relationship, which we thus seek to establish, are our concepts (p. 230).

It is our concepts which thus give rise to our "*a priori*" (preface). Concepts represent what our mind brings to experience and the truth that is "*a priori*" arises from the concept itself (p. 231).

The rise of the "*a priori*" from the concept itself happens in two ways. In the first place, there is that kind of truth, exemplified best in pure mathematics (e.g. Euclidian and non-Euclidian axiom systems), which represents the elaboration of abstract concepts. Such abstract concepts are completely separated from any application to experience and empirical truth. They are connected to knowledge of logical truths and can be said to give rise to certain knowledge only. Second, there is the empirical concept with its application to the given, which exhibits pre-determined principles of interpretation, the conditions of our ability to make distinctions, and to classify and relate the contents of experience. The empirical concept can give rise to probable knowledge only (pp. 231, 281).

Furthermore, Lewis says that "A priori truth is definitive in nature and rises exclusively from the analysis of concepts" (preface) and our concepts represent what our mind brings to experience in order to interpret it (p. 230). Concepts operate in terms of "Patterns of distinction and relationship [...]" (p. 230) and these patterns of relation should be seen as a system or as patterns distinguishing relations, i.e. concepts A, B, and C are related and interdependent (p. 82). "The nature of a concept as such is its internal (essential or definitive) relationships with other concepts." (p. 83). Concepts cannot be separated into independent parts. Linked to this view is the understanding expressed by the following statement, which also shows the influence of logic upon Lewis' ideas:

Logical analysis is not dissection but relation [...]. the analysis of A into B and C does not divide A into constituents B and C but merely traces a pattern of relations connecting A with B and C (p. 82).

Since, according to Lewis, the "*a priori*" is created by our mind and since our mind may also alter it, we have a free choice in selecting our "*a priori*" (p. 233). However, Lewis says, the only way we can choose another "*a priori*" or change it, is by reflection, as shown in the following statement:

The a priori is knowable simply through the reflective and critical formulation of our own principles of classification and interpretation. Such legislation can be recognized as our own act because the a priori principle which, is definitive, and not a material truth of the content of experience, has alternatives (p. 232).

And he continues by saying that "[...] the determination of the a priori is in some sense like free choice and deliberate action." (pp. 232-3). Through the choice of another

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“*a priori*”, Lewis claims that we may not only change our mode of interpreting experience but may also change our behaviour (preface, 90, 230).

It is noteworthy that Lewis’ arguments concerning personal reflection and deliberate action constitute some of his most important explanations of how we may change our behaviour. He says that “[...] everyone both can and must be his own philosopher [...]” (p. 2); within philosophy questions such as “What is good?”, “What is right?”, “What is valid?” are investigated. And given that the final responsibility for our life and actions rests upon ourselves, it is as single individuals that we have the answers to these questions; it is not possible to ask for answers from someone else (p. 2). Therefore, according to Lewis, we both can and need to be our own philosophers since “[...] in philosophy we investigate what we already know” (p. 2).

When we investigate what we already know, so Lewis argues, we have the possibility of changing our conceptual modes. This is because concepts are not stable but change over time (p. 257) “[...] everything which has a name is to be identified with certainty only over some stretch of time.” (p. 257). In order to further explain the changeability of concepts, Lewis talks about the categorical system by which we classify experience (p. 272).

We always categorize our experience. It is our categories and our classifications that specify the content of experience (preface, pp. 220-21). When having a system of categories in place we can interpret, interrogate, comprehend and understand experience and give this some kind of meaning (pp. 220, 221, 237, 259, 272). For instance, the category “disease” is just a name – a word. But it has a certain meaning and this meaning is its concept. So the concept is what “fills” the word – the category. Both categories and concepts can be abandoned. This may happen when they no longer serve a purpose (pp. 235, 268, 272) and can be done upon pragmatic grounds. However, Lewis remarks that, usually our categories remain the same while our concepts change, which, according to him, is due to new ranges of experience or more adequate analysis of old experience (pp. 235, 268, 272). This kind of change reflects a learning process according to Lewis (p. 68).

However, it is not always the case that there is only one correct “*a priori*” to be applied in the interpretation of experience. There may exist alternative conceptual systems, which can give rise to alternative descriptions of experience that are equally objective and equally valid, provided there is no logical deficiency in them. If this is the case, it will be “[...] determined, consciously or unconsciously, on pragmatic grounds” (p. 271) which conceptual system will be applied. However, it is also to be noted that Lewis argues that “[...] no experience can conceivably prove them (referring to our conceptual systems) *invalid*” (p. 266). It is only possible to come to that conclusion through personal reflection (p. 232).

### 2.2 *The social element in knowledge*

From the above discussion, it might look like Lewis’ theory was solipsistic in nature, i.e. closed in on the individual and restricted to that individual’s experience, which in the end might have implied that no knowledge were possible (for more on this, see Wilcox, 2004). On the contrary, Lewis is very early in emphasising the social element in knowledge. In Chapter IV of the book *Mind and the World Order*, Lewis (1929) elaborates on the social element in knowledge: common concepts and our common world. He begins the chapter in the following self-explanatory way (p. 90):

The significance of conception is for knowledge. The significance of all knowledge is for possible action. And the significance of common conception is for common action. Congruity of behavior is the ultimate practical test of common undertaking. Speech is only that part of behavior which is most significant of meanings and most useful for securing human coöperation.

Having emphasised the existence and the need of common concepts, he continues the chapter by discussing two alternative perspectives, that of the rationalists, assuming common concepts originating from “human nature” and that of the empiricists, assuming common concepts are due to the “common world” we are exposed to. He rejects both. Already in the Chapter I, we find his critique:

[...] both treat knowledge as if it was a relation between the individual mind to external object in such wise that the existence of other minds is irrelevant; they do not sufficiently recognize the sense in which our truth is social (p. 25).

We shall not follow his full argumentation here; we will only give some fragments of a more general interest. Against the empiricist's view, he holds:

[...] that our common understanding is based upon the presence to us of a common world [...] is unduly simple. Our common world is very largely a social achievement – an achievement in which we triumph over a good deal of diversity in sense-experience (p. 93).

In a similar vein, he claims that the “[...] ‘common reality’ projected by [...] understanding of each other is, to an extent not usually remarked, a social achievement” (p. 111). He also indicates a kind of evolutionary development of concepts. He claims that there is “[...] good deal of verifiable differences in the power of individuals to discriminate and relate in the presence of the same situation.” However:

[...] [t]he need to coöperate is always there. Th is being so, the importance of those concepts which are framed in terms of distinctions and relations which *are* common, is enhanced, and of those which should be in terms of what only some can discriminate, is diminished (p. 113, emphasis in original).

Finally, he notes:

[...] [t]hat our possession of any considerable array of common concepts depends upon the presence to our minds of a common reality is – or should be – a commonplace. But both our common concepts and our common reality are in part a social achievement, directed by the community of needs and interests and fostered in the interest of coöperation (p. 116).

### *2.3 Interpretable, probable and predictive knowledge*

Knowledge has, according to Lewis, a number of characteristics. The ones we have chosen to emphasize here are that it is interpretive, probable and predictive (pp. 37, 44 and 166).

“All Knowledge is [...] interpretive.” (p. 166). Interpretation is seen as an activity of the mind, which reflects the character of past experience. Without interpretation, knowledge is not possible (p. 195). Thus, knowledge of empirical truth arises through conceptual interpretation of the given (p. 37), which therefore, according to Lewis, results in making empirical knowledge probable only (p. 37). In terms of probability, Lewis (1934, p. 133) illustrates his pragmatic approach to knowledge by saying that:

[...] pragmatism is inductive: the given experience of the moment of knowing is the basis of a probability judgement concerning the experience [...] which would verify, and in terms of which the real nature of the object is expressible.

This argument supports the understanding expressed in his well-known statement (also referred to by Shewhart (1939) in *Statistical Method from the Viewpoint of Quality Control*: “[...] knowing begins and ends in experience; but it does not end in the experience in which it begins” (Lewis, 1934, p. 134). In this statement, Lewis’ (1934, p. 134) ideas about the temporal nature of the knowledge process is clearly shown.

Another important characteristic of knowledge is that it is predictive (p. 44). Lewis states that: “[...] it is impossible to escape the fact that knowledge has, in some fashion and to some degree, the significance of prediction.” (p. 44). Knowledge, as valid interpretation, concerns the relation between an experience A and another future experience B which we seek to anticipate with the help of A (p. 165). Unless we make this anticipation of future experience, we cannot have knowledge of external reality, and so cannot plan future action (pp. 195, 391). This anticipation of the future may be seen as intentional, since an intention relates to something that transcends immediate experience. And, in our interpretation, Lewis considers this kind of anticipation of the future to be essential and crucial for meaning and any theory of knowledge (Lewis, 1934, pp. 130-31). Thus, empirical knowledge entails both actual observation and a correct anticipation of further possible experience (Lewis, 1934, p. 136). But, this raises the question whether we must ascribe a deterministic understanding to Lewis on the ground that for him true knowledge is really true only if future experience is identical with what was predicted? However, the answer to this question is – no. Lewis sees prediction in terms of probability, meaning that all interpretations of experience, and therefore all empirical knowledge, is probable only, however high the degree of its probability; no verification could ever be absolutely complete (p. 281). “Every such judgment about the real external world remains forever at the mercy of future possible experiences” (p. 281). All empirical knowledge is therefore probable only and can due to its character never be exhaustive (pp. 37, 281).

To sum up, we may illustrate Lewis’ (1929, p. 391) ideas about his theory of knowledge with his final statement in *Mind and the World Order*:

The mind will always be capable of discovering that order which requisite to knowledge, because a mind such as ours, set down in any chaos that can be conjured up, would proceed to elicit significance by abstraction, analysis and organisation, to introduce order by conceptual classification and categorical delimitation of the real and would, through learning from accumulated experience, anticipate the future in ways which increasingly satisfy its practical intent.

### 3. Traces of Lewis’ theory of knowledge in writings by Shewhart and Deming

“There is no knowledge without interpretation.” (Lewis, 1929, p. 195) is a fundamental statement made by Lewis and one, which both Deming and Shewhart refer to in their works. And Lewis’ (1929) explanation of how our mind imposes the “a priori” upon experience in order to interpret it, is by Deming and Shewhart rephrased as theory. This is clearly shown in Shewhart’s book *Statistical Method from the Viewpoint of Quality Control* where he writes, “[...] we cannot have facts without some theory.” (Shewhart, 1939, p. 88). And in connection with this statement, Deming, as Editor, writes in a footnote “[...] if there is to be any knowledge at all, some knowledge must be a priori.” referring to Lewis (1929, p. 196).

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Deming (1994) is clear on the issue that without theory experience has no meaning, for he says that it is the possession of a theory, which enables us to ask questions and learn. Paraphrasing his argument in more practical terms he also says that: “[. . .] to copy an example of success, without understanding it in the light of a theory may lead to disaster.” (Deming, 1994, p. 103). Shewhart (1939) also argues for the importance of a theory in as much as he claims that without a theory we cannot have facts. But where Deming (1994) connects his statement to management, Shewhart (1939) connects it to statistics. The incorporation of Lewis’ ideas in their writings both about management and statistics indicated in what ways Shewhart and Deming found Lewis’ ideas helpful.

The similarities between Lewis’ discussion on the “*a priori*” and Deming’s arguments presented here are easily recognised. Shewhart on the other hand does not, as directly as Deming, refer to Lewis’ thoughts about reflection and deliberate choice of “*a priori*” in his two books *Statistical Method from the Viewpoint of Quality Control* (1939) and *Economic Control of Quality of Manufactured Product* (Shewhart, 1931). However, one can find traces of similar thoughts as those of Lewis’ when studying the appendices in his book *Economic Control of Quality of Manufactured Product* (Shewhart, 1931). In this book, Shewhart refers to contemporary philosophers like William James (1842-1910), Alfred Whitehead (1861-1947), Bertrand Russell (1872-1970) and Charlie Dunbar Broad (1887-1971). The same philosophers are referred to in Lewis’ (1929) book *Mind and the World Order*.

In line with Lewis’ arguing, “[. . .] knowledge has, in some fashion and to some degree, the significance of prediction [. . .]” (Lewis, 1929, p. 44), Deming (1994) also relates theory to prediction, as one enabling the other. He states “[. . .] rational prediction requires theory and builds knowledge through systematic revision and extension of theory based on comparison of prediction with observation.” (Deming, 1993, p. 105) and he adds that every plan is based upon “[. . .] prediction concerning conditions, behaviour, performance of people, procedures, equipment or materials.” (Deming, 1993, p. 106). Without prediction, experience and examples teach nothing and without prediction management would not be possible since “Management is prediction” (Deming, 1993, p. 104).

However, all prediction is probable only (Deming, 1994). And, as if quoting Lewis’ (1929, p. 195) argument that knowledge is probable only since “there is no knowledge of external reality without the anticipation of future experience”, Deming (1986, p. 133; compare Lewis, 1934) continues: “No matter how strong our degree of belief, we must always bear in mind that statistical evidence is never complete.” It is also possible that he was inspired by Shewhart who came to the conclusion that “[. . .] any model is always an incomplete though useful picture of the conceived physical thing [. . .]” (Shewhart, 1939, p. 19). These citations are closely connected to the three components, which, according to Shewhart (1939), constitute knowledge (Figure 1).

The interaction between the three components of knowledge seen in Figure 1 also shows clear connections between Deming, Lewis and Shewhart. Since Deming’s (1994, p. 105) statement, that “[. . .] rational prediction requires theory and builds knowledge through systematic revision and extension of theory based on comparison of prediction with observation.” is almost exactly the same as the one to be found in Shewhart’s (1939, p. 85): “Knowledge begins in the original data and ends in the data predicted, these future data constituting the operationally verifiable meaning of the original data.” And in Lewis’ (1929, p. 134) words this means: “[. . .] knowing begins and ends in experience, but it does not end in the experience in which it begun.” Simply said,

the observant reader may find that, the similarities shown in these examples of statements by Deming, Lewis, and Shewhart, lie in their claims of the importance of interpretation, reflection and prediction of experience.

Shewhart (1939, p. 85) also connects his comment “[...]knowledge begins and ends in experimental data [...]” to his illustration (Figure 1) of the three components, which to his mind constitute knowledge. The dynamic dimension of the knowledge process, seen in Figure 1, is by Shewhart (1939, p. 45) related to his specification-production-inspection cycle (SPI- or Shewhart-cycle) where he says: “The three steps in fig.10 (which show the Shewhart-cycle) correspond to the three steps in a dynamic scientific process of acquiring knowledge.”

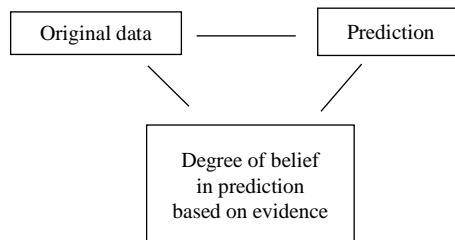
It is interesting to notice that the Shewhart-cycle, applied to a manufacturing setting, is the origin of Deming’s PDSA-cycle. However, Deming added the action part to the original SPI-cycle, which was published in the 1950s when he was invited to hold seminars in Japan. According to a private conversation between Brian Joiner and Edwards Deming, Deming exclaimed, when the Japanese talked about the specification-, production- and inspection stages, that they must not forget action. “Action is the most important part”, he said (according to a verbal account of by Brian Joiner). Thus, the Plan-Do-Check-Act(ion) cycle was born (in later writings Deming replaced check with study, thus the PDSA-cycle).

Already in the writings of Lewis the action part was emphasized, since he said that “The ruling interest in knowledge is the practical interest of action” (p. 85). Indeed, Lewis (1929, p. 90) developed this further in the statement: “The significance of conception is for knowledge. The significance of knowledge is for possible action. And the significance of common conception is for community of action.” Lewis’ emphasis on a common conception of social processes, as a condition of communal action, can also be found in Deming’s work on the PDSA-cycle since the same is not only for individual learning, but also for the use of organisational learning.

It is therefore tempting to draw the conclusion that Lewis have inspired both Shewhart and Deming and formed their understanding of the importance of the learning – or experience cycles (SPI-, PDSA-cycles) for organisations. Furthermore, it is from his work with the PDSA-cycle that Deming (1994) proceeded to develop his theory of “Profound Knowledge.”

#### 4. Some further comments

In order to give a full account of Lewis, Shewhart and Deming one must consider the temporal context, which to some extent they shared. It was a time of great discoveries, discoveries that were to change and overturn the deterministic understanding of the



**Figure 1.**  
A schematic illustration of knowledge components

Source: Shewhart (1939, p. 86)

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universe that had been paradigmatic at the beginning of the twentieth century. At the time when Lewis wrote *Mind and the World Order*, Werner Heisenberg had just recently discovered the uncertainty principle and the world had learned of Albert Einstein's theory of relativity and his treatment of definition (Lewis, 1934; Cunningham, 1994). One could easily argue that the writings of Lewis were influenced by these events. In fact, Steve Fuller (2000, p. 36) writes in his critical book on Kuhn (1951): "[...] Lewis anticipated many of Kuhn's most radical statements concerning the incommensurability of worldviews [...]"

Although the writings of Lewis and Shewhart are from the beginning and mid-twentieth century, we want to emphasise the importance of their ideas and those of Deming, as they still permeate the quality movement and has had profound influence on current industrial praxis. Many industries work with versions of Shewhart's theories for statistical problem solving, today often under the heading of "Six Sigma", and the PDSA-cycle is emphasised in most improvement work, irrespective if it is called Kaizen, six sigma or lean thinking. The experimental nature of process improvement is also described in a recent *HBR* article on Toyota, by Takeuchi *et al.* (2008). Here, the evolutionary improvement element in knowledge development, indicated by Lewis, and integral to the use of the PDSA-cycle is intriguingly treated. Another area of application, where Lewis' ideas indirectly have had an influence, is within the health-care sector, where Deming's profound knowledge has been emphasized (Batalden *et al.*, 1993; Berwick, 2008). On a theoretical note, Lewis' theory has been utilized as a framework for subjective probability theory, see Bergman (2009).

However, while working with this paper, it has also become increasingly clear that many of the profound insights of Shewhart and Deming regarding their theory of quality have gone missing over the years. Thus, we saw the possibility to rediscover their insights in an attempt to get a better understanding of the philosophy underlying important areas of Shewhart's and Deming's theory of quality. In order to understand from where some of the ideas of their theory of quality originate, we have, in this paper, attempted to create, if not a profound analysis of Deming's and Shewhart's original ideas and contributions to quality sciences, at least an introductory exposition promoting a better understanding of the historical background of their theory of quality.

As a final note for future investigations, it would be intriguing to further explore Lewis' ideas of our common world largely being a social product and the impact shared understanding and shared language (in Lewis' terms-speech) has on human interaction and cooperation. These ideas of Lewis are not clearly emphasized by Deming and Shewhart and one wonders what the inclusion of them might have implied for their theory of quality. It is also interesting to further explore these ideas of Lewis as similar ideas, within social constructionism – in particular the idea of how relational processes make up our identity and our world and consequently our behaviour (Hosking and McNamee, 2006; Shotter, 2002; Gergen, 2007; Bahktin, 2007) is gaining more and more attention within the field of organisational studies. One thus wonders: what could the field of theory of quality gain by the inclusion of a relational perspective?

## Notes

1. Pragmatism – a philosophy based on the principle that the usefulness, workability and practicality of ideas, policies and proposals are the criteria of their merit (*Encyclopaedia*



*Britannica*, 2000). It stresses the relation of theory to praxis and takes the continuity of experience and nature as revealed through the outcome of directed action as the starting point for reflection. Experience is the ongoing interaction of organism and environment. Furthermore, interests or values guide knowledge. Major contributors to pragmatism are Pierce, James, Dewey, and Mead (*The Cambridge Dictionary of Philosophy*, 1999).

2. Sense-data here should not be seen as correlated with nervous processes, but rather the brute fact element in perception, illusion and dream (Lewis, 1929, p. 57).

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## **Paper II**

Mauléon, C., Bergman, B. and Alänge, S. (2003)

Common concepts for Common Action: Sense Making or Senseless Making in Organizations?

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# **Common Concepts for Common Action: Sense-Making or Senseless making in Organisations**

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## **1. Introduction**

In seeking the philosophical roots of the quality movement (Mauléon & Bergman, 2002), it becomes apparent that the pragmatist Lewis (1929) had a significant (but often unnoticed) influence on Shewhart (1931, 1939), who is generally acknowledged to have been one of the most influential thinkers in the early quality movement. For example, the thoughts of Lewis (1929) on the pragmatic conceptual nature of knowledge were an important source of Shewhart's (1931, 1939) central theme of continuous improvement, which was subsequently taken up by Deming (1986, 1993) in his well-known and influential PDSA ('Plan-Do-Study-Act') cycle.

Although it is generally acknowledged that the quality movement has been strongly influenced by various concepts in the contemporary discourse on management (Cole & Scott, 2000), the historical links between the quality movement and its basic philosophical roots have become more obscure. The present paper addresses this issue by reconsidering some of the central ideas of Lewis (1929) and the links that appear to exist between these ideas and the development of the modern quality movement. In particular, this paper explores the arguments of Lewis (1929) concerning the importance of 'common concepts for common action' and its applicability in contemporary organisations.

In pursuit of this objective, interviews are conducted with five managers from different organisations. These interviews explore the misunderstandings in communication and interaction that can occur between individuals as a result of their (often unnoticed) different interpretations of the concepts that they use routinely in their everyday working lives (Lewis, 1929).

The contention of the study is that it is neither possible nor desirable to create common concepts in all situations in any organisation; however, there is a need for an increased awareness that organisational members can behave differently because they often ascribe different individual meanings to what they erroneously believe is a commonly shared concept.

## 2. Literature review and theoretical framework

### 2.1 Concepts and reflection

Terms such as ‘mental model’, ‘schema’, and ‘paradigm’ (Tolman, 1948; Sims & Gioia, 1986; Hellgren & Löwstedt, 1997; 2001) are increasingly utilised in the contemporary management literature to describe how each individual in an organisation has his or her own unique way of interpreting experience and taking action. However, according to Naess (1968), the challenge faced by organisations is to deal with the fact that most people are not aware that they often define and interpret concepts differently. To address this problem, Lewis (1929) contended that organisations require “common concepts for common action”, and that one way to achieve this is through self-reflection.

According to Lewis (1929, p. x), “...the application of any particular concept to any given experience is hypothetical”; in other words, people can choose or change their *a priori* by reflection. As Lewis (1929, p. 232) put it: “The *a priori* is knowable simply through the reflective and critical formulation of our own principles of classification and interpretation”. According to this view, individuals can choose another *a priori* and thereby change not only their mode of interpreting experience but also their behaviour.

Lewis (1929) contended that common concepts are required for community of action; indeed, Lewis (1929) held that congruity of behaviour is the ultimate practical test of a common understanding of concepts. In this regard, Lewis (1929) contended that *speech* is crucial for achieving a common meaning and understanding that secures human cooperation. Deming (1986, pp. 276–7) adopted a similar view when he observed that an agreed operational definition “... puts communicable meaning into a concept ... that reasonable men can agree on”. Deming’s (1986) ideas on community of action are thus related to the ideas of Lewis (1929), whose analysis of the relationship between the *a priori* and human behaviour had been passed on to Deming (1986) via Shewhart’s (1931) original thoughts on continuous improvement. Indeed, as a result of this influence, Deming (1986) chose to call his PDSA (Plan-Do-Study-Act) improvement cycle the ‘Shewhart cycle’. This cycle has since become the archetype of the principle of ‘continuous improvement’, which has long been one of the cornerstones of the contemporary quality movement.

Pierce (1868/1960) was perhaps the first philosopher to argue that scientific knowledge is legitimised by the practice of a community of enquirers. According to Pierce (1868/1960), no individual can be the absolute judge of truth because, no matter how strong that person’s inner certainty, belief might be based on prejudices that the individual has not realised could be questioned. A similar view has been adopted by Argyris et al. (1985), who contended that the test of truth occurs when a community of investigators, each of whom begins with a different set of assumptions and is free to criticise any aspect of each other’s work, converge

on a set of beliefs. Although such a community can never be certain that its beliefs are true, the members of the community can be confident that they are approaching truth through a self-corrective and self-reflective process of rational criticism within a community of inquiry (Argyris et al., 1985).

This notion of the ‘test of truth’ represented an important aspect of the theory of so-called ‘action science’ (Argyris et al., 1985), which refers to the implementation of knowledge in action. In this regard, Hedberg (1981, p. 7) observed that theories of action “...are for organisations what cognitive structures are for individuals”. In a similar vein, Weick (1999) argued that theories of action, like the cognitive maps of individuals, interpret signals from experiences and tie the stimuli to action. This resonates with the pragmatic views of Lewis (1929) noted above, who demanded ‘knowledge for action’. Although Lewis (1929) and his idea of the *a priori* seems to have been largely forgotten in mainstream philosophy, Fuller (2001) has contended that Lewis’ (1929) contributions preceded, and were more insightful than, more widely read books on the theory of science—such as Kuhn’s (1962) *The Structure of Scientific Revolutions*. As noted above, Lewis (1929) contended that individuals understand the ‘here and now’ through critical reflection, and that this is an ongoing process; however, it should be noted that he did not elaborate on the influence of the social context on this process of reflection. In this regard, more contemporary scholars, such as Sztompka (1991) and Argyris and Schön (1974), have made useful contributions.

## **2.2 Concepts and action**

Action and language are interconnected. According to Von Wright (1971), intentional behaviour reflects the use of language and Argyris et al. (1985) asserted that the competence required to understand action can be compared to the ability to speak a language. Argyris et al. (1985) went on to say that, like sentences in a particular language, actions make sense only within a particular community of practice and the competence required to understand action is acquired through membership of that community. A corollary of this view is that what a person means to present in one community can be perceived in a totally different way in another community; indeed, misunderstandings and misconceptions can arise without the person ever knowing it—unless he or she is aware of this possibility or the community has come to a consensus about the agreed meaning of common concepts.

Naess (1968) has argued that, within a group of individuals who interact on a daily basis, most of what they want to communicate is usually perceived in the way that they want it to be perceived. Moreover, this is usually reflected by the behaviour and responses of peers. This is in general accordance with Lewis (1929, p. 91), who stated that it is possible to grasp the meaning of another person only by “... observing the relation of his meanings to one another and to his behaviour”.

According to Naess (1968), grave misunderstandings are rare between people in a confined group because their use of language and other habits are well known and determined within the group. However, in large and complex projects it is common for people to come from different parts of an organisation (or different organisations), which can be situated in different cities, or even in different countries. This can cause many misunderstandings and conflicts in complex projects. Such misunderstandings are especially likely to occur with language, which can be defined in one way in a given situation, but defined in a quite different way in another situation. In other words, the definition of a proposition is relative to its context (Naess, 1960; Pålshaugen, 2001).

### **3. Methodology**

To investigate the issues raised in the literature review, five in-depth interviews were conducted, in 2002 with students who were undertaking their PhD studies at the same Swedish university while working in various external organisations. The interviewees, who included both male and female students, were thus both practitioners and doctoral students. For the purposes of this paper, their real names are suppressed, and the fictitious names ‘Chris’, ‘Mike’, ‘Peter’, ‘Eric’, and ‘Tom’ are used to designate the five respondents. The interviewer had taught doctoral courses with all of the respondents and therefore knew them personally. Although it has been suggested that a preceding relationship such as this might introduce some bias (Oppenheim, 1966/1992), other authors have suggested that the potential positive outcomes to be derived from interviews between people known to one another outweigh the negative effects of potential biases (Alvesson & Sköldberg, 2000).

The interviewees were asked to illustrate how they have encountered situations relating to ‘common concepts for common action (Lewis, 1929) in their organisations. The study utilised open-ended interviews to encourage the interviewees to speak as openly as possible of their personal experiences and to create narratives of the phenomena being investigated (Czarniawska- Joerges 1998, 1998; Kvale, 1997). According to several authors (Frank, 1995; Nicholas & Gillet, 1997; Sköldberg, 1994) narrative studies of this type give priority to the interviewed persons’ providing a personal account of their own lives and experiences. The narrative approach does not seek to present generalised knowledge; rather, the aim is to present contextual narratives of human endeavours in an attempt to make sense of complex and ambiguous realities (Habermas, 1968; Guignon, 1997). It is not suggested that the results of such an approach can be generalised; however, the results do provide a relevant framework for investigating similar ideas in the future.

Each of the interviews, which were conducted in Swedish and thereafter translated into English, took 60–90 minutes. The empirical data were analysed by three researchers—at first independently, and thereafter collaboratively. This analysis of the material generated a



number of categories and themes, all of which were developed on the basis of the interviews (rather than from the extant literature). The interviewees were then presented with the results of the analysis to provide them with an opportunity to comment and give feedback.

## **4. Findings**

As a result of the analysis described above, five categories emerged from the empirical data. These categories were designated as follows:

- \* empty concept;
- \* open and closed concepts;
- \* concepts and reflection;
- \* concepts and action; and
- \* concepts and identity.

With regard to each of these categories, relevant findings from the interviews are presented below.

### **4.1 Empty concept**

#### **4.1.1 Chris**

Chris worked in a multinational company. One of her many roles within this company had been responsibility for the development of an intranet for external customers. However, although the product-development team had been given the task of developing an intranet, they were not given any guidelines or standards regarding the features that the intranet should have; in other words, the concept (of the proposed intranet) was 'empty'. Chris described this situation as follows:

Every individual had different 'fillings' for this concept ... and that became very problematic. It took us at least... six months to define the concept ... People couldn't understand why we took so long to develop an intranet. Everybody thought that we had lots of time to develop the intranet ... [But we said:] "Yes, but we don't know what it is. We don't know what it stands for. Of course, it's a concept, but we don't know what the concept means; we haven't filled it." ... For us, it became [an issue] of connecting function and definition.

Chris described the consequences of the ambiguity of the intranet concept in the following terms:

There was a variety of understandings of the definition of 'intranet'. That was problematic for us ... ambiguity. We had so many definitions of the same concept. If we had understood that beforehand and been able to describe and explain what kind of problem we had ... to our management ... we could have been given the 'ok' to speed up the process. But instead we were yelled at! ... It wasn't possible to get a perfect consensus ... I don't think we ever had the ideal situation ... where we had the definition ... but that didn't ever exist ... The ambiguity was created in the beginning

... we needed to decrease it a bit, but we surely couldn't have decreased it fully ... at least not within the framework of costs and the time we had then.

It is apparent that the problem was not an absence of common concepts; rather, the basic concept was *empty*. The participants could not agree on an understanding of the content of the essential concept. This is not an easy problem to address. Indeed, anxiety had apparently become a significant obstacle when dealing with such an empty concept.

#### **4.1.2 Mike**

Mike had a somewhat different story to tell. This interviewee, who also worked in a multinational company, suggested that an 'empty concept' can act as a driving force for organisational change. He illustrated this with the novel concept of 'module time':

When dealing with organisational change ... one solution is to invent new concepts. In our case ... we created a concept that we thought we should achieve. We gave it a new name—'module time'—something that was quite new. The plan was that when we had eventually done this everyone would then know what 'module time' was from their perspective. But we didn't know what it was beforehand because it was a new word [and] no other company had done this. It was ... unique. The name is the highest level ... of any phenomenon that you are talking about ... so we didn't try to name it with an existing name ... and thereafter go out into the world and ask what it resembles the most ... If we had done that in the beginning ... we would ... have begun to reduce the possibilities because people would have had their preconceptions from the beginning ... And then the [innovative] process would have stopped

In this case, it is apparent that the 'empty concept' provided the participants with the opportunity for the project to begin with something completely new and free from preconceptions. The aim was to generate new ideas, rather than being inhibited by old ideas and preconceptions.

#### **4.1.3 Peter**

Peter, who also worked in a multinational company, made some interesting observations about a project team in his company. This project, which had previously experienced several changes of project leader and a high turnover of team members, suddenly began to function well. According to Peter, the problems were solved by visualising the processes of the project in drawings on a blackboard—followed by the preparation of a document, which the project members called an 'ulcer document'. Peter described this in the following terms:

Whatever problem came up ... they drew it [on a blackboard] ... and then they took care of the problem right away ... Whether it was a personal problem or a technical problem ... they brought it up in the group ... unless it was too sensitive. Then they discussed it ... [and] the solution was documented ... so they got an overview of it, which they could show to others and say: "We've solved this!" ... They did this

collectively and quite directly ... And it didn't end there ... they went back to the solution document over and over again ... to see if it really had been solved ... or whether the problem had arisen again ... They wrote a list of these problems and called it an 'ulcer document' [because] all these things represented 'ulcers' [for the team members]!

In this case, a totally new concept (the 'ulcer document') functioned as a way of uniting the members of the project team in a commitment to solving problems. This was thus another example of an 'empty concept' not being perceived as a threat (as it had been in the case described by Chris); rather, the 'ulcer document' was seen as an 'empty concept' that could provide a solution to problems.

#### **4.1.4 Summary of findings regarding 'empty concept'**

It is thus apparent that an 'empty concept' was not always associated with anxiety. Although the ambiguity of an 'empty concept' caused tension in the case described by Chris, this was not so in the case described by Mike—in which the 'empty concept' served to avoid preconceptions in a development process and thus encouraged new ideas to emerge and fill the concept as the process went along. In the case described by Peter, the 'empty concept' was also useful by functioning as a means of problem-solving in a project.

## **4.2 Open and closed concepts**

### **4.2.1 Mike**

In discussing the concept of 'module time' (see above), Mike noted that the concept changed over time :

To make the process work well, we needed to modify the attitude towards consensus [and] say that there was not one interpretation of this. Many different perspectives can exist and there is value in allowing perspectives to be different.

However, Mike noted that there must be a balance between open and closed concepts. To avoid inefficiency and restrain costs, there must be closure at some point by choosing one or other idea for inclusion in a concept. However, this can cause problems. Mike explained this when he explained that the team must ultimately:

... meet in discussion [and] take a final decision to choose or discard this and that ... But it can be problematic if we are not [perceived as] open enough ... from someone else's perspective. That can cause problems. I have experienced that ... It can become an obstacle ... for understanding and the possibility of choosing the right thing.

### **4.2.2 Chris**

A similar problem of choosing among alternatives also existed in the case described by Chris regarding the development of the intranet (see above). As she recalled:

... among all these perspectives [regarding the intranet] ... there came a problem of choosing ... And it wasn't always possible to discard this or that on the basis of them being [obviously] 'wrong'... I think that it took too long ... It is best not to take too much time in consensus seeking.

Nevertheless, Chris was aware that it was sometimes necessary to be prepared to re-open a discussion about an apparently 'closed concept':

We locked [the concept] in order to be able to continue ... [But] then I asked myself whether there was any possibility that I might want to review this concept ... whether I might want to open up the concept of the intranet again ... in that case [the concept would be both] open and closed!

#### **4.2.3 Summary of findings regarding 'open and closed concepts'**

There is always a dilemma in deciding when to choose to 'close' concepts (or "lock" them, as Chris put it). As Chris observed, there is always the possibility that it might be necessary to 'open' a concept again if circumstances dictate that modifications are needed. And although Mike argued for not wasting too much time on consensus, he was obviously aware that concepts had to be kept open for a certain amount of time to ensure that creativity continued to be stimulated within his organisation.

### **4.3 Concepts and reflection**

#### **4.3.1 Eric**

Eric, who had experience as a project leader in various projects in a multinational organisation, talked about the problem of people not being aware of potential obstacles in the day-to-day life of an organisation. In many instances people failed to comprehend these obstacles unless they reflected upon them. According to Eric, these incidents were actually due to cultural differences within the same organisation:

The difficult thing is that we didn't think we could have cultural differences if we sat close to each other as sister divisions ... But that is what is dangerous ... [because] there are differences everywhere! ... And because they are not obvious ... they often become a trap ... If we are working with a Japanese organisation ... well then we realise that that is a cultural problem situation [and that] we have to take a certain course of action ... but if we are working with ... Swedes [in] the same company ... it would seem obvious that it is the same language ... the same culture ... But this is actually not so ... We have totally different ... nuances so to speak ... different companies within the same group have different routines, different development models, etc. ... We keep on using the same terms, but we actually mean different things!

Although Eric talked about the need for reflection and how it could help communication processes in the organisation, he was resigned to the fact that this often did not take place in his organisation:

... most often people are in a too much of a hurry... to give feedback and ask other people what they actually meant ... They don't have time for that ... they don't even have the energy to think for themselves ... it creates lots of misunderstandings...

It is apparent that Eric was very frustrated that people in his organisation did not even bother to take the time to reflect and communicate meaningfully with their co-workers.

#### **4.3.2 Chris**

Chris, who was also aware of this problem of mixed perceptions, unsuccessfully sought more support from management with regard to an improved understanding of their problems with the development of an intranet. As she observed:

Management needed to be aware of the fact that there were multiple perceptions ... of concepts and that this was problematic for us ... [We required] active support ... the opportunity to reflect ... to speed up the process. But instead, we were yelled at!

#### **4.3.3 Mike**

Mike also highlighted the importance of reflection and communication in the project management team and the sub-teams within the same organisation. He made the following comments in this regard:

Project management and sub-teams basically have different tasks ... that is why they cannot have the same common [concepts]. Project management has one result [in mind] and they have their process to achieve this result ... but the sub-team has another result [in mind] and ... another process to reach this result ... And that's where the difference occurs. We have found that it is very easy to create a situation where we agree on an abstract level ... about certain concepts ... but when we look at the local perspective ... these common concepts actually meant very different things ... our interpretations were based on totally different situations. There exist ... on the abstract level ... some concepts which we can all relate to and agree on together ... but every local level does their own interpretation of the concept ... It's important that these different perspectives are allowed to meet ... without being criticised ... as right or wrong ... There needs to be an acceptance that different contexts have different perspectives on concepts ... And it's important to talk about them ... we *need* to talk about them in order to enhance a common understanding.

It was apparent in this case that Mike was aware that different levels in the same organisation can have different understandings of the same concepts, and that it is necessary to be aware that they might thus have different views on how to reach a common goal. He was

also aware that there is no ‘correct’ perspective and that there needs to be an acceptance of different perspectives.

#### **4.3.4 Summary of findings regarding ‘concepts and reflection’**

It is apparent that all three of these respondents had experienced significant difficulties with regard to different perceptions of concepts within their organisations. In one case (Eric), this was even likened to an internal ‘cross-cultural’ problem, and in two of the cases (Eric and Chris) this had obviously led to severe frustration and criticism. However, all respondents seemed to be aware that the resolution of these difficulties required time and opportunities for reflection and communication to resolve differences in perception regarding the content of concepts.

### **4.4 Concepts and action**

#### **4.4.1 Chris**

The question of how concepts relate to action was addressed by several of the respondents.

Chris made the following comments with regard to the development of the intranet:

I think *action* is very important to understanding ... [because] people don’t just understand through words ... If there had existed an action process [in our project] ... we could have reduced this chaos ... I could have *acted* from the beginning ... [In fact] as soon as we began to *do* something, a lot of things did begin to happen!

Chris thus emphasised the importance of connecting the definition of a concept to action. In her opinion, a well-defined action process—for choosing a definition and then beginning to act as soon as possible—would have actually assisted in defining the concept in the first instance.

#### **4.4.2 Eric**

Eric had a different view on the efficacy of early action. He gave a concrete example of the potential problems that can occur if action is undertaken too soon in product development:

We have to realise that we cannot always meet customer demands [immediately] ... we might need to redesign a product ... [even if] we then have a three-month delay. ... It doesn’t look good ... when we cannot meet our commitments ... but on the other hand it is also not good if we have to deliver the product with this problem ... it’s expensive to deliver defective things!

#### **4.4.3 Summary of findings regarding ‘concepts and action’**

There were obviously conflicting views on the importance of early action with regard to concepts that had not been fully defined. Chris felt that getting into action as soon as possible was an important aspect of defining a concept. In contrast, Eric gave an example of premature action leading to significant costs and a loss of efficiency in product development. It would thus seem that there is a need for balance between action and reflection.

## **4.5 Concepts and identity**

### **4.5.1 Tom**

Tom, who worked in the information technology department of a national Swedish organisation, commented on the role played by language in forming the identity of his organisation:

Organisations create an identity through a certain chosen language ... which I can see very clearly here ... [But] language can have double meanings which can put us in a predicament ... [For example] language can distinguish between those who are so-called 'insiders' and those who are 'outsiders' ... abbreviations are used extensively here ... [which] could be influencing efficiency because some people find them quite incomprehensible ... There are those who think that using our internal language code is quite a good way to show that they are a bit 'trendy' and know how to use these abbreviations to show off. It's a bit like saying: "I am one who really understands the internal code!" But, at the same time, the fact is that they are actually disrupting communication by using these terms.

### **4.5.2 Eric**

Eric gave an example of the role in language in forming a 'common culture' in a project with which he had been involved:

We realised early on in the project that we had different cultures and that we spoke different languages ... so we worked [to ensure that] we would have the same values ... All the project leaders and support groups came up with some suggestions of what they thought was important and good ... We did this for a couple of cycles ... and then we wrote down seven or eight values as common values ... These then came up at every ... project meeting and in all information letters and in the project magazine that came out once a week. People were always reminded of these things ... that we had all agreed on... so they became the basis of one common culture in the project.

### **4.5.3 Peter**

Peter talked about his conscious choice of words to ensure that the recipient of his message 'recognised' himself or herself in his choice of language:

I think a lot about words ... thinking ... what words I should use ... to write a message or an e-mail ... Words are extremely important ... I can manipulate and use words that I know will bear fruit. I always go to my boss beforehand and talk about an issue ... and then listen to what he or she says ... and then use the same words when I write about it ... And then they recognise themselves and they think: "Oh, this is nice!" ... That's how I do it ... and the same goes for when I talk to people ... it [the use of language] is a conscious choice.

#### **4.5.4 Summary of findings regarding ‘concepts and identity’**

It is apparent that linguistic concepts can: (i) give a feeling of belonging (or not belonging) to a group (as in Tom’s case); (ii) help to create common values in a project (as in Eric’s case); and (iii) give a feeling of recognition (as in Peter’s case). In all of these cases, language gave individuals some kind of identity and sense of belonging.

### **5. Discussion**

An interesting common finding in all of the interviews was that the interviewees were initially quite sure that individuals in their organisations understood things in the same general way. However, as the interviews progressed and became more reflective, the respondents all began to realise that they were aware of common daily examples of misunderstandings that had arisen from different interpretations of the meaning of certain concepts. It became clear that individuals did not always share common concepts—which caused misunderstandings and inappropriate actions that had the potential to have costly consequences for the respondents’ organisations.

One of the major findings of this study is, therefore, the importance of creating opportunities for organisational members to explore their (often different) understandings of the concepts they use in their organisations. This exploration can take place as individual self-reflection; alternatively, it can occur in formal or informal meetings between any two individuals or larger groups of organisational members (Allen 1977).

In this study, it was apparent that the interview process itself functioned as a form of guided self-reflection for the interviewees. During the dialogue with the interviewer, the interviewees engaged in a process of self-reflection that led them to develop new insights into the experiences and knowledge they already possessed. In other words, the interview process helped them to make their own discourse more practically relevant (Pålshaugen, 2001; Ollila, 2000). This process was in general accordance with the view of Senge (1994), who has described a ‘road map’ on how to develop skills and processes for group reflection and clarification of individual mental models in order to create a shared mental model within an organisation.

### **6. Conclusions**

The empirical results of the present study show that there needs to be a balance between uncertainty and stability in forming and understanding the concepts that underpin organisational life. Too much stability can produce a stultifying atmosphere in which passive employees fail to provide new ideas and a creative impulse for the organisation (Burns & Stalker, 1961; Rohlin et al., 1995); on the other hand, too much uncertainty can induce anxiety, insecurity, and frustration, which can cause employees to be refrain from risk and



decisive action (Skard, 1977; Quinn et al., 1996; Jacobsen & Thorsvik, 1998). It is apparent that there is a need for organisational members to share common concepts if their organisations are to engage in effective sense-making, but it is not desirable to impose either a stultifying 'over-socialised' regime with respect to these matters, nor an anarchic 'under-socialised' state of chaos (Hellgren & Löwstedt, 2001). It is obviously important to have definitive common concepts with which to work, but it is also essential to respect the fact that people can have different understandings of these concepts.

Finally, given that a fundamental tenet of the quality movement is 'continuous improvement', organisations must recognise that people must be provided with ample opportunities to meet and reflect together if they are to enhance their common understanding of the shared concepts required for sense-making in organisational life.

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## **Paper III**

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A Pragmatist Framework for Promoting a Safety Culture in Health Care.

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# A Pragmatist Framework for Promoting a Safety Culture in Health Care

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## Abstract

This paper analyses various approaches to the concept of a 'safety culture' in terms of their epistemological assumptions regarding the nature of organisational learning. As a result of this analysis, the study proposes that a framework for the promotion of health-care safety that is based on the philosophy of conceptual pragmatism can be used to integrate the various strands of current research. In particular, an approach based on conceptual pragmatism can bridge the apparent gulf that exists between the rational objectivist view and the relativist perspective on the role of learning in developing a safety culture. According to the pragmatic perspective of safety management that is proposed here, organisational members need to give continuous attention to safety issues in health care by ongoing reflection on the accepted organisational norms and values. A case study from a health-care safety project in Sweden is utilised to illustrate the ideas advanced in this paper.

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## 1. Introduction

Interest in health-care safety is growing and many studies have been conducted on a wide range of initiatives that have been suggested to improve the delivery of health care within a so-called ‘safety culture’ (Dean et al., 2002; Donchin et al., 2003; Manser & Wehner, 2002; Singer et al., 2003). However, for any such improvements to work, it is necessary to ensure that the goals and practice of safety research have a sound theoretical basis. Applying various safety methodologies without understanding the assumptions that have led to their development might be one of the reasons for failure when they are implemented (Mauléon and Bergman, 2009; Giroux & Landry, 1998; Park Daahlgard, 2000). Moreover, ‘blind trust’ in the implementation of such methodologies without proper analysis can decrease an organisation’s ability to operate safely in the future because actors are not attentive and responsive to the dynamic contextual cues that exist in any organisation (Roberts and Bea, 2001; Weick et al., 2008; Weick and Sutcliffe, 2003, 2007; Weick and Roberts, 1993; Rochlin, 1993).

In general, health-care staff have been trained and taught within a paradigm that adopts what might be called a ‘modern positivist’ view of science (Fishman, 1999). According to this paradigm, general theories are built up by breaking complex processes down into individual variables that are identifiable and controllable. Medical research and health science, like most research in the natural sciences, often adopts these assumptions. Medical and nursing staff thus tend to turn to research expecting to find general theories that provide ‘ready-made’ solutions to the problems of patient safety. However, such a ‘positivist’ paradigm is not necessarily well suited to the dynamic nature of safety in a complex socio-cultural system. Although safety methodologies based on such an approach can generate potentially useful counter-measures to safety problems, these are more likely to be focused on symptoms rather than causes and do little more than suggest short-term ‘fixes’.

In contrast to the ‘positivist paradigm’, relativist approaches (Vaughan, 1996) would appear to be more attuned to the complex dynamics of most health-care delivery systems. However, such approaches tend to be observational rather than remedial, and are thus limited in their capacity to provide clear directions for progress in promoting health-care safety.

The present study therefore proposes a third approach, which is essentially based on the writings of the conceptual pragmatist Lewis (1929). It is the contention of this study that this ‘conceptual pragmatic’ approach to health-care safety bridges the gap that exists between the rational objectivist paradigm and the relativist perspective.

The remainder of this paper is organised as follows. The next section presents a review of selected literature on the concept of safety culture. Three approaches that have been adopted are analysed in



accordance with their epistemological assumptions regarding the nature of organisational learning and its relationship with the development of a safety culture in organisations. The paper then presents some thoughts on the application of the conceptual pragmatist approach to health-care safety. This theoretical discussion is supported by a case study of a Swedish project for the implementation of an ‘incident reporting system’ in several clinics connected to a large teaching hospital. The study concludes with a summary of the major findings and their implications.

## **2. Perspectives on safety culture**

In general, the term ‘safety culture’ refers to the characteristics of an organisational culture that pertain to safety issues. Although the notion of a ‘safety culture’ has received significant attention in American managerial discourse (Barley & Kunda, 1992), the concept has been defined and used in a variety of ways. Some definitions have posited ‘safety culture’ as a goal to be achieved or as a synonym for safe operations (IAEA 1991; Cheyne et al., 1998; Mearns & Flin, 1999), whereas others have understood it as being a process (Hudson, 1999) or a ‘toolbox’ that enables safe operation to be achieved (Weick, 1987). Several authors have attempted to classify the multifaceted concept into coherent frameworks (Cooper, 2000; Cox & Flin, 1998); however, none has explicitly based these classifications on epistemological assumptions.

If such an epistemological approach is adopted, two main perspectives on ‘safety culture’ become apparent in the literature. The first, which adopts a rational objectivist perspective, has been most apparent in the work of Reason (1997, 1998, 2000); this approach emphasises the role played by objective error-reporting systems in ‘engineering’ an appropriate safety culture. The second, which adopts a relativist perspective, is epitomised in the work of Vaughan (1996); this perspective emphasises the evolving socio-cultural nature of any judgment regarding an ‘appropriate’ safety culture. Although there is significant diversity in the literature on safety culture, the work of these two authors can be taken as representative of the two major streams of thought on the subject.

The present study contends that neither of these two approaches is entirely satisfactory and that a third approach—the so-called ‘conceptual pragmatist’ approach of Lewis (1929)—provides a means of bridging the gulf between them. Each of these three approaches is discussed in more detail below.

### **2.1 Rational objectivist perspective**

Reason (1997, p. 195) defined safety culture as “the engine that continues to propel the system toward the goal of maximum safety health”. According to Reason (1997), such a safety culture can be ‘engineered’ by identifying and instituting good practices; such practices are posited as ‘essential components’ that can be ‘fabricated’ and ‘assembled’ to produce an ‘effective’ safety culture.

Reason (1997, p. 196) equated such an “effective safety culture” with an “informed culture”. He identified four components in such a culture: (i) a *reporting* culture (in which people are prepared to report their errors and ‘near-misses’); (ii) a *just* culture (which engenders an atmosphere of trust that encourages people to provide safety-related information); (iii) a *flexible* culture (which enables an organisation to reconfigure itself to cope with high-tempo operations or certain dangers); and (iv) a *learning* culture (which ensures that the ‘right’ conclusions are drawn from safety information and that appropriate reforms are implemented). According to Reason (1997), these four components can be ‘engineered’.

Although Reason (1997) was not explicit about his assumptions regarding the nature of organisational learning in this framework, his emphasis on error-reporting systems as a major aspect of a safety culture appears to have had two main purposes. First, it would seem that he envisaged error-reporting systems as enhancing a form of ‘organisational memory’ that supports members of the organisation when they are facing problems that might be new to them, but which are no longer new to the organisation. This reification of knowledge ultimately appears to align the behaviour of individuals to that of the organisation as a whole. Secondly, it would seem that errors and ‘near-misses’ are understood as natural phenomena in the design of any socio-technical system. To decrease the number of such errors, the system needs to be redesigned on the basis of the information acquired via the error-reporting system. This quest for improvement is apparent from the links that Reason (1997) emphasises between his *reporting* culture and his *learning* culture.

These ideas on organisational learning are in general accordance with Elkjær’s (1999) notion of learning as a *management tool* for developing the cognitive abilities of individual members of the organisation. For Reason (1997), learning appears to be equated with ‘progress’ in improving the abilities of individuals, and thus the organisation as a whole. As such, learning is positively correlated with safety; that is, if individual and organisational learning occurs, the organisation *must* become safer. Although Reason (1997) acknowledges some problems in linking the reporting of adverse events to learning, the general impression from his writings is that learning appears to have only positive consequences with respect to safety. Such learning appears to be unproblematic because ‘errors’ are regarded as constituting a natural category. Even if the definition of what constitutes an ‘error’ might be problematic to the members of the organisation, this is apparently not the case for objective scientific methods—which, it would seem, can confidently classify actions into natural categories as ‘errors’, ‘near-misses’, and so on. Based on these classifications, adjustments in the system are perceived to be not problematic.

## 2.2 Relativist perspective

Vaughan's (1996) notion of the 'normalisation of deviance' described a social process during which norms and standard practices are (often unintentionally) readjusted to accommodate multiple goals, pressures, and ambiguous evidence on the nature of safety and risk. The consequence of this change process is the transformation of the 'deviant' into the 'acceptable' as that which was previously unacceptable gradually becomes accepted as part of normal practice.

This understanding of the evolution of normal practice resembles the 'situated perspective' of learning espoused by Lave and Wenger (1991), who contended that learning occurs in social settings as an integral aspect of practice (rather than preceding or succeeding it); in other words, learning is held to be an inevitable aspect of participation in social life. Lave (1993) summarised the 'situated perspective' on learning in terms of four premises:

- \* Knowledge always undergoes construction and transformation in use.
- \* Learning is an integral aspect of activity in and with the world at all times (that is, the occurrence of learning is not problematic).
- \* What is learned is always complex and problematic.
- \* Acquisition of knowledge is not a simple matter of taking in knowledge; rather, things assumed to be natural categories (such as 'bodies of knowledge' and 'learners') must be re-conceptualised as cultural and social phenomena.

Given this understanding of learning and evolutionary change, the relationship between learning and safety is more challenging in the relativist perspective than was the case with the rational objectivist perspective described above. If evolutionary change is an inherent characteristic of practice, the problem is whether such evolution promotes or hinders safety. As Vaughan (1996, p. 416) observed, such a judgment can only be made from a "... luxurious retrospective position". The ongoing evolution of practice might not be judged as 'positive' or 'negative' (with regard to safety) without the benefit of hindsight.

In this regard, Perrow (1984) suggested that accidents are 'normal' in interactively complex and tightly coupled systems. Vaughan (1996, p. 415) went beyond this "basic pessimism of the original model of normal accidents" in asserting that:

... even when technical experts have time to notice and discuss signals of potential danger ... their interpretation of the signals is subject to errors shaped by a still-wider system that includes history, competition, scarcity, bureaucratic procedures, power, rules and norms, hierarchy, culture, and patterns of information.

Thus, according to Vaughan (1996), even ‘safety experts’ are not infallible in their assessments of safety issues. Their judgment is as contextual as anybody else’s judgment because it is a socio-cultural product of the experts’ participation in practice. As such, experts do not own an exclusive ‘right’ to pronounce on what is right and what is wrong in terms of the positive or negative consequences for safety.

Moreover, although outside ‘experts’ might introduce new insights that do reduce the risk of accidents, they might lack the experience and authority to make a meaningful contribution to an established culture. As Vaughan (1996, p. 418) observed: “... tinkering with culture can have unintended system consequences that are hard to predict”.

In summary, according to Vaughan’s (1996) relativist perspective, learning is not something that can be ‘managed’; indeed, attempting to manage it can even be dangerous. Nevertheless, Vaughan (1996, p. 416) continued to insist that “... accidents can be prevented through good organizational design and management”. The author encouraged the pursuit of every possibility to reduce the risks of an accident. However, from her perspective, good management and organisational design cannot ultimately prevent accidents from happening—because the definition of safety itself is a socio-cultural product.

### **2.3 Conceptual pragmatic approach**

Although it has been suggested that the two perspectives on safety described above are merely two ‘levels’ of a safety culture (Hudson, 1999), the two perspectives actually represent different interpretations of the nature of learning in organisations. The first perspective rests on an essentially static view of organisations in which learning can be managed and a culture can be ‘engineered’, whereas the second perspective assumes a more dynamic view of organisations as having continuously evolving cultures in which learning simply happens. In other words, the first represents an objectivist view of culture that does not appear to take into account the socio-cultural dynamics of safety practice in organisations, whereas the second represents an ‘anything goes’ relativist view of culture that observes the facts after the event but does not appear to provide clear guidance for avoiding the occurrence of accidents in the future. Faced with the dilemma of choosing between these two apparently inadequate approaches, the present study proposes a third *pragmatist* approach to patient safety that refuses to characterise this choice as an ‘either/or’ distinction.

Lewis (1929) coined the term ‘conceptual pragmatism’ to describe how learning, knowledge, and actions are created and shaped through reflection on previous experiences, interpretation of present experience, and anticipation of future experience. Such a pragmatist view transcends the duality of the rationalist perspective (which sees learning as simply a cognitive process) or the relativist perspective

(which sees learning as something that ‘just happens’). In contrast to this duality, the pragmatist perspective sees learning as a cognitive process situated in the social context.

Lewis (1929) contended that knowledge is essentially about experience, and that such experience is interpreted by individuals through their *a priori* conceptualisations, which can be likened to contemporary notions of ‘mental models’ (Senge, 1990) or ‘schemata’ (Hellgren & Löwsted, 2001). However, Lewis (1929) claimed that such *a priori* conceptualisations can be understood and modified by individuals through reflection, which he also referred to as ‘learning’. Personal reflection, the learning process, and deliberate action thus constitute some of the more important elements of Lewis’ (1929) theory of conceptual pragmatism.

For collective action to take place, Lewis (1929) contended that ‘common concepts’ are required. Such ‘common concepts’ are necessary because a concept (understood as the definition or content of a ‘category’) can change over time as a consequence of new experiences and/or new interpretations of old experiences. This can create confusion if the category remains the same while the content of it changes through experience. According to Lewis (1929), the required common concepts are *created* through talk and *identified* through congruity of behaviour. Temporality is thus taken into account in this pragmatic understanding of the evolving nature of learning, knowledge, and behaviour. Indeed, Lewis (1929, p. 133) stressed this temporal aspect in observing that “... knowing begins and ends in experience; but it does not end in the experience in which it begins”.

The conceptual pragmatic approach thus bridges the gulf between the rational objectivist view of the need to gather data in an objective manner to improve safety systems and the relativist view of learning as a socio-cultural phenomenon that cannot be managed. According to the conceptual pragmatic view, actors can be attentive and make sense of their realities by continuous reflection—thus becoming mindful of their activities in the context of managing safety.

#### **4. Applying conceptual pragmatism to health-care safety**

According to conceptual pragmatism, the significance of knowledge is not whether it is ‘true’ or ‘false’, but whether it is *usable* (Lewis, 1929). The key question thus becomes how research can provide usable knowledge to practitioners who are working to improve patient safety; in other words, the issue is the *kind* of knowledge that practitioners require for improving patient safety.

It is acknowledged that the methods and tools advocated in the rational objectivist perspective of Reason (1997) are certainly ‘usable’ in many situations. For example, the principle of confidentiality of incident reporting—which Reason (1997, p. 197) described as “indemnity against disciplinary proceedings, as far as it is practicable”—certainly appears to be ‘usable’ as a guideline. However, the

utility of some other objective guidelines for safe operation might be appropriate today but irrelevant tomorrow. Moreover as, Vaughan (1996) has warned, safety is compromised if people cease to reflect upon such guidelines and norms—or, as Lewis (1929) would express it, if they cease to reflect upon their own *a priori*.

Thus, according to a pragmatist perspective, practitioners require more than a set of principles that seem to be useable today; people also need to challenge the norm of what constitutes ‘usable’ knowledge because the ‘common’ understanding is continuously evolving in any organisation. As Weick (1987) has observed, continuous change produces constant outcomes in terms of safety. Weick and Sutcliffe (2003) have also emphasised the need for a critical attitude towards shared norms and values within any organisation.

Several authors (Snook, 2000; Weick & Sutcliffe, 2003) have contended that accidents occur when the norms and values of an organisation do not match the reality of contemporary operations. This can occur if the norms and values change over time (Vaughan, 1996; Lewis, 1929) or if the norms and values fail to adapt to a changing environment (Sutcliffe, 2003). If such a mismatch does arise between the accepted norms and the reality of operations, the major challenge is not whether to report an ‘incident’, but understanding the evolution of the definition of an ‘incident’ itself.

## **5. Case study: Incident reporting in health care**

### **5.1 Setting of the case study**

An illustrative case from Sweden provides some interesting insights into the issues discussed above. A public authority responsible for health-care clinics attached to a teaching hospital was gathering data about patient safety. However, it soon became apparent that the database of the national incident-reporting system was quite inadequate. The few local incidents that had been reported at the national level did not provide a reliable basis for improvement initiatives at the local level. There was therefore a need to define and implement a local system for incident reporting that would complement the national system by providing accessible and useful data on patient safety in the local region. It was therefore decided to collaborate with a few local clinics to define a new system that could subsequently be implemented across the whole region. For this purpose, a reference group was created consisting of practitioners from three local clinics (nurses and doctors) and consultant ‘experts’ in human resources and quality management (including the first author of the present paper).

The first problem was to define an ‘adverse event’ or ‘incident’ (in Swedish, an *avvikelse*, which is literally translated as a ‘deviation’). Although it had originally been planned to provide the clinics with a pre-ordained definition of such an ‘incident’, it was recognised from a conceptual pragmatist perspective

that there was a need to develop a consensus definition of the term because ‘expert opinion’ on this question can change over time (Creed et al., 1993). It was therefore felt that encouraging clinic staff to reflect about what is ‘safe’ and what is not was at least as important as providing a well-functioning reporting system. As a consequence, each of the three participating clinics was asked to work out its own definition of such an ‘incident’. Representatives from the three clinics subsequently met together with project leaders to agree upon a common definition of ‘incident’.

The next step in the project was to develop a simple system for reporting ‘incidents’ that fell within this common definition. The system was then tested and refined over several weeks. In parallel with this preparatory work, discussions were begun with companies that developed computer-software tools for incident reporting. The result was a computer-supported reporting tool that was adapted to the needs of the three clinics involved in the project.

Although it had been envisaged that this computer-supported system would soon be implemented in all clinics in the region, this did not eventuate because project members recognised that the complex issue of patient safety could not be solved by simply implementing an incident-reporting system. Reporting incidents would not ensure safer health care unless staff members could learn from the reported events. In particular, it was recognised that the utility of any incident-reporting system required a better understanding of the role of *human error* in the design and use of any socio-technical system (Spante, 2009). Project members recognised that there was a need to shift the understanding of ‘human error’ from being an unspoken taboo to being accepted as a legitimate subject for discussion. To achieve this, there was a need to change the unrealistic image of an ‘expert’ as being a ‘failure-free’ person to a more realistic understanding of an ‘expert’ being a reflective person who was capable of acknowledging and discussing his or her mistakes.

The strategy for implementing the incident-reporting system was therefore changed. Rather than providing a ready-made incident-reporting system for any clinic that desired it, it was decided to propose the system only to clinics that could explain why they needed such a system and how they were planning to utilise it for resolving issues of patient safety. In accordance with this change in strategy, the original name of the project was changed from ‘Adverse-event reporting-system project’ to ‘Patient safety: adverse-event reporting’.

## **5.2 Analysis of the case study**

The most important issue arising from this case study is how an ‘incident’ (in Swedish, *avvikelse* = ‘deviation’) was defined by the project team. Participants in the project team realised that the concept was vague and that they needed “common concepts for common action” (Lewis, 1929). For example, the

question of whether an unreadable prescription should be considered a ‘deviation’ led to a nurse observing: “This is not a deviation; this happens every day”. Other instances of uncertainty regarding the definition of an ‘incident’ led to several meetings in which people found themselves talking at cross-purposes. It was therefore decided to seek a common definition of what constituted a ‘deviation’ by asking each participant to initiate discussions in his or her own clinic, followed by subsequent discussions with the other members of the project team.

Over a period of a few weeks, a working definition was adopted and then subsequently revised in the light of further experience as new input into the ongoing discussion. Moreover, members of the project team spent a considerable amount of time in their respective clinics informing colleagues (who were not personally involved in the project) about the meaning behind the concept.

The ‘final’ definition that was eventually agreed was perceived by project members as an important outcome of the project. The ‘official’ definition that was decided upon was: “A deviation occurs when a process or an event does not follow the expected course of action”.

Although the formulation of a common definition *was* an important outcome in itself, the continuous process of ‘sense-making’ that was undertaken by the project members was, in many ways, even more important than the final wording of the definition itself. By engaging in conversational dialogue about the concept of a ‘deviation’, the members of the project team questioned the norms of what is acceptable and what is not. As several authors have argued, it is important for people to engage in continuous revision of their *a priori* (Lewis, 1929) assumptions of what is acceptable (Vaughan, 1996; Weick & Sutcliffe, 2003). Although common concepts are needed, it is important to be aware that such concepts evolve over time (Lewis, 1929); as such, they must be continuously addressed and questioned (Mauléon and Bergman, 2009) if safety is to be ensured.

## **6. Conclusions**

The present study has reviewed the concept of ‘safety culture’ in the literature and analysed its links to various epistemological views on the nature of learning. As a consequence, the study has proposed that a framework of learning based on conceptual pragmatism can be used to integrate the rational objectivist perspective with the relativist perspective in developing a safety culture.

The present study does not deny the importance of tools such as incident-reporting systems in promoting safety. Such reporting systems certainly facilitate the gathering of important information that is potentially useful in assessing and redesigning complex socio-technical systems. However, the present study proposes that the importance of incident-reporting systems goes beyond their conventional role as scientific tools that purport to provide objective information; rather, incident-reporting systems can be



utilised to enable actors to reflect upon current work practices and their role in a safety culture. The perspective adopted in the present study is that incident-reporting systems are, in themselves, a vital aspect of the unfolding events in any organisation. As such, actors need to be constantly aware of the evolving significance of the inputs and outputs of these systems, rather than passively accepting them as objective ‘truth’.

To achieve this understanding of the potential role of incident-reporting systems, organisational members need to put aside a rational objectivist view of learning (which implicitly defines incident-reporting systems as infallible scientific tools) and adopt a *pragmatist* view (which recognises that incident-reporting systems reflect dynamic socio-cultural processes that are not linear in nature). In the case study reported here, the *development* of the incident-reporting system and the organisational practices of patient safety had an ongoing mutual relationship of reciprocal influence.

In the final analysis, it was thus ironic (and potentially counterproductive) for the actors in the case study to claim, as they did, that they had established a ‘final’ definition of the word ‘incident’; in the ultimate, safety management as seen from a pragmatic perspective has no such ‘final’ definition.

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## **Paper IV**

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Knowledge Overlapping Seminars: A Conversational Arena for Facilitating Co-construction of Shared Understanding in Projects.

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# **Knowledge Overlapping Seminars: A Conversational Arena for Facilitating Co-construction of Shared Understanding in Projects**

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## **Abstract**

The aim of this paper is to test and evaluate a method – Knowledge Overlapping Seminars (KOS) for creating shared understanding of a project goal in a Six Sigma Project. Misunderstandings often rise in projects amongst people who do not share the same language due to their belonging to different organisational contexts. As such there exists a need to develop methodologies that will assist in revealing hidden misunderstandings in communication among people who come together from different context and work together. The present study proposes a methodological ‘tool’ for this purpose. Knowledge Overlapping Seminars is designed as a type of seminar in which various members of a team have an opportunity to guide one another in their respective different domains of knowledge related and connected in a project. The design of KOS aims to avoid obstacles to effective overlap of knowledge domains that can arise in other types of meetings, with special emphasis on avoiding prestige. KOS is a promising methodology for application in projects with a view to achieving a shared understanding of the project goal, fewer misunderstanding, better quality and, ultimately, more satisfied customers.

## **Introduction**

Interest in project management and project-based organisations has increased significantly in recent decades. It has been contended by some authors that project-based organisations perform better than other organisations because they integrate diverse resources and expertise in an efficient and flexible manner (Masters and Frazier, 2007; Lindkvist, 2004; De Fillippi, 2002; Kaulio, 2007; Sydow et al., 2004). However, others have claimed that many projects are suffering from significant delays and cost overruns (Engwall & Westling, 2004, Ayas and Zeniuk, 2001) as increasingly large and complex projects require partners who are drawn from a wider diversity of occupational groups and knowledge domains (Jackson and Klobas, 2008; Beynon-Davies, 1995; Boland and Tenkasi, 1995; Simpson et al., 2004; Bechky, 2003; Jackson & Klobas, 2008; Cronemyr, 2000). Because these people often have different domain-specific languages (Bragd et al., 2008), this significantly increases project complexity in terms of interpersonal relations, information co-ordination, learning activities, and politics (Sense, 2004). Indeed, a lack of clarity with regard to the basic definition and objectives of a project has been identified as one of the most significant causes of project failure (Koning et al. 2008; Engwall & Westling, 2004). In many cases, this lack of clarity can be ascribed to conflicting values

and communication difficulties between different occupational groups or knowledge domains (Donnellon et al., 1986; Simpson et al., 2004, Cronemyr, 2000). To overcome these problems, strategies for facilitating the co-construction of shared meanings in projects would appear to be vital.

In response to this need, the present study describes and evaluates a dialogue-based seminar approach that is designed to create shared understandings in a project. The approach, which is known as a 'knowledge-overlapping seminar' (KOS), facilitates individual and collective reflection among diverse knowledge domains in relation to a specific topic or object (Star and Greisemer, 1989). The objective of the KOS approach is to identify areas of overlap among the knowledge domains of various project members, thus facilitating cooperation by identifying potential misunderstandings in the project. Drawing upon relational theory (Shotter, 2005; Gergen, 2007), the KOS encourages conversational and reflective activities with a view to co-constructing shared meanings by identifying potential misunderstandings, thus facilitating coordinated action.

The remainder of this paper is structured as follows. Following this introduction, the theoretical framework of the study is presented; this includes a discussion of diversity in projects and a detailed description of the nature of a KOS. The paper then presents an application of KOS in a case study; this includes a description of the research setting, the research methodology, the planning of the KOS, and the means of data collection and assessment. The next section presents the results of the application, followed by a discussion of the findings. The paper concludes with a summary of the main findings and implications of the study.

## **2. Theoretical background**

### **2.1 Bridging diversity in projects**

A pioneer of the quality movement, Shewhart (1939), drew upon the conceptual pragmatism of Lewis (1929) in emphasising the importance of shared concepts in achieving cooperation. Since then, many other authors have noted that a lack of common understanding of key concepts is a significant cause of misunderstandings and a potential barrier to cooperation in shared projects (Naess, 1968; von Wright, 1957, 1971; Pålshaugen, 2001).

A common source of such misunderstanding is that people often perceive different meanings when contemplating what is ostensibly a 'single' concept. Boland and Tenkasi (1995) developed the idea of *perspective making* and *perspective taking* in arguing that misunderstanding results from the fact that different areas of expertise within an organisation tend to have divergent perspectives. Misunderstandings in organisational projects can then arise from simple mishaps in communication among people who do not share the same perspective (Simpson et al., 2004; Naess, 1968) and/or the specialised language of a particular knowledge domain (Argyris et al., 1985; Naess, 1968). As Argyris et al. (1985) observed, words take on particular meanings within a given community of practice, and the competence required for understanding these meanings is acquired only with actual membership of a particular community of practice. As a consequence, what a person means to communicate in one



community can be perceived in a completely different way in another community; indeed, misunderstandings and misconceptions can arise without the person being aware of the fact.

Lewis (1929) contended that the different meanings attributed to concepts arise from each person's unique personal *a priori*, which he posited as an individual idiosyncratic way of interpreting and understanding experience. This notion has found expression in the contemporary management literature in the form of the plethora of 'mental models', 'schemata', and 'paradigms' that are said to provide distinctive interpretations of experience (Senge, 1990; Hellgren & Löwstedt, 1997).

In an attempt to bridge differences in *a priori* (Lewis, 1929), several purposive programs have been suggested to promote understanding among project members (Weick & Roberts, 1993; Sense, 2004; Jackson & Klobas, 2008). Although these programs differ in detail, they share in common a theme that *narration* and *reflection* can be utilised for the creation of shared understanding and a relatively homogenous view of shared tasks and how they should be carried out (Boland and Tenkasi, 1995). According to Mauléon et al. (2000), who also argued for the importance of reflection, unnoticed misunderstandings are often grounded in 'taken-for-granted' communication, whereby people presume that everyone else has the same understanding of certain key concepts in the projects being undertaken. In an attempt to address the problem, Mauléon et al. (2000) argued for an increased awareness of the different meanings that common concepts can have within a given organisation.

To achieve shared meaning in projects, a space for reflection is required. In such a 'conversational space', complexities, ambiguities, doubts, and difficulties can be expressed and heard in a manner that encourages relationships and the co-construction of meaning (Hosking & McNamee, 2006); in short, it is a space for 'sense-making' (Weick, 1995) as the common concepts required for common action are created (Lewis, 1929; Wittgenstein, 1953; Shoter, 2002; Gergen, 2007).

It is in accordance with this thinking that the present paper introduces the notion of a 'knowledge-overlapping seminar' (KOS) as a potential conversational arena in which project team members can explore their various knowledge domains and reflect upon their relation to the main objectives of their shared project. The main purpose of a KOS is, therefore, to support the co-construction of shared understanding in projects by identifying potential misunderstandings, thus facilitating coordinated action. The characteristics of KOS are explored in greater detail below.

## **2.2 Knowledge-overlapping seminars**

### **2.2.1 Objectives**

KOS has three objectives: (i) to stimulate people within a project team to talk about how their own domain knowledge and that of others relate to the tasks of the whole team; (ii) to enhance awareness of differences in the definitions of common concepts within the organisation; and (iii) to create shared understandings of common concepts through open dialogue.

### 2.2.2 Participants

Three types of participants are typically involved in a KOS: (i) a guide; (ii) a facilitator; and (iii) participants.

The *guide* talks about his or her domain-specific knowledge in relation to the common project goal. It is important that the guide is the *only* person present from his or her domain because this ensures that: (i) the discussion does not include domain-specific details that are beyond the comprehension or interest of the other participants; and (ii) the guide does not have to justify his or her description of the job to a person within the same domain who might have a different view (thus avoiding issues of intra-domain ‘prestige’).

The *facilitator* should be trained in conducting KOS. To avoid problems of prestige and politics, the facilitator should not be a manager of the guide or the participants. The facilitator’s role is to provide assistance to the seminar by asking apparently simplistic questions of the guide (such as: ‘Why is this done?’; ‘On what basis do you make these choices?’ and ‘How do you reason when doing this?’), rather than functional/technical questions (such as: ‘What is the best way to do it?’ or ‘Who should do it?’). Without appearing to cross-examine the guide, the facilitator thus steers the conversation towards a more profound understanding of the guide’s domain-specific knowledge. The facilitator must be observant to ensure that the conversation is kept on a level at which all participants can be involved in gaining an understanding of the guide’s role and domain; if necessary, the facilitator asks the guide to repeat or clarify what has been said.

The *participants* should all be from the same knowledge domain so they can relate to each other’s questions; however, their knowledge domain must be different from that of the guide (as noted above). Although they are from different knowledge domains, the guide and the participants should share a common task or a common goal in a project. This ensures that the topics discussed in KOS are always related to the domain-specific knowledge needed in the specific setting; moreover, it diminishes the likelihood of either participants or guide engaging in defence of their own domains. The focus of the KOS is always upon the overall task or goal.

### 2.2.3 Planning for a KOS

The planning for a KOS proceeds by several sequential steps:

- \* *Step 1*: Identify the need for knowledge overlap in a project with people from different knowledge domains and find a suitable facilitator. (The project manager or project steering committee is responsible for this step.)
- \* *Step 2*: Define the major knowledge domains (two, three, or four domains). (The project manager and KOS facilitator are responsible for this step.)
- \* *Step 3*: Conduct an initial exploratory meeting with the whole team. Note that this is *not* a KOS, but an introductory meeting for a KOS (Mauléon and Ollila, 2009). People from each domain define their specific task in relation to the project in one sentence. When all domains

have defined their tasks, the whole team agrees upon the common task and goal of the project. (The KOS facilitator is responsible for this step.)

- \* *Step 4:* From each domain, select one guide and 2–6 participants. Prepare the guides individually in how to describe *what* they do and *why* they perform the tasks in relation to the main goal of the project. (The KOS facilitator and the guides are responsible for this step.)
- \* *Step 5:* Perform the KOS (as described below). Each guide provides guidance for each of the other domains (that is, two guides present at two KOSs, three guides present at six KOSs, and four guides present at 12 KOSs). (Each guide and the KOS facilitator are responsible for this step.)
- \* *Step 6:* Organise a follow-up meeting with the whole team at which the major findings from the seminars are gathered in a suitable format—for example, an Ishikawa diagram (Ishikawa, 1982)—and future actions are planned. (The project manager is responsible for this step, with assistance from the KOS facilitator.)

#### **2.2.4 Conducting a KOS**

Each KOS (see step 5 above) is conducted as follows.

- \* *Phase 1:* The facilitator reminds the participants of the common task and goal (as defined in the initial meeting described in step 3 above) and then asks the guide to present his or her task in relation to the common goal of the project.
- \* *Phase 2:* The guide describes briefly *what* he or she is doing in the project and *how* he or she is doing it.
- \* *Phase 3:* The guide begins to describe *why* he or she is doing it and is repeatedly asked by the facilitator: ‘Why is this a problem?’ and ‘Why is it so?’. If the participants seem hesitant to become involved, the facilitator should initiate this process by asking further open-ended questions such as: ‘When you do this, what happens?’, ‘How did you come up with a solution like this?’, ‘On what basis did you make this decision?’. The aim is to open the discussion to questions from the floor and create a non-judgmental atmosphere that encourages inquisitive and friendly conversations (rather than making people feel defensive).
- \* *Phase 4:* The seminar should then evolve in accordance with the questions and comments of the participants. There might be questions about matters that the guide considers to be self-evident, but these questions should be dealt with on their merits to encourage participants to become aware that it is safe in a KOS to ask questions that might be considered simplistic.
- \* *Phase 5:* Misunderstandings should be identified in the course of the seminar, but there should be no suggestion of blame or judgment. The goal is to identify and highlight misunderstandings, but not to *solve* them. Possible actions from these findings should be discussed in the final feedback meeting (see step 6 above).

\* Phase 6: The seminar should last no more than three hours (including a refreshment break).

These seminars can be quite challenging as a result of the emotional processes triggered in a KOS (Mauléon and Ollila, 2009).

### **3. Application of KOS**

#### **3.1 Setting**

The setting for this case study of the application of KOS was Siemens Industrial Turbomachinery AB in Finspong (Sweden), which employs approximately 2200 people and belongs to the Siemens Group (an employer of approximately 460,000 people in 190 countries). The Finspong company develops, sells, manufactures, and maintains gas and steam turbines. This involves several highly specialised knowledge domains, which come together for product development and process development. Since 2001 the firm has utilised the Six Sigma method for process development and improvement.

Six Sigma is a statistical problem-solving methodology based on an advanced form of Shewhart's (1931, 1939) improvement cycle. Six Sigma was introduced by Motorola in the 1980s and made famous as a result of its utilisation by General Electric in the 1990s. Since then it has spread widely, and it is now used by many companies around the world. Six Sigma is a structured way of solving problems in an existing process by analysing real process data (that is, 'facts'). It is often referred to as 'DMAIC', which is an acronym for the successive phases of the Six Sigma process—'define', 'measure', 'analyse', 'improve', and 'control'.

The purpose of the Six Sigma project chosen for the KOS application was to investigate the root causes of a problem with so-called 'modification orders'. These orders were issued by the gas turbine engineering department and sent to the service department for execution at customers' sites; however, these modification orders were not being reported back to the engineering department as having been carried out. It was unknown whether the orders were executed but not reported, or whether they were simply not executed at all. There were also varying opinions about the process itself that did not match the official terms of the process. During the 'define' and 'measure' phases of Six Sigma, it was established that people involved in the process did not know how or what they should do; moreover it was apparent that conflicts and apportioning of blame were occurring among the personnel involved. There was also confusion about the respective roles of 'modification orders' and so-called 'service bulletins' (a derivative of 'modification orders').

#### **3.2 Research methodology**

The study was conducted in accordance with the methodology of a 'collaborative action inquiry', which seeks to integrate the social sciences with organisational knowledge to generate actionable scientific knowledge (Lewin, 1946; Westlander, 1999; Reason & Bradbury, 2001). In all forms of action research, the researcher has a close identification with the activities and direction of change of the object being studied (Westlander, 1999); however, the distinguishing feature of collaborative action inquiry is that researchers and organisational members are jointly involved in a process of self-

reflection and shared responsibility for the action that derives from the knowledge that is created (Shani & Bushe, 1989; Shotter, 2002; Eden & Huxham, 1996).

This research methodology was adopted in the present case to: (i) study the applicability of KOS as a methodology for active change (Silverman, 2005); and (ii) study the co-construction processes generated by KOS from ‘within’ (Czarniawska-Joerges, 1992; Shotter, 2002).

### **3.3 Initial meeting**

Both of the present authors were present at the introductory meeting at which the methodology and objective of KOS were presented by the second author and observations were conducted by the first author. The aim of this meeting was to encourage project members to co-construct a shared understanding of the project goal. The results of this meeting can be further studied in Mauléon and Ollila (2009).

The knowledge domains for the KOS were jointly selected by the second researcher and the project manager, who came from the business excellence department. The selected domains were: (i) service product managers (responsible for issuing ‘service bulletins’); (ii) product support engineers (responsible for technical coordination of ‘modification orders’); and (iii) application engineers (responsible for carrying out ‘modification orders’ and ‘service bulletins’). Three persons from each domain were appointed to participate in the seminars, but other tasks and unplanned events intervened and only two from each domain eventually attended. The utilisation of three domains implied six KOSs (as noted above).

There were nine participants in the initial meeting—the project manager, six persons from the three domains (of whom two were not original members of the Six Sigma team), and the two authors of the present study. Two of the persons who subsequently participated in the KOS were not present at the initial meeting. After the methodology of KOS had been explained, the participants from the three domains described their specific tasks in the process. The formulation of the common task and objective was quite difficult, but the group finally agreed upon the following wording: “Carry out modification orders with the intention of improving gas turbines in the fleet”.

After the initial meeting, three persons (one from each domain) were appointed as guides; all three guides had been with the company for several years.

### **3.4 Data collection and assessment**

Data for this case study were collected through questionnaires, interviews, and observations of the initial meeting and the subsequent six KOSs. Both authors were present during the first two KOSs, at which the first author conducted observations and the second author took notes (while simultaneously being the facilitator). During the final four KOSs, the second author attended alone due to time limitations. Evaluation questionnaires were handed out before and after each seminar. About one month after the KOSs, semi-structured interviews (each of about one hour) were conducted with all of the individual participants and guides. These were audio-recorded and thereafter transcribed.

Several weeks after the KOSs had been conducted, the project leader for the Six Sigma project and the second author met to evaluate the merits of KOS in the context of the project. Before the six KOSs had been conducted, the project leader and the second author had identified the root causes of the problem in the Six Sigma project in a cause-and-effect diagram. This consisted of 12 small branches. After the seminars, the Six Sigma team gathered again and extended the cause-and-effect diagram with the new findings from the KOS. The number of small branches increased from 12 to 40.

## **4. Results**

The results are presented in two groups: (i) evaluation of KOS as a method for identifying misunderstandings and knowledge gaps in projects; and (ii) evaluation of the design of KOS itself.

### **4.1 Identifying misunderstandings and knowledge gaps**

The role of KOS in identifying misunderstandings and knowledge gaps is presented in the form of two examples. The first shows how a major misunderstanding between two knowledge domains was identified, and the other describes the knowledge gap that was identified between two knowledge domains.

#### **4.1.1 Example 1: Identifying misunderstandings**

The first example arose from the recognition that two knowledge domains (service product managers and application engineers) had divergent opinions about the role of two types of documents (so-called ‘modification orders’ and ‘service bulletins’) within the organisation. In particular, the two KOSs that were conducted with the service product managers and the application engineers led to revelations about the utilisation of ‘service bulletins’. The application engineers realised that they should actually do something with these bulletins (which were produced by the service product managers), whereas the service product managers realised that, until now, very few application engineers had actually done anything with the bulletins that they (the service product managers) had been producing with great care.

It became apparent at the KOS that there was confusion regarding the nature and role of the ‘modification orders’ and the ‘service bulletins’. As the Six Sigma project leader observed:

The modification order [was sometimes packaged] as a ‘service bulletin’ instead of as a ‘modification order’. And when the recipients of these documents described what they did with them they said: “Well, if it is a modification order then I do this, but if it is a service bulletin then I do nothing”. They apparently did not know that these were two forms of the same thing. And [hearing this at the KOS] was a ‘light bulb moment’ not only for me, but also for the person disclosing that it was like this.

Mary, who was from the service product managers, made the following observations about the apparent failure of the application engineers to utilise the service bulletins that she and her colleagues had prepared with great care:

The purpose of a service bulletin is that we are supposed to simplify things for the [market] teams. We create a customer letter called a ‘modifying sheet’ ... There is a lot of work involved in preparing this letter. Everyone puts in a lot of effort ... it is a huge process to

create a framework upon which everyone is agreed regarding the terminology to be used. And then the Application Department don't even send the letter! ... It is quite frustrating when this happens with something you have worked hard to achieve.

When asked why the document had not been properly utilised, Mary replied:

Well, I think that it is because of unclear roles. It isn't clearly defined who is supposed to do what ... We send the information to the application engineers according to what their leaders have told us to do ... [but] the application engineers do not usually have direct customer contact ... I think that it should go to sales engineers, who would *sell* this.

Rick, who was from the application engineers, supported Mary with regard to this problem:

The letter to customers created by the service product managers is not used by any application engineer I know ... And then the service product managers feel that they are sitting in their workshop over there... working on something that nobody uses ... Either they are doing something wrong or we are doing something wrong. And we are all wasting a lot of time on something no one later uses.

An underlying theme of perceived criticism and antagonism between the two domains (service product managers and application engineers) also became apparent. As Mary (from the service product managers) observed:

That [criticism] is something we hear all the time ... [but] there is just so much to do; we hardly sit around and twiddle our thumbs! No, we work really hard, but then we hear that ... we don't do enough ... [There is] very little understanding [about] what is being done in the different departments.

This undercurrent of criticism and antagonism caused significant tension between the two groups at the KOS, which had to be tactfully managed by the facilitator. As a consequence, the KOS enabled the underlying causes of this tension to be revealed and reduced. It became apparent that the 'problem' was not caused by either group; rather it was the result of not having a shared understanding of the form and function of the service.

#### **4.1.2 Example 2: Identifying knowledge gaps**

The second example concerns the two KOSs conducted with application engineers and product support engineers. Before the KOS, the application engineers had apparently not been aware of the role of the product support engineers. They had been in the habit of speaking directly with the gas turbine engineering department—which had been a very inefficient use of resources and time. In subsequent interviews it became apparent that this had occurred because the product support department had been in existence for only a short time. The Six Sigma project leaders explained the problem in the following terms:

The product support department had obviously lived a rather 'anonymous' life. The service people did not know that they existed as a resource. Instead they went to the 'old' technicians responsible for their issues; that is, they went to the engineering department that had dealt with the turbines from the beginning. So this was an issue that was identified in the KOS: that there existed a relatively new and unexploited resource.

Chris, who worked as an application engineer, agreed with this analysis:

I now have a better understanding of this ... we will now spend less time on this task. Instead of asking around and wondering where to get information and who to ask, I now know ... I can get help with this ... so more efficient work really, spending less time on a task and maybe getting less frustrated for not knowing!

Rick, who also worked as an application engineer, confirmed this view:

I haven't been aware ... that we should involve them ... but when you sit and talk about it, it is quite obvious that this should be the case!

Fred, who represented the product support engineers, agreed:

Yes, there were not many who knew about our role. They did not really know what our role is, but now it has become clearer.

This second example demonstrates that the identification of the support available from certain knowledge domains can make a project more efficient and diminish frustrations for all concerned.

## **4.2 Evaluation of the design of KOS**

### **4.2.1 Role of the facilitator**

Many of the social interactions in the KOSs were highly emotional, and it became apparent that the role of the facilitator was essential in ensuring that the KOS did not become disruptive and futile. As the Six Sigma project leader observed:

Because the KOS involves people from diverse knowledge domains who do not share a common language, they often do not know what others are doing. The facilitator's role then becomes important for keeping the KOS on a civilised level, with no personal attacks being committed ... and a focus on what the different tasks are.

### **4.2.2 Role of the guide**

In the first KOS, the guide representing the service product managers presented her job to the participants representing the product support engineers. However, it soon became apparent that the most important rule of KOS had been inadvertently broken—the guide was not alone from her domain. When the personnel had been selected for participation in KOS it was not taken into account that one of the product support engineers had worked as a service product manager for quite a long time. This person therefore had significant knowledge of the guide's domain, although this knowledge was not identical with that of the guide. In a subsequent interview, the guide observed:

He was answering for me all the time. He took over my role. I would not have used the words he used ... He said "She means this", and I did not have the time to think. I felt ... he would correct me. I felt forced ... It became too superficial because of this. We never came down to the 'why' questions so I could give my own answers. Even though the facilitator tried to steer the dialogue, it did not work. He [the product support engineer] was too experienced in the role of a service product manager ... Still, I have to admit that it started me thinking about why I am doing the things I do.



As a result of this error in selection of personnel, there was a general feeling that the first KOS had been a failure. It was evident that a guide needs considerable experience in his or her role to ensure that a rich dialogue is established in the KOS.

#### **4.2.3 Absence of management**

The interviewees were of the opinion that not having a manager present was important in the design of the KOS. The absence of management was beneficial in terms of the openness of the conversation and participants' feeling free to ask any type of questions. The Six Sigma project leader was of the opinion that this was a major factor in ensuring that the KOSs worked so well in creating shared knowledge (compared with 'ordinary' meetings):

It is this [the absence of management] that separates these seminars from departmental meetings that are steered by the boss. It is important that the group feels that they are allowed to ask any questions and talk about whatever they feel is necessary ... I think this is the strength of this method—that there is no hierarchical thinking and that KOS gets people together who really are doing the job ... giving them a chance to get together and talk.

#### **4.2.4 Concerns about the KOS**

Although the general opinion was that the KOS was a good way to get all participants involved, some concerns were expressed. In particular, participants were uncertain about how the KOS should be documented and how the information gained in the KOS might be utilised in the project and in the organisation as a whole. Rick (from the application engineers) made this observation:

I hope that the gaps that we identified ... when we sat and talked ... can be remedied. But I do not know how this is to be done ... I am a little anxious as to how you [the researchers and project leader] are going to manage this.

In the event, this was not a problem in the present case because the project was a Six Sigma project. In such projects, the task of gathering and using the information fell upon the project leader (the so-called 'Black Belt').

A few participants also perceived potential difficulties in terms of personal time commitments. As one of the participants, Paul, observed:

To be honest if the management group had not told me that this [the KOS] was a priority, I would not have changed my schedule.

Similar comments were made by another participant, Chris, who had initially been daunted by the prospect of a three-hour KOS:

When I first got there I thought: "Oh, are we going to sit here that long!" ... But it was quite well planned really.

Despite these initial misgivings, participants subsequently thought that more people should have been involved in the KOS. Although they had initially believed that there would be difficulties in spending so much time in a KOS, they subsequently thought that it had been worth the time that they had invested. However, it was apparent that support for the KOS from management is a prerequisite for getting people to attend in the first instance.

## 5. Discussion

It is apparent from the findings that the project members in different knowledge domains had divergent understandings of what they were supposed to be doing and what they actually did. The project members were, initially, quite convinced that they had a shared understanding of these matters; however, as the dialogue and reflective process proceeded in the KOS they identified several misunderstandings (or differences in interpretations) in their project.

In the example of the confusion concerning the Service Bulletins (SB) and Modification Orders (MO) we find that the different knowledge domains, Application Engineers (AE) and Service Production Managers (SPM) had interpreted the two differently. We find that the Service Production Managers producing the Service Bulletins sees this as being a business opportunity whereas the Application Engineers do not and thus do not introduce them to the customers out on site but often simply installs the adjustments presented in the Service Bulletin for free. Here we find a discrepancy between the interpretations within the knowledge domains; Service Production Managers, them seeing the difference of the Service Bulletins and Modification Orders and seeing the Service Bulletins as business opportunities and where the Application Engineers sees the Modification Orders as simply being ‘maintenance information providers’ of the specific gas turbine and do not work with the Service Bulletins at all.

In this example the two knowledge domains, Service Production Managers and Application Engineers began the process of what Boland and Tenkasi (1995) calls ‘perspective making and perspective taking’. The actors representing the two knowledge domains slowly approached each other’s interpretations of the Modification Orders and the Service Bulletins. In this process the two domains further got closer in understanding the role of the respective knowledge domain in relation to the project. However it seems that the representative from the Service Production Managers had a fuller understanding of the roles of the Application Engineers but thought they weren’t commercially focused and heavily criticized this. At the same time the representative from the Application Engineers clearly had knowledge gaps concerning the different roles of the Service Bulletins and the Modification Orders and did not know that these were only ‘two sides of the same coin’ which undoubtedly became costly for the company.

As such we find how the various actors from the different knowledge domains were somewhat ignorant (and critical) of the role of the other knowledge domains in the project. However, as the KOS progressed, a shared understanding of the existence of other perspectives became apparent and they finally understood the problem. They simply had not possessed a shared understanding of the purpose of their various roles. These developments can be ascribed to the KOS serving as a ‘conversational arena’ (Hosking and McNamee, 2006) in which the participants felt comfortable to speak freely. The KOS removed any perception of ‘them’ and ‘us’.

In summary, the process of KOS resulted in a better understanding among project members as to *what* they do, *why* they do it, and *how* they do it; moreover, they gained an improved understanding of how this related to the overall goals of the project. The whole process of KOS was assessed by

participants as being a fruitful way of creating a shared understanding of the project, thus facilitating coordinated action in the project.

## 6. Conclusion

Although it is said that misunderstandings are rare in closely connected groups who share a common language (Mead, 1934; Naess, 1968; Argyris et al., 1985), the problem for complex projects involving multiple knowledge domains is that individual project members usually do not share a common language and shared understandings. It is likely that this is one of the main causes of misunderstandings and disruptions in the complex inter-disciplinary projects that are becoming increasingly common in contemporary business.

The present study has described a 'knowledge overlapping seminar' (KOS) and has demonstrated in a case study that it can be a fruitful tool in supporting the co-construction of shared understandings in projects involving multiple knowledge domains. Through a KOS, the participants were able to identify new ways of working together more efficiently by overcoming discrepancies in perspectives and knowledge of the roles of others.

Despite this success, it is not possible to claim that the KOSs conducted in the present case are capable of changing the culture of the whole organisation with regard to an increased awareness of ambiguity and differences in meaning and understanding. To achieve such an outcome, management needs to organise such seminars on a regular basis. However, it can reasonably be claimed that a 'seed has been planted' with regard to new ways of thinking that have the potential to influence participants in their day-to-day work practice and, as such, to influence the thinking and behaviour of others.

In summary, the study has shown that KOS can be a beneficial way of encouraging the co-construction of shared meaning, thus diminishing misunderstandings and facilitating coordinated action in organisations.

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## Paper V

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The drama of co-construction — exploring what 'goes on' in a conversational arena.

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# **The drama of co-construction**

## **- Exploring what ‘goes on’ in a conversational arena-**

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Abstract:

*Aim:* We want to investigate, from within, actor’s process for co-constructing shared meaning in a conversational arena, here an Introductory Meeting to Knowledge Overlapping Seminars (KIM). Our aim for this study is to contribute to a better understanding of what ‘goes on’ in a co-construction process as it is argued here that this relational process of creating shared meaning is one way to delimit misunderstandings, and facilitate joint directed action (JDA) in projects. JDA- collective activities becoming aligned with an objective

*Design:* Participative Observation and action research

*Findings:* Co-constructing shared meaning of a project goal supports the pursuit of joint directed action. This is an emotional process in which actors negotiate and co-create a common understanding of the project goal. This process can be facilitated and supported by a facilitator.

*Value:* We wish to contribute to an enhanced understanding of the co-construction processes of creating shared meaning going on in social encounters. This is done, in situ, as we take the perspective that to study processes like co-construction necessarily means that we are part of this process; which also is necessary in order to make sense of the complexity of the talk-in-interaction (Shotter, 2005, 2006; Rovio-Johansson, 2007). We believe that by gaining increased understanding of the co-construction processes in a conversational arena we can find new ways to navigate within them better (Shotter, 2005).

**Keywords:** co-construction, conversation, shared meaning, conversational arenas, face-to-face meetings, joint directed action, emotion

## **Introduction**

“Truth is not born nor is it to be found inside the head of an individual person, it is born between people collectively searching for the truth, in the process of their dialogic interaction” (Bakhtin, 1984, p. 110).

Organizational members spend a lot of time at work in meetings, interacting with others. These meetings are, in many cases, the only arenas where people get together to talk about their joint activities, make decisions, share knowledge, and create knowledge. The list of

different activities taking place could be made very long. There are some accounts describing meetings as being unproductive and/or confusing its participants (see e.g. Kaufman, 2002; Pasmore, 1997; Drucker 1974). The view of meetings being almost a waste of time has led to various suggestions for improvement of the time spent face-to-face. These suggestions are, for example, about introducing more structure into meetings, getting a better understanding of group dynamics and reducing the number of meetings. Other scholars (Simpson et al., 2004; Shotter, 2002; Gratton and Ghoshal, 2002; Ford & Ford, 1995; Isaacs, 1993) have focused upon conversations in meetings stating that the study of conversations contribute to the understanding of meetings and their outcome. “*Organization ultimately rests in shared systems of meaning*” Morgan (1997, p. 147) and the most common way to try and create shared meaning in organisations today is through conversations in meetings. In this paper, based on participative observation, we study, in situ, the relational processes ‘going on’ in conversations in an introductory meeting (IM). We build upon the theory of *conversational arenas* (Hosking and McNamee, 2006) and *co-construction* (Bakhtin, 1984; Shotter, 2002; Gergen, 2007). Our attempt is to contribute to the understanding of what ‘goes on’ in meaning creation processes with the purpose of increasing our knowledge about how to organize our activities to support this process.

Drawing on relational theory (Shotter, 2005, Gergen, 2007) it is here suggested that the process of creating shared meaning, i.e. co-construction, is not only a conversational activity, but could also be understood better if viewed as an emotional activity. Implications put forward suggest that we need to set up meetings, supporting the emotional activity of co-construction if pursuing shared meaning. Co-construction in turn lays a foundation for joint directed action, meaning collective action aligned with an objective, be it e.g. a project goal, safety or other.

“Rationality and analytical rigour, even though often lacking in practice have always been celebrated in theory of management. In turn, this has led to a denial of the role of emotions in the workplace” (Gratton & Ghoshal, 2002. P. 214).

Hosking and McNamee (2006) introduce the definition of the *conversational arena* which is a space that supports relational engagement necessary for co-constructions (Hosking, & McNamee, 2006). The conversational arena is set up to invite multiple voices without trying to homogenize them; it is a space open to multiplicity, complexity, ambiguities, doubts and difficulties (ibid.). Conversational arenas are a space for sense making (Weick, 1995) in the moment. It is within this type of space, where *common concepts*, necessary for joint action, can be created (Lewis, 1929). It is also within the conversations in a conversational arena where judging and evaluation of concepts takes place and where assessments are negotiated and shared agreements are reached (Shotter, 2002). This activity is essential for knowing how to *go on* together (Wittgenstein, 1953, nos 151, 179; Gergen, 2007). With the pre-conception that the clarification of different beliefs, meanings, values of group members is essential if we are to ‘go on together’ (Hoskin and McNamee, 2006; Gergen,2007; Shotter, 2002) and facilitate organized action (Morgan ,1997; Donnellon et al., 1986) can we afford not to facilitate and support people in their relational engagements such as conversations in meetings?

Inspired by the ideas of co-constructional activity as a means for creating shared meaning, the purpose of the paper is twofold; first we want to provide *knowledge from within* (Shotter, 2006) a co-construction activity contributing to the understanding of such social processes (Shotter, 2006; Fairclough, 2005; Roivo-Johanson, 2007) as with increased knowledge we can

identify 'new' ways to navigate within them and thus support co-construction. We also aim at discussing the emotional activity going on in a meeting as this seems to influence the process of co-construction.

The structure of the paper is as follows. Firstly, we outline our theoretical framework portraying some perspectives on conversational activity. Secondly, we present the context of our study and the methodology chosen for this case. Thirdly, the co-constructive activity from within the KOS Introductory Meeting (KIM) is shared. Finally, a concluding part summarizing the discussion and the contribution of the paper is put forward.

## **Theoretical framework**

### **Conversation as activity**

“Conversations lie at the heart of managerial work. ... Conversations lie at the heart of how companies develop new ideas, share knowledge and experience, and enhance individual and collective learning” (Gratton & Ghoshal, 2002, p. 209).

Alvesson and Kärreman (2000a) describe how “Language is increasingly being understood as the most important phenomenon, accessible for empirical investigation, in social and organizational research” (Alvesson & Kärreman, 2000a, p. 1126). Such a perspective emphasises how language is rooted in *dialogic practices* (Bakhtin, 1984) in our every day conversations (Shotter, 2002; Shotter and Cunliffe, 2002). Language, in this perspective, does not describe action but is itself a form of action.” (Gergen and Thatchenkerry, 2004, p. 236). This implies that language here is not seen as simply being ‘referential –representational’, meaning that language or words are dead word-forms or patterns being self-contained and standing alone (Shotter, 2008). Language is instead perceived as the means constituting reality (Cunliffe, 2002b, p. 129; Chia and King, 2001; Shotter, 2008).

In terms of the role of conversation in organisations, contemporary organisational behaviour studies having a discourse approach needs to focus its attention on how language and communications works in the creation of groups (Shotter, 2008). As such it is beneficial to study the conversational role of how language works to organize us into social groups capable of coordinated action (Shotter, 2008; Shotter and Cunliffe, 2002). In conversation as in action the individual is reflectively influenced by limitations such as the needs of others, knowledge of others, and has to adapt to them by changing his/her actions. This can also lead in the long run to a curbing and reshaping the very tendencies to act her/his immanent drives. The individual thus modifies his/her actions and also changes her/himself under the impact of the ‘clash’ with ‘hard’ realities (Sztompka, 1991, p. 66).

Following on this idea we find Searle (1969) arguing that organizational activities can be redefined and altered as they are language dependent institutional realities. Language is the medium for interaction (Potter and Wetherell, 1998) and as such it is thus through relational activities such as conversations we can influence people to engage in joint directed action in accordance with certain strategic objectives and institutionalized ideas. Conversations can thus create opportunities for cooperation (Cunliffe, 2001; Styhre, 2001) and joint directed action. Interactive moments are unique, and part “...of an unfolding and ongoing process in which we respond, try to connect with others, shape meaning, and create opportunities for

action in the unfolding flow of conversation.” (Cunliffe, 2001, p. 352). In interactive moments “...individuals may grasp the very essence of their human identity, which itself is constantly reconstructed through social interactions.” (Simpson et al., 2004, p. 47). These interactive moments in conversation can thus support individuals becoming reflective and aware of different interpretations and meanings which support the pursuit of Joint Directed Action.

### **Conversation for co-construction of shared meaning and joint directed action**

“Something very special occurs when two or more living beings meet and begin to respond to each other-much more happens than them merely having an impact on one another. There is always in such meetings the creation of qualitative new, quite novel and distinct forms of life which are more than merely averaged or mixed versions of those already existing realities “(Shotter, 2006, p. 23).

If we have a relational perspective upon meaning creation, meaning is seen as being created in our co-ordinations, co-actions or ‘joint actions’ (Garfinkel, 1967; Berger & Luckmann, 1966; Shotter, 2002; Gergen, 2007; Wittgenstein, 1953). Meaning is not located in the single individual’s actions, but *within* the action two or more people engage in (Gergen, 2007). It is local in that it is produced in particular contextual relations between people in a social context; something that makes sense in one context does not necessary make sense in another (Pålshaugen, 2001; Argyris et al. 1985; Mead, 1934). Meaning is, in this perspective, created in the ‘dialogical reality or space’ people construct in their joint actions (Shotter, 2002; Bakhtin, 2007).

Having a relational perspective gives that it is through conversation or speech we can co-construct shared meaning and thus pursue Joint Directed Action. Shotter (2002; 2006) describes how it is within ‘*joint action*’ or what he in his later writings call ‘*dialogically structured*’ activity where meaning is created. Shotter is here influenced by Bakhtin’s (1984) *responsive dialogical approach* to language in which Bakhtin emphasizes speech and our utterances, our embodied acts of voicing, our words and the bodily feeling they arouse in others and ourselves, not on language as formal system of static, repeatable forms functioning in accordance to rules in their application (Shotter, 2008). Following this we can also find Vygotsky (1986) focusing upon speech and not the act of language as a formal system in understanding meaning. Here Vygotsky (1986) claims that it is the complex internal relations, characteristic of a living whole, which makes it possible for a meaningful use of our words, which shape, direct and organize people’s behavior.

As an example of the ‘joint action’ we find Shotter’s (online article a) discussion of how scientists in the early stages of their research communicate with each other via dramatizations of their understandings of their own and others’ work. Referring to Ochs et al. (1994) Shotter explains that it is within these scientific dramas that the participants in the conversation take on different roles; that of the set designer, author, director, actor, protagonist and audience. And it is in the unfolding of these dramas that the participants in the research community “...*work out between themselves, by testing and checking their understandings of each other’s utterances in the course of their ongoing involvements, as to whether they are communicating with each other in an un-confusing manner.*” (Shotter, online article a, p. 4).

Supporting the co-construction process of shared meaning by initiating a sphere or an arena (Pålshaugen 2001; Gustavsen, 1992; Hosking and McNamee, 2006) in which ‘scientific dramas’ as the one described above can be supported can be a way to facilitate the co-

construction process of shared meaning and thus organized action (Donnellon et al., 1986; Morgan, 1997). This space could also be an arena in which practices can transform into becoming 'reflexive dialogical practices' (Cunliffe, 2002a). Reflexive practices meaning the way we need to engage in continuous dialogue, both oral and written, with self and others where we can explore how our own action and conversational practices and ways of creating sense can be sustained by our relations and as such influence our actions (Shotter & Cunliffe, 2002; Shotter, 2005). We can thus by understanding or simply noticing our conversations improve our own everyday practices from within our conduct of them (Shotter, 2005).

### **Managers as practical authors**

Engaging in conversation with a relational perspective using metaphors and stories (Cunliffe, 2001) can support bridging diversities between different boundaries of discourse (e.g. different knowledge domains or communities of practice, Lave and Wenger, 1991). This facilitates the process of co-constructing a common understanding, which allows us to act within a context (Alvesson, 1993). Managers therefore can act as authors of organizational realities through their conversations (Cunliffe, 2001). This authorship Cunliffe (2001) refers to and later presents as 'Managers as practical authors' (Shotter and Cunliffe, 2002) describes how managers attempt to construct an understanding of who they are in order to create a shared understanding of the organizational landscape and "*... how they may move others to talk or act in different ways through their dialogical practices.*" (Cunliffe, 2001 p. 1). The managers role in this perspective is to support actors in their conversational activities in which they can co-create a "*...shared dynamic, relational-landscape for action, and in so doing, elaborate themselves into a 'mutually enabling community', in which instead of obstacles to each others projects, can come to see each other as resources, as resourceful conversational partners.*" (Shotter and Cunliffe, 2002, p. 18). In line with this reasoning we find Morgan (1997) arguing that : "*...the fundamental task facing leaders and managers rests in creating appropriate systems of shared meaning that can mobilize the efforts of people in pursuit of desired aims and objectives*" (Morgan, 1997, pp. 147).

## **Methodology**

### *Project description*

S.Corp. is a large multinational organization which employs 460,000 people in 190 countries. In the specific unit where the study was conducted they develop, sell, manufacture, and maintain their specific product—which involves several highly specialized knowledge domains. These domains come together in different settings, including product development and process development. Since 2001 the firm has utilized the Six Sigma method for process development and improvement. This paper builds on a study of one of the meetings within a Six Sigma project with the purpose to investigate the root causes of a problem with so-called 'modification orders'. These orders were issued by the G.T.- engineering department and sent to the service department for execution at customer sites; however, these modification orders were not being reported back to the engineering department as having been 'carried out'. It was unknown whether the orders were executed but not reported, or whether they were simply not executed at all. There were also varying opinions about the process itself that did not match the official terms of the process.

The empirical foundation of this paper draws on a participative observation study. The fieldwork was done at the Introductory Meeting (IM) of a Knowledge Overlapping Seminars

(KOS) that was going to go off some weeks later. The IM took place on a Monday afternoon starting at 13.00 at the company site in a conference room. The empirical material consists of notes from the participative observation of this meeting. One member in the research team was observing how the team members were collectively creating a shared understanding of the project goal thereby gaining some insights into the activities taking place at the IM. At this meeting, field notes were taken as the researcher sought to identify critical events and central concerns addressed by the project team members. Some of the communication included highly esoteric language filled with technical terms, arguably very complicated to fully digest and understand for an outsider. However, the research team member has been engaged in research together with the facilitator of the IM and through this gained knowledge the environment that the project elaborated within. Participative observation was chosen since taking on the role of an ethnographic researcher (Geertz, 1988) enables the researcher to come closer to and systematically observe the activity of creating a common understanding.

The analysis of the material has proceeded from a perspective labelled as discursive pragmatism (Alvesson and Kärreman 2000a, 2000b; Kärreman and Rylander, 2008) meaning that the analysis is primarily based upon discursively produced outcomes such as conversations.

## **The drama of co-construction**

The meeting begins with Pete, the facilitator, showing a power point slide stating “How to avoid misunderstandings between people from different backgrounds in a team”, he then proceeds talking about the purpose of the KOS Introduction Meeting (KIM). He talks about what they need to go through at this meeting and why this needs to be done, he also describes the KIM being an open forum where no questions are seen to be “simple” questions. He then introduces the research team, that is himself and one of the authors here, and what they will be doing at this meeting and in the forthcoming Knowledge Overlapping Seminars (KOS). He also briefly describes the research both have conducted and conduct together, and describes how a group with a shared background, such as for example Technical Support, can generate a domain specific language. He then briefly introduces the definition Knowledge Domain as being for example a discipline or a department with a specific language built upon specific knowledge. He talks about how a domain specific language can be a source for misunderstandings in projects as projects mostly are built up by different members from different parts of the organisation or from outside the organisation, everyone bringing their own domain specific language to the project. He then talks about how fewer misunderstandings can be met by creating a shared language in a team, which can be facilitated by conducting KOS’s. He also talks about the benefits KOS’s have in relation to other types of meetings. He explains how work rotation is a slow way to identify knowledge overlap. And thereafter he goes on to describing how a KOS is conducted. This brief introduction takes approximately 30 minutes.

Thereafter all participants introduce themselves.

Paul: Product Service Engineer (PSE)

Fred: Product Service Engineer (PSE)

Samuel: Black Belt in Six Sigma Project presented here (BB)

Calvin: Application Engineer (AE)

Pat: Application Engineer (AE)

Mathew: Project Manager Sales Engineer (SPL)

Lisa: Service Production Manager (SPM)

Pete: Facilitator (working as project manager in the organisation and action researcher)

Christina: Participative Observer

After the presentations, Calvin directly starts by asking what a *knowledge domain* is. The participants talk about different potential definitions and implications:

- 01 Calvin: Could you call domain – occupation?
- 02 Lisa: Role descriptions are important in order to understand.
- 03 Paul: We are not supposed to understand just *do* [emphasis on do, chuckles]
- 04 Lisa: Area of responsibility //swe: ansvarsroll// *is* domain [emphasis on is].
- 05 Pete: Yes, maybe

*Observer comment: The group seems to be confused and do not agree on what a knowledge domain is. The atmosphere is open, friendly and humorous.*

- 06 Pete: It is ok to interpret this word in different ways

The group leaves the discussion on knowledge domains after Pete has told them they can put different meanings in the concept, as long as they understand the idea of it. They now proceed to talk about knowledge overlap and Pete shows a power point slide saying what knowledge overlap is. The group proceeds into talking about where knowledge overlap may be important. And here they get into the issue of the management of projects.

Note: When the participants talk about the team it is the project team they mean.

- 07 Mathew: Are you talking about knowledge overlap in the *team* only? [emphasis on team]
- 08 Pete: Yes
- 09 Calvin: But isn't there a more general problem behind misunderstandings? That our leaders are not leaders [frustrated]
- 10 Pete: This is not a leadership problem. It is not about leadership.
- 11 Calvin: I don't mean Carl (the CEO) but more in general. I don't mean [interrupted by Pete]
- 12 Pete: Leaders also need Knowledge Overlapping Seminars [laughing]
- 13 Calvin: No, but our managers are not leaders. They don't lead the work [undeterred by Pete's interruption, surly and irritated]
- 14 Pete: That depends on how you view leading [calm voice]
- 15 Calvin: Yes, but if you lead a soccer team you need to be clear! [provocatively]

*Observer comment: The meeting has been going on for about one hour and now something happens in the group. They seem frustrated, tired, stressed and a bit uncomfortable. They move around in their chairs. And two persons say they need to leave the meeting. Lisa says that she is going to Germany. Paul states that he has only booked until 14 the others argue against him and say it was until 15. The group is agitated and you can almost touch the tensions in the group. The meeting seems close to a collapse. This reaction seemed to stem from the discussion about leadership and the argument Calvin had with Pete concerning what leadership is.*

Pete cuts in and reminds the members of what is at stake here.

- 16 Pete: Let's focus on what we need to do. We are supposed to identify misunderstandings! [firm voice]

*Observer comment: It is obvious that Pete has the mandate to calm the group as they settle down. The two member of the group who said they needed to leave stays.*

- 17 Paul: The project is in a seasick situation. (relating to the Six Sigma Project)

*Observer comments: The group starts, intensely and energetically, to talk about conflicts. There are so many discussions going on and I have a hard time to take notes. They talk about the different roles in the project, lack of commitment and leadership. And who is doing what or at least is supposed to do it.*

- 18 Calvin: What are you doing with the MO's (modification orders)? [a question posed directly to Paul]  
19 Paul: That is a very good question and now I want to explain! [cynical and frustrated]  
20 Pete: Ok let's stop here [interrupting Paul]  
21 Paul: The specific problem we see in our group is /...details.../ and this is not solved in 10 minutes! [frustrated and loud]  
22 Samuel: Do you see any other knowledge domains?

*Observer Comment: Samuel cuts in and interrupts the discussion between Paul and Pete. He seems to want to calm the situation and get all involved in the meeting again.*

Pete doesn't respond to Samuel's question and presents a slide illustrating the four knowledge domains to be involved in the KOS's. These are: PSE - Product Service engineer; SPM – Service Production Manager, AE – Application Engineer and SPL – Project Manager Sales Engineer.

- 22 Mathew: Who is the SPL?  
23 Pete: That's you! [surprised]  
24 Mathew: Oh ok one of those who actually *does* something [cynically laughing]

*Observer comments: The way people speak sounds less humorous and a bit more cynical. The group starts to talk about the Six Sigma project and they do not agree upon the process flow in the project. Samuel tries to calm Calvin who still seems to be irritated about leadership and responsibilities.*

- 25 Samuel: How do you feel about that? [question posed to Calvin]  
26 Calvin: So so. Shouldn't X and X be a part of the game and isn't it the responsibility of the project leaders? Isn't there a problem there [referring to the project leaders]  
27 Mathew: What are you saying *now*? [agitated question posed directly to Calvin]  
28 Calvin: What I'm saying is (giving details). [irritated voice]  
29 Mathew: But I *am* doing that! [provoked, irritated voice]  
30 Calvin: Yes but you're only one in 13-14 people doing it [irritated and loud]  
31 Mathew: Yes but that concerns the delivery project managers [irritated voice]  
32 Calvin: Yes, but it is also concerns the service project managers [irritated voice]  
33 Paul: But the delivery project managers haven't been given the education [in a soothing voice]



- 34 Calvin: But the fact still remains and that is that we should get all modification orders reported!

*Observer comments: There is clear frustration and friction between Mathew and Calvin. Paul cuts in, seemingly to soothe the situation and not getting into name blame.*

- 35 Pete: There is always some cleaning being done on the side. (meaning that some MO's disappear in the process and are thus not reported to Calvin's team.)  
36 Calvin: *Who* is doing that then? [raising his voice] I can't take the responsibility for something someone else has *not* done [irritated voice and loud]

Mathew and Calvin argue but Pete cuts in and tries to interrupt their argument. But Mathew ignores Pete and continues:

- 37 Mathew: It is exactly the lack of commitment that is a big problem! If you are not particularly involved in one issue you don't care about it even if the end result is bad for everyone. [irritated voice]

*Observer comments: Someone says that "the process of defining processes is a disturbing process in itself"- with a cynical humoristic voice.*

Pete wants to go on with the meeting by specifying the roles in the project represented in the room.

- 38 Pete: What is your job? (referring to the specific project goal)  
39 Lisa: The main focus of the project is to filter and coordinate modification orders.  
40 Lisa: To create a customer adapted generic [is interrupted by Paul]  
41 Paul: No that's what *we* are doing! [frustrated, and the other PSE agrees]  
42 Lisa: [showing no signs of irritation] review modification orders, create service bulletins. That is what I meant by customer adaptation...

Lisa does not finish her sentence. Everybody is silent.

*Observer comment: Lisa seems to be reflecting and the others allow her the space for doing that.*

- 43 Lisa: ...No, we haven't understood each other's roles  
44 Paul: the project goal is to evaluate and conduct modification orders, project specific modification orders and to support service with technical evaluation...  
45 Calvin: So what are I4 then doing? Then they are not doing their job! [aggravated]

*Observer comment: I4 are not represented at the meeting, however they give technical support as well, which could be a reason for the confusion here.*

- 46 Lisa: No, they are getting better at it but not all.  
47 Calvin: Thanks for stating that!

After this discussion the AE (application engineer) is allowed to describe his role in the project without interruptions.

48 Calvin: The purpose is to prepare quotations, receive modification orders from project leaders, technical data for quotation. Coordinate on-site work activities, report completed modification orders.

49 Pete: what then is the common goal? What is it you're doing in the process that should be improved?

*Observer comment: This task is very difficult and the group members have great difficulty agreeing on the common goal.*

*The discussion is intense and rapid, it becomes difficult to keep up with notes.*

*Some of the members give suggestions to the common goal and the others consent or reject the suggestion depending upon if they recognize their personal interpretation of the project goal in the suggestion or not.*

*They seem to be stuck in their personal day-to-day level in their description of the project goal.*

*They have a hard time to recognize their specific role connected to the goals suggested. The different suggestions of the common goal become more and more abstract.*

*After some time they finally agree on the common goal being "Improving gas turbines".*

However Pete cuts in and argues that this is not an actionable goal.

50 Pete: What does this *really* mean? [emphasizes]

*Observer comment: Pete continues and argues that this is not an actionable goal and steers the group into another co-construction process of creating/ identifying an actionable goal.*

*This process is tough and frustrating but the group seems more confident and calmer now after the previous discussions.*

*The group finally identifies the common goal being "Implement Modification orders with the intention of improving gas turbines in the 'fleet'."*

Note: Fleet here is what they refer to when talking about all the products they have out on customer sites.

*Pete rounds up the meeting and the general atmosphere is one of exhaustion, relief and general contentment.*

## Discussion and contributions

This paper set up the purpose to provide *knowledge from within* and to discuss *emotional activity* going on in a co-construction process. One meeting was observed, as meetings are important arenas for co-constructing, and thus pivotal for team members to see how to go on together (Gergen, 2007). The results from the participative observation were presented as excerpts from conversational as well as emotional activity going on during the meeting. Moreover observer's comments were presented as additional illustrations of the emotional activity going on, since emotions were not addressed explicitly, but rather communicated as tone of voice or body language.

In the beginning of the meeting the participants discuss different views of what a knowledge domain is. The diverging ideas are approached with humour. At this point of the meeting the conversation is theoretical, focusing on different definitions, an important conversational activity to start creating a shared meaning. The emotional activities such as the laughter and the willingness to listen to others are also part of this co-construction process. The facilitator states that it is ok to interpret the knowledge domain in different ways as long as they understand the meaning of it (turn 6). He is, thus creating the sphere or arena (Pålshaugen 1998; Gustavsen, 1992; Hosking & McNamee, 2006) to support the co-construction process.

When the participants start to talk about knowledge overlap something happens. In turn 9 to 15, we can follow Pete (the facilitator) and Calvin bringing forward their perspectives regarding misunderstandings. They raise their voices and interrupt each other. The observer comments at this point reveals that the atmosphere is irritated and tense, two of the participants even state that they have to go. According to the field notes the emotional activity at this point is more visible and intense. On the one hand as suggested by Edmondson (1999) the group experienced psychological safety, which made individual members feel safe enough to take the risk of expressing different views. On the other, too much emotional activity might be perceived as unprofessional in some organisational settings as emotions are seen to destroy concrete, constructive and efficient discussions. Emotional activity such as too much laughter or harsh words can make people feel uncomfortable and it is important that the emotional activity is taken advantage of when creating the sphere, arena or space for co-constructing meaning which enables joint directed action. As Morgan (1997) puts it "*creating appropriate systems of shared meaning that can mobilize the efforts of people in pursuit of desired aims and objectives*". In the emerging knowledge based and service intensive economy work, we will need the same level of empathy, mutual understanding and trust. Emotional conversations are the foundation for building such relationships. This paper puts forward that emotional activity is in fact essential for the creation of shared meaning. We can assume that if the facilitator in the observed meeting had moved on without recognizing or even avoiding the "clash" with "hard" realities necessary for individuals to modify his/her actions and also change him/herself (Sztompka, 1991) this opportunity to support the co-construction of shared meaning would have gone lost. Instead he takes action to support the participants in their conversational activities in which they can co-create their social reality. By saying that the conversation is important for revealing any potential misunderstandings he enables the co-creation of a relational-landscape for action and supports the participants to see each other as resources, as resourceful conversational partners (Shotter & Cunliffe, 2002). The findings from this study indicate that we need someone to facilitate the drama of co-construction by inviting people to joint action in ways that legitimize expressions of emotions and where emotions are appreciated for the role they play for our interpretation of how to go on together.

Taking part in the conversational arena enabled the project members to explore each other's pre-understanding, local reality, a priori (Lewis, 1929). The conversational and emotional activity gave them insights into how their individual a priori differed and where their different knowledge domains overlap. In turn 38 Pete, the facilitator, initiates a discussion regarding specifying the roles in the project. The following conversation (turns 39 to 45) illustrates how the project members have differing perspectives on what various functions are supposed to do. The group seems confused, but the conversation ends in discussing the common goal and Pete asks: *What does this really mean?* In their attempt to answer the question the project members co-construct a shared meaning by talking about what they do, why they do it the way they do it, how they do it and how this is connected to the overall project goal. This process seemed to increase both their personal and interpersonal reflection process and thus increased their awareness of the individual differences in understanding the project goal. It can easily be argued that awareness of differences in interpretation and meaning is necessary if we are to minimize misunderstandings and support joint directed action.

In summary, the project members in the study took part in both conversational and emotional activities in the process of creating a shared meaning of their project goal. Pete, the facilitator, acted as the author of the project reality (Cunliffe, 2001), hence supporting the members in their co-construction process and thus safeguarding the collapse of the meeting. People were about to leave but decided to stay. Moreover, the paper shows that it is important to remember that we all bring our own a priori (Lewis, 1929) and we need to be courageous enough to meet in our differences, and not be too quick in our strive to find consensus. Based on the findings of this study it can be argued that we should organize our projects and set time and give support to reflectional arenas such as the conversational arena to enable co-construction of shared understanding if we want to have joint directed action.

This paper contributes to the research on co-construction of meaning by providing some illustrations about the emotional activity going on in the co-construction of shared meaning in a conversational arena. Our point is that emotions and co-construction are inextricably intertwined social processes. Although, further research is needed to bring an increased understanding into the question of how we create shared meaning. The participative observation in this study was done "spontaneously" meaning that the researcher attending the KOS Introductory Meeting had not planned to systematically take field notes. Once the meeting started the researcher sensed that this was a good opportunity to study the co-construction process from within. Therefore in addition to field notes it would be interesting to use audio and video record to further study the drama of co-construction in order to "grasp" more of 'what goes on'.

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