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The Art of Communication

Investigating the Dynamics of Work Group Meetings in a Natural Environment

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Abstract
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Meetings in work groups are important organisational arenas to form ideas, share knowledge, and co-ordinate and develop work. Therefore, meetings are a potential source to innovation and efficiency in organisations, as well as to a means to improve interpersonal relationships in the workplace. One approach in previous research on group interaction has been to codify verbal utterances and link various communication patterns to group performance. However, missing in previous research is how the interaction pattern in a group emerges and how behaviour of the group affects the interaction pattern. This thesis focuses on behavioural and contextual factors and their impact on the interaction pattern of work groups. The aim of the thesis is to investigate how the interactional pattern of meetings is influenced by the behaviour of the leader, the behaviour of the group members, and the structure of the meeting.

To investigate the link between contextual factors and the interaction patterns, group observations were conducted in management teams and work groups, during their ordinary meetings. As a basis for observation, Losada & Heaphy's (2004) communication model was applied, which showed a link between a specific communication pattern and high performance. The findings of the present thesis suggest that the leader plays a significant role for the outcome of the interactional pattern of a meeting and that he or she can contribute in several ways. Equally important to the interactional pattern of management teams and work groups is the effort and commitment expended by the other participants. The findings further show that the structure of the meeting is relevant: For example, structuring the meeting as a case discussion rather than a traditional meeting agenda results in a more dynamic interaction. By examining how the interaction is affected by leader behaviour, employee participation and meeting structure, the thesis contributes to the existing literature in the field of interaction analysis.

Keywords: interaction, communication, leadership, work groups, meetings

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Abbreviations

Appreciative inquiry	AI
Complex adaptive systems	CAS
Interaction process analysis	IPS
Losada interaction model	LIM
Positive organizational scholarship	POS

1. Introduction

Consider a room. *There are four tables pushed together, and people are sitting on chairs around the tables. They are drinking coffee or cokes, and there are paper scattered on top of the table. Some of the papers say "agenda" and soon many people will start scribbling on them. There is a hum of conversation, and then one person raises her voice and begins to speak, and the hum begins to die down. Shortly after this a second person starts speaking, apparently in response to the first person's comments, and this is followed by a third person's remarks. All in all, at the end of this event over three quarters of the people in the room will have spoken at least one or two sentences, but only a few will remember what was said.*

Helen B. Schwartzman
*(*The meeting: gatherings in organizations and communities*, 1989, p 3)*

Groups exist everywhere in society and in different contexts and cultures. This thesis focuses on work groups and how they interact during meetings. The study is based on observations at work group meetings in the Swedish public sector. It is a qualitative study of interaction in meetings aimed at exploring how the context and behaviour at the meeting affect the pattern of verbal interaction in a group. The study focuses on the meeting as an arena for interaction at a workplace.

Meetings are a significant part of everyday work in modern organisations and a place for connecting to the other members of an organisation (Dutton & Ragins, 2007; Schwartzman, 1989). Meetings thus form a social arena within an organisation (Baker & Dutton, 2007). In this view meetings, both formal and informal, are seen as an important way to build relations and connections in an organisation. Other views on meetings are that they are a place for status negotiation, a place for making sense of the organisation, and as a place for group learning (Owens & Sutton, 1999; Schwartzman, 1989; 1993; Jay, 1976).

Meetings are seen both as the place where decisions are made and where work is being done but they are also often seen as a waste of time. The reaction to a meeting may be "oh no, not another meeting I don't have time" or "good that you called for a meeting as we really need to discuss this." One reason why many people react negatively to meetings and feel that they are a waste of time is that they have not realized that the meeting serves as an

arena for other functions than purely work and decisions (Schwartzman, 1989).

When people meet, they talk. Language is the most important human sign system (Berger & Luckman, 1966/1991). The main activity during a meeting is talk (i.e. to convey ideas) and the participants engage in verbal interaction trying to establish what needs to be done or inform each other about current issues in the organisation. Talk is a relational activity building connections between people in an organisation or a group. Creative connections are sometimes referred to as high quality connections, implying that they give energy and promote learning (Dutton & Heaphy, 2003). Such learning inter-actions are also called "relatonics" which is described as "a continuum of ongoing relational processes supporting and developing skills and competencies among people in work." (Döös, 2004:77)

Scientific enquiry of talk and the structuring of verbal interaction are studied by coding and analysis of verbal utterances, which is referred to as interaction analysis. The earliest studies date back to the 1930s and the field developed rapidly after the Second World War. Social scientists wanted to grasp the on-going processes of groups. (Hare, 1973) A widely spread category system was developed by Bales and colleagues at Harvard university (c.f. Bales, 1950a). The aim of such category systems was to test or illustrate theories of group development by modelling verbal behaviour in groups. Interaction analysis models capture verbal interaction by assigning different categories to different types of utterance. It looks at interpersonal behaviour and the function of verbal utterances in a group setting. (Hare, 1973) In this tradition groups are seen as social systems for patterning interaction. The purpose of such an analysis was to investigate problem solving, leadership and group development. Much time and effort were also spent on developing a reliable coding system and training coders in the application of the system. These studies resulted in models describing the interaction between participants in groups. (McGrath, 1997)

A weakness in much research on group processes is that most of the early studies on small groups were conducted in laboratory settings investigating parts of the processes in groups. McGrath (1991:148f) notes that:

Yet there are some serious limitations to much of that earlier work, especially regarding the degree to which it reflects the structures and processes of naturally occurring groups as we meet them in our everyday life. […] Much of the empirical foundation of group theory de-rives from study of a limited range of types of ad hoc groups under controlled experimental conditions. Most of that work involves very small groups (two or four members) with con-stant membership arbitrarily assigned by an experimenter that exists for only a limited time without past or future as a group, isolated rather than embedded in any larger social units

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(organizations, communities). [...] Many of the groups we meet in everyday living [...] have pasts together, and they expect to have futures. Yet they have variable membership from one occasion to another. They seldom exist in isolation; they are embedded within larger social aggregates – communities, organizations, neighborhoods, kin networks, and departments. (McGrath, 1991:148f)

The groups studied in this type of research were often temporary groups only existing in the laboratory (McGrath, 1997). A major difference between laboratory groups and real groups is that real groups share a common future and history and have a varying membership over time (McGrath, 1991). More research on real-life work groups is needed in order to fully understand how groups behave (Edmondson, 1999; McGrath, 1997). To fully understand how the interaction of a group is developed we need to look at how real work groups behave at meetings.

The Losada Interaction Model (LIM)
This thesis builds on research presented by Losada & Heaphy (2004) who presented the Losada interaction model (LIM[1]) (Losada & Markovich, 1990; Losada, 1999; Losada & Heaphy, 2004; Fredrickson & Losada, 2005). Building on earlier models of interaction analysis, the LIM was "developed out of the time series generated by observing 60 strategic business unit (SBU) management teams from a large information processing corporation" (Losada & Heaphy, 2004:744) and the teams were selected "on the basis of having complete performance records provided by their company. Each team consisted of eight people." (Losada & Heaphy, 2004:744)

The LIM is an interaction model measuring and modelling verbal speech acts in a group setting. The verbal interaction is presented as an interaction pattern of a group. This interaction pattern shows how the group uses the dimensions of the interaction model. The model is based on earlier models in the field of interaction analysis, especially the model developed by Bales (1950a). Each verbal utterance is coded into one of six categories. The categories are: *advocacy* (arguing in favour of the speakers viewpoint), *inquiry* (asking questions), *positive* (giving positive comments), *negative* (giving negative comments), *other* (taking in perspectives from persons or groups outside the organisation), and *self* (taking the perspective of the individual or the group). These categories are paired into three bipolar dimensions: *advo-*

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[1] I have chosen to call the model LIM in order to get a useful single word describing the entire interaction model developed by Losada. The model was developed by Losada in the Meta Learning Centre and first published in 1990 under the name Group Analyzer (Losada, M., & S. Markovich (1990) *Group Analyzer: A System for Dynamic Analysis of Group Interaction*, Proceedings of the Hawaii int. conf. on Systems Science, Vol. 4, 1990, pp. 101-110). In later publications the model was referred to as the Meta-learning model, or ML-model. Later additions were made together with Emily Heaphy, 2004, and Barbara Fredrickson, 2005.

cacy-inquiry, *other-self*, and *positive-negative*. Empirical use of the model show that groups which are able to balance the two first dimensions and have a ratio of positive over negative comments (P/N) of five or more are classified as high performance teams.

The LIM shows that the interaction of a group can be linked to the perform-ance of a team. The control parameter of the model is connectivity which is closely linked to the P/N ratio. Connectivity is the number of connections and interactions in the group between the group members during a meeting. If the persons connect to each other by referring to what earlier speakers have said or acknowledging that they have listened to what the others have said then this counts as connectivity in the model. (Losada & Heaphy, 2004; Louma et al, 2008) High connectivity generates an expansive emotional space in the model. In an expansive emotional space there are more possibilities for action and learning. (Losada & Heaphy, 2004; Dutton, 2003) The LIM is presented in more detail in chapter two.

Some contributions of the LIM
The LIM is based on earlier interaction models (such as Bales 1950a), but in some respects it takes a step further in analysing group interaction (see chapter two). First (i) it is able to link the performance of a group with the interaction in a group. Second (ii) Losada added the dimension of *other-self* into his model. This bipolar dimension was borrowed from the SWOT analysis used in business organisations in order to map the internal strengths and weaknesses and the external opportunities and threats. Third (iii) the LIM shows that the ratio between positive comments and negative comments (P/N) can be used to find the connectivity of a group, which in turn is linked to the performance of a group. This is a major contribution of the LIM, showing that such an easy measure as counting the positive comments and negative comments can give strong indication on how the group performs. Fourth (iv) the LIM shows that chaos and complexity theory can be used to describe the interaction of a group. This means that the LIM is firmly connected with the history of complexity theory describing groups as complex dynamic systems. Fifth (v) the LIM looks at natural occurring groups solving a real organisational problem (the development of annual strategic plans) and thus answers to the call of interaction and group research done on real-life groups. Based on these strengths of the model the research group decided to uses the model. The choice of the LIM as an analysis tool was motivated by the presented features of the model and its perceived practical relevance.

Losada (1999) investigates real-life work groups but still missing in the re-search is the connection between the compositions of the groups, the age of the groups, the maturity of the groups, and the form of the observed interac-

tion which may help us understand how the interaction pattern is created. Several questions regarding the groups are not answered. For example, first (i) the leadership of the groups: how were the groups organised hierarchically? Second (ii) participation: how many of the partaking members in the group contribute and participate in the meetings. And third (iii) what did the context of the meetings look like; what was the length of the meetings? What did the structure of the meetings look like? These gaps are all clearly focused on the context of the groups. The LIM describes the interaction of the groups but it does not give any explanations on contextual factors concerning the groups. To fully utilise the potential of the LIM more understanding of how a balanced interaction pattern arises is needed. The results from the LIM give a better understanding for the dynamics of high performing work teams but there is a lack of contextual factors that would be able to explain differences in interaction patterns between groups. This thesis therefore takes a broader look at group interaction within an organisational and social context. More specifically, it looks at both the interaction and the context of meetings in work groups.

Contextual factors are referred to as the characteristics of an organisational context often related to the effectiveness of a work unit or the performance of a single employee (Oldham & Cunnings, 1996). Champion et al. (1997) suggest the factors training, managerial support, and communication to describe the context that makes a team effective. According to Gladstein (1984:503) "contextual variables that […] affect […] effectiveness include supervisory behavior, rewards for group performance, training availability, and market growth." Cohen & Bailey (1997) include rewards and supervision in the definition of organisational context. In summary organisational context is defined as the characteristics of the organisational environment that affects the effectiveness of a team or collaboration.

Contextual factors thus have an influence of how a meeting will unfold and what the interaction pattern at a meeting will look like. Several assumptions on context are possible to make. (i) Older groups probably have a more developed interaction pattern and hence a more balanced interaction. It may even be the case that the LIM predicts age, not performance. Wheelan et al. (2003) show that older and more developed groups have more "work statements " in their communication than less developed groups, i.e. they are more focused on the task of the group. (ii) The influence of the meeting on the work of the participants will also affect the interaction at a meeting. If the meeting has a direct influence on the work of the participants, they are at least destined to be more active and committed at the meeting than if the meeting has no influence on their work situation. (iii) The structure and how the meeting is organised will affect the interaction. Structure may include such features as size of the group, topic of the meeting, procedures for the

meeting, and the setting of the meeting. (iv) The behaviour of the leader will affect how the meeting unfolds and thus what the interaction will look like.

These perspectives of leader behaviour, participant behaviour and structure of the meeting were also found to be of importance for the interaction pattern of a meeting in the general research project. Little is known about the influence of contextual factors on the interaction in a group. More research is needed to establish how different contextual factors and specific behaviours will influence the interaction at a meeting.

Purpose and research questions

The purpose of the study is to explore how different contextual factors affect the interaction pattern in the LIM at a meeting. In the empirical work three contextual factors seemed to be of special interest: the behaviour of the leader, the behaviour of the participants, and the organisation of the meetings. The purpose could thus be further broken down into three separate but interrelated research questions:

1. How does the behaviour of the leader affect the interaction pattern in the LIM?
2. How does the behaviour of the participants affect the interaction pattern in the LIM?
3. How does the structure of the meeting affect the interaction pattern in the LIM?

Delimitations
The study is limited in several aspects. (i) It focuses only on formal meetings. (ii) It investigates groups in their natural setting. (iii) It focuses on the dynamic interaction between the participants of the groups. It does not look at the personality traits of the participants in the groups or the age, sex, or race of the participants. Further it does not consider the level of group development. The study is limited to the group level of analysis. However, the age of the groups are noted with the assumption that older groups have had more time to develop.

The study is also limited to observing interaction at meetings. Work in organisations take place in many different places, of which the meeting room is one. The picture of the meetings is a mirror of the groups but it is not a complete picture. However, meetings are an important arena for social interaction in organisations and they mirror social processes in organisations. There is an understanding that the workplaces have other arenas for communication and that not all aspects of the communication at the workplaces are observed.

Intended contributions

This study intends to contribute by making a synthesis of interaction research, focusing on the verbal interactional patterns of a group, as well as the context of the group. The need for such a synthesis is evident and the reward for such a study would be a deeper understanding of group interaction. Previous studies of group interaction are surprisingly empty of context and of group theories. It is two fields that have not met. This study brings in the context into interaction research; by doing so, it take other theories of groups into account. Previous interaction analysis research is aware of the importance of context but it does not incorporate it into their models. Context is considered to be exogenous to the interaction.

A second intended contribution of this study is that it investigates naturally occurring groups. Several scholars have called for more research on real-life groups rather than on temporary groups in a laboratory (Edmondson 1999; McGrath, 1997) and on groups in context (Gladstein, 1984). Losada (1999) has partly met this need by studying real-life groups, but he did so in his laboratory and without contextual information. The present study takes this one step further by analysing the interaction and behaviour of real-life groups in their natural habitat.

The study also intends to provide a theoretical contribution to the field of interaction analysis by taking a broader view on interaction in groups including the context of the meetings and the context of the groups, and not just focusing on the actual interaction in the groups. It also gives an empirical contribution by showing how different meetings and different meeting behaviours can affect the interaction of a group.

Definitions of a group

It is difficult to discover an adequate method of describing a group because of its ever changing quality. It is a collection of spontaneous interactions occurring simultaneously in many directions. It has depth as well as length and breadth and by consecutive observations it is possible to discern distinct patterns and definite direction toward conscious or un- conscious goals. In spite of the fact that description of this entity through categorizing and conceptualization endangers the portrayal of the dynamic quality of the group, which is its essential characteristic, it is necessary for real understanding of the group process. (Wilson, 1937:237)

What is a group? There are many definitions and explanations related to this question. A key issue in group research is the definition of a group as a group of persons interdependent on each other. (Brown, 2000) Early group research defined a group as a collection of people pursuing the same goal. One minimalistic definition of a group is that it is at least two persons defin-

ing themselves as a group and that at third outsider person considers these two persons to be a group (Brown, 2000). This definition would imply that groups are a very common thing, i.e. we could find them in almost every setting. McGrath & Kravitz (1982:199) use a broad working definition of a group: "two or more people in dynamic interaction with one another." This definition also implies a common past or a common anticipated future. The authors are aware of the fuzziness of this definition and acknowledge that almost all "multi-person agglomerates" at some times are regarded as groups.

In this study definition of a group is based on Edmondson (1999). She uses the term work-group for *groups that are based in a larger organisation, has clearly defined membership criteria and shared responsibility for a task or a product*. This definition is used to define a work group in this study. Important factors here are the clearly defined membership and the shared responsibility. Persons working in the same department in a larger organisation are not necessarily members of the same group. The shared responsibility and interdependence are what draw the line here: members of a group are interdependent on each other to solve a common task. Work groups are understood to be rather loosely coupled in terms of the relationship between its members. At the end of the working day, the group is dissolved and at the beginning of the next day the group is recreated. The work group exists in the bounds of the organisation. This does not mean that the members of a work group cannot socialise during their spare time and outside work activities; rather, it simply means that the group is created to share responsibility for a task at the workplace. Participation in work groups is sometimes fluid, i.e. it is possible to be a temporal member of a work group or a member of several work groups in the same organisation. This is common among managers.

A common distinction in group research is that between groups and teams. Teams are considered to be more than a group; the term team implies that the function or the performance of the group is better when it functions as a team. Wheelan (2010) makes a qualitative distinction between work groups and work teams. Her definitions are "a work group is composed of members who are striving to create a shared view of goals and to develop an efficient and effective organisational structure in which to accomplish these goals. A work group becomes a team when shared goals have been established and effective methods to accomplish those goals are in place". (Wheelan, 2010:2)

This study defines a work group as a group based in a larger organisation with clearly defined membership criteria and with the common responsibility

for a task or product. Furthermore, the groups have an appointed formal leader.

Disposition of the thesis

Welcome to the universe of verbal interaction at meetings. The tour starts in the literature. At the core of the study, is the observation of several work groups and their meetings. The thesis consists of ten chapters. The present chapter introduces the study.

- Chapter two starts with an introduction to theories that are connected to the LIM. Such theories emerge from the field of complex adaptive systems (CAS) theory, interaction analysis, group development, leadership, conversation models, positive psychology, and positive organisational scholarship (POS) theories. Particular focus is on the different ways that have been used to capture the interaction of groups. Complexity theory and concepts drawn from complexity theory and used in investigating social systems are also explained. The aim of the chapter is to give a theoretical background as well as equip us with tools that could be useful later in the study. The theoretical perspectives presented build on an eclectic approach towards theory. This means that theories from several schools of thought are included. The theories are chosen for their relevance for the studied phenomenon – interaction in work groups.
- Chapter three presents the methodological considerations of the study. It starts with an introduction to the general research project of which this thesis is a part. The chapter also introduces the current study and how the empirical material was collected. A qualitative analysis tool, based on the dimensions of the LIM, for capturing the interaction in groups is developed and presented. The different interactional categories of the LIM and how they could be interpreted are also discussed.
- Chapters four to eight present the observed groups (chapter four: The Elementary school; chapter five: The Environment unit; chapter six: The IT unit; chapter seven: The Municipality management unit; and chapter eight: The Culture unit) and give three sequences from observed meetings. Each sequence ends with comments to the described meetings from the viewpoint of the contextual factors leader behaviour, participant behaviour, structure, and the interaction pattern in the LIM. These chapters start with a background to the five participating groups. Each group is described according to what it does and which role the group has in the municipal organisation. The members of the groups are presented from the point of their pro-

fessional background and their experience from working in the organisation. The leaders are given a special introduction regarding their background and experience from leading the groups. A short summary of what the observed meetings looked like in the groups is also given.

- Chapter nine discusses the results of the empirical study. The results are presented in three parts: the behaviour of the leader, the behaviour of the participants and the structure of the meeting. These three parts are related to the interaction pattern of the LIM. The chapter also proposes three functions of a workplace meeting. The three functions are: the work-oriented meeting, the relation-oriented meeting, and the learning-oriented meeting.
- Chapter ten concludes the study. The conclusions are drawn based on the three research questions of the study. The chapter also highlights some pointers toward future research and investigations of work group meetings and meeting behaviour.

2. Previous research and theoretical background

This chapter gives the theoretical background to the investigation. The aim of the chapter is to present theories that are linked to group behaviour and group interaction. The study uses an eclectic approach to theory, i.e. the study does not use one single predefined theoretical perspective; rather, the study gathers theories from fields that are believed to be of importance for the study. An argument for the eclectic approach has been made by Mintzberg (1977) and Mintzberg & Lampel (1999) who suggest that studies which follow one predefined perspective run the risk of missing important pieces of the theoretical puzzle. The eclectic approach also gives flexibility in integrating theoretical and empirical developments from different scholarly fields. This eclectic approach provides an integrated framework that draw on disparate strands of literature to create a better understanding of the studied interaction.

The main purpose of the chapter is to give a background to the study and show different approaches to analysing groups and group interaction. The LIM has been closely linked with CAS, earlier interaction models, and POS. These fields of research are therefore presented.

The chapter starts with an introduction to the world of CAS. CAS theory could also be of use to understand why groups behave as they do. Moreover, different interaction analysis models are presented and how these have been used to capture the interaction in teams and groups. The following sections concern development in groups and models of conversations. The chapter ends with a short introduction to the field of positive organisational scholarship.

Complex adaptive systems theory

The world is made up of systems. Everywhere we look there are different systems. Systems are defined as a group of connected individuals or actors that interact together. The general assumption in CAS is that the interaction among the parts in a system creates a global pattern which, in turn, influ-

ences the local interaction. A complex adaptive system is built around independent actors interacting with each other and thus together creating an emergent pattern. Contemporary scholars in group research have started to realise that groups can be described as complex adaptive systems (Losada, 1999; Losada & Heaphy, 2004; Wheelan & Williams, 2003; Fuhriman & Burlingame, 1994) and that the verbal interaction in a group is a way to map this complexity.

Chaos theory has been used to understand change and development in social and organisational studies (Ruelle, 1991; Kaufman, 1995). It has also been used to analyse the prevalence of both chaos and order in modern, complex organizations (”chaordic organizations”) (van Eijnatten, 2004), to study organisational learning processes (Stacey, 2001; Backström, 2004; Södergren, 2005; van Eijnatten & Putnik, 2004) and innovation projects (Richtnér & Södergren, 2008).

CAS theory has its roots in chaos theory. But what is chaos and how it is defined? Strogatz (2001:323) defines chaos as an "*aperiodic long-term behaviour* in a *deterministic system* that exhibits *sensitive dependence on initial conditions.*" There is still no accepted (mathematical) definition of chaos and Strogatz (2001) uses the above definition as a working definition accepted by most (mathematicians). Chaos should not be understood as the absence of order, as the term is often used in everyday life. Chaos theory has originally been used by chemists and physicists to explain patterns and movement in for instance fluids (Strogatz, 2001).

The difference, if any, between chaos theory and CAS theory is not yet clear. Some scholars use the terms interchangeably. This is most common among natural scientists. Chaos theorists seem to be interested in describing, and possibly explaining, the emergence of complexity. The main interest for social scientists using complex dynamics is the study of the border between chaos and order. It is within this border that learning and change can take place. This suggests that scholars interested in change and development have started to use complex systems theory to gain a better understanding of change and when change is possible (Boyatzis, 2006).

Complex adaptive systems are made up of interactions between the parts of the system. They have some unique features which define them. These are:
- Emergence – the global pattern in the system emerges over time. Time is therefore a prerequisite for a complex adaptive system to evolve. The systems need to be observed and followed over a long period. This corresponds with Strogatz' (2001) emphasis on the long-term behaviour of a system.

- Self-organisation – Self-organisation is central for a complex system. The system has to intrinsically organise the patterns; it cannot be forced to do so through outside forces. The interaction between the parts (actors) of the system is what makes complex dynamics possible. Without interaction, there would be no emergent complex patterns.
- Non-linearity – small events may have a large impact on the system. The non-linearity of complex adaptive systems means that "everything has the potential of affecting everything else" (Fuhriman & Burlingame, 1994:504). This is also exemplified by the butterfly-effect which is described as "the notion that a butterfly stirring the air today in Peking can transform storm systems next month in New York." (Gleick, 1998:8) The butterfly effect does not mean that there is no way of predicting the path of a system; rather it means that there is "order *masquerading* as randomness" (Gleick, 1998:22).
- Interaction and feedback – complex adaptive systems are made up of independent actors interacting with each other and with the surroundings of a system. This interaction creates global patterns, which in turn effects the local interaction within the system. (Solé & Goodwin, 2004)

Groups as complex adaptive systems
Wheelan & Williams (2003) established five criteria that need to be fulfilled for a group to be considered as a complex adaptive system. These are:
- the actors in the group must be independent and interacting
- the local interactions must generate global patterns
- the emergent pattern must be independent of the characteristics of the members participating in the group
- similar patterns should emerge in different groups and
- similar patterns should occur and be observable in other systems. (Wheelan & Williams, 2003:447)

They conclude that groups are complex adaptive systems and that verbal interactions of groups can be used to measure and model the patterns generated within the system. Global patterns are further explained by Wheelan & Williams (2003):

Each agent interacts with other system agents. These local interactions generate a global structure that is independent of the individual agents. That is, local interactions generate global patterns, but these global patterns are not the result of individual agents but rather a unique pattern created by their joint interactions. In turn, the global structure that emerges influences the individual agents and their local interactions. These changed local interactions, then, collectively alter the global structure. (Wheelan & Williams, 2003:445)

Global patterns are macrostructures created by the interaction of the independent actors in the social system. After a while, one pattern will be dominating or several patterns will stabilise and support each other. This is what is referred to as an order parameter.

Attractors and order parameters
An attractor is "a set to which all neighbouring trajectories converge" (Strogatz, 2004:324). This means that the attractor is a point towards which the system is "pulled". The attractor, also called order parameter, is the deciding factor that determines the possible playing ground for an interaction, also referred to as phase space. In terms of a group and the interaction in a group the order parameter is the way of thinking and the limitations on the subjects the group is able to handle. This concept still has no common agreed upon definition. The most important form of attractor is the strange attractor. This attractor is sensible to initial conditions which imply that very small changes in the initial conditions may have large effects on the interaction pattern. The terms chaotic attractor and fractal attractor are also used to describe a strange attractor, depending on which of the two characteristics you want to emphasise. (Strogatz, 2001)

Losada & Heaphy (2004) use four types of attractors: the fixed point attractor, the limit cycle attractor (also called the periodic attractor), the torus (or quasi-periodic attractor), and the chaotic attractor. The chaotic attractor is also called the complexor, standing for complex order attractor. The complexor is the equivalent of a strange attractor. It is obvious here that the concepts have different names although they are describing the same dynamic. Zander (1979:424) has described this confusion as: "researchers […] are remarkably inventive in creating new names for phenomena that already have a name." Instead of using the term attractor, the term order parameter will be used here. In a meeting setting a fixed point attractor would entail a meeting in which the interaction is locked in the corner of advocacy and self, never to involve other parts of the possible interactional playground. Such a meeting would be seen as dull and with a lack of novelty. The strange attractor, or the complexor, would give a much more dynamic meeting in which the trajectories of the interaction never repeat themselves and the interaction uses most of the possible space for interaction. (Losada & Heaphy, 2004)

In a non-mathematical sense an order parameter can be understood as the culture or norms in a social system or a group. The order parameter limits or expands the possible positions for an interaction. The number of ways the system is able to interact is determined by the order parameters in the system. These order parameters are in turn developed by the interaction itself in the system. The system develops the order parameters through its interaction, and in turn these order parameters come to determine the possible pat-

terns of interaction. Wheelan & Williams (2003:445) refer to this as "local interactions [in a complex adaptive system] generate global patterns [...] the global structure that emerges *influences* the individual agents and their local interactions." (Emphasis added.)

This similarity of the concept of an order parameter and the concepts organizational culture and norms are striking. Institutions, order parameters, attractors (in social systems), and norms could be seen as different names for the same phenomenon. This has the implications that organizational scholars could have had a complex systems approach without knowing it.

Berger & Luckmann (1966/1991) use the term institutionalisation to describe the taken-for-granted culture in a society. Their term institutionalisation has several common points with the term order parameter, or attractor, which is used in CAS theory to set the ground for which interactions are possible for a group. This is the type of behaviour that guides the interaction in a system and decides what the system can do. The institutions set the boundary for the interaction.

The concepts of legitimisation and institutionalisation used by Berger & Luckmann (1966/1991) have close connotations with the order parameter concept of complex dynamic systems theory. First of all, all human activity is subjugated to habitualisation which is the routines of everyday life that make us avoid unnecessary choices and decisions. The habits reduce the numbers of decisions being made every day. Institutions then are habits that have been institutionalized as a way of doing things. These institutions have a story and are developed over time. They are also socialised onto the next generation. A new institution needs only one generation to become a new reality. When the parents of a child create rules, i.e. institutions, these rules become a reality for the child, i.e. the institution was there before the child and is therefore perceived as real and always existing. Interestingly enough, the institution becomes more real for the parents after they have socialised their child into it. Institutions, although real and existing before us in time, need to be legitimised and this is done through language. The legitimisation of an institution is done to explain and justify why things are done in a certain manner. (Berger & Luckmann, 1966/1991)

The weather could also be said to be a complex system that is hard to explain by the use of CAS theory, at least if you want to predict the weather. But if you would like to understand the weather and the complex dynamics of the weather, CAS theory could be useful. Ordinary linear models could not explain the behaviour of weather systems, but as Lorenz (1963) showed, non-linear equations could. There is a difference between understanding and predicting. Lorenz did not predict the weather; he merely showed that the

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weather could be described with the help of complex dynamics and non-linear equations. Losada (1999) later did the same, but for verbal interaction in groups. All dynamic systems are made up of parts that interact with each other; if the parts did not interact it would only be a static system.

The problem with interaction in social system is to define which interaction that is going to be studied. Social systems interact in several ways. You could choose to study only physical interactions (e.g. when persons touch each other). You could study non-verbal interaction, such as looks and gestures, or you could chose to study verbal interaction, i.e. when people talk to each other. All of these interactions, which occur at the same time, are important in social systems. For some reason, perhaps because it easy to measure and record, verbal interaction has taken the lead position over these other types of interaction. It is much harder to notice and register non-verbal interaction in a group. Verbal interaction is probably important in human interaction (we talk to each other almost every day). (But the first telephone calls were awkward histories without any visual cues. The telephone, by the way, has probably affected our way of interacting with each other more than we think because it makes it vital to take turns when talking and sends verbal signal that we understand or that we want the other person to continue talking.) (Silverman, 2004))

Language is the most important sign system of human beings (Berger & Luckmann, 1966/1991). Thus language should take a prime position over other types of interaction in human encounters. This is also why it is so hard to understand other cultures when you cannot speak their language (there is no words to explain what is going on). Arguing against this you could say that the eyes are the most important organ for humans and that you could sign your way through (at least easier conversations) and to send short messages in interacting with people that do not speak your language.

Using CAS theory in understanding how groups function has several implications. When comparing CAS theories with other theories on human interaction and social communities you realise that these concepts have a lot in common with CAS theory. For instance, Berger & Luckmann's (1966/1991) ideas on institutionalisation could be directly transferred to the concept of order parameters in social systems. This supports the use of CAS concepts in the human and social sciences.

From CAS theory three useful theoretical concepts are used in discussing social systems and groups. These are self-organisation, order parameter, and emergence. Self-organisation means that the system cannot be forced into behaving in a complex manner; the interaction has to be self-organized. Self-organization entails that the system (in this case the group), without inter-

vention from the surroundings, interacts in a complex manner. Order parameter is a key concept in understanding complex dynamic systems. First, it is the order parameters that set the boundary for the interaction in a system. The possible play field of interaction is set by the order parameters. Order parameters are furthermore created within the system. They are created by the very same interaction that they later set the boundary for. Interaction thus creates order parameters that then guide the following interaction. These order parameters serve as the culture or the norms of the group. Norms set the boundary for what is possible to do in a group without being seen as an outcast. Emergence means that the interaction pattern that is created by a group emerges over time. Time is thus important for a system. If you leave a system alone for a longer period, a pattern will emerge. This also implies that changes in the system sets the emergence back, but it does not necessarily mean that the system is back on square one. In a group, for example, one new member is most likely to adapt to the rules and norms (order parameters) in the group and will thus not change the dynamic of the group that much. Several new members could question the norms and develop new ones in the same way that the old group had done. Further, one strong new member may have the possibility to change the culture of the group.

Schein (2004) also touches on the idea that norms emerge from the interaction of a group, but he states that norms are not solely the effect of an ongoing interaction but are also an effect of leadership behaviour. Leadership behaviour is an important source for ideas and behavioural models for the group to adopt. Thus, Schein shares a view on norms as emerging within a group and from the interaction of a group, but not only from the interaction. The leader has more impact on the emerging norms than the other actors in a group. The behaviour of the leader is thus perceived to be more important than the behaviour of the other participants in a group. It is the leader who influences which norms will be finally set.

CAS theory and meetings

The concepts of CAS theory may be used to look at meetings and groups. Groups are social systems where the main interaction that takes place is verbal interaction (Fuhriman & Burlingame, 1994; Backström et al., 2006)

When social scientists summarise and transmit the scientific chaos theory to their respective disciplines, they focus on different parts of the theory and when they describe the fundamental properties of CAS their lists look slightly different. Stoehrel (2007) lists four important characteristics of complex systems: *emergence, self-organisation, non-linearity and feedback mechanisms*. Backström (2010) means that there are seven essential characteristics of complex systems: *unpredictability, comprehension, interaction,*

dependence and independence at the same time, emergence, nonlinearity and self-organisation. Murphy (1996) chooses to include seven characteristics: *non-linearity, feedback, bifurcation or phase transition, strange attractors, scaling, fractals and self-organisation*. Fuhriman & Burlingame (1994) mention *sensitivity to initial conditions, strange attractors, fractals, phase space, bifurcation and irreversibility* as the main properties of CAS. It is thus hard to decide what is important and some of the theorists include more of the theory in fewer categories. Below the six concepts of *emergence, self organisation, interaction, feedback, non-linearity, and order parameter* will be further explained with a look at its implications for groups.

Interaction between the parts of a system is a prerequisite to be able to talk about a complex adaptive system. A system starts with an interaction between the parts of the system. Before the interaction starts, the initial conditions for the interaction are set. The interaction is sensitive to small changes in these initial conditions. When the interaction has started, influences from the interaction within the group and from interactions and influences from the environment occur. The interaction creates *order parameters* that are inserted into the system via a feedback loop. Accordingly, the system is a causal system, but it is a circular causality. The system is *self-organising* in the sense that the rules for the interaction are created within the system and the system cannot be forced to interact in a specific way. The *emergent* patterns that the system generates are a result of self-organisation and interaction.

Self-organisation implicates that the meeting culture of a group emerges over a relatively long period and that the culture is in constant development. The culture does not change easily, and new persons entering the group or new policies directed at the group may have small effects on the emergent pattern. At the same time, a change of behaviour is possible and this is done gradually and in close connection do the surroundings of the system/group. The group may have to adapt to new pressure from the outside or one of the participants in the group takes on a new role. The *self-organisation* creates the necessary qualities that the system needs to function. The meetings are self-organised and the structure of the meeting and the roles of the participants are not forced on the participants. There are no written scripts for the meetings.

A group consists of actors who interact, and this *interaction* creates *emergent* patterns. These patterns are a result of an interaction between the actors of the group or between actors and the environment. The pattern is unique to a certain time and a certain place, but similar patterns may occur in similar systems. This implies that the system is in constant change. In an interaction between humans new ideas and new perspectives are born, which are not a

result of individual thoughts but of the interaction between individuals. Time is also a prerequisite for a pattern to emerge. The system needs time to interact and create patterns. The *emergent* pattern could be described as new ideas that come to existence as a result of the ongoing interaction. None of participants had thought of or articulated the idea before the interaction took place, but somehow it emerged from the interaction.

Groups create a way of working and interacting that has consequences for how they work with their environment and their customers. This *interaction* in turn generates *feedback* to the group, creating a constant loop of feedback and interaction. The interaction may be either physical or verbal.

Non-linearity and *sensitivity to initial conditions* – meetings may take a new development at any time depending on the initial conditions of the meeting. The daily form of the participants may have a large impact on the meeting. Small differences in these initial conditions may have large consequences for how the meeting eventually unfolds. Therefore, it is hard to identify a general interaction pattern in a group. A major implication from CAS theory is the fact that generalisations are seldom possible because the constant ongoing changes in the system and the interaction between the system and its environment. *Non-linearity* imply that small events during the interaction may have large effects. An example of such event may be when one of the participants uses an unexpected word during the interaction, which from that point on affects the rest of the interaction.

The leader and the participants are actors within the system, i.e. they are both are able to influence and are subjected to influences by the interaction in the system. The "form" of the leader could be an initial condition that varies between each meeting (interaction), suggesting that small changes in the behaviour of the leader may have significant effects on the meeting. The same is valid for the participants. Their "form" varies and these small variations may have large effects on the outcome of the meeting. These small changes in the initial conditions may help to explain the large variation between the meetings in some groups. Because the system also interacts with the environment of the system, small or significant changes in the environment may have large effects on the meeting.

The structure of the meetings is part of the emergent meeting culture in the group. This structure is a combination of self-organisation within the group and interaction with the environment, i.e. how meetings are conducted in this organisation and the picture that the participants have of what a meeting is and what it should accomplish. Political organisations would be expected to have more meetings because the main decision process of a political organisation is based on discussion, consensus and a qualified majority rule. The

structure is also an order parameter in the group. This order parameter is created through the interaction between the members of the group.

Order parameters may be used at different levels in a group. On a higher level, the order parameters may be described as the culture of the group, behaviours and questions that are accepted by the group and that the members of the group perceive as important. On a lower level an order parameter may be the way the group interacts and the topics that the group chose to discuss. Groups often have reoccurring topics or themes that the group constantly returns to discuss. These themes may be seen as order parameters. It is the order parameters that control the interaction and the result of the order parameters should be observable over time in the interaction and in the topics and form of the discussion.

In a CAS sense the three perspectives of leader, participant, and structure would mean that we look at the interaction between the actors (leader and participants) and try to identify the *order parameters* in the group by looking at the structure. The *emergent* patterns are examined at with the help of looking at the verbal interaction in the groups. The *initial conditions* for the interaction in the meetings are hard to visualise, but the notion that they exist and that they may have a large impact on the meeting entails that the initial conditions may be used to explain differences in behaviour.

Several organisational scholars have begun to use CAS theory of in looking at groups and group behaviour (e.g. Losada, 1999; Losada & Heaphy, 2004; Wheelan & Williams, 2003; Fuhriman & Burlingame, 1994). These studies have focused on verbal interaction in groups and used interaction analysis in order to capture the ongoing interaction in work groups. This brings us into the field of interaction analysis which is more closely examined in the next section.

Interaction analysis

Interaction analysis is part of the discursive approach to organisational studies interested in investigating talk and text in organisation (Fairhurst & Cooren, 2004). Interaction analysis is a quantitative method focused on counting and categorising verbal utterances and is especially focused on the nature of verbal utterances and the sequence of utterances in an organisational setting. Fairhurst & Cooren (2004) mention three approaches to discourse analysis: interaction analysis, conversation analysis, and speech act schematics. These three approaches share a common view in studying language but "they focus on context and discourse as action in different ways." (Fairhurst & Cooren, 2004:132) Interaction analysis is especially focused on the nature

of verbal utterances and the sequence of utterances in an organisational setting. Conversation analysis "examines the social organisation of talk-in-interaction and how it enables individuals to make sense of their worlds", and speech acts schematics "focuses on the performative character of language and its episodic ordering." (Fairhurst & Coren, 2004:132f)

Bales (1950a) developed the first widely used model for measuring and describing group interaction. He called the model Interaction Process Analysis (IPA) (Bales, 1950a). The model consists of twelve categories grouped into four groups. Verbal comments are coded in one of these categories. Two groups belong to a task area and two groups to a social-emotional area. The task area groups are considered to be harmless and uncontroversial i.e. a more non-emotional type of communication often regarding technical solutions or information. Table 1 presents the categories used by Bales.

Table 1 Bales (1950a) Interaction Process Model (IPA)

Area	Category description
I. Social emotional area positive reactions	Shows solidarity, shows tension release, agrees
II. Task area: neutral input and attempted answers	Gives suggestion, gives opinion, gives orientation
III. Task area: neutral questions and requests	Asks for orientation, asks for opinion, asks for suggestion
IV. Social emotional area negative reactions	Disagrees, shows tension, shows antagonism

The model has been widely used and tested in a broad range of fields. Bales has also created a database of "normal" meeting patterns for the model, making it possible to compare different kinds of meetings. Several later interaction models are either based on, or similar to, the IPA model. For example, areas I and IV correlate with the categories of *positive* and *negative* in the LIM and areas II and III correlate with the categories *advocacy* and *inquiry* in the LIM.

An alternative category system of emotionality and work in groups was developed by Bion. He used three categories of emotional states. They were called different cultures or emotional climates: *dependency*, *pairing*, or *fight-flight* behaviour. (Hare, 1973)

[D]ependency (when group members seem to be dependent on the leader or some external standard for direction), pairing (when group members turn to each other in pairs for more intimate emotional response), and fight–flight (when group members act as if their purpose is to avoid some threat by fighting or running away from it). In addition, the group is continu-

ously "at work" on some problem. At specific times, the particular emotional state associated with the work activity may be dependency, pairing, or fight–flight. The ongoing process of a group can be described in terms of successive shifts from one of these work emotionality states or cultures to another. (Hare, 1973:116)

Others later developed the model adding levels of work and separating fight from flight (Hare, 1973). Wheelan developed this interaction analysis model aimed at observing the development stage of a group by observing its verbal interaction. The model is called group development observation system (GDOS) and codes each complete thought into one of eight categories: *dependency statements*, *counter dependency statements*, *fight statements*, *flight statements*, *pairing statements*, *counter pairing statements*, *work statements*, and *unscoreable statements*. (Wheelan & Williams, 2003) This model is based on the same common assumptions as other interaction models. The coding in the model was checked by other coders enabling the researchers to calculate an inter-rater reliability. The categories, however, have the advantage of being relatively easy to use. According to Hare (2003:135), "The division into task and social-emotional has a long history dating from the 1930s." It continues to be of interest in contemporary group research.

The major assumption in these types of interaction models is that the interaction in a group could be measured quantitatively and the measures could be compared with those in other groups. The problem is what the data tell us and how information on these interactional patterns should be interpreted. In other words, how should the information be used? (McGrath, 1997) It may be useful in order to establish different interactional patterns between groups. The next step would be to try to answer the question why the groups interact differently.

In Bales' system, the unit to be scored is a bit of behavior (usually verbal) which can provide enough of a stimulus to elicit a meaningful response from another person. In practice, this is usually a sentence. Each sentence or comparable act is given only one score to indicate the element of task behavior or social–emotional behavior which appears to the observer to dominate the act. (Hare, 1973/2010:108)

Losada (1999) takes the interaction analysis approach a few steps further. First, he uses real groups, although in a laboratory setting. The meetings in the laboratory concern real work-related issues. He also manages to connect the interaction pattern of the groups, which is a descriptive term, with the performance measures of the groups. This gives the model normative implications in which a certain type of interaction pattern is linked to a certain performance level. The data on the interaction then become more useful than just recording the interaction in a group. With this kind of data, the interac-

tion model has normative implications showing that a certain interaction pattern could be linked to high performance.

Coding only verbal utterances means the loss of nonverbal communication and interaction in a group. (Paulista et al., 2006) The group will have developed a history and a common nonverbal language during its "life-time". The surrounding organisation will have an impact on the observed group in a meeting. The interaction models therefore have two major flaws. First, these models only record verbal interaction, although the observer in the room probably uses nonverbal interaction as a help when deciding which dimension an utterance should be coded. Nonverbal interaction is discarded and the culture of the group is also discarded. Groups with a common history have probably developed a culture of their own that effects the interaction in a meeting. Using the terms from CAS theory, the groups have developed order parameters that come into play when the group meets and interacts. Second, the interaction models only measure what is happening inside the meeting room, discarding the surroundings of the group and the events outside the meeting room that the participants bring with them into the meeting. The models are developed by using laboratory groups that are put together for the purpose of the research. Thus, these groups lack a common history and an expected future together. The groups also lack a common culture. The effect of these laboratory groups is that the researcher will have a major impact on the group. This could however also be an advantage in these groups because the groups are not affected by their common history and culture.

The Losada Interaction Model

The interaction model used in this study was developed by Losada (1999) and then further elaborated by Losada & Heaphy (2004). The original study was a laboratory research study with 60 participating teams. The study was done in a laboratory setting but the teams were real-life work teams discussing real-life work issues. This is a difference from most other interaction research in which the groups are often temporary groups and the issues constructed issues. Each team consisted of eight persons and their interaction was coded in the lab while they were discussing strategic planning for their companies. The units were business units from larger companies in the IT sector and they were chosen because they had easy accessible information regarding performance. The performance information could be linked directly to the unit. This information was complemented by a peer-review where the units were evaluated by other units in the organisation, both higher- and lower-level units. Another complement was a customer satisfaction survey. Units that scored high in all three surveys were classified as High Performance (HP) units; units that scored high on two and low on one

were classified as Medium Performance (MP); and units that scored low on all three measures were classified as Low Performance (LP).

Each verbal utterance in the groups was coded into one of six categories. The categories are: *advocacy* (arguing in favour of the speakers viewpoint or sharing knowledge), *inquiry* (asking questions), *positive* (giving positive comments), n*egative* (giving negative comments), *other* (taking in perspectives from persons or groups outside the organisation), and *self* (taking the perspective of the individual or the group).
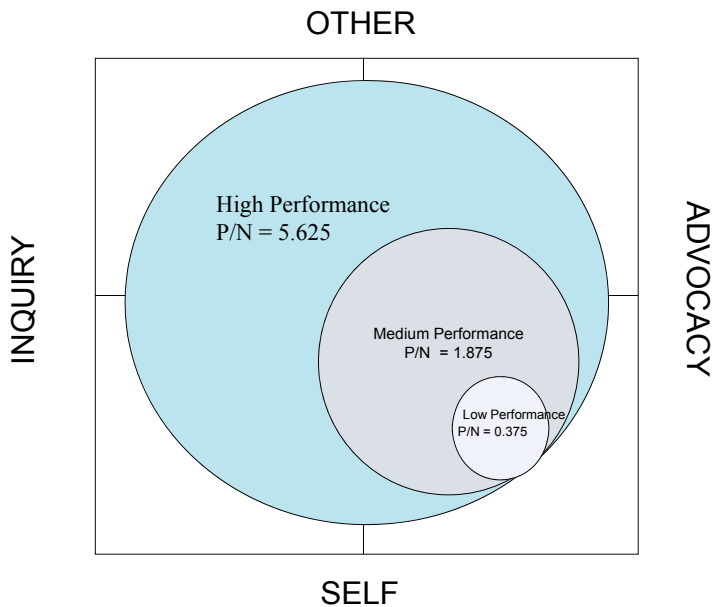
Figure 1 Emotional space and positive over negative (P/N) ratio for low, medium, and high performance groups (adapted from Losada & Heaphy, 2004).

The results of the study showed that groups that were able to balance the first four categories and had a higher rate of positive comments over negative comments were also classified as HP. The model shows that there is a correspondence between pattern of communication and performance. The model does not explicitly establish a causal relationship between communication and performance though it does show that communication and performance correspond with each other. The result also shows the importance of a balanced type of communication in which the group is able to both explore and argue, and this is done in a positive climate. The three bipolar dimensions of the LIM have its background in several different fields. Let us take a closer look at the dimensions of the LIM.

Positive – Negative
This dimension is very much based on the Bales' (1950a) IPA model. The dimension can also be linked to the work of Fredrickson (1998; 2002), the *broaden-and-build* theory of positive emotions. This theory originates in the field of positive psychology and states that negative and positive emotions have different behavioural effects. Negative emotions are often connected to direct actions as fleeing or fighting (fight or flight). Positive emotions on the other hand are connected to the mind and create new ways of thinking and new social resources. Fredrickson's (1998; 2002) broaden-and-build theory of positive emotions is one example of contributions from the field of positive psychology. This model suggests that positive emotions broaden and build the possible thought action repertoire, whereas negative emotions limit the same thought action repertoire. The background is the fight or flight reactions of negative emotions. The preferred ratio between positive and negative in the LIM is more than five times as many positive comments over negative comments. It is noteworthy that negative responses are still needed. Some scholars have recognised that negative emotions also can have positive effects (Bagozzi, 2003; Lopes & Cunha, 2006).

Positive and negative signals are used in different ways, where the costs of ignoring negative signals are often higher than the cost of ignoring positive signals. In times of crises this is put to its test, and this could be one explanation to the focus on negative signals and feedback. (Cameron, 2008) The reaction to negative criticism is thus much stronger than the reaction to positive feedback and therefore an overweight of positive feedback is needed to balance the influence of negative signals (Baumeister et al., 2006; Roberts 2006). This could be one explanation to the high ratio of positive over negative comments in the LIM

Inquiry – Advocacy
The dimension of *inquiry-advocacy* shows the balance between exploring and investigating, and advocating one's own views. Background to the dimension is found at Argyris & Schön (1979) and Senge (1990). According to these authors, a balance between these dimensions leads to a more effective action. Senge (1990) also asserts that the balance between these categories is crucial for learning. To only use *advocacy* would lead to a state where the own views are acknowledged, and to only use *inquiry* would lead to a situation where one's own standpoints are hidden behind the questions. The most productive way for the teams is thus to balance these two dimensions. According to Senge (1990), balancing inquiry and advocacy is a key to development and learning in an organisation. He further notes that organisations often have a lack of inquiry at their meetings and purpose some ground rules in to enhance the frequency of inquiry in a group. One of the rules is to level out the status at meetings, acknowledging the fact that anyone, whatever

status, may have opinions and inputs that can benefit the organisation. Senge et al. (1994) proposes a framework for balancing advocacy and inquiry using four interactional styles during an interaction. The main proposed styles include observing, telling, asking, and generating. Observing refers to looking at the process of the interaction and commenting on it, rather than making comments on the content of the interaction. Telling concerns explaining one's thinking or give input to the discussion. Asking pertains to either clarifying the issue or interviewing others on the issue. Finally, generating denotes testing the propositions or engaging in a dialogue.

Other – Self

This dimension is grounded in the strategic literature where analysis of the environment and self-scrutiny leads to how the strategy of a group should be formed. The analysis of the environment identifies opportunities and threats in the surroundings while the self-scrutiny identifies the strength and weaknesses of the group. A balance in this dimension should therefore lead to higher performance, at least according to Losada & Heaphy (2004). The dimension is well connected to the field of POS. Spreitzer & Sonensheim (2004) reason that focusing on others and empathy with others is a source of positive anomalies. Cooperrider & Sekerka (2003) and Cooperider & Whitney (2005) use the dimension in the model over positive organizational change and appreciative inquiry (AI).

The LIM is thus based on several academic disciplines, including psychology and organisational learning. The basic view is that what goes on in a group is possible to describe and measure by listening and coding the speech acts in a group. These speech acts are understood as verbal behaviour, i.e. when we say something we act. Quinn & Dutton (2005:39) define a speech act as "an action in language that creates a social reality that does not exist before the speech act is uttered." These verbal behaviours are then coded regarding function rather than content. But if every verbal utterance is regarded as an act and acts are regarded as intended and goal-oriented in the sense that you want to achieve something with your act, the act of speaking would be based on both intent and function. To categorise utterances in this way seems a bit problematic. There is a functionalist tendency that each verbal utterance can be coded and categorised without taking any interest in the rest of the arena. The assumption of the model and the groups is that you can classify the communication/listening situation to the verbal behaviour. The problem is that it is virtually impossible to code the interaction in real life and that several utterances are hard to put into one single category. It is difficult to replicate this study, even if you trained a lot and really wanted to figure out how to classify the communication.

The model has a firm foundation in the theoretical literature in that it uses parts from several other studies and piecing them together into a useful model. The model uses features from different disciplines, such as interaction analysis, management literature, and strategic literature. Interesting to note though is the evolvement of the background literature. In the first article (Losada, 1999), published in a computer journal, the model is loosely described and the theoretical framework upon which the model is built is shown to be mainly from the management and strategic literature. In the early article it seems as though the model is based on previous interaction models with the addition of the *other-self* dimension borrowed from the strategic literature. In the later article (Losada & Heaphy, 2004) this new dimension is further elaborated upon, now with references to the literature on psychology and flow. The *positive-negative* dimension is also enhanced by the addition of references to the psychology literature and the positive organizational studies field. These features do not make the model any less valuable, but it is notable to see the addition of references being added later on in the process. Particularly noteworthy regarding this is that the empirical base for the articles was done many years before the model was published, indicating that the theoretical base for the model at the time of data collection was thinner than later on.

The main problem with the LIM is distinguishing between the different categories in the model. These difficulties make it hard to use the model in practice without substantial training. But the model is very useful as a way of describing the dynamics at a meeting and as a way of putting words on the events in a meeting. It could be used in a very controlled setting to obtain the pattern of a balanced communication. The dimensions make sense and they have high face validity. It is easy to grasp the general idea of the model but it is harder to understand the sections on emotional space and how it is computed.

There are several significant implications to be drawn from the LIM. The idea that high performing teams have a different way of communicating is certainly useful and has managerial implications. But how do you create such a communication climate? It would be of interest to the practice community to try to create this communication climate in the work teams of their organisations.

The ability to describe the communication in a meeting in a simple fashion is of benefit for several reasons. The usefulness of the model also shows in how the dimensions can be used to classify the events in a meeting. Yet, the usefulness becomes less when it comes to using the model as a coding tool. Then it is clear that the dimensions are not as useful as it seemed at first.

Three key points in the LIM:

- The model is normative, indicating that groups able balance their interaction and have a more dynamic communication, also show better performance records. This implicates that complex dynamic interaction equals successful groups. This is clearly a normative statement.
- Balance is of the essence in this model. Groups that balance their communication and are able to use several viewpoints and perspectives are more successful. The balance notion is also found in other theories, such as Senge (1990), Senge et al (1994), Argyris & Schön, (1979), and Ancona & Isaacs (2007).
- Advocacy can be thought of in two ways. There is bad advocacy, trying to beat your opponent in an argument, and there is good advocacy meaning that you share important information to the group. The idea comes from the fact that sharing is important and that advocacy is needed in groups. The Losada framework could otherwise be understood as having a good and a bad side (good equals positive, other, inquiry; bad equals negative, self, advocacy). Losada shows that both sides are equally important.

Development in the field of interaction analysis

Bales developed one of the most widely used systems of interaction and process analysis of groups. The IPA model has been tested in several groups and settings. One problem with the model is the focus on structure rather than on the content of the interaction. An additional setback is the time-consuming task of training coders in accordance with the model and the arduous task of collecting data. (McGrath, 1997) The model, however, is still in use and new approaches to the model can be found. For instance, Beck & Keyton (2009) suggest a combination of methods to study interaction processes and discursively strategic interaction in meetings. The strength of the IPA model is that it is applicable to any group in any setting (McGrath, 1997). Gorse & Emmitt (2003; 2007), for example, use the IPA model to investigate construction team meetings. Their findings indicate that construction teams seldom engaged in negative interaction, almost to the extent that real existing problems may be missed. They also point to the difficulty of obtaining access to real groups.

One major problem with the strict interaction analysis method is the time and costs of training coders and coding the interaction. Another drawback is the "apparent theoretical sterility" (McGrath & Kravitz, 1982:210) of the studies. The interaction analysis is interested in what McGrath (1997) calls the "morphology" of group interaction, i.e the structure of verbal speech acts in different group settings. The first part of this morphology deals with the participation patterns in an interaction (who speaks and how much). The

second part is concerned with the temporal structure of the interaction (in which order a speech act occurs). (McGrath & Kravitz, 1982)

Typically, a coding scheme is developed and a coding catalogue is written listing examples of utterances and behaviours to be coded and which category they belong to. The coding catalogue is changed as new problematic cases are added. The coders are then trained using the coding system for a period of several months. Bales, for instance, recommend a three-month training period (Bales, 1950a). To control the coders different measures of inter-rater reliability are developed. There are no firm limits of how high the inter-rater reliability needs to be and different studies use different measures. A measure called Cohen's kappa is frequently used but no limits have been established regarding reliability. Pincus & Gaustello (2005) suggest that a Cohen's kappa of 0.66 is sufficiently high.

Group research in the 1950s had a balance between laboratory studies and field studies. This changed in the 1960s, however, where the laboratory study took over. A flaw in the research was the lack of theory and theoretical advance. Later reviews called for more studies using natural occurring groups in a non-experimental setting. In the 1970s much focus in the area of group research was on the problem of group task performance. (McGrath & Kravitz, 1982)

Other approaches to interaction analysis

Beck & Keyton (2009) investigate how message strategies and message function can be perceived in a meeting. Their findings indicate that it is common to interpret others' actions at meetings as strategic. Another contribution is the method of using a multi-method approach and retrospective interviews in combination with interaction analysis. They use the IPA model to establish a baseline for the communication comparable to other groups. However, they do not use the model for exhausting coding, which would not give a full description of the interaction.

McGrath (1991) suggests a new theory, including a temporal dimension in the analysis of group interaction. He defines group interaction as "[…] a flow of work in groups at a micro level." (McGrath, 1991, p. 165) He calls for more research on naturally occurring groups in contrast to groups in experimental settings. Naturally occurring groups are groups that have a past and an expected future together. He also notes that much of the earlier theories do not regard the fact that the same type of speech acts have different meanings in different contexts.

Another approach to mapping and looking at interaction in groups is the models of conversation and dialogue. Some of these models will be presented in the following section.

Conversation and dialogue

A different approach toward describing the interaction in a group is to describe the ideal structure of an interaction. I refer to these models as conversation models. These models could be more metaphorical than interaction models. The conversational models presented below are all less strict than the interaction models presented above in the sense that there is no coding of verbal statements in the conversational models. The conversational models presented here are the ones by Gratton & Goshal (2002), Schein (1993), Senge (1990), Isaacs (1993), and Wilhelmson (1998). The purpose of these models is to enhance the quality of the conversations in the meaning that more relevant information should be discussed and that the core issue should be more readily addressed. The models also try to give an understanding of the process of an interaction.

Gratton & Goshal's (2002) model presents four types of conversation taking place in an organisation. These include dehydrated talk, intimate exchange, disciplined debate, and creative dialogue. Gratton & Goshal (2002) claim there is a time and place for every one of these conversations in an organisation though they also note that most organisations would benefit from more creative dialogue. They do not see a problem with other types of conversation as long as there is room for all of them. The issue is to find a balance between the different types of conversation. It is also important to note the different arenas for conversation presented in the model. As I interpret it, all of these conversations, except the intimate exchange, take place in the meeting room. Gratton & Goshal (2002) also propose some ideas for developing a better communication climate in an organisation (e.g., "institutionalise questions and doubt" and "develop some new rules and forums"). An important idea is that space matters and that the seating in a building is important for the quality of conversations.

Schein's (1993) model of conversation is more of a group development tool. He advocates that the group should gather together in order to do dialogue. He presents a hierarchical view of conversations with a positive and a negative side. The negative side contains discussion, dialectic, and debate. In this trio the debate has the same form as the disciplined debate in the Gratton & Goshal model, which is to systematically and rationally discuss and solve a given problem. On the positive side of the model, we find suspension, dialogue, and metalogue. Suspension means to accept differences in views in

the conversation and to listen actively to others in the group. Dialogue refers to building a common ground by exploring assumptions. Metalogue entails thinking together as a group. This is where new assumptions are born regarding the reality and new cultures.

According to Senge (1990), balancing inquiry and advocacy is a key to development and learning in an organisation. He also suggests that organisations often have a lack of inquiry at their meetings and propose some ground rules to enhance the frequency of inquiry in a group. One of the rules is to level out the status at meetings, acknowledging the fact that anyone, whatever status, may have opinions and inputs that the organisation can benefit from. He also makes an important distinction between discussion and dialogue: "in a discussion decisions are made. In a dialogue complex issues are explored." (Senge, 1990:230). Senge (1990) also asserts that the balance between these categories is crucial for learning. To only use *advocacy* would lead to a state in which the own views are acknowledged, and to only use *inquiry* would lead to a situation where the own standpoints are hidden behind the questions. The most productive means for teams is thus to balance these two dimensions. To learn a group has to balance inquiry and advocacy. No learning will come from a conversation between two advocates: there will be no new perspectives to challenge axiomatic views. Such a meeting is likely to escalate into a conflict of world views. Instead, Senge suggests making one's own view, and the data this view is based upon, open for inquiry. This could be perceived as a risky strategy in a conversation if you see the conversation as a conflict with potential winners and losers. To one-sidedly focus on inquiry will most likely not work either. Just asking a lot of questions does not enhance learning. This is why he advocates a balance between inquiry and advocacy. He also emphasises the importance of the leader behaving as a coach for his subordinates. (Senge, 1990)

Isaacs (1993) proposes to "slow down the inquiry" in order to have better dialogue. What he means is to ask questions with meaning, not just to show off your talented intellect. Isaacs (1993:25) defines dialogue as "*a sustained collective inquiry into the processes, assumptions, and certainties that compose everyday experience."* He also suggests some guidelines for dialogue such as suspend assumptions and certainties, slow down the inquiry, listen to your listening, and befriend polarisation. According to Isaacs, dialogue sessions are leaderless; they should have no agenda; they have no purpose; and there are no decisions to be made. The goal of such a dialogue session is to do inquiry and create learning in the organisation. He also includes a schema for conflicts in dialogues indicating two main defences used by participants when being attacked: go silent and tense, or yell it out. The conflict map also makes it possible to solve conflicts in a group by making the conflict and the assumptions underlying it more visible.

The aim of a well-functioning conversation is to develop and express collective assumptions in a group or an organisation. By expressing collective assumptions the group will be able to create a common understanding of what the world looks like and this in turn will help the members of an organisation to look for a common goal. This alignment will be easier if the members of an organisation share and agree upon the assumptions. Such sharing of assumptions and ideas takes place in the interaction between people of an organisation or a group. Wilhelmson (1998) points to some specific competencies that need to be mastered by the individuals in order to engage in a learning conversation.

First, the individual must be able to be "close to, and distanced from, themselves and others" *at the same time* (Wilhelmson, 1998:267). This implies that the conversation becomes both integrated and differentiated. Integration refers to the participants building on ideas that emerge and what is being said during the ongoing conversation, whereas differentiation entails that the participants dig deeper in the understanding of the conversation and question the ideas that emerge from the conversation. The individuals engaged in the conversation thus need to be critically reflective of their own ideas and assumptions as well as of the ideas and assumptions of others. The members also need "the capacity to be at the same time competitively oriented, in order to safeguard their own individual interests, and cooperatively oriented, in order to understand others." (Wilhelmson, 1998:265)

For a conversation to become a learning conversation, the dialogue needs to be symmetric instead of asymmetric. Symmetric conversations are balanced regarding to dominance and asymmetric conversations are dominated by the person with the superior position. In asymmetric conversations "superiors are close to their own perspective and distance themselves from the notions of others, they strive to have their own way" and "subordinates demonstrate their closeness to superiors and refrain from asserting their own experiences." (Wilhelmson, 1998:263) On the other hand, in a symmetric conversation:

Both superiors and subordinates focus first on the subordinates' perspectives. The superiors make an effort to come close to the perspectives of the others and encourage them to speak out. To some extent the superiors also refrain from asserting their own will. The subordinates thus get the space to formulate a voice of their own and the courage to question what other people say. (Wilhelmson, 1998:263)

The ideal conversation combines the competences of distance and closeness, cooperation and competition, and symmetry. The ideal conversation "is [an] open and mutual reflection, based upon giving voice to different perspectives, and the search together with others for new ways of understanding,

which provide the prospects for a genuine new knowledge construction." (Wilhelmson, 1998:263) Such conversations are called discourse "weaving", which closely resembles when the dimensions of the LIM are in balance. Such conversations are a dialogue between all the present persons and "questions and answers are evenly distributed among all the speakers, each and everyone is approached by each and everyone in the discussion." (Wilhelmson, 1998:263) Thus, the conversation needs to be symmetric, cooperative, and competitive at the same time in order for the group to learn. There should be a balance between cooperation and competitiveness.

The conversation model developed by Whiliamson (1998) thus proposes that the ideal conversation should be characterised by:

- Cooperation *and* competition at the same time. The participants should both safeguard their own ideas and interest and make an effort to understand the ideas and assumptions made by others. Questioning what other people say should be used to understand the assumptions of the other persons in the conversation.
- Discourse weaving: many voices creating a dynamic interaction. Dialogue instead of monologue. Questions and answers are evenly distributed among all the speakers. Everyone is included and approached in the discussion.
- The leader should leave room for the participants to formulate their ideas and encourage them to speak their mind.

Implications

In this thesis I have chosen to work with interaction analysis and the LIM but with a qualitative interpretation of the interaction.[2] Consequently, the method borrows from interaction analysis models and from the models of conversation presented above. The categories of the LIM have been used as a basis for the analysis of the interaction pattern in the studied groups. The LIM was chosen because of the strengths of the model, its empirical grounding, its practical relevance, and the connections with CAS theory, POS, and the field of interaction analysis. The LIM was also used within the general research project as a means to analyse the interaction pattern in the observed groups. Based on these strengths of the LIM the LIM was used as the main observational tool.

The interpretation of the interaction pattern has been done in the form of a qualitative analysis and is not based on a quantitative frequency analysis.

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[2] See chapter three under the heading *Establishing the interaction pattern: qualitative coding in the LIM* (p 68) for further details on the operationalisation of the LIM categories and the applied method of coding the interaction in the LIM.

One reason for this choice was that the link to the context of the groups was kept. The categories of the LIM also turned proved hard to operationalise and discriminate between. This is discussed further in chapter three.

The study has been done in real-life groups in order to answer to the need of such studies (McGrath, 1997; Edmondson, 1999). Such groups share a common history and have an anticipated future together in contrast to temporary laboratory groups. The groups also represent different work activities and functions. This gives insight to interaction patterns in different professional cultures. The studied groups also represent different types of function in order to gain insight into communication patterns in different types of group.

Group development and group dynamics

The notion that groups develop over time has been around since the 1950s. These developmental models investigate the sequential development of a group in terms of performance and relations. There are several models proposing a sequential development in the life of a group (Schutz, 1958; Bennis & Shepard, 1956; Tuckmann, 1965). Schutz's (1958) FIRO (Fundamental Interpersonal Relations Orientation) model is one of the most known and most used models of group development. The model presents three dimensions explaining the evolvement of a group and human interaction: *inclusion*, *control* and *affection*.   The dimension *affection* was later renamed *openness*. The dimension *inclusion* relates to the need for contact and interaction with other people. *Control* is associated with being in control over others. Some people like to be in charge of things and others are more satisfied being followers. The *openness* dimension is associated with sharing personal stories or not. Groups develop in the three main dimensions and two transitional phases. The phases follow each other sequentially: *inclusion phase* (followed by a comfort phase when the membership and roles of the group are established), *control phase* (followed by an idyll phase in which the leadership of the group is established) and the *openness phase* in which the group works as a team.

Hare (2003:127) notes that the observation "that groups progress through a series of phases" is documented "by using case material from therapy groups, a fact that is usually overlooked when applying the findings to groups with other types of tasks." Therapy groups often have a more distinct development than other groups. Gersick (1988) observed group development in work groups that completed a task. In these groups the development seemed to jump ahead and the groups worked more effectively when the deadline came closer. Gersick (1988:9) referred to this as "'punctuated equi-

librium', through alternating inertia and revolution in the behaviours and themes through which they approached their work."

Bennis & Shepard (1956) takes a psychodynamic perspective on groups and compares a mature group as something resembling a mature person: a person that is able to resolve internal conflicts, mobilise his resources, and take action. In a mature group there is also a need for valid communication. "A mature group knows very well what it is doing" (Bennis & Shepard, 1956:415). They identify *dependence* (authority) and *interdependence* (personal) as the two cornerstones of group development and the resolve of uncertainties.

In the process of abstracting, stereotyping and interpreting, certain obvious facts about group processes are lost. For example, each group meeting is to some extent a recapitulation of its past and a forecast of its future. This means that behaviour that is 'regressive' or 'advanced' often appears. (Bennis & Shepard, 1956:419)

Their proposed model is a phase model in which each phase builds on the former. It is also possible for a group to fall back to a previous phase. The phases have to be completed in consecutive order: a group cannot "jump" to a higher phase.

Tuckmann (1965) and Tuckmann & Jensen (1977) propose a four-stage model containing the phases: *forming*, *storming*, *norming* and *performing*. The first stage is where a newly formed group is engaged in boundary work, testing and dependence. The second stage is characterised by conflict and resistance to group norms. The third stage is where the group establishes roles and norms which to work from. The final stage is where the energy of the group is channelled towards the task and the performance of the group. Later, Tuckmann & Jensen (1977) added a fifth stage into their model: *adjourning*, i.e. the dissolvent of the group. This model is similar to Wheelan's (2005) five-stage model, ending with the termination of the group.

Wheelan's (2005) development model of groups (IMGD, Integrative Model of Group Development) uses a five-stage approach to group development:
- dependency and inclusion
- counter dependency and fight
- trust and structure
- performance and work
- termination

In the first phase the members are dependent on each other and it is important for the members to feel included in the group. The members also need to be informed about what is happening in the group. In the second phase there

is a power struggle in which the authority of the leader is questioned and tested. In addition, the members try to distance themselves from too much inclusion in the group. Norms start to develop regarding accepted behaviours in the group. In the third phase the members of the group are starting to trust each other and a division of labour between the members is developed. The fourth phase is characterised by teamwork in which the members take on different responsibilities depending on the situation. Several of the leader functions may also be delegated or rotated within the team.

The five-stage model is a life cycle model ranging from newborn groups to mature groups, and ending with the termination or liquidation of the group. The present development level of a group is determined by the group development questionnaire (GDQ), which is a self-evaluation taken by the members of the investigated group.

Important in the study of groups is to be aware of the different development stages in a groups life. Groups and their inhabitants behave differently depending on the development stage of the group: "this suggests that researchers should be cautious about interpreting their results without considering the developmental levels of the groups they are studying" (Levine & Moreland, 1990:591) Wheelan & Williams (2003:462) also make this point: "group development theory and research would predict that members of groups operating at different stages of group development would communicate differently." Group composition is an important field of study, particularly the size of a group. Wheelan & McKeage (1993) tested developmental theories on large (>25 participants) and small (<11 participants) groups and concludes that increased group size does not hinder group development. The size of a group, however, can be an obstacle that hinders communication and participation.

Leadership in meetings

Closely tied to interaction in groups is the field of leadership (McGrath, 1997). The leader has great influence on the interaction and on the chosen subjects for the interaction in a group. The leader also has considerably more influence over possible topics and supporting views in the groups than the other participants. Leadership theory therefore becomes an important aspect of the present study. Such theories are found in the field of group research as well as in the field of leadership research. The aim of the study is to look at the *behaviour* of the person who is appointed leader of the meetings and how the behaviour of this behaviour affects the interaction. It is a question of looking at the *leader* and not at the *leadership* of the groups.

One of the earliest publications on leadership may be the study of managerial roles written by the French manager and engineer Henri Fayol in 1919. He defined the functions of the manger to be planning, organising, commanding, co-ordinating, and controlling. His study was translated into English in 1949 and his ideas travelled over the Atlantic to become an inspiration for American leadership scholars. (Jaffee, 2001)

Bryman (1996) identified four approaches to leadership during the 20th century: the trait based approach, the leadership styles approach, the contingency approach, and the new leadership approach. The trait approach focuses on personal and physical traits in relation to leader effectiveness. The leadership styles approach instead focuses on the actual behaviour of the leader. The contingency approach studied the contextual and situational effects on leadership (Fiedler, 1967; Fiedler, 1976). To be effective different situations require different leadership styles. The new leadership has developed into a wide array of different types of leadership and it is sometimes hard to tell the difference between the types. Some examples of new leadership are transformational leadership (Burns, 1978; Bass, 1997; Bass & Avolio, 1993), transactional leadership, servant leadership, authentic leadership (Luthans & Avolio, 2003; Greanleaf, 1977; Avolio & Gardner, 2005), ethical leadership (Trevino et al. 2000; Brown et al., 2005), spiritual leadership, and charismatic leadership.

A common distinction in the literature on leadership is that between *leaders* and *managers*, but why do we need to make that distinction? According to some scholars (Zalesnik, 1977), managers and leaders are two inherently different things. You cannot be both manager and leader. Others (Mintzberg, 1973) have a different view, arguing that it is two distinct processes but that they can be part of the same individual: it is possible to be both manager and leader. Mintzberg (1973) also showed that certain taken-for-granted assumptions on what managers do did not hold in an empirical investigation. According to Mintzberg (1973/1990:163), the taken-for-granted assumption regarding leaders was that "the manager organises, coordinates, plans, and controls." He showed that actually managers spent most of their time talking to others in short staccato meetings or on the telephone.

Schein (2004) defines leadership as creating and changing an organisational culture. This author makes a difference between leaders and managers. Managers do not create culture; rather, they act within a given organisational culture. He thus links organisational culture and leadership into almost the same category: you cannot have the one without the other. Leaders are the ones that create a vision for the group to follow and managers are the ones who manage an already established vision. Managers preserve instead of create.

A more useful distinction is the one between *formal leader* and *informal leader*, where the formal leader has the stripes on his shoulder to show that he is formally responsible for the function and performance of the unit. Formal leaders are leaders who are formally appointed to lead. These persons are both leaders and managers. The informal leader is the person "elected" by the group to lead the unit. Informal leaders are those who take on leadership responsibility in a group situation without a leader. He or she has no formal responsibility for the unit but may have considerable influence on the actions and performance of the group. For Schein (2004), the person who first proposes a solution that works is the one who becomes leader. Thus, in a sense this person is an informal leader. This applies in groups without appointed leaders in the first developmental phase. Such groups would be rare in most work life situations. In established organisations the order of things is often done the other way around. First, you appoint a leader that will be responsible for gathering the group and leading the group. You do not gather seven persons in a room and wait for one of them to step forward and become the leader by proposing a solution to the present situation.

This study is focused on a limited part of the everyday life of the organisation, namely the meetings that take place. This is why the question of leadership is less important and the question of the behaviour of the formal leader is more important. The behaviour of the leader in the meeting situation is important because it is the leader who decides on the form and topic of the meeting. There are established rules in the meeting situation that makes the leader a more prominent figure than the other participants. In our understanding of what a meeting is we have already decided that one person will be the chair of the meeting with the responsibility to call for the meeting and establish the form for the meeting. It is thus inherent in the meeting form that the leader starts and finishes the meeting and if necessary, initiates the discussion at the meeting.

Leadership is often defined in terms of responsibility for resources and communicating a vision to others in an organisation. The leader is the one responsible for the actions of the others in an organisation. Yukl (2006), on the other hand, proposes that culture and leadership do not necessarily need to be linked as closely as Schein suggests. Yukl (2006) uses the term *managerial leadership* to distinguish between formal appointed leaders and informal emergent leaders. Yukl (2006) uses a broad definition of leadership that encompasses both leaders and managers. He also includes the followers in his definition of leadership because there will be no leaders without followers. He does, however, not include informal leaders in that he is mostly interested in leadership within an organisational setting. Accordingly, leaders are formal leaders or managers with a responsibility for leading at least some persons in an organisation.

Drath et al. (2008) reason that leadership theory is moving toward a leadership theory in which the leader serves as resource for the followers and they question the basic tripod model of leaders, followers, and shared goals and mean that modern leadership is more collaborative and peer-like. Modern leadership theory should focus on the co-creation between the leader and the followers and the outcome of such leadership. Three such leadership outcomes are direction, alignment, and commitment. Such collaborative leadership directs by creating "widespread agreement in a collective on overall goals, aims, and mission". It aligns "the organisation and coordination of knowledge and work in a collective" and it commits by creating "the willingness of members of a collective to subsume their own interests and benefit within the collective interest and benefit." (Drath et al, 2008:636) This collaborative leadership resembles the leadership style preferred by Swedish leaders (Backström et al., 2008). Such leadership is characterised by trust, co-operation, empowerment, and consensus. Yet, it is also characterised by an aversion to conflict, fear of decisions, and time consuming processes. Swedish leaders are also not expected to know everything and they are good at listening and taking advice from their subordinates. (Backström et al., 2008)

According to Wheelan (2005), the behaviour of the leader will not influence the group if the group is at a high level of development. In the final stages of development, what some call teams, the leadership functions are rotated and the group will function best if the leader steps back from controlling the group. These groups are not leaderless but the leader does not need to act as a leader for the team. These theories, however, are focused on explaining how a team works and not what a group does at a meeting. In the meeting situation, which is a separate part of the daily work of the group, there has to be a person performing the leader functions of starting the meeting, explaining what the meeting is for, and controlling the structure of the meeting. This is most often done by the appointed leader of the group or unit. In ordinary work groups, which are not considered to be teams the appointed leader automatically has a strong influence on the meeting and how the meeting is going to unfold.

Leadership function at meetings
Yukl (2006) suggests that the leader of a meeting has to balance between being task-oriented and relation-oriented when leading meetings. The task function comprises behaviours such as: process structuring, stimulating communication, clarifying communication, summarising, and consensus testing. The group maintenance function consists of gate keeping, harmonising, supporting, standard setting, and process analysing.

These different functions closely resemble what Jay (1976) calls dealing with the subject and people. Dealing with the subject implies listening and keeping the meeting centred on the subject, clarifying what the outcome of the discussion should be, preventing misunderstandings and confusion, summarising, terminating the discussion, and summarising what has been agreed upon. Dealing with the people involves a leader who controls garrulous, draws out the silent, encourages the clash of ideas, watches out for the suggestion squashing reflex, comes to the most senior people last, and closes on a note of achievement.

Yukl (2006) also presents eleven guidelines for leading meetings that focus on solving problems or making decisions. (Inform people of necessary preparations for a meeting; share essential information with group members; describe the problem without implying the cause or solution; allow ample time for idea generation and evaluation; separate idea generation from idea evaluation; encourage and facilitate participation; encourage positive re-statement and idea building; use systematic procedures for solution evaluation; encourage members to look for an integrative solution; encourage efforts to reach consensus when feasible; and clarify responsibility for implementation)

Closely resembling these guidelines for leaders are Wheelan's (2010) ten behaviours that effective team members should engage in during meetings. Wheelan defines the leader as a team member, i.e. the leader should engage in these behaviours as well. The ten suggested behaviours are:
- don't blame others for group problems
- encourage the process of goal, role, and task clarification;
- encourage the adoption of an open communication structure in which all member input and feedback are heard;
- promote an appropriate ratio of task/supportive communications;
- promote the use of effective problem-solving and decision-making procedures; encourage the establishment of norms that support productivity, innovation, and freedom of expression
- go along with norms that promote group effectiveness and productivity
- promote group cohesion and co-operation
- interact with others outside the group in ways that promote group integration and cooperation with the organisational context
- support the leader's efforts to facilitate group goal achievement (Wheelan 2010:54-70)

Positive organisational scholarship

An emergent field in the study of organisations is the field of Positive Organisational Scholarship (POS). The field is relevant for this study since the LIM is linked to this tradition and since the *positive-negative* dimension of the model is supported by POS theories. POS has taken inspiration from the field of positive psychology from the 1980s. The aim of positive psychology is to seek answers to questions, such as "what constitutes a good life" and "how can we promote excellence?" (Seligman & Csickzentmihaily, 2000; Snyder & Lopez, 2005) Positive psychology started as a reaction to sickness-oriented views in contemporary psychology. Instead of a Diagnostic and Statistical Manual (DSM) of mental illness, positive psychology wants to develop a manual of mental health. The problem with the DSM is that it "has rendered science poorly equipped to prevention" (Seligman, 2005:5).

POS also started as a reaction to problem-centred studies. Many of the studies made in the field of organisational development focused on identifying and rectifying an organisational problem. Instead, the positive movement looks at what makes an organisation (or a group, or a human being) to function well. "[POS] focuses on the dynamics in organisations that lead to the development of human strength, foster vitality and flourishing in employees, make possible resilience and restoration, and cultivate extraordinary individual and organisational performance." (Bernstein, 2003:267) POS looks at the good and functioning things in an organisation and tries to develop theories that help explain the positive side of organisations. (Cameron et al., 2003)

The acronym POS is explained by Bernstein:

Positive refers to an affirmative bias, an examination of phenomena that represent a value orientation toward abundance, elevation, and virtuousness. Organizational refers to positive processes and states that occur in association with organizational contexts. It draws from the full spectrum of organizational theories to understand, explain, and predict the occurrence, causes, and consequences of positivity in organizations. Scholarship refers to rigor, theory, scientific procedures, and precise definition. (Bernstein, 2003:267)

POS should not be just another think positive approach to human life: "POS is not just about looking at topics like self-actualization. It is about structures, cultures, processes, leadership and other organisational conditions that foster positive states and positive dynamics in human communities." (Bernstein, 2003:267)

One example of a POS related approach is AI. AI is originally a change and organisational development process. The idea underlying AI is that good practice and ideas should be made explicit and spread throughout an organi-

sation. The object, therefore, is to find the things that work well in an organisation by asking positive questions. This is done in a four-step process with the aim to illuminate the positive things in the organization and involve all the members of the organization. (Cooperrider & Sekerka, 2003)

The four steps of AI are organized into appreciative conversations which follow a particular structure:

- Step one: discover, appreciate, and value the best of "what is". This step aims to identify the positive capacity of the organization. This is done by an interview process within the organisation which involves both employees at all levels and owners in the change process. This involvement helps the members become aware of the positive things in the organisation.
- Step two: dream, envision "what might be". The aim of this step is to create a vision of a well-functioning organisation. What happens in this step is that the positive inquiry made in the first step inspires the members in the organisation to develop ideas to do things even better.
- Step three: design, discuss "what should be". The structure of the organisation is designed to fulfil the ideas generated in the previous step. It is easier for an organisation to change when they follow a dream. Thus, this is a good way to overcome resistance for change.
- Step four: destiny, determine what should be and how to empower, learn, and improvise. In the early work of AI this step was called delivery, but this made the focus on implementation too strong. The word destiny indicates that it is for the good of the organisation to change in a positive manner. (Cooperrider & Whitney, 2005)

A result of the process is that the organisation increases relatedness to each other in the organisation. As the participants go from problem focus to a more positive inquiry, the room for positive conversation increases and relatedness increases.

According to Bernstein (2003:267), "Positive states and/or positive dynamics […] may lead to extraordinary instrumental outcomes or extraordinary human outcomes or both." This view is consistent with the notion that positive emotions help build personal recourses.

The broaden-and-build theory, as mentioned above, suggests that positive emotions help to broaden and build our thought repertoire (Fredrickson, 1998). Thus, positive emotions promote learning and the expansion of the scope of our thoughts. Negative emotions, on the other hand, narrow the thought-action repertoire. They are focused on a specific threat and on two solutions to that threat: fight or flight. The broaden-and-build theory there-

fore has potential implications for both innovative work and psychosocial wellbeing in the work life (Södergren, 2009).

Relations are important in POS. Relations can be seen as either life-giving or life-depleting (Dutton, 2003). Life-giving relations are meaningful and give energy to the persons involved in the relation. Life-depleting relations steal energy and deplete life. Relations are in the end created by interactions between human beings. Connections can either be favourable and lead to new things or they can be obstructing and blocking or even impair development.

Dutton & Heaphy (2003) and Baker & Dutton (2007) define the quality of a relationship based on its contribution to development. High quality connections (HQC) have three main characteristics: they have a higher degree of emotional charge than the ordinary relations; they have a higher degree of sustainability; and they have higher connectivity, i.e. the degree of relational generativity and openness to new ideas and the ability of the relationship to prevent behaviour that limits this openness. "HQC are characterized by recognition of and responsiveness to the other, and therefore are critical for coordinating highly interdependent work." (Dutton & Heaphy, 2003:279) A similar concept is the concept of "relatonics" which "have process as well as structural qualities, being created and recreated in interactions, in interplay and actions, through conversations and co-acting." (Backström & Döös, 2005:1)

Quinn (2007) defines connectivity as the degree of openness to new ideas and influences, as well as the degree of generativity contained in a connection. People who are aware of each other's existence, but which do not interact, do not have a connection. Interaction rituals occur when people are physically present, have a common focus, and share the social boundaries of their interaction. There is co-ordination between the interaction and energy. Conversations increase feelings of energy if they contribute to increased connectedness, competence, and autonomy. The feeling of energy builds up the mental resources because energy is a positive affective experience (Fredrickson, 1998). Losada & Heaphy (2004) connected the LIM with the field of POS and focus on the type of interaction pattern that signifies high performance teams. The positive category plays a significant role for the interaction pattern and the overall meeting dynamics.

POS thus works as a positive lens in organisational studies trying to identify the functioning of organisations and groups. POS is still an emergent discipline in the field of organisation studies. The positive perspective may be useful in understanding why organisations and humans flourish but the field suffers a risk from being overly focused on the positive and the positive side of organisations.

Summary of the chapter

This chapter presented an overview of research and theories from different fields adjacent to the LIM. The main focus was to present concepts and studies relevant for the study of interaction in group meetings. Theories on CAS and interaction analysis models were presented. Some studies have assumed that the interaction in a group can be a complex adaptive system and the LIM is one example of such a model. The close link with the natural sciences and the graphical presentation mapping interaction in groups makes the Losada framework easy to grasp, even without formal training in mathematics or complex dynamics.

Other theories on group interaction were also presented and one important contributor to this field is Bales. His IPA model has been widely used in the field of small group research. Group development theories and leadership theory were also presented and such theories are closely linked to interaction analysis and group analysis. An introduction to the emergent field of positive organisational scholarship (POS) was also given. This field of inquiry borrows from positive psychology and explores positive strengths in organisations. The field also focuses, as does the LIM, on the importance of a positive emotional climate for the learning and productivity of a group or organisation.

3. Research design and methodology

This chapter provides a description of the research process of the study. The purpose of the chapter is to give an overview on what has been done and how it has been done. The chapter presents the methodological choices made in the research process and starts with a background to the general research project, of which this thesis is a part, and some notes on the development of the research process. The focus of the chapter is to give a picture on how the research process unfolded and what has been done in terms of methodology and method. The analytical process is also described.

The study focused on five groups in the Swedish public sector. The interaction in each group is analysed from the perspective of leader behaviour, participant behaviour, and structure. This analysis is connected to the interaction in the groups, which is presented through the categories of the LIM.

This study is part of a larger research project. Scholars from the field of psychology, business studies, statistics, and pedagogy have been working together to use the LIM in a public sector setting. The project involved observation of public sector work group meetings and training and interaction with the groups. The theoretical base for the project was the interaction model used by Losada (1999) and Losada & Heaphy (2004). The general project, as was this study, was financed by the Swedish insurance company AFA[3].

The general research project included four areas of investigation, one of which was the present study on interaction and context:

1. Is it possible to develop the interaction pattern in a work group? The research team worked together with twelve public sector work groups to determine how groups can develop and train their interaction. The team also made measurements of the communication through a survey completed by the participant groups before and after the training.

2. Which contextual factors are important when looking at the interaction in a work group and how do they correlate with the interaction

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[3] AFA Insurance

pattern? The importance of the context of the meetings and the groups. This is the focus of this thesis.

3. How does the interaction pattern contribute to health and learning? The correlation between communication and factors contributing to psychosocial health. The original LIM study (Losada, 1999; Losada & Heaphy, 2004) linked interaction and performance. In the research project we linked interaction with theories on psychosocial health and wanted to investigate correlations with this field and the interaction in work groups. Empirical [Statistical] data from the groups suggest that the pattern of communication correlates with psychosocial health. (cf. Stöllman et al., forth.)

4. The research team developed tools for training the communication in groups, including a survey for measuring the baseline interaction pattern in the groups. Other material for working with the interaction in a group setting and an analytical framework to help clarify the categories of the LIM were also developed. (cf. Södergren et al., forth.)

The theme of this thesis is the context of the interaction in a meeting situation and the effect of this context on the interaction pattern represented by the LIM. The thesis investigates the correlation between the LIM and three contextual factors during a meeting: leader behaviour, participant behaviour, and the structure of the meeting. Early in the general research project we noticed that even though the interaction pattern is important for the function of the group, other factors in the context and surroundings seemed to be important for how the meetings unfolded. We therefore concluded that we wanted to look further into the correlation between context and interaction. This thesis is the result of that investigation. The goal of the analysis was to determine how the different aspects of context affected the interaction in the groups.

My role

My role in the general research project was as a researcher in the research project team. I participated in the field work of ten of the twelve participating groups. From these ten groups, I selected five for the present study. The criteria for selection are elaborated later in this chapter. I shared the main responsibility for the research process together with one of the other scholars from the research team in eight of the groups. My responsibility involved informing the group before the observations, conducting the observations and the interviews, and giving feedback to the groups regarding the interaction pattern. We also worked together on training methods to be used in the groups. These training methods were then implemented in the groups. Responsibility for the groups also entailed handling all the contacts with the leaders of the groups.

The work in the research team also consisted of preliminary analysis of the recorded material. I participated in developing a framework for coding the interaction used as a basis for observation and interpretation of the LIM interaction. This work will be presented in coming research articles. The research team developed different forms of training used in the participating groups.

The fact that the study is part of a larger research project has several implications for the present study in that the sample of units and the number of selected units were selected within the general research project. The research project was also set to take place in public sector units.

The general research project

This section presents the general research project while the next section describes the design of the thesis in more detail.

Sample of participating units

The sample of groups under study in the general project was based on variation within the Swedish public sector. The groups form a "micro cosmos", mirroring the different parts of the public sector. The units range from the highest leader functions, staff groups, technical oriented units, and education and health care units. Participating units in the project were three hospital units (heart intensive care unit, paediatric unit, and geriatric unit), an elementary school unit, a kindergarten unit, a development unit in the city council, an expert unit, a technical unit, an environment unit, a museum, a manager unit, and a culture unit.

The research process of the general research project

The twelve participating units in the general research project were observed by members of the research team during each unit's ordinary meetings. The work groups were followed for seven to eight work meetings. Before the observations started, the groups were introduced to the LIM and to the research project at an introductory meeting. They were also interviewed in a group interview at the end of the observation period. Thus, the researchers met with the groups ten times during a period of 6-12 months. The research process of the project is presented in Table 2.

Table 2 Research process of the general research project

Step	Procedure	Time
Step 1	Introduction meeting	3-4 months before the first observation
Step 2	Observations, Interviews	Month 1-10
Step 3	Group interview	Month 11-12

- *Step one:* The groups were first introduced to the research project and to the dimensions of the LIM. They were also given the opportunity to ask questions about the project and the option to decide whether to take part in the study. This introduction was the first contact with the entire group. During the introduction, a survey was handed out that the groups filled in and sent back to the research team containing questions on learning and interaction. This survey of the general research project was used to establish a baseline for the interaction in the participating groups.
- *Step two:* Step two involved carrying out the observations in the participating groups. This step lasted for about 10 months and will be described in more detail below. Parallel with the observations, interviews with approximately 60% of the participants were conducted. The meetings were audio recorded and the researchers also took field notes during the observations.
- *Step three:* As a final step, the groups were interviewed in a closing interview. In this interview the groups elaborated on what they had learned during the observation period and gave feedback on the training. The participants were given a second survey based on the questions on learning and interaction. This was done when the work with the group ended.

Interaction and training with the groups
The design of the project involved development and training of the interaction in the participating groups. This was done in the form of feedback interventions and simple communication exercises that were possible to do at the same time as the ordinary meetings.

During these observation and training sessions, two researchers observed the interaction in the groups and took notes on the topic of the meetings and the participants present at the meeting. The researchers gave feedback regarding the interaction pattern with examples from the observed interaction. The idea was to focus of positive things in order for the groups to develop a more balanced interaction pattern according to the dimensions of the LIM. The participants were also given the opportunity to reflect on the researchers'

feedback. Several other practical training methods, apart from feedback, were also used in the groups (Södergren et al., forth.).

Implications for the present study
For the present thesis, this means that several methodological considerations were already included within the project framework. For example the:
- Number of participating units (twelve work groups)
- Number of followed meetings (seven to eight ordinary meetings)
- Training with the groups (feedback and other communication training interventions)
- Initial sample of units (units with different functions within the public sector)
- Public sector (municipal and city council units)
- Theoretical perspective (the LIM and psychosocial health)

On the other hand, I had the freedom to choose:
- Research questions and the research topic (context and interaction)
- Theory and theoretical perspective (the LIM combined with other group behaviour theories)
- Method of analysis (qualitative coding of the interaction)
- Sample of groups from the initial project sample (five municipal groups)

The advantage of working within a larger research team was the opportunity for interaction with the other team members, as well as help in developing the research questions and approach for my investigation. Another advantage was the possibility to take part in several meetings and in several groups. In total I took part in ten groups and conducted almost seventy observations together with colleagues in the research team. These observations helped me to develop the research questions for my investigation and also to investigate the role of contextual factors for what the communication climate looked like at the meetings.

The problem with working in a research project team is that some of the methodological choices were already made and I had no possibility to control these choices. I had to accept that the study took place in the public sector and that the groups were observed for 7-8 meetings. On the other hand, the design of the project gave stability to my own investigation and it made it possible for me to follow several groups for several months, during which I developed the research questions for the present study. The results from this study are therefore a consequence of the work in the project team and in all the participating groups of the research project. The research project is thus an integral part of this study that I could not have done without. The team and the work within the team helped me to develop a way to analyse

my meeting examples in a working manner. The operationalisations of the LIM categories were done with help from the research team. The final operationalisation was chosen by me, however.

Reflexive methodology

Alvesson & Kärreman (2007) argue for a reflexivity approach when working with empirical material. New theories are not found in data; rather they are the result of critical reflection. "The role of [the] empirical material is to inspire the researcher to problematisation of theoretical ideas and vocabularies" (Alvesson & Kärreman, 2007:1265), which is to say we must explore weaknesses of the present theories. To analyse empirical material they suggest that the material is used as a "critical dialogue partner" rather than a haystack in which new theories are waiting to be found.

The term breakdown is used to describe the lack of fit between empirical observations and theory. Such breakdowns provide opportunity to develop new theories. However, before this can be done, careful consideration of other theories and observations must be done. It is thus important to be open to new influences from different fields and different paradigms when developing new theory. It also important to remember that it is necessary make *interpretations* of empirical material: "nothing speaks for itself." Theories are thus a lens through which the world is observed, which implies that parts of the world are not seen through the lens. The role of a theory is, according to Alvesson & Kärreman (2007) to "provide insight, illumination, and understanding." (p. 1267)

It is of no use trying to be neutral or objective when dealing with empirical field work. Alvesson & Kärreman (2007) maintain that it is better to mobilise one's own subjectivity in determining interesting anomalies and thus solid research problems. To make the subjective experience more relevant they suggest that research aiming at developing new theory take advantage of the concept of *interpretive repertoires*. An interpretive repertoire is understood as the skills and knowledge that the researcher is in possession of at the beginning of an empirical study. Two levels of interpretive repertoires can be identified, the deep and the shallow level of understanding. Deep theories are such that the researcher knows well and feels comfortable using. Shallow theories are such that the researcher has some knowledge of, but only on a very low abstract level. The most intriguing results, and thus new theory development, takes place when the researcher is faced with an empirical breakdown that triggers this shallow understanding. In such cases advancing involves developing the shallow interpretive repertoire to a more advanced investigation into the empirical problem.

This study is in accordance with Alvesson's (2011) ideas on reflexive methodology. Because there have been no opportunities to revisit the research sites to carry out further empirical studies, the gathered empirical material has been used over and over again with different interpretations in order to find solutions to intriguing problems.

Alvesson & Kärreman (2007) argue for a mixed research group containing researchers preferably from different paradigms or even different fields of knowledge because this makes it more likely to find new things in the empirical material. When different paradigms meet, reflexivity is encouraged because of the different metaphors used. "The dialogue among framework, researcher, and empirical material should be, whenever possible, multilingual." (Alvesson & Kärreman 2007:1270) This way of working has been done in this research project. For instance, the team has met on several occasions to discuss possible interpretations of the empirical findings.

The work with the empirical material in the research team started early in the process. The team met on a regular basis to discuss questions of interpretation of the concepts of the LIM and we tried to decide how to use the concepts when performing actual observations. We found that we had different interpretations regarding the frequency of the utterances but that the overall pattern of interaction resembled each other. From this, we concluded that the interpretations were adequate to give good feedback. The feedback given to the groups were based on the pattern of communication in the LIM. Similar patterns thus gave similar feedback. When the patterns differed from each other, we first discussed this with the group and then we performed an after-observation discussion of the different interpretations. The next step was to conduct a more detailed coding with the use of the concepts in the LIM. The idea was to develop an interaction pattern describing the interaction in the groups. This proved to be difficult, however, due to difficulties to discriminate between the categories of the LIM when conducting a quantitative coding.

To overcome these difficulties the thesis uses a qualitative approach for interpreting and analysing the empirical material. According to Silverman (2004) (and others), the choice of approach is dependent on the type of research question and the aim of the research. Qualitative research is mainly used when the phenomenon is new or unknown, or when using new methods. The aim of this study is to investigate the interaction in the observed groups by taking the context and the behaviour of the groups into account. Qualitative research is focused on identifying and exploring unknown or relatively unknown phenomena. A qualitative approach means that the nature, or quality, of a phenomenon is investigated. (Starrin & Svensson, 1994)

Another issue concerns generalisation. Generalisation in this study is possible because of the different functions of the observed groups. The breadth in the empirical material should make a certain degree of generalisation possible. According to Yin (2006:28), it is possible to generalise from case studies "when it comes to theoretical hypotheses, but not populations." Because cases are not considered to be sample units, there could be no statistical generalisation. Instead, it is a question of *analytical generalisation* which means that already developed theory is applied to compare results from different cases. Silverman (2006) also makes the point that we often focus too much on formal generalisation (which Yin (2006) calls statistical generalisation). Sometimes it is enough with a single observation to falsify an entire theory, as in the case with the observation of the black swan. That single observation falsifies the hypothesis that all swans are white.

In the present study it is hard, or nearly impossible, to draw a line between the phenomenon and the context of that phenomenon. Because most of the research done in the field of interaction analysis has been conducted in a laboratory setting, context has been "controlled". Losada (1999) studied real-life groups but in a laboratory setting and hence the groups shared a common history and a possible common future. The topic of the meetings under study was also given. Losada tried to isolate the phenomenon by using a laboratory and at the same time allowing room for context in the form of real-life groups.

According to Feldman (1995), data involves recording of events and contexts and work as a reminder for the researcher. The data may also help researchers to discover new things that they had not noticed earlier. Data and the knowledge of the researcher are described as being the same, or at least conterminous. Data are thus "not only notes and tapes […] but also what the researcher knows as a result from the data gathering process." (Feldman, 1995:6) Events that were observed but not recorded are therefore eligible for analysis. If the researcher is able to remember an event that is not recorded it could still be used in an analysis. In this study many insights in the early research process came from observations in ten groups and from the work within the research team.

Research process for the present study

The research process for the present study contained three major steps. The first step was done together with the research team and contained observations of meetings and team discussions. During these observations and discussions, the final research questions started to form. In the second step, which was done both in parallel and after the first step, the research ques-

tions were formulated more definitely and a selection of groups to conduct the rest of the study was made. In the third step the meetings from the selected groups were analysed. Table 3 gives an overview of the research process for this thesis.

Table 3 Overview of the research process

Step one	Step two	Step three
Work within the research project team	Preparing the thesis	Writing the thesis
- Observing meetings *in situ* - Coding in the LIM during the meetings - Taking field notes - Training and interaction with the groups - Conducting interviews - Team meetings and discussions - Learning about the groups - Developing ideas for my own investigation	- Selection of groups - Literature search - Development of research questions - Selection of meetings - Operationalisation of the LIM and research questions	- Analysis of a sample of meetings from audiotapes - Linking empirical findings to theory

The research within the general research project was in the form of an observational and interventional study of interaction in groups. It was during the observational work in several groups that leader behaviour, participant behaviour, and structure first started to be used in a preliminary analysis of the observed meetings. We noted that different interactional patterns in the groups emerged depending on the organisation of the meetings and the behaviour of the leader and participants. We also noted that the groups sometimes engaged in atypical behaviours that resulted in a different interactional dynamic. The gaps in the LIM also pointed towards these three perspectives of enquiry. The researchers in the project team agreed that these theoretical aspects seemed to be of importance when trying to explain and understand the interaction pattern at the meetings. This preliminary analysis and work with the empirical material was done within the research team.

The three perspectives used to analyse the interaction at the meetings were developed in an iterative process that involved going between observations of meetings and search in the literature. Participation in ten groups seemed to point towards the importance of looking into leader behaviour, participant behaviour, and structure when analysing the interaction at the meetings.

This was also supported by the literature. Leadership and group research is closely linked (McGrath, 1997) and most work groups have a formal leader who is in charge of the group and who has responsibility for the performance of the group. The other side of leadership is followership (Yukl, 2004), i.e. both leader behaviour and participant behaviour became an interest of inquiry. Structures are used to help focus, define, and clarify. Structure is referred to as factors within and outside an organisation that help to draw boundaries for the organisational task and to focus the attention of the organisation. Jaffee (2001:6) refers to structures as "boundaries, norms, hierarchy, communications, and coordination mechanisms." In this study I became interested in examining how the structure of the meeting affected the interaction.

In the second step a deeper search into the literature was done on interaction and meetings and I decided to focus on the five municipal units taking part in the study. The observations made it possible to define new questions and hypotheses on the context of the groups and the meetings. This process can be classified as an inductive method in which the empirically grounded observations contribute to an understanding of the process.

Five groups from the Swedish public sector

Five municipal units were chosen from the twelve public sector groups participating in the general research project. I had participated in observations and empirical work in ten of the twelve groups. Of these ten groups, four belonged to the city council, five to the municipal sector, and one was a foundation funded by the state. The investigation and analysis of this thesis was based on the five groups belonging to the municipal sector.

To select the groups to be investigated in this thesis the following criteria were imposed:
1. The groups should represent different functions of the public sector (education, management, control, service, culture), i.e. the groups have different tasks and do different things concerning the clients of the groups.

2. The groups should be placed on different hierarchical levels, i.e. the groups have different responsibilities at different levels within the public sector organisation.
3. The members of the groups should represent different professions (teachers, inspectors, technicians, administrators, managers) and the groups should be responsible for different operations.
4. I should have been present in the groups and had shared responsibility for the research process in the groups within the general research project. This criterion was set to ensure that I had enough background information on the meetings in the groups.
5. Based on the other four above-mentioned criteria, it was natural to exclude city council groups and focus the study on municipal groups.

This selection resulted in a sample of five municipal work groups: Elementary school unit, Environment unit, IT unit, Municipality management group, and Culture office unit. In these five units I had participated in 38 of 40 observed meetings. My first-hand experience from these groups was particularly deep compared to the other five groups of which I had first-hand knowledge. In the other five groups I had participated in roughly half of the observed meetings. The five units also represent different functions of the municipality and can be found at different levels in the municipal hierarchy. Table 4 presents an overview of the selected groups for the present study.

Table 4 Units analysed in the study

Unit	Age of the group[4]	Leader experience *(in the observed group)*	Function of the group	Average size[5]
Elementary school unit	>5 years	>5 years	Education	9

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[4] Age of the group is hard to establish and is here based on the answers given by the participants in individual interviews. In some cases the perceived age of the group differed considerably between participants. I have tried to establish when the group was formed, which is one measure of age, and the stability of the group. If the group has had a stable core of participants for some time, this is the age of the group. In other cases I decided that a new leader arriving to the group marks the birth of a new group even though the group has existed long before the new leader arrived. If the leader has been a participant of the group before becoming the leader of the same group this is not marked as the birth of the group.

[5] The groups differed in size at every meeting depending on who was able to attend the meeting. The true size of the groups, which is the size of the group when everyone assigned to the group is present, is not given here. The table shows the mean size of the groups during seven or eight meetings. The true size is always a bit larger than this real size. The groups thus have a nominal size consisting of the number of employed at the units and that are expected to be present at the meetings. Then there is the real size which is the actual size of the groups at the meetings. This real size is then combined to get the average size of the groups during the year of observation. Each sequence presented in the empirical chapters gives the actual size of the group at the time of the meeting.

Table 4 (Continued) Units analysed in the study

Unit	Age of the group	Leader experience *(in the observed group)*	Function of the unit	Average size
Environment unit	2 years	2 years	Enforcement of environ-mental law	8
IT unit	1 year	<1 year	Service	12
Management unit	1 year	1 year	Executive	12
Culture unit	1½ year	1½ year	Education	5

Working in the research team

As a research team we made an effort to create a common understanding of the recorded meetings and the dimensions of the LIM. Much of the analysis was done in a group setting and this made it possible to immediately validate and test the ideas that were evoked from the material and recordings. These sessions often began with a briefing regarding the group or the issue that was going to be discussed. When the group or problem had been introduced, we either discussed the issue or listened to recordings from the meetings. In terms of validity this analysis procedure would make the results stronger in that they have already been tested once. The team met regularly twice a month in 2010 to test and validate the results and each other's ideas. Between the sessions, individual analysis was performed by the present author on the material. Results from the analysis were presented to some of the groups so they could give their view on the analysis.

Empirical material

The study material included observations, interviews, and informal talks. The material used in the present study was collected between November 2007 and May 2009. Five groups were observed with eight meetings per group. This equalled about three hours of field work per week during the study period. In all, 40 meetings were observed and audio recorded, resulting in almost 80 hours of recordings. I participated in 38 of those meetings. Field diaries were kept on all observations, which were printed shortly after the observations. No audio recordings are available from the two meetings that I did not participate. Each group was followed for about one year from first contact. The observation period varied between five and ten months. The average time of observation spanned over eight months. Parallel with the observations, interviews with the group participants were conducted. The empirical material was later analysed by listening to recorded meetings.

Observations served as the main analytical tool. All of the observations, except three, were conducted by two researchers. In addition to the observations, informal talks were held with the group participants during coffee and lunch breaks. In the Municipality manager group the researchers were invited to eat lunch together with the group, which offered a good opportunity for informal conversations with the participants.

Observations and field diaries

The observations were open observations in the sense that the groups were aware of being observed and that they also knew what the researchers were looking for (Holme & Solvang, 1997). A list of the observations is found in Appendix C.

The groups were observed during their ordinary meetings and each group was observed at eight meetings. The observations were conducted by a pair of researchers and their main focus was to listen to the meeting and code it *in vivo* according to the categories of the LIM. The observers also noted the number of participants at the meeting and the general behaviour of the group. The structure of the meeting was also noted, i.e. how the group went about conducting the meeting. The researchers conducting the observation were usually sitting at the same table as the participants (on some occasions, they were sitting at the side of the table). All meetings were recorded with a digital recorder in order to collect all the data and make it possible for later analysis. The recorder was placed at the table in the middle of the room. Some meeting rooms were too large for this to be possible, in which case, the recorder was placed to catch as much as possible of the conversation.

Interaction with the groups
The researchers were interacting with the groups in the beginning of all meetings, presenting themselves and sometimes giving a brief of their thoughts of the previous meeting. Such feedback was also given half way into the meetings or at the end of the meetings. This feedback was referred to as training by the researchers and was part of the research design for the general research project. The aim of the training was to make the groups aware of their own interaction pattern and to develop the interaction in the groups.

Thus, the groups were subjected to other forces than just the organisational forces during the observed meetings, i.e. they received input regarding their interaction and ideas on how they could change their interaction pattern. This process probably changed their interaction but not to the extent that an analysis of the contextual factors affecting the meetings is rendered meaningless. There are several reasons for this. First, it is possible for groups and

individuals to act or take on certain behaviours for a short period, but not in the long run. The duration of the meetings was at least one hour (in some cases whole days) and the discussions regarded topics that concerned the work of the participants. Second, the groups were in agreement with being observed. They were asked to act naturally and disregard the presence of the researchers. Third, the members of the groups grew accustomed to the presence of the researchers, and, at the same time, became better acquainted with the researchers. Fourth, the groups did not develop a balanced interaction pattern over time; instead, the interaction pattern varied between the meetings, regardless of their place in the series, which could be linked to other contextual factors.

Self-estimates made in the survey that were conducted before and after the work within the research team with the various units indicate that the participants believe they have undergone a small but significant improvement in the direction of the profile Losada & Heaphy's high performing teams' exhibit. Above all, the surveys show that the participants of the groups have become better at balancing the *self* and *other*, are more inquisitive and more *positive*, suggesting that there is a demonstrated impact of the training and intervention activities. However, the qualitative coding analysis of various meetings shows that this development cannot be read as a continuous improvement over time. The interaction pattern in the LIM varies greatly among different meetings and sequences. This large variation gave rise to the need to explore the meaning of the context for the interaction at the meetings.

In conclusion, the groups were influenced by the presence of the researchers and the training but that this influence did not change the analysis of the contextual factors more than any other observational study would have done.

Field diaries
Field diaries were kept on all observations. The aim of the field diary was to keep track of the meetings and gather basic information and communication at the meeting. Each field diary was transcribed immediately after the meetings. The field diary also contained a coding sheet to keep track of the communication pattern during the meeting. The diaries were not open diaries in the sense that all of the events of the meetings were noted. The diaries were theory-driven with focus on the LIM, the context of the group, and the subject matter at the meetings. The analysis of the diaries made it possible to create a chronological narrative of the groups. The field diaries in combination with the audio recordings later became the main material used in the analysis of the meetings. The field diary is presented in a facsimile in Appendix A.

Natural occurring meetings

The groups decided on their own regarding how to organize the meetings and they were asked to conduct their meetings in their normal fashion. Thus, the observed meetings were "naturally occurring groups" (McGrath, 1997), indicating that the groups exist without the interference of the researchers and that the meetings would have taken place anyway had the researchers not been present. In the IT unit the leader introduced new topics for the meetings, which were discussion topics covering non-technical issues. The meetings in the observed groups were all naturally occurring meetings.

Because the period of observation was of such long duration, the units and the organisations often changed between the visits. There were often new participants in the groups and new directives or reorganisations that the groups had to consider at their meetings. This kind of change, however, is a natural part of every organization's life. The long period of observation also meant that the surroundings of the organisation had time to impact the groups.

Observational effects

Observational effects occur when the participants start to behave differently in the presence of observers than they would if the observers were not present. There are two main observational effects. The first is when the participants try to act more "correct" when being observed. They do not want the outsiders to see how they normally behave. The other type of observational effect is when the participants start to behave in a manner that they think will either please or be in line with the focus of the researchers. (Holme & Solvang, 1997) Schein (1998) maintains that everything we do as an outsider in a group setting is an intervention and thus triggers some form of observational effect. It is important to be aware of this phenomenon but it does not automatically nullify the observed behaviour. Several of the participating groups have witnessed that being observed changed their behaviour during a meeting. Most of the participants, however, said that they soon forgot that they were being observed and that it did not bother them to be recorded. It is clear that the groups have changed their behaviour when being observed. How much this observation effect has changed the behaviour of the groups is hard to estimate.

Interviews

To obtain a more solid background on the participants in the groups and also get to know the participants better, interviews were conducted with some of the participants in the groups. The participation in the interviews was voluntary and based on the possibility that the participants had time for interviews.

The groups were asked to self-organise the participation in the interviews. A total of 41 interviews were conducted in the five groups. I participated in 28 of these interviews. The rest were conducted by other researchers participating in the general research project. The result was that roughly 70% of the participants of the five studied groups were interviewed. The interviews were conducted either by two researchers or by a single researcher. In the interviews an open-ended interview guide was used. The interviews were separated into three themes:

- Individual background (general background of the participants and earlier work experience)
- The group (background of the group, how long it has existed, how often they met, and what the interaction looked like)
- The organisation (current events and special features of the organisation)

These interviews serve as a background for the groups giving the history of the groups from the participant's viewpoint and the current events in the organisations of the groups. The interview guide contained 15 questions and one exercise. During the interviews, the respondents were asked to rate their own communication in the three basic dimensions of the LIM. This exercise allowed for discussion to take place on communication in general and the LIM. The respondents sometimes associated freely from the model or gave opinions on other ideas on communication and groups.

The interviews were held at the workplace of the respondents, often in their private office or in a smaller meeting room. The interviews varied in duration (from 30-90 minutes). All interviews were audio taped. Instead of transcribing the interviews in full length I listened to the interviews and noted sections that were found to be of substantial value. These sections were then transcribed verbatim. An advantage of open-ended interviews is the possibility to ask follow-up questions and pursue different paths depending on the background of the participant (Holme & Solvang, 1997). A complete list of the interviews made in the five studied groups is found in Appendix B.

All of the leaders of the groups were interviewed and these interviews tended to be longer than the other interviews.

Informal talks

In several groups I had the opportunity to have informal talks with the participants in the groups before (and sometimes after the meetings) the meetings started. In one of the groups, the Municipality management group, the researchers were invited to eat lunch with the group at their full-day meetings. This was an excellent opportunity to have informal conversations with

the participants and to ask questions regarding current events in their organisation and group. In other groups the leader sometimes stayed after the meetings to talk and evaluate the meeting. This was an opportunity for the leaders to get some personal feedback and the possibility to reflect on the meeting. At the same time, this allowed me to learn more about the group and the organisation. Sometimes during the meetings when we did not understand a term or an issue, we asked the group what they meant. In these informal talks I took what Bryman & Bell (2007) call the apprentice role, i.e. the observer uses the fact that he does not know everything about the organisation and that he needs help to understand what is going on. Informal talks were also a way of getting to know the personalities of the participants outside the group sessions. Some people get anxious talking to groups and are more comfortable in one-on-one situations.

Taken together, the three sources of the empirical material (observations, interviews, and informal talks) provide a broad picture of the groups and how they have communicated during the meetings.

Ethical considerations

Ethical consideration is of great importance in any research, especially in dealing with close observation of people in their work environment. All the meetings and interviews were recorded digitally. This makes it important for the respondents to have confidence in the researcher to handle the material with consideration and care.

Because all of the meetings were recorded, ethical issues must be taken into account. During the observations, a good deal of irrelevant information in relation to the study was automatically gathered and this information had to be handled wisely. We promised the participants not to spread the information or let any outsider listen to the material. In the Elementary school unit this was an issue in that their discussions often involved children attending the school and their parents. We also emphasised that the focus of the study was more on the structure of the communication rather than the actual content. Content is of course of interest here but not the specific content. I feel confident in describing a meeting and telling the readers what was discussed in terms of content but not individuals who were discussed.

Another ethical issue is how we should handle conflicts and other group or personal aspects found in the observed groups. The chosen tactic, which was thoroughly discussed in the team, was to ignore these factors until the individual concerned asked for help. In this way we avoided the problem associated in engaging in individual interventions that were not asked for and we

could focus on the behaviour of the groups and not the behaviour of the individuals. The feedback given at the interventions was also given in a group setting. We did not address or point out individuals when giving feedback. It happened that individuals would ask for feedback regarding their specific behaviour and in these cases we obliged them but not in the large group setting. Such feedback was delivered or discussed either in the interview session or in another scheduled session. When giving such feedback, we focused solely on the interactional behaviour of the participant. We did not enter into any psychological discussions.

It is important to protect the participants in the studied groups by making the material anonymous, which can be done by omitting the names of the participants and the municipalities where the groups are active. Because the study was known to be conducted in the municipalities and at the specific units, it is still possible for persons in the close surrounding of the group and who were aware of the study taking place in their organisation to deduce which groups are presented and who is saying what in the presented sequences. I have not discovered any good solution to this problem. However, the groups have changed since the study was undertaken and they do not exist in the same form and with exactly the same members as when the study was conducted. The basic idea is to keep as much contextual information as possible such as the branch of the units and what the everyday life of the units look like. I have also wanted to give a short historical background to the groups, making it possible from these accounts to guess the identity of the units.

Making sense of the LIM

Interaction models observing behaviours in groups have some common and agreed upon features to make them useful as observational tools. The most fundamental feature of such models is the mutual exclusiveness and exhaustiveness of the chosen dimensions in the model. (Bakeman & Gottman, 1997) Consequently, only one behaviour is supposed to be captured by only one category in the interaction model, i.e. it should be impossible to double code any behaviour. Another feature of these interaction schemas is the number of categories. The literature (Bakeman & Gottman, 1997) recommends no more than six categories. More than six make it hard for the coder to place the behaviour in a category.

With this background, what can we say about the LIM for capturing interaction in teams? The model uses six categories arranged as three bipolar dimensions, but the coder still has to choose from six categories when observing the interaction in a group. Are these six categories mutually exclusive

and exhaustive? In my view there are several overlaps between the categories making it hard to discriminate between them. These insights come from several hours of coding in the model and from meetings with the research team. The research team struggled to find a way to code the interaction of a group according to this model and the difficulties started with the first operationalisation of the categories.

First, we had trouble discriminating between the categories of *advocacy* and *self*. We could not really decide whether an utterance was supposed to be coded *advocacy* or *self* when it contained both references to the person speaking and was a presentation of a viewpoint of the person speaking.

The next issue in the coding process is the category of *other,* which proved to be hard to operationalise. The boundaries of the groups are of importance here, but where should they be drawn? For example, in trying different boundaries for the *other* category we discovered the impact of these operationalisations on the overall outcome of the observations of the interactions in the groups. First we tried, going against the definition of the model in the articles, to have a narrow definition of the dimension *other-self*. Using this definition the persons present in the room were seen as self and everyone else not present in the room where seen as *other*. This proved to be a fruitful definition and made it rather easy for the coders to hear he differences between *other* and *self*. Because this definition was quite far from the original definition, we wanted to see what would happen if we applied a wider definition of *other*: the entire office of the organisation which the group was a part of. We still did not want to use the original definition defining the entire organisation or company as *self,* which in this study would entail including the entire municipal organization into the category of *self*. This definition would not be a fruitful operationalisation. These different definitions proved to have a major impact on the outcome. How should one define the definition of *other* and *self*? There is no clear answer but it seems that the model is not very good at discriminating between the categories.

The dimension of *positive-negative* proved to be the easiest one to discriminate between but we had some difficulties here as well. First, when should an utterance be *positive*? Is it every positive sound made by the participants or is it a concrete positive feedback in the form of appreciation? The *negative* dimension was easier but the problem was that we had trouble finding any negative comments in the observed meetings. This could be a peculiar result from our observations and not linked to the difficulties of coding in the model. Swedish public sector meetings are perhaps not coloured by emotions at all. This in turn points to some implications and questions the usefulness of the model in other context than the original one. More on this matter later.

Another problem we had was what is called interjections in grammatical terms (i.e. short words such as yes, oh, and the like). In which dimension should these be coded? The model is supposed to capture all verbal interaction in a group, including these little terms. But we could not find any place for them. Should we code them as *advocacy*, *inquiry*, *positive* or *negative*?

What conclusion can we draw from all this? My conclusion is that the categories of the LIM do not seem to be mutually exclusive and exhaustive, suggesting that the model has some flaws or that the description of the model in the articles is not thorough enough to make it possible to recreate the categories. There could be several reasons for this lack of information in the articles: a lack of space in the articles and/or not enough space to present every little piece of data and information in a research article. The model, on the other hand, is well grounded in the literature.

The strength of the LIM is its firm grounding in organisational theory and complexity theory. The LIM has also been proved to be useful as an easy way to describe the interaction in a group and as a feedback tool of the interaction. The LIM has high face validity and the model is firmly grounded in the field of organisational studies. It is also built on earlier models, but developed further into complexity theory and positive organisational studies.

In this study the LIM is used as a conversation model and as a descriptive tool for describing the interaction in a group meeting. This is referred to as qualitative interaction analysis to distinguish it from a strict quantitative coding of verbal utterances. The analysis model used in this thesis looks at the interaction by scoring the interaction in the LIM and presenting the scored interaction pattern in a graphic model.[6]

They main difference between this type of interpretive coding and a strict quantitative coding is a temporal one. In a strict coding schema each meeting would be segmented into short units of time and all utterances during such a time unit would be coded into the model. When doing an interpretive coding, the time frame of the interaction is changed. Several minutes of information giving are interpreted as being *advocacy*, but I give no count of how many *advocacy* statements there were during these minutes. The advantage of such an interpretation is that the actual count of the statements becomes less important while the impact of the statements becomes more important. *Inquiry*, for instance, is often made by asking a short question. This would only give one count in the strict coding approach and the answer to the question may be long and elaborate, which would give several counts of *advocacy*. The balance between *inquiry* and *advocacy* would then be unbalanced towards

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[6] See page 71.

advocacy, even though the question gave the interaction and the meeting a whole new turn.

Operationalisation of the research questions

Borrowing from Alvesson & Kärreman (2007), I see theory as a lens that helps to illuminate the studied phenomenon and helps to share insight about it. Such a view implicates that a choice has been made regarding possible findings. With a lens you only see the colours that the lens are sharpened to see while all other nuances are lost. This means that choosing a theoretical perspective is a critical choice for the results of a study.

The three aspects of group behaviour used in this study are leader behaviour, participant behaviour, and structure of the meetings. The research questions focus on how these three contextual aspects affect the interaction pattern at a meeting. To conduct an analysis the research questions needed to be operationalised. By using these particular aspects, the possible results of the thesis have been narrowed down. The following sections explain the operationalisation of the research questions.

Structure is operationalised as the *infrastructure*, the *content*, and the *setting* of a meeting. *Infrastructure* implies the rules and procedures of a meeting, such as protocols, agendas and a list of speakers. Schwartzman (1989) includes how a meeting is conducted and what the rules for the meeting look like in the meeting form. *Content* looks at the topic of the meeting and the purpose of the meeting. *Setting* looks at what the meetings look like in a spatial sense, how the group is formed around the meeting table, and what the meeting room looks like.

Thus, structure covers how the meeting is conducted, what the meeting is about, and how the group is placed in the meeting room. Questions regarding structure: What is the form of the meeting? How do the members do what they do? What type of meeting is it? What do they do during the meeting? What does the physical structure of the meeting look like?

Leader behaviour is defined as the behaviour of the appointed leader of the group. Leadership is defined as *managerial leadership* using a term borrowed from Yukl (2006). In this definition the leader is the person the group expects to perform the leadership role at the meetings. Leadership is in this study regarded as a specialised role in a group setting. No distinction is made between leaders and managers: all of the appointed leaders in the groups are referred to as leaders in this study. Thus, leaders and managers are considered the same person in this study. All of the participating units belong to

larger organisations and all of the participating groups have a formal appointed leader.

Leader behaviour examines leader activity during the meeting sequences. It looks at what the leader does in terms of communication and controlling the meeting. Leader behaviour tries to discover how the activity of the leader affects the interaction pattern in the meetings. What does the leader do? What effect does this behaviour have on the interaction pattern in the LIM?

Participant behaviour focuses on the behaviour of the followers in the groups and on the activity of the participants at the meetings. It is especially sensitive to the active contribution of the participants at a meeting. The participation aspect is both a part and an effect of leader behaviour but it also has an impact on the communication of a meeting. I also study the number of participants that are active during the meeting. What do the participants do? What effects does this behaviour have on the interaction pattern in the LIM? Table 5 describes some of the operationalisations of the research questions.

Table 5 Leader behaviour, participant behaviour, and structure

	Description	Procedural/Activities
What is the leader doing?	• Informs or argues (*advocacy*) • Asks questions (*inquiry*) • Gives positive comments (*positive*) • Gives negative comments (*negative*) • Talks about clients (*other*) • Talks about the group (*self*)	• Starts the meeting • Finishes the meeting • Distributes the floor • Asks for silence

Table 5 (Continued) Leader behaviour, participant behaviour, and structure

	Description	**Procedural/Activities**
What are the participants doing?	• Inform or argue (*advocacy*) • Ask horizontal questions (*inquiry*) • Ask Vertical questions (*inquiry*) • Give positive comments *(positive)* • Give negative comments (*negative*) • Talk about clients (*other*) • Talk about the group (*self*)	• Signal the intention to talk • Talking: one participant talking • Silent • How many take part in the discussion?
What does the structure of the meeting look like?	• Infrastructure: rules, procedures, form, agenda, notetaking • Content: topic, purpose • Setting: physical organisation, seating, type of room/furniture	

The leader and the participants may thus give information to the group, come with an argument, ask a question, deliver positive feedback or comments, deliver negative feedback or comments to the group, talk about the clients, or talk about the needs of the group. The leader has the further responsibility of leading the meetings, and he may start the meeting, finish the meeting, distribute the floor in the group, ask for silence, and decide and explain the form of the meeting. These are the basic meeting control functions.

Working with the empirical material

The general approach of analysis was divided into two major steps, where the *first step* focused on exploration and idea generation. I started working with the empirical material by listening to all the recorded meetings and taking additional notes. The field diaries were used in this step to compare the insights from the meetings and refresh the memory of the listener. The field diaries contained information on the number of participants, the subject

of the meeting, starting point and end point of the meeting, the location of the meetings, the communication pattern at the meeting, the feedback given, and some general reflections. The first step ended with the selection of three sequences from the five units under study.

Each sequence was sequence was chosen based on the three perspectives used in the study: leader behaviour, participant behaviour, and structure of the meeting. Based on these three perspectives, I choose sequences that put particular emphasis on one of the three perspectives. In some sequences the meeting behaviours and structure are typical for the group based on the entire series of observed meetings. This focuses on what an "ordinary" meeting looked like and how the group behaved on such occasions. In other sequences the behaviours are atypical for the group. Atypical situations may work as a defining moment for a group's identity. In such instances the true identity of the group is revealed more clearly. The fifteen empirical sequences are presented in Appendix D and Appendix E with a title of the sequence and a short description of which perspective the sequence focuses on.

In the *second step* three selected sequences from each unit were listened to again and analysed with the use of the operationalisations of the LIM and the research questions. The analysis procedure was to re-examine shorter sequences from the described meetings in the first step. These sequences were analysed in more detail. Focus was on describing the events of the meetings and to comment on them according to the perspectives of leader behaviour, participant behaviour, and meeting structure. The meetings were bracketed into smaller segments of 8-40 minutes depending on the length and development of the meeting. A basic bracketing strategy was to portion the meeting when the participants changed subjects or when there was a significant change in the communication at the meeting, or any other natural break such as a coffee break or a new head speaker. This is referred to as "natural units" (Hare, 1973).

Establishing the interaction pattern: Qualitative coding in the LIM

The LIM captures the interaction pattern of the meetings and the research questions examine how the participants and the leaders behave at the meetings and how this affects the interaction pattern. In this study the LIM is used as a conversation model using a qualitative interpretation of the interaction pattern in a group.

When assessing the LIM interaction pattern, each sequence was scored by two researchers. The researchers scored the sequences independently and before the final estimate was set, they exchanged the assessment and read and mediated upon each other's comments. This allowed us to interact to some extent with our opinions regarding the meeting, and the estimate and understanding of the sequence deepened as we openly discussed and willingly listened to arguments that looked at the sequence from another perspective. The final score was then set as negotiated coding agreement (Garrison et al., 2006).

When deciding on a score, three basic criteria were considered: *frequency*, *amplitude* and *relevance* of the utterances. Each category was assed using these three criteria. *Frequency* refers to the number of statements, i.e. a subjective interpretation of quantity without it being necessary to go into any exact numbers. *Amplitude* is the strength of the statements, i.e. the commitment of the utterance and if the utterance has high or low value of importance for the speaker. *Relevance* refers to the relevance of the utterances in relation to the topic and purpose of the meeting and the overall goal and task of the group. Wheelan (2010) uses the term *work statements* and *subsidiary statements* to differentiate between statements that are focused on the task and those that are not task-oriented. After these three criteria had been established in all the categories of the LIM, an adjustment was made according to the relative balance between the categories. This was done considering the basic idea of the LIM with a balanced interaction. Table 6 shows how the concepts of frequency, amplitude, and relevance were used.

Table 6 Frequency, amplitude, and relevance of an utterance

Frequency	Amplitude	Relevance
How often is the category used?	How important is the utterance for the speaker?	Is the utterance relevant for the topic of the meeting?

The categories of *positive* and *negative* comments were also assessed using frequency, amplitude, and relevance, but here we included the atmosphere into the assessment. Was there an open communication climate during the meeting? Was there an expression of open or indirect hostility in the interaction? Did the group share laughs together? Such atmospheric judgments were made to score the categories as *positive* or *negative*.

To make an assessment of the interaction pattern a scale from 1-10 was used in each category of the LIM. The scale was divided into three levels defined as follows: (1-3: low level) "non-existent or weak signal in the group", (4-6: moderate level) "there is a signal from some or several of the participants in

the group", and (7-10: high level) "distinct signal in the group". Table 7 shows how the scoring levels were defined and how the participation rate affected the scoring at each level.

Table 7 Scoring the interaction of the groups

Step	Definition	Participation rate
1	"non-existent signal"	Low
1-3	"non-existent or weak signal"	Low
4-6	"there is a signal from some or several in the group"	Medium
7-10	"distinct signal in the group"	High
10	"clear and distinct signal from several in the group"	High

When the participants just occasionally use the category or not at all, this is scored as 1. A rating of 10 indicates a "distinct and clear signal from all of the participants in the group", i.e. several (more than two) of the participants use the category several times during the meeting. Participation rate thus became a criterion in the highest (7-10) and the lowest scale level (1-3). More than just one or two participants need to be active in order to be ranked in the highest level, and if only one or two persons are active the score will be in the lowest level.

The participation rate in the discussion was decided to be of significant importance in order to score high in the model. In theory one or two persons talking during a meeting could create a perfect balance at a high level in the LIM, even though so few participants are not taking part in the discussion. A person skilfully using the categories of the LIM could even create a perfect pattern at a high level in a monologue. This situation was thus considered inappropriate and we decided that the relative participation rate was important to score high in the model. The important thing was to treat the LIM as a conversation model which implies that a conversation needs to actually take place.

The scores are presented in a spider-web diagram to give a graphic presentation of the interaction pattern during the analysed sequences. The ideal interaction pattern is presented in Figure 2. In the diagram there is a balance between all the categories of the LIM at the highest level (10) and the ratio between positive and negative comments is set to 6 to 1 (10/1.75=5.71). The diagram should be read looking at the scores for each category and by looking at the balance between the bipolar dimensions of *advocacy-inquiry*, *other-self*, and *positive-negative*. The diagram thus illustrates the interactional dynamics of the scored sequence as well as the balance between the

dimensions. The spider-web diagram is an alternative graphic presentation of the interaction pattern in the LIM based on a qualitative coding procedure. The procedure builds on the categories of the LIM but is does also include participation and commitment.
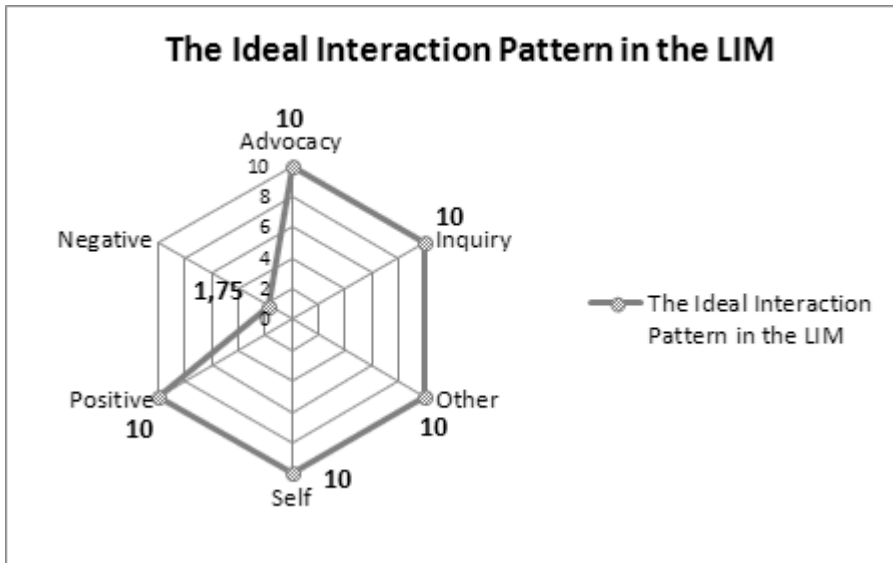
Figure 2 The ideal interaction pattern in the LIM

The assessment of the interaction pattern is referred to as qualitative coding in the sense that two researchers have done a common interpretation of the interaction pattern for the sequence. The joint coding is thus not a validation in the strict sense. The researchers were not isolated during the coding and did not calculate any correlation values (e.g. using Cohen's Kappa (cf. Bakeman & Gottman, 1997)). Instead, the researchers worked together on an estimate discussing and reasoning together to create the final assessment of the interaction pattern that both researchers could accept and thought was a fair description of what they had heard during the sequence.

The estimate is thus based on two researchers focused listening of the sequences. The team thinks that these estimates fairly describe what happened during the sequences. The reconciled coding took advantage of the knowledge that exists within the research team regarding the LIM.

Each recorded sequence has been analysed in two steps, where the first step was to establish the interaction pattern in the LIM for the sequence. This was done by two researchers. The second step was to connect the interaction pattern with the behaviour of the leader, the behaviour of the participants, and the structure of the meeting. The analytical work was done from audio

recordings and supplementary transcripts of the sequences. This second step was done by the author.

Description of the meetings
A basic type of presentation of the empirical material and the empirical findings is description. An important choice here is which type of description and how detailed the description should be. In this study I have chosen to use a combination of description techniques, the first being a descriptive background to the groups and the second a sequential description of the events for a selection of meetings. The description of the meetings and the behaviour of the participants at the meetings are based on field notes and the recorded tapes of the meetings. The field notes give a first glance of what is going on at the meetings and the recordings help to highlight different types of behaviour observed. The description of the meetings forms a narrative that both gives the subject and setting of the meetings and the main interactional events during the meetings. The narrative focuses on what the participants are discussing and how the meetings are conducted. The idea with the descriptions is to give examples of meeting behaviours that seem to be important for the interaction and to show different aspects of the local context in which the interaction is taking place.

When describing something, you have to omit different aspects of the described situation. It is impossible to describe every detail of a situation or a physical place. Thus, I was forced to choose which details are important and how they are going to be described. Bases on the purpose of the study, I chose to focus on four descriptive components of the meetings. These are the same building blocks used in the conceptual framework for the study: leader behaviour, participant behaviour, structure of the meetings, and the LIM interaction pattern.

Finding and writing a story are the two major steps in doing qualitative research. The first step is to find a story that needs to be told and that will shed light on the phenomenon in question. It is clear that this step involves analysis: which story to choose and how to present it is the first step in the analysis of the material. This also implies that there can be no separation between analysis and observations. The analysis is an on-going process staring on the first day of observation. The next step is to write a story that presents the material such that the participants would recognise themselves in the description. This is sometimes referred to respondent validation (Silverman 2006). Silverman, however, notes that respondent validation is not a good method of validating qualitative research and instead he proposes the use of analytical induction. Analytical induction refers to the testing hypotheses generated from the research process. This is done by using the constant comparative method, deviant case analysis, and comprehensive data treat-

ment. The constant comparative method is used to test provisional hypotheses by finding other cases and comparing different groups. Deviant case analysis seeks out and addresses deviant cases in the data. Comprehensive data treatment means that all data are used in supporting the claims of the research. These approaches has been used in the present study, especially the constant comparative method was applied when analysing the interaction in the groups.

Limitations

Analysing from tapes has two major disadvantages. One disadvantage is the sound quality of the tapes. It is not always easy to hear everything that is said on the tapes. The sequences that were analysed were for this reason transcribed verbatim so that the listener could check who was talking and what they said. Another disadvantage is that all other on-going interaction is lost. It is not possible to see how a message is received if there is no verbal comment. It is also hard for an outside observer who has not been at the recorded meeting to make sense of the meeting just from the tape. Important surrounding and background factors at the meetings are then lost. However, the fact that I had first-hand experience from the groups made this disadvantage less serious. The field diaries were also useful when creating and understanding the background of the sequences.

The scope of the study is limited to formal meetings. Looking into the interaction at all encounters in an organisation would be of interest. The communication at the meetings may not be representative for the communication at other meetings or at other situations in the organisation where other situations and other meetings probably would have a different interaction patterns.

Summary of the chapter

This chapter gave an overview of the research process and methodological choices made in conducting the study. The study uses observations, interviews, and informal discussions as its empirical sources. The observations were conducted in five Swedish public sector groups. The groups were followed and observed over seven or eight formal meetings. To analyze the interaction at the observed meeting the categories of the LIM were used. This analysis was made in a qualitative estimation of the interaction pattern in the groups.

4. The Elementary school

This chapter, together with the following four chapters, introduce the observed groups participating in the study and gives sequences from three observed meetings from each of the groups. These five chapters make the empirical core of the study and the meeting sequences in the groups are described and analysed.

Each chapter introduces the groups and their meetings. Each group is presented in three meeting sequences showing examples of the three studied contextual factors of the thesis: leader behaviour, participant behaviour, and structure of the meeting. The presented sequences are also analysed and scored with the use of the qualitative interaction analysis model developed in the previous chapter.

Introduction

The Elementary school unit is a municipal elementary school in a larger municipality. The school consists of classes ranging from kindergarten up to the sixth grade. The area in which the school is situated is a socially mixed area with many residents of a foreign background. The work of the school consists of taking care of the education of the children in the different age categories as well as keeping them in the school after the classes are over. This part of the work is done in the recreational centre that takes care of the children before and after school.

The group and the participants

The group observed is called the development group of the school and their focus is to think of the long-term development of the school. The group meets once a week, usually afternoons between 14.30 and 16.00. The average length of the meetings is one hour and fifteen minutes. Those who participate in the group are team leaders[7], union representatives, and the principal and vice principal of the school. The participants at the meetings are either responsible for a team of teachers in the school or representing the

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[7] Swedish: *arbetslagsledare*

teachers union. The participants are called development leaders. The average group size during the meetings is nine persons, including the leader. There are several layers of leadership positions at the school, ranging from head principal, vice principal, and team leaders. The responsibility of the team leaders is to organise the work of a team of teachers.

The group formed at the time (about 2000) when the current principal started to work at the school. The primary focus of the group is to "look into the future" and try to prepare the school for coming changes. The idea behind the group is to have a group that could plan for the strategic future of the school. The role of the group is to be able to plan ahead several years and not focus so much on the present situation in the organisation. The disposition of the group has changed somewhat over the years but the basic structure of the group is still intact. The group is especially focused on development and long-range planning. A second group at the school, with almost the same participants, known as the leader group, focuses more on implementation and the weekly operations of the school. This gives the development group an opportunity to focus on strategic planning and thus the meetings focus less on details and more on how the school should meet the future.

The participants think that the group is a well working group:

"You never enter a meeting feeling anxiety. It is a positive school, but it is situated in a tough area. It is hard to work here. /…/ [The leader] is good at spreading the positive things in the organisation." (Interview no. 32, 2009)

The same participant also comments on the meetings:

"The meetings are limited in time and [the leader] is good at interrupting the discussion and focusing on the topic at hand. The meetings give us an opportunity to think things through." (Interview no. 32, 2009)

The venue of the meetings

The meetings take place in one of the ordinary classrooms. In one corner of the classroom there is an oval table used by the pupils in group assignments and it is at this oval table that the meeting is conducted. The classroom has three doors, one is leading to a smaller group room, one is the entrance leading to the hall where the pupils hang their jackets, and one is leading out to the school yard. The leader sits at one short end of the table and the others gather around her. The participants usually sit at the same place around the table. The vice principal, is for instance, always sitting on the left-hand side of the leader. The observers are sitting a few paces away from the table. No overhead or other technical equipment is used during the meetings. The class

room, with the small benches for the pupils, gives the meeting an intimate character. (Figure 3 shows the meeting room).
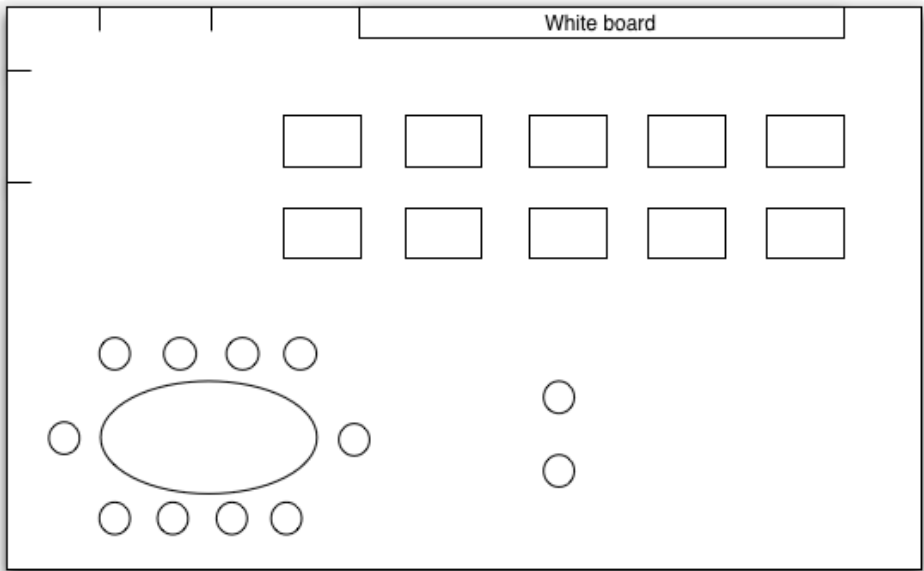
Figure 3 The meeting room of the Elementary school

The meetings contain two separate parts, one information part and one discussion part. The information part is the formal part of the meeting where the protocol from the previous meetings is discussed. The meetings usually start with a briefing from the principal and then they normally have one or two discussion topics to cover. The meeting usually goes through three distinct phases in addition to the forming of the group and the closing of the meeting. These phases are a formal phase in which the protocol is discussed and the participants are given an opportunity to add points to the agenda. The second phase is the distribution of a written handout and the silent reading of the handout. The third and longest phase is the discussion of the handout. The phases in the meeting are summarised below:

1. Gathering during small talk between the participants
2. Opening of the meeting, a quick review of the protocol from the previous meeting, and additions to the agenda
3. Distribution and silent reading of the handout; the leader introduces the topics
4. Discussion of the information in the handout
5. Closing of the meeting

The leader of the group

The leader of the group has a background in child care and has worked her way up within the municipal educational system. She started as a child care taker, then became responsible for a kindergarten and then vice principal, and finally, head principal at the current elementary school unit. She has been head principal at the school for ten years. The principal of the school showed an interest in group processes and group and leadership theories and had been taking part in several leadership courses.

The leader describes her philosophy of leadership which in part is inspired from a soccer coach she used to play for:

"[The coach] always had the best team on the field. And that's a mind-set. I also work in that way. You always have the best team, the best pupils, and the best staff. Many coaches have the best players on the team injured or on the bench and they always have a lot of excuses. Many coaches are waiting for victories that will give the team self confidence but [he] developed a self-confidence in us, and that's why we won. /…/ I try to do that as well. All the players I have, so to speak, are different and they are good at different things and you need to lift them what they are good at." (Interview no. 30, 2009)

The leader is focused on the mission of the school, which is to give the pupils a solid education. She says, "it is the mission that is important" and that the mission should decide how the school is organised and how the work is done at the school. The leader keeps a forward looking approach to her leadership of the organisation: "I'm not so much for history – I want to look to the future." (Interview no. 30, 2009) She goes on to say:

"We are working by watching what others do and I work a lot by reading research papers and watch and learn from that. It is clear that this will be subjective: it is me who decides the things I think are good. That's what I sell but I'm a damn good salesman. And that's what it's all about somehow being a leader- that you believe in what you're doing." (Interview no. 30, 2009)

She also means that by looking forward and being informed you are able to work proactively instead of being surprised and working reactively to changes:

"I don't want to be affected by life, I want to affect life. Then you are in control and you can decide for yourself what to spend your energy on. It is a loss of energy to be surprised all the time when decisions are made that you really ought to know about but don't, such as decisions that were taken two years ago." (Interview no. 30, 2009)

The group remained stable during the entire year of observation, which makes it unique compared to the other participating groups in the study. The school went through many changes during the year, particularly regarding the number of pupils in the classes at the school. These changes were discussed at the meetings, and sometimes the group was ahead of changes that were planned for the coming year, or even the year after that. An example of such forward planning was the fact that the group already prepared for and discussed the coming changes discussed in the parliament. A proposal had been made in the parliament but nothing was decided yet. Even so, the group, or at least the leader, had read the proposal and decided to prepare some reactions to it. This was just a proposal waiting to be handled in the parliament and not any new directives, but the group was nevertheless preparing for the future. As the leader said: "I plan to live in the future, and therefore I make plans for it" and "it is always a loss of energy being surprised" meaning that it was better to be informed about events after the fact.

Meeting sequences in the Elementary school unit

Sequence one: Discussing parental critique

In this sequence the leader plays a major role for how the meeting unfolds. The leader monitor and controls the meeting and reminds the participants of the agreed upon rules for the meeting. The group organises the meeting by distinctly separating idea generation and discussion.

At this meeting the group had a specific problem to discuss, or as the leader calls it, a "burning issue". After a few fast comments on the previous protocol and some other general points on the agenda, the group begins discussing the problem that many children are leaving the school for other schools in the area. The discussion is focused on one specific pupil whose parents have written a letter explaining their decision. The parents wrote this letter on a request from the principal who wanted to have more information on why the pupil had changed schools. The headline on the agenda for this discussion is called "parental critique". As a way of bringing order to the discussion and letting all of the participants have their say, the meeting starts with letting all the participants read the mail from the parents and write down their thoughts regarding the mail. After about ten minutes of silent reading, the group members shared their thoughts with each other. The leader of the group made clear that there should be no discussion, only reflections. There are ten persons participating in the meeting.

At the beginning of the meeting, the leader presents the issue and asks one of the participants to stop reading the mail she has distributed in the handout. She also explains the form of the meeting:

"I do not want you to read these e-mails yet." The leader says looking at one of the participants that had started to read the handout. The participants answer "ok" and put down the paper. The leader goes on to explain what the meeting will look like:

"We will begin with the agenda and then take some time [to read through the handout]. The idea is that when we get to this item, that you read through the e-mail and that you get some time to reflect on what you think about it based on the questions that I have written. Then we make a round robin. Everyone's opinion should be heard. Then we will have a discussion."

The leader continues and quickly covers goes on to the first formal items on the agenda. When they have covered the first items on the agenda and reached the item called "parental critique", the leader once more reminds the group on the form of the meeting:

"The important thing is that you read both e-mails, consider them and write down some thoughts. Then we will do a round robin [to hear] regarding your thoughts, and then we will have a discussion. Everyone will get a chance to share their thoughts with the group. It is important that all are present."

After the group has read in silence for about ten minutes, the leader breaks the silence and once more reminds the participants about the form of the meeting. When the first participant starts to express more than just reactions, the leader immediately interrupts her and reminds the participant that there should be no discussion:

"We will do a round robin to hear everyone's thoughts and everything is supposed to be put on the table." The leader turns to the vice principal and asks:
"Can you take some notes and write down the thoughts that come up." Then she turns to the participant sitting nearest on her right and says:
"You can start then, [name]."
"The first thing that struck me when I read this was that the parents were lulled into some sort of security when they were here with their child and looked [at the school]. But that's not it. This is very alarming. I think that's what they write… and this is something that… we must do something about this.
"I will stop you there." The leader interrupts.
"Yes"

"Because…"
"I know."
"We shall not discuss."
"No, therefore I…"
"Give your comments and then we proceed. Well, have you finished?"

The presentations continue and the rest of the participants share their thoughts and ideas with the group. The leader distributes the floor during the sequence and the vice principal takes notes. The participants try to explain what they read into the letters and what they thought about why the parents let their child leave the school. Here are some examples of their thoughts:

"I think [the parents] had too high expectations. How were these expectations created and why did they have these great expectations? Have we given them the wrong picture, or have we given them a true picture?"
"Where did they get the information?"
"It sounds like it is based on observation, or is it the experiences of the pupil that [they build on]?
"They do not build their decision on fact, but on emotion."
"We need to think about how… what we need to do now is to reflect on /…/ how we present our school so that it is a realistic presentation."
   "It builds a lot of emotion I have to say when you read between the lines, and it is hard to know what it represents."
"We must be able to explain how we actually work with these things that they express concern about and have comments on. We must be able to tell them about what we actually do. Otherwise, they are not given any examples or evidence that we actually do what we say we are doing." The vice principal finishes the discussion.

The leader summarises the presentations and starts the discussion:
"Now it's more about how. We have posted some questions: how do we address the criticism? What do we do? What can we do better? What can we change and what can we keep?"

The next step in the meeting is to discuss what could be done in the future to avoid the problem or what they could do to lower parent expectations. The group decided that one of the main issues was the discrepancy between what they said to the parents and what the parents thought that the school really did. They did not want to change anything; rather, they wanted to be better at explaining things to the parents. The issue was not that they worked badly but that they could not explain well enough to the parents what really happened at the school.

During the discussion, the group becomes louder and louder and several participants are talking at the same time. The leader steps in:

"Try to be a bit better behaved, so raise your hand when you want to speak."

"That goes for you too" says the vice principal.

"Yes"

The participants are holding up their hands to signal that they want to speak and the leader keeps track on the speaking order.

The leader summarises the discussion:

"We have noted a lot of great things on the list here, which might be part of this. It is clear that it is hard for the parents to explain why all these other pupils have left the school. I think that these parents have been extremely nice and honest and brave to give us this information and I thank them for that. The question is whether we need to drill more into what they say, and I think we've got enough on the table."

Comments to the sequence

Leader behaviour – the leader controls the meeting by introducing the topic, deciding on and explaining the form of the meeting and reminding of the form of the meeting. The technique to remind the participants of the form of the meeting is used repeatedly during the sequence. Whenever one of the participants starts to discuss, the leader quickly steps in and reminds the group that they should focus on contributing to the discussion in the first step and later discuss the issue at hand. The leader set the rules for the meeting and stated that the discussion was free and that every opinion, good or bad, was welcome. On some occasions, the leader of the group had to stop the participants from entering into discussion. The group had existed for a long time and they have had time to formulate rules and principles for their meetings. Further, it seemed that the participants accepted these intrusions by the leader.

Participant behaviour – the participants generally played by the rules during the meeting, and when they did not, they were reminded by the leader. During the round of reflection the group tried to create a common picture of what had happened and why the parents removed their child from the school. They also built a shared understanding on how the problem could be avoided in the future and what the problem really was. The reflection session served as a way for the group to formulate the problem and build a common ground on which they could elaborate further.

*Structure*s – The topic of the meeting was to explore the written communication from the parents and understand the information given by the parents. They also explored ideas on what they as a group could change and do better. The discussion had a distinct structure with some notable features. The

group was given a written handout at the beginning of the meeting that the participants subsequently read. Then they shared ideas and questions in a round robin manner without discussing the topic. Next they discussed the ideas and concerns raised during round robin. One of the participants took notes during the meeting in order to keep track of the ideas. When everybody had shared their thoughts, the discussion took place. The leader made clear that they should not discuss in the first par, but only give their sentiments on the problem. It was in the next step that they tried to solve or at least make inquiry into the nature of the problem and how they should take it from there.

The LIM interaction – The *advocacy-inquiry* dimension came into natural play during the sequence. The group shares thoughts and ideas (*advocacy*) and they formulate questions (*inquiry*) which can serve as a basis for further discussion and elaboration on the topic.

Other enters the discussion via the parents e-mail to the school. The group discusses why the parents have acted as they did and what the e-mail meant. *Self* is used to analyse what the participants have done and what they need to do in the future.

The leader encourages the participants and their ideas: "that was an interesting question". The group also shares many laughs together and the atmosphere of the room is positive, regardless of the serious nature of the topic, making the score in the *positive* category high. There are few *negative* comments during the discussion. Figure 4 illustrates the interaction pattern for the presented sequence.
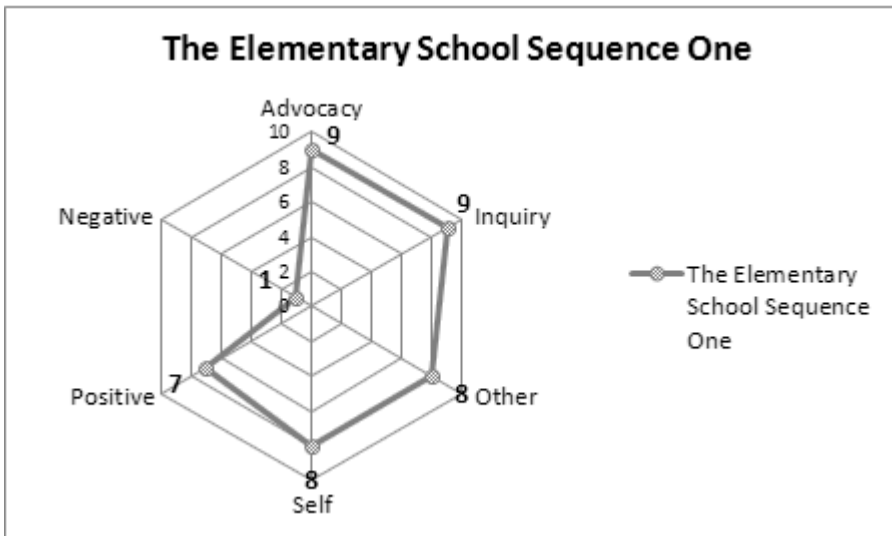
Figure 4: Interaction pattern: Discussing parental critique

The graph shows the interaction pattern during the presented sequence. A balance between *advocacy* and *inquiry* and between other and self exists at a high level, indicating that the group manages to fully utilise all the categories in the LIM. There are also more *positive* comments than *negative* comments. The pattern shows that the group manages to keep the discussion focused on both asking questions and advocating ideas. The active controlling of the meeting helps the participants to keep their focus on the topic and they accept the rules for the meeting. The participants also take responsibility for the outcome of the meeting by contributing with their personal thoughts on the situation.

Sequence two: Discussing cutbacks in the staff

In this sequence the participants play a major role by exploring the situation and the school staff. The participants manage to include and talk about others in the meeting sequence as well.

This meeting was held five months after the first meeting and follows the form of the first meeting. The meeting starts with the head principal distributing a handout containing the costs of different activities at the school and the costs of free massage. The second part of the handout contains a listing of the current employees and their designated work time. The topic of the meeting is to discuss school cutbacks and savings. The principal calls this "adopting the number of employees to the operations".

When the meeting starts some of the participants start to look at the handout. The leader steps in and says:

"I don't want you to look at these papers in advance. We'll try to do this together."

The leader then proceeds to cover some of the fixed items on the agenda and after presents the discussion topic for the meeting.

"Now I am going to distribute this material. I have made a paper informing about the current situation and I've also looked at the consequences. We will go through this together here in the group."

The leader starts by explaining the numbers on the two papers given to the participants. The first paper shows the number of pupils at the school and the second the income for the coming fiscal year. The last paper shows the principal's suggestion for cutbacks. The leader says,
"You will be given time to read through this material. I just want to explain the disposition of the information."

The participants ask for more details regarding the numbers on one of the papers and the leader explains. Then the participants are allowed time to read the handout and formulate questions regarding the information in the handout. During this time, the leader leaves the room to make copies for everyone to keep and to show their work teams.

The group reads in silence for about two minutes. Whispering conversations are heard among the participants. After two minutes, the conversation gets louder and louder. The leader steps in and asks if everyone has read through the material. Then she says:

"Could we do like this: we start the discussion and begin to take questions. Then we can try to find out [what the numbers mean] and also that everyone gets to have their say."

The leader starts to inform the group that there have been some changes with respect to the income side. The school has been granted more money for the coming fiscal year. The leader then informs the participants about the current situation on pupils and staff. The school has lost twenty-nine pupils from last year.

"Every student we lose creates a lot of holes. /…/ We have been able to have so many employees during the years because we have so many side incomes. We have been pushing the problems before us all the time and we are still doing that. /…/ Because of the side incomes we are in a better position now than we would be otherwise. I think this is important to know and keep in mind."

The group asks the principal about the staff and the current situation. The leader tries to explain the difference between the number of employees and the actual number of persons working at the school.

"I did not understand what you said. /…/ You thought it wouldn't cost anything if you were on leave. But how did you say, before and after?"
"It costs those days that you work in January."
"Yes."
"You are not on leave from January 1st"
"No."
"And you will not return in June."
"Yes, but then I am following…"
"And with these six persons it will be… these days in January will be one and a half months total salary for these six persons. The equivalent of one person's full pay for one and a half months. And for those weeks in June, it will be almost two-three months salary."
"Yes, then I am following you."
"Plus holiday pay that they are allowed compensation for."
"Yes, then I am following you."
"Do you understand what it is that cost?"
"Yes."
"Well, but like I said before, do we have a choice?"

The discussion becomes louder and the leader steps in and asks the group to calm down:
"Let's return to the order here. As I said, we're going to behave ourselves today, now that we have [the researchers] here. So let's make a round robin when we have talked about this, so that everyone gets an opportunity to express their view."

The leader then explains her suggestion for adaptation between the number of employees and the income. The school has to cutback three to four employees for the coming year.
"There will be no substitutes for the teachers in education. Do you understand what I mean here?"
"We also need to look at our staff benefits. It is lunches, food and sandwiches, meals and parties, and massage. Do you see that massage and the wellness hours and fruit are large costs? We have never presented these numbers like this before."

The group continues to ask the leader questions:
"[Name] you raised your hand, didn't you?"
"Yes, I just wanted to ask: is the term adjustment just a fancy word for notice or…"

"Adjustment"
"Yes but is this adaptation…"
"It just so happens that we do not have enough pupils."
"Yes, but it is the same as if we need to lay off people?"
"Yes, or we do not extend the temporary contracts."
"Right."
"We have not included any of the permanent staff in the cutbacks."
"Okay"

The discussion continues and the participants keep asking the leader questions:
"If we didn't keep the massage, I don't understand, what would that mean in money?"
"I wasn't clear there. This is only one example of savings and we can choose exactly what to… it was good that you asked."
"I thought of this with free lunches. These are educational lunches, were they not?
"Yes."
"And would that mean that every teacher who ate with their class would have to *pay* for their lunches?"

The leader answers questions and explains the information in the handout. At the end of the sequence, the group discusses the time frame for the reorganisation and when and how they are going to inform the staff. The idea is to prepare the various suggestions and work through them. The leader finishes the sequence:

"How do we move forward with this? I think we need to look at how we solve this with the services and teacher education, and how we can make adjustments and what it will mean for the organisation. /…/ We need to have a separate meeting and make sure that someone prepares a suggestion. As you said [name of the participant], it is actually a bigger issue. If we do this job well, we could save a lot of resources, I think"

Comments to the sequence
Leader behaviour – The leader distributes the floor and she takes the most talking space during the meeting. The leader starts the sequence by giving information and explaining what the numbers in the handout mean. This is done both as an introduction and as a direct response to questions from the participants in the group. When the discussion gets too animated, the leader steps in and asks for order. The leader clearly defines the discussion by noting that all ideas and inputs are needed and that the discussion is "free". She thus encourages the participants to explore the situation and come up with suggestions.

Participant behaviour - There is a high participation rate at this meeting and good flow. Most of the questions from the participants at the meeting are directed towards the leader (vertical inquiry). They ask many questions in an attempt to understand and make sense of the numbers in the handout. The group answers to the call from the leader to explore and then come with new ideas. This exploration involves both questions and suggestions from the participants. The participants also step outside their own box and explore the situation of the staff and teachers in the organisation.

Structure – The topic of the meeting is to discuss the budget for the coming fiscal year and plan the activities of the school together with the available resources. The meeting starts when the leader distributes the handout for everyone to read. The group then spends a couple of minutes to read through the material and after the discussion starts. The word is free but in order to keep order the participants need to ask for the floor by raising their hand or otherwise signal to the leader that they have something to say. The leader keeps track of the persons that want to speak.

The LIM interaction – The group and the group leader contribute to the discussion by asking questions and making suggestions. The entire sequence represents a form of common *inquiry*. The leader clarifies when necessary and the group then provides input to the discussion. There are several ideas and suggestions in the discussion in the form of *inquiry* and *advocacy*.

The entire discussion is focused on the organisation and what the new organisation will look like in order to meet the available resources. In this discussion the staff and the organisation have been interpreted as *other*. This definition is made because of the climate in the group and the concern with the staff in the organization. Another interpretation would have been to view the entire discussion as a *self*-oriented discussion. The group takes an outside perspective in their communication and the focus for the meeting is constantly putting the children and their situation in the centre of attention.

The atmosphere is surprisingly positive considering the topic of the discussion. It is important to note, though, that none of the cutbacks will hit the participants personally. The meeting lacks clearly stated *positive* comments in that the group is more focused on the task and at discussing the work of the group. Even though the meeting is focused at discussing problems and suggesting solutions, there are not many positive comments on the suggestions. The positive support is at least not expressed verbally. From the observations, there was some positive body language, such as head nodding, i.e. some sort of silent positive support. Unfortunately, these nonverbal behaviours were not systematically recorded in the field diaries. Figure 5 depicts the interaction pattern from the sequence.
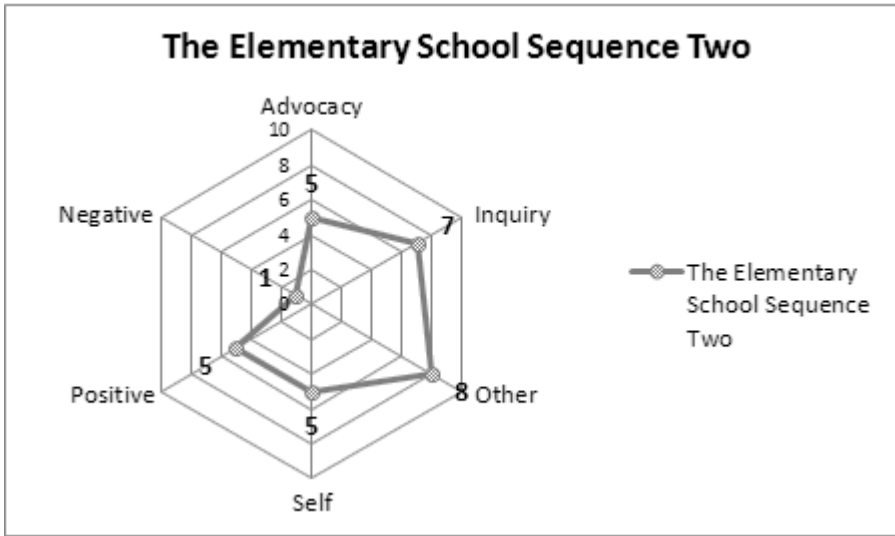
Figure 5 Interaction pattern: Discussing cutbacks in the staff

The graph shows the interaction pattern during the presented sequence. There is an overweight of *inquiry* over *advocacy*, a major overweight of *other* over *self*, and more *positive* than *negative* comments. The pattern indicates that the group is mainly focused on exploring the situation of the staff in the organisation and their current situation. The low score in *advocacy* indicates that the group is in a problem formulation phase in which the problem needs to be explored before they can search for possible solutions. The group is also mainly concerned with the staff situation, which is demonstrated by the high score in the *other* category.

The main feature of the sequence is the way the participants explore the new situation and what this will mean for the staff in the organisation. This exploration gives the meeting a rather unusual form, scoring high on both *inquiry* and *other* and low on *advocacy* and *self*. The usual pattern in the LIM would be high on *advocacy* and *self* and low on *inquiry* and *other*.

Sequence three: Discussing the organisation of the staff

This sequence focuses on how the group conducts their meetings, i.e. the structure of the meeting. The group organises the meeting by gathering around a material and by having an open discussion climate.

When the meeting is supposed to start, there is still one person missing. The head principal does not want to lose time and says: "we could reason a bit regarding these surveys in order to use the time effectively". The survey is an internally developed survey targeted at measuring the work conditions

and how the employees feel about the organisation. The survey on stress and the work environment shows better numbers this year and there are less employees feeling negative stress this year than last year. There is also a higher response rate than last year. The leader talks through the survey. After this discussion they go through the protocol from the previous meeting and also ask if there are any questions to take up at the end of the meeting. There are ten persons present at the meeting.

Then the group responsible for marketing presents their new brochure presenting the school as a socially focused knowledge school. This ends the formal part of the meeting and the head principal says "now the discussion is free". With these words, they start the discussion of the new organisation for the following year.

"Well, if you look at this material that you have got here, this is a proposal on the new organisation. /…/ And now we will have a free discussion to find a good way to go forward with this now."

The leader goes on to explain some details in the material:
"Now you will need some time to look this through."

"This is a working material only, so nothing is official yet. And we need to think about how we release the information. I can say straight off that this is a proposal based on the brain and not on the heart because we had to look at where we have the expertise and to make use of skills in an intelligent way. But here we have tried to assume that people are in the right place and it means, as you can see, that there are some changes that we have to work a little bit on."

"It is impossible to find a justice that is one hundred percent fair. /…/ The ambition of the management team has been to identify key figures that we can use in a material when we are planning the organisation, and this was one way [to do that]."

There is a short silence and then the leader says:
"So the idea now is to read. We can take a moment and read and ask questions. And again, no question is too dumb to be asked and all questions asked, are asked in this room. We will then decide before we end the meeting the way forward. And that is what will be in the protocol. Otherwise, we could not have a free discussion in the development group."

The group looks at the handout, containing mainly numbers, for a minute. Then they start to ask the leader for more information:

"I didn't really understand what you said there in the beginning. You meant that the percentage is different…"
"Yes, but it will be a different amount per pupil."

They go on to discuss what the work groups look like and how many pupils there will be in each class. There is also some confusion in the group regarding the names of the employees on the list presented by the leader. One of the participants explains the current work situation for one of the teachers in her work team. The leader continues to control the discussion and the participants signal that they want to talk by raising their hands.

Next, they talk about the different competencies among the teachers in the groups. The leader is clear that they will never use teachers that are not qualified to teach at their school.

Comments to the sequence
Leader behaviour – the leader presents a suggestion of the new organisation of the school and gives a short introduction to the material before she opens the discussion. The leader is clear that the solutions should be within the given economical framework. During the sequence, the leader controls the meeting. She also engages in longer explanations of the information given in the handout.

Participant behaviour – The group keeps to the stipulated rule and the leader encourages participation and new ideas by officially having free discussion. This is a way of informing the participants that they are now allowed to express any opinions and to test ideas in this forum. The participants find many questions to explore and the discussion jumps between different ideas, questions and suggestions. The group varies between trying out solutions and formulating problems. Most of the questions are vertical questions from the participants to the leader on the information in the handout and whether different solutions are possible.

Structure – The purpose of the meeting is to look at the organisation of the staff and try to match this with the current economic reality of the school. The group spent a short time to examine the handout which consists of time specifications for the teachers and the other staff at the school. The leader then announces that the discussion is free and that the group till try to find a workable solution to the new organisation by engaging in an idea-generating phase. The participants raise their hand when they want to speak.

The LIM interaction – The group participants come with many suggestions and thoughts about the organisation. This is done both in the form of *advocacy* and *inquiry*. The leader has encouraged this exploration of ideas and

suggestions. The interaction moves between *inquiry* and *advocacy* and the group shifts between proposing solutions and formulating problems and questions.

Others are referred to in the discussion, mainly the children and how their needs will be affected by the new suggested organisation. The group also bases much of the discussion on the resources that are available. This could be referred to the *self*-category. The discussion is centred on the school but there is also ample room for the surrounding environment in the discussion. The group is asked to think freely and to come with ideas during the meeting.

The discussion takes place within a *positive* atmosphere although there are not many clearly stated positive comments. Figure 6 displays the interaction pattern from the sequence.
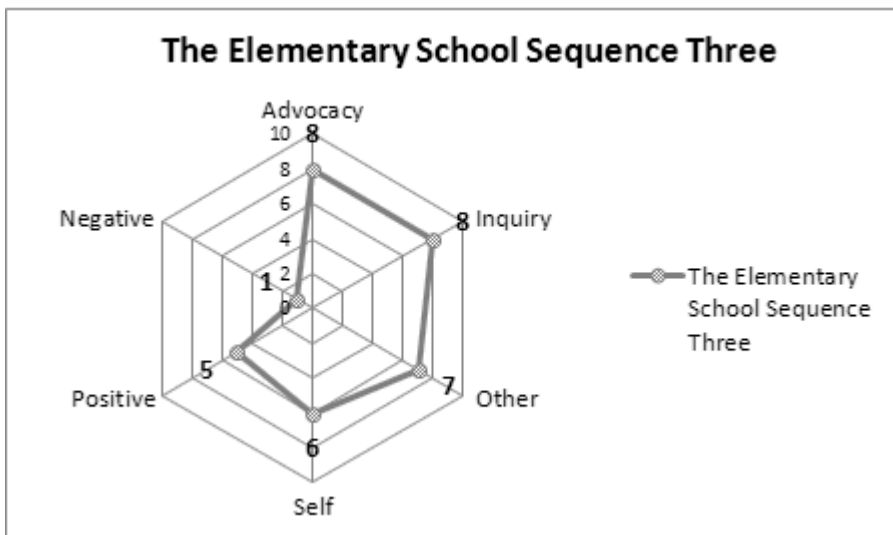
Figure 6: Interaction pattern: Discussing the organisation of the staff

The graph shows the interaction pattern during the presented sequence. Balance between *advocacy* and *inquiry* exists at a high level, a slight overweight of *other* over *self*, and there are more *positive* than *negative* comments. The pattern indicates that the group is involved in both asking questions and coming with suggestions. The centre of attention is on the staff and on the pupils of the school *(other)*. The balance in the dimension *advocacy-inquiry* indicates that the group moves back and forth between formulating the problem and suggesting solutions.

Summary of the findings in the Elementary school unit

The group has organised their meetings according a model in which the same basic structure is used at every meeting. This structure seems to help the group to balance *inquiry* and *advocacy* in their meetings. The group starts with a round robin structure, where all participants contribute their opinions. The structure during this part of the meeting is strict and formal, i.e. no discussion is allowed, just opinions. In the next phase of the meeting the group is open for discussion of opinions. Because the group has shared their opinions in the previous stage of the meeting, the group now has access to most of the knowledge and opinions that they need to solve or discuss the problem at hand.

In the first phase of the meetings the group participants are focused on sharing their view, i.e. *advocacy*. In the second phase of the meetings the participants focus more on exploration of different viewpoints and asking each other questions on the discussion, i.e. *inquiry*. This is thus an example on when the structure of the meeting helps the balance in the communication.

The meetings were formal and not just discussion meetings. A protocol was always kept at the meetings. The assistant to the head principal took notes during the meetings. Thus, the assistant did not have the opportunity to participate fully at the meetings. The principal sometimes made short comments to the one taking notes, saying, for instance, "write this in the protocol" or "it is only necessary if you write…"

The meetings had some standing issues at the agenda that were discussed at every meeting. These issues included comments on the previous protocol and information from the group responsible for work environment. However, at most meetings the information and fixed issues at the agenda were quickly dealt with so that the meeting could proceed to the discussion and development aspect of the meeting, which was the main purpose of the meeting.

In the dimension *other-self* there is also a balance at most of the meetings in this group. This balance, however, is more of a "moving" balance depending on the topic discussed at the meeting. In some discussions there is an imperfect balance towards the *self*-category. The topic and the purpose of the meeting give different balances in the *other-self* dimension. When the group discusses organisational topics there is an imbalance towards *other*.

The future-oriented perspective at the meetings helps the group to take an outside perspective. To *inquiry* about the future requires a more *other*-oriented perspective. The *self*-oriented perspective, on the other hand, is almost always focused on the history of the group. This temporal dimension

of the model helps explain a lot about the communication pattern of this group. The future-oriented perspective seems to come naturally for the leader of the group. In the interview she expressed it as: "I plan to live in the future and therefore I want to affect it". The rest of the group has adapted to this view and are used to talking about the future during the meetings.

The leader controlling the meeting has responsibility for letting everyone speak their minds, which was done in an elegant way in this meeting culture. Letting everyone share their views is a very effective way of getting everyone's opinions in the room. In this way all of the participants have at least spoken once at every meeting. This way of organising helps the meeting move forward and ensures that all contribute to the discussion.

The leader gave very clear instructions and made sure that they were followed. She also made sure that they had enough time to discuss the problems on a deeper level. If the discussion would stray, the leader put the meeting back on track. The leader was also concerned with the way the time was spent: she did not want to spend time on irrelevant things and she did not want to wait for late attenders to the meetings. On one occasion (sequence three), one of the participants was late because she had to attend to a pupil. This was a legitimate reason for being late, but the leader proposed that the group start with another discussion to make the most of their time. This serves as an example of the getting-things-done approach used by the leader.

The leader of the group is task-oriented and therefore does not care much for small talk. She could be described as a person that wants to get things done and that wants to focus on solving and discussing the problems at hand. The meetings of the group are structured to focus on practical and actionable issues.

The leader in the group plays the following roles: functions as a reminder for the group that it is allowed to talk and think freely at the meetings and functions as a controller of the structure of the meetings. She is clear on when the group is allowed to discuss issues and when they are not. This division between discussion and opinions helps the group to focus on the subject matter.

The culture of the elementary school has been developed for at least eight years. The group has existed for about ten years but it took its current form in the beginning of the 20th century when the new head principal took over the school. The participants of the group have changed over the years but the core of the group is still intact. During the year of observation, no one left or entered the group. This stability is probably important for the group and the development of a well working meeting structure and form. Further, because of this stability, the ground rules for the meetings were understood and ac-

cepted by most of the participants. The norms of the groups were set and developed. They had found a way to organise that worked well for the group.

The group worked in the same way at every meeting meaning, suggesting that the participants accept and understand the ground rules for the meetings. The principal has the function of conversation leader and guides the communication according to topic. The meetings are similarly structured and the principal has a rather strict way of leading, but everyone is included in the discussion. The structure is designed more to keep the discussion on track rather than not letting everyone participate. Rules of the meetings are not communicated verbally but all of the participants seem to be cognisant of the rules and have accepted them.

5. The Environment unit

Introduction

The Environment unit is an environment office of a medium-sized municipality. The work of the unit consists of outside inspections of kitchens and restaurants in the local area as well as tests taken on the toxic levels in the air and ground. The work is guided by projects where it is decided which types of inspections that need to be made. The unit is subdivided into three sub-units handling different parts of the environmental control in the municipality. The office merged in 2006 with the office of city planning and city architects, and the new unit is referred to as the City planning and Environment office. Earlier they were a stand-alone unit in the city municipality office. The logic underlying the merger between city planning and the environment office is that all new constructions in the municipality need to obtain a permit from the environment office and get their environmental plan approved. Much of the work done by the environment office also concerns the indoor environment of the buildings in the municipality, such as measuring radiation levels and checking ventilation systems. Thus, there is an organisational logic underlying the decision to have the two units under the same organisational structure.

The group and the participants

The average group size during the observed meetings was eight persons. All members had the same educational background (health inspectors). They split their work time between taking part in inspections and writing reports and filing. The larger group is divided into three subgroups: environmental protection, health protection, and food inspections. The subgroups do not co-operate or work together on a daily basis and the members of the different subgroups are seated in different corridors at the office. There is, however, large mobility between the groups where they change positions every now and then.

The inspectors have a personal responsibility for planning their work and have liberty to choose how and in which order they want to do perform their

work tasks. The constraining factor is the timetable from the political side of the organisation, where the inspectors have to report to the politicians making the decisions at regular intervals. The work of the inspectors is regulated by environmental laws, but there is still much room for the inspectors for interpretation of the paragraphs in the law.

The group has office meetings every Friday afternoon between 13.00 and 15.00. The aim of the meetings is to share information and to co-ordinate between the three subgroups. Because of the different inspections, it may be that they do not see each other for a whole week. The observed meetings in the group function as a possibility for co-ordination between the subgroups and as an opportunity for the leader to spread information to the other members of the unit. The inspectors report to each other what is going on in their section. Sometimes the inspectors ask direct questions to the leader regarding how to solve a work-related problem.

The participants of the group think that the meetings are important for the group to see each other and get together, as well as to receive information from the unit leader on recent and upcoming events.

"I like it here but I would like to work with other tasks. [The structure] here is extremely flat. There are not many career opportunities. There are no possibilities to move up or advance. Those who have left probably did not feel that they could develop here." (Interview no. 23, 2008)

The venue of the meetings

The meetings take place in a small conference room in one corner of the office building. The left-hand side and the front side of the room have windows. In the corner of the room a paper flip chart is placed. No technical equipment is used during the meetings. The observers are sitting in chairs placed at the wall or at the table together with the group members. The leader is always sitting at the short end of the table and the participants are placed around the table. Some of the participants sit at the same place at every meeting. One of the senior inspectors, for instance, always sits on the left-hand side of the leader. Figure 7 gives an overview of the meeting room.
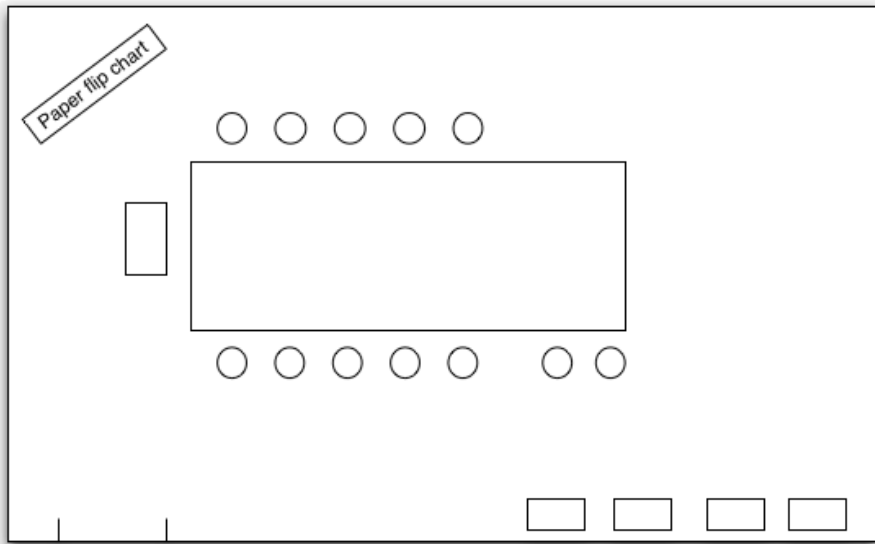
Figure 7 The meeting room of the Environment unit

The meetings follow the same agenda every time and involved the following phases:

Phases in the meeting

1. Gathering during small talk
2. Opening of the meeting and review of the protocol from the previous meeting
3. Reporting and discussion from the pre-planned agenda; the leader informs the group
4. Closing of the meeting

Most of the inspectors claim to be satisfied with their work and their work situation, but there are signs of stress. In the employee survey there are several inspectors pointing out that they are stressed and even one noted the desire to change work. The fact that the inspectors are able to plan their own work is an important factor contributing to the work satisfaction of the inspectors. Changing work roles from outside inspections to inside paper work also contributes to work satisfaction at the office. The monotony of the everyday office work is broken by the field work and inspections. According to one of the senior inspectors:

"It is an independent work. /…/ I do my own planning. I decide how the projects will be run and this means that I have to prioritise my work. Sometimes when you have much to do it is extremely difficult, but it is an independent job with a lot of contact with other people. /…/

You get to be a part of the entire organisation and take part in the planning process." (Interview no. 18, 2008)

The work and the subgroups are two aspects of the work of the office. Projects are started to target different areas in the municipality or different branches such as schools and day care centres. The subgroups are important because most of the everyday work take place within these subgroups. This makes the subgroups cohesive and most of the development and planning are done in these groups. The fragmented structure of the office makes the Friday meeting function as a group building meeting more than a planning or discussion meeting.

The unit has a flat command structure with one leader of the environmental office. He in turn has one higher ranking person, the leader of the larger City planning and Environment unit. The smaller subgroups have a leader, but this is more of an organisational leader than a manager. This leadership is also rotated on an irregular basis. For those inclined for advancement, there are few options at the office. The possibility to control their work at the office is substantial however. Almost all of the inspectors believe that the best part of the job is the freedom of self-organising and planning the work day.

Most of the inspectors are satisfied with their work and the meetings. They found their jobs rewarding and interesting and the best part of their work is the freedom to plan. Some feel that they have a stressful work environment with little or no time for reflection. They must also constantly answer telephone calls from concerned citizens. This has the effect that their work day is fragmented and stressful.

The leader of the group

The leader of the group started as an inspector at the office and was then asked to become head of the office when the previous leader left. He accepted the position, although he felt that the everyday work of being an inspector was more fun and rewarding than leading and administrating the office. He tries to work as much as possible with his old job doing inspections and planning inspection projects: "I still do some inspector's work and that is the most fun part. I would not like to drop that part entirely." (Interview no.19, 2008) The leader is well thought of among the other inspectors, partly because of his humble and quiet nature. He did not have any ambition to become the head of office when he was asked to take over the leadership of the office. One reason he was asked to become the head of office was that he was the inspector that had worked the longest at the office.

The hardest part of being a middle manager was the time constraint and the administrative part of the work.

"The hardest part with the work is the time pressure, the fact that you never catch up. There are always things to be done that are waiting. You would like to do some things better but there is no time. I am not very fond of administration and economy is the least interesting part of my work." (Interview no. 19, 2008)

The overall picture of the office is a workplace with independent inspectors performing and planning duties on their own. There seems to be great of pride in their work and this is also a source of stress. The inspectors have difficulties in saying no to new projects and to calling citizens. In addition, they work more than is required from them. This makes the Friday meeting especially important because it creates a zone where all the inspectors at the office can meet and create a feeling of belonging and togetherness. The individual work and the fact that the inspectors can plan their work independently is a source of pride among the inspectors.

The previous leader did not share information with the inspectors. One of the inspectors noted that the current leader of the group is "incredibly transparent, and he tells us about what is going on." (Interview no. 18, 2008) Another inspector said that the leader of the unit was very good and that he always supported the inspectors, both externally and internally in the organisation. The leader was also perceived as being good at providing the inspectors with the latest information about the organisation and current events in the administration of the municipality.

Meeting sequences in the Environment unit

Sequence one: Working together as a group

This sequence is a typical meeting in this group. In this particular sequence the leader plays the head role of the meeting by being both chairman of the meeting and the person with access to information.

This meeting is the first observed meeting in this group. The meeting is an ordinary office meeting in which the leader informs the group about what is currently going on in the municipality and at the office. The leader follows a pre-planned agenda for the meeting which is used at every meeting. There are nine persons present at the meeting.

First on the agenda is the previous protocol. The group looks at the protocol and the leader says "if you want to add something, just tell me later."

Then he moves on to a general information item: one of the municipal leaders will be following the inspectors in doing an inspection. The inspector responsible for this explains that he has been in contact with the municipal leader:
"I have been in contact with him. He is hard to get in touch with. I had to leave my cell phone number in order for him to contact me. I have been in contact with a pizzeria for the inspection but I haven't got any answer from them yet."

The leader gives information from the latest meeting with the leader group. The city planning office has had a tough time handling their workload and therefore:
"There will be a new full time employee at the city planning office", the leader says.
This is met with positive remarks from the group.

The leader tells the group that there has been some questioning regarding the newly employed at the office. He says that personnel from other parts of the office have talked about the employment. He says that it is ok to have different opinions but if they had some real issues with the employment they should talk with the one who made the decision. He ends the information on this matter by asking:
"Do you have any comments regarding this matter?"
One of the inspectors answers and says that she thinks it was good that they brought it up at the leader group meeting.

The leader then goes on with further information. They will publish a report about a controversial issue in the municipality. The head of the office will be the contact person in the errand if the media or private persons are asking questions.
"We will get help and support with this report from the [university]"
"That's good"
"Yes, it feels good. They are experts on this type of measurement and they will give an objective estimation."
"Will they be present at the hearing?"
"No… it's not really decided yet. We have not received the report from them yet. It will be published and made available on the Internet."

The leader continues to give information. The activity of a day care centre in the municipality is not following the regulations on day care centres in the municipality. The leader says that the issue "has fallen behind the chairs

between the city planning and the environment office because of management changes at the office."

"Is there any comparable case? I mean other centres that have these problems?"

"Are there other centres that have the wrong location?"

They discuss this issue.

"I have the errand right now and have been in contact with the manager of the day care centre. I also promised to get back to her. Do you think I need to anything right now or should I wait for the…" one inspector asks the leader.

The leader concludes this issue by saying, "I can contact her and explain the situation. It's a complicated errand, but now we have decided what to do and it will be initiated by the city planning office."

The leader moves on to inform the members on an appeal against a heat installation. The neighbours have questioned the permit to install heating. According to the leader this errand is unique for the municipality. The inspector responsible for the issue tells the group in more detail about the issue. After her presentation one of the inspectors says:

"It will be good to see what happens with such errands."

Previously, there have been no such procedures. The leader notes that maybe they should not ask the neighbours about such an installation. Other municipalities have different regulations regarding this matter. The leader ends with saying:

"It is a peculiar errand."

Then they quickly move on to the next item.

Comments to the sequence

Leader behaviour – The leader follows the pre-planned agenda employed in every meeting. He starts with asking the group to comment on the previous protocol and then he goes on to give information. The leader talks most of the time but after his short presentations are finished, there are several comments from the others. The leader does not engage in any procedural tasks in the sequence apart from officially starting the meeting. He does not have to distribute the word or ask the group to be silent. The group listens carefully to the information given by the leader, commenting or asking questions occasionally.

Participant behaviour – The participants take part in the meeting by commenting on the items on the agenda and the information that the leader presents. There are also a few questions. Several of the participants take part in the discussion and have comments or ask questions. During the discussion

about the day care centres, the responsible inspector asks the leader what is expected of her. The leader answers that he will contact the city planning and then come back to the inspector. This is clearly a work-oriented sequence at the meeting. During the discussion about the neighbours' complaint, the leader starts with presenting the special case and then asks the responsible inspector if she wants to add anything. The inspector then offers her version of the story, which is directly followed by comments from the others in the group. It is similar to a mini case presentation, but without problem solving. This is an example of how to give information in a more interactive way than just reporting the facts. The group is involved in the errand and they may have similar cases on their desks in the future.

The structure of the meeting – The purpose of the meeting is for the leader to inform the group about current events and co-ordinate the work between the subgroups in the unit. The meeting is structured like an ordinary meeting with an agenda with standing items that are worked through at every meeting. The leader follows this agenda for the duration of the meeting. The meeting is organised with the agenda, a protocol, and one of the participants is taking notes.

The LIM interaction – Participation is high at the meeting and there is considerably interaction between the leader and the participants. There is mostly *advocacy* taking place during the meeting but this type of *advocacy* could be called positive or sharing *advocacy*. No one tries to advocate a view point; rather, they are sharing information that could be useful. The participants enter the discussion by asking for clarifications of the given information or asking about their work situation. These vertical questions place *inquiry* at a moderate level.

The group focuses on their unit and their work during the sequence. This creates an imbalance in the *other-self* dimension.

The atmosphere is *positive* and the group reacts positively to the fact that the city planning office will get a new full-time employee. Figure 8 shows the interaction pattern of the sequence.
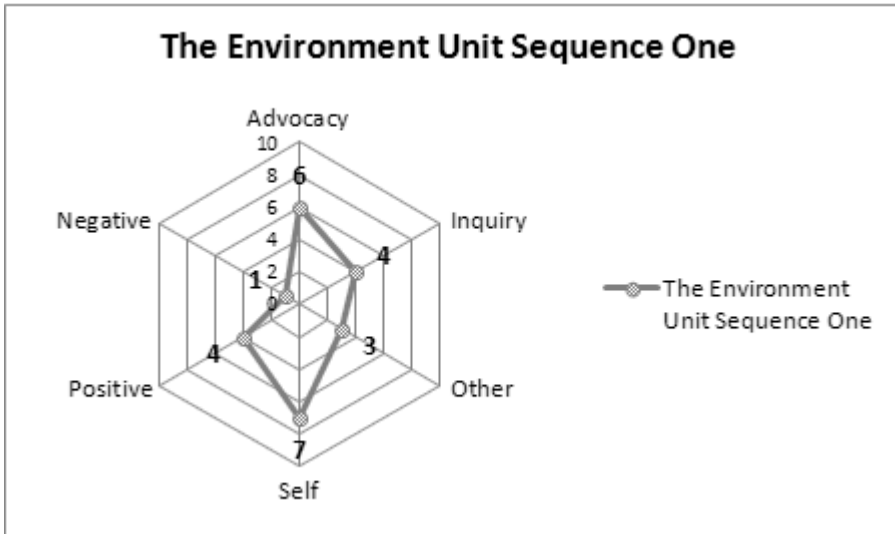
Figure 8 Interaction pattern: Working together as a group

The graph exemplifies the interaction pattern during the meeting. There is an imbalance in the dimension *advocacy-inquiry* towards *advocacy* at a moderate level. In the *other-self* dimension there is a major imbalance towards *self* over *other*. The atmosphere of the meeting is *positive* and almost no *negative* comments.

The pattern indicates that the group mainly focuses on the internal affairs of the unit during the sequence. The leader informs the group which listens carefully and asks for clarifications. On some occasions, they enter the discussion with their own ideas or thoughts.

Sequence two: Discussing possible joint projects for the coming year

This sequence has more interaction than a typical meeting in this group. The participants engage in the discussion and are willing to both explore the topic and contribute with their thoughts and ideas.

In this sequence the group discusses joint projects that are going to be started. The projects are already funded and the only cost for participation for the unit will be time. The unit has to decide whether they want to take part in these joint projects. One of the participants tells the group of his experiences of being part of this kind of project. He says that it takes a lot more time than anticipated and that the end result of the project is often in the form of a scientific report. There are nine persons present at the meeting.

The leader gives the background and explains what it is about:
"There are environmental joint projects every year that one can sign up for if one has the time and feels that it is interesting."

The inspectors can either be project managers for the projects or they can chose just to take part in the project. The project plans for the coming year have arrived and the leader says:
"It is four different projects and I thought that we go over them to see if we should join or not."

Before he moves on to present the projects, he explains how the projects are chosen in the previous stage. The first project: sound pollution from circulation. The leader reads from the project description. The leader comments on the project:
"It sounds quite complicated. It doesn't sound easy."
The others agree.
"Will we be involved in this project anyway?" one inspector asks. One of the participants has been part of a previous project so he is asked, "did it take more time than you thought?" He says that it takes time but that they had allocated time for the project. "But it is really instructive."

The leader says "The question is interesting but…" "Should we leave that project and decide when we know about the other projects?" The group nods and hums.

The next project is about service and conduct when performing inspections. The leader reads from the project description.
"We have talked about these things and it is important." /…/ "What do you think about this project?"

One of the inspectors says that they are already good at communicating. The leader explains that if there are not enough participants signing up for the projects, they will not start. He also says that they can benefit from running projects without having to take an active role.

One of the inspectors asks, "Is it expected of us to take part in projects every year, or…?" The leader says that they are not expected to be part of the projects because there are so few projects running every year.

One of the inspectors explains that currently there are no demands to participate but that in the future there will probably be demands to participate in the projects because the municipalities receive funding for the projects.

The leader then continues the meeting by explaining the third project: cosmetic products aimed at children. Such products have become increasingly common in retail. The main idea of the project is to inform shop owners about the products and their effect on children.

One of the participants says, "What?" when she hears the headline for the project.

The leader continues to read from the project description, then asks for comments, and receives the following reflections from the group.

"This should be done by us and this is an area which we have neglected."
"But we have already planned the next year and we have no time for this project."
"How big is the problem?"
"This is not the type of project I would prioritise if I did a project next year."
"I think we should wait."
"[And] what would the end result from this type of product be?"

The leader tries to explain from the project description. And they decide to read the last proposed project before they take any decision on participating in the projects.

The leader continues, "I will take the last project as well."

This project is about electric waste. There is a problem with theft from dumps with electric waste. More specifically, old refrigerators are stolen and then exported and sold in other countries. The leader ends the presentation of the project by saying:
"Well the floor is open." No one takes up on the invitation and the leader continues. "If I can say what I think first. I don't believe this is a problem for us in this municipality."
"If we should be part of any project, we have to feel like it is really the one we want to take part in," says one inspector.
"I would prefer to take part in a follow-up project [of the last project we took part in] instead of starting new ones," says another.

The group discusses the matter briefly concluding together that perhaps this should be done by the leaders of the environmental offices.
The leader says, "I can bring this up as a request on next Friday [at the leader group meeting]. /.../ If you have any ideas for next year's projects, then give them to me and I can present them next Friday as well."

They next decide on the projects:

"Let's take a decision regarding the projects," the leader says.

"It doesn't matter what I think because I work with it," comments one of the inspectors.

"Of course it matters, everyone's opinion is equally important," the leader answers.

The group leader of one of the subgroups remarks that they have discussed their view on taking part in any type of joint environmental project.

"It sounds like a fun project."

"Fun yes," says the leader, "but it is not an easy project."

"It feels like the project is on this level and that we are on another lower level."

"Let's do like this," says the leader, "do we want to participate yes or no?"

The group says, "No."

"I interpret that as a no."

Comments to the sequence

Leader behaviour –The leader reads from the description of the projects and lets the group decide if they want to participate. The leader clearly shows when he thinks the projects are of no interest to the group. Concerning the projects he says, "I do not think that this is a problem for [our municipality]" or "this seems like a very complicated project." After the description of the projects, they decide whether they are going to participate by answering yes or no. They turn down all of the projects. The leader does most of the talking during the sequence. The first project is met with many opinions from the participants but when he asks about the other projects, the group is more silent. The leader is the one who has both the detailed project descriptions and the background to how projects are picked in the first place.

Participant behaviour – Participation is high and the members ask each other questions (not just questions to the leader). Because one of the participants has been part of a previous project, he has experience from what it is like. One of the other participants asks him about time allocation and workload when taking part in a project. At least half of the participators say something during the sequence. This horizontal interaction disappears during the later stages of the meeting sequence, where the questions and interaction go through the leader. The participants formulate the implicit and guiding question for the sequence: Do we have time for these projects? One of the participants states this more clearly: "If we should be part of any project, we have to feel like it is really the one we want to take part in." Thus, the projects are primarily examined from the viewpoint of time allocation. Moreover, the participants are taking responsibility for their own work situation and the focus on the meeting. The participants focus attention towards the time costs of the proposed projects.

The structure of the meeting – The topic of the sequence is the joint projects for the coming year and the group has to decide if they want to take part in these projects. This sequence of the meeting does not follow any special form or agenda. The leader has decided that the group should decide jointly to take part the projects. The participants are free to contribute during the meeting sequence and they are not required to ask for the floor if they have something to say. The leader asks the group what they think, or says, "The discussion is free." Before the group decides whether to take part in the projects, everyone has the opportunity to participate.

The LIM interaction – The purpose of the sequence is to determine whether the group should participate in joint projects during the coming year. The group explores various projects on the agenda to decide whether the projects would be of interest. During the presentation of the projects, the participants have time to reflect and think about the different projects. The group then engages in *inquiry*. After a short presentation of the projects, the group is given an opportunity to *advocate* their views on the projects. Positive *advocacy* is used in the form of sharing important information. There are also some positive comments on the projects and the project experience. *Inquiry* is used both vertically and horizontally in the sequence. The first project is especially met with substantial horizontal inquiry, indicating that questions are not directed to the leader but to someone else in the group who might have more information regarding how it is to be part of a project.

The *other-self* dimension is not directly involved in the discussion but there are forms of using both other and self. *Other* is represented in the discussion by other municipalities and other administrations in the municipality. Others are not given any real role in the discussion but they do look at how other municipalities have done. Both these examples, however, are indirect *other* and indirect *self*. The focus is on deciding whether the group (i.e. *self*) will have enough time and energy to take part in the projects. This balance between time and effort could be seen as the theme of the sequence. *Self* in this case is the thinking of one of the inspectors regarding time allocation and planning.

The discussion is *positive* and everyone in the room is allowed to have an opinion about the joint projects. At the same time, there are no positive and supporting comments. There are also no *negative* comments during the sequence. Figure 9 shows the interaction pattern for the sequence.
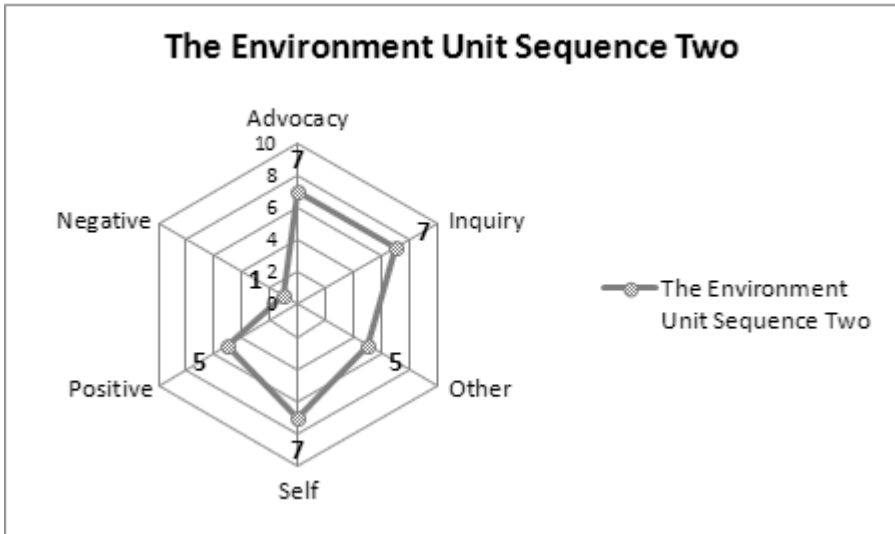
Figure 9 Interaction pattern: Discussing joint projects for the coming year

The graph shows the interaction pattern during the presented sequence. Balance can be found between *advocacy* and *inquiry* at a high level, an imbalance of *self* over *other*, and a more *positive* than *negative* comments. The pattern indicates that the group manages to keep the discussion focused on both asking questions and advocating ideas on a high level. The imbalance in *other-self* indicates that the group tends to be more centred on their own perspective and their own time than on the interest of others.

Sequence three: Sharing information

In this sequence the group engages in a round robin to discuss events of the coming week. This round robin allows the participants to take part equally at the meeting. The structure thus sets the frame for the meeting.

The first part of this meeting contains a good deal of information from the head of the office while the next part of the meeting consists of the part in which all the inspectors share information with each other regarding their whereabouts during the week and their plans for the coming week. There are eight persons present at the meeting.

The leader asks the group to have a round robin discussion starting with the inspector sitting adjacent to him. The idea of the round robin is to tell the group what the coming week will entail for the individual inspectors. The first inspector is going to leave the unit shortly:
"I am free Monday and I will pick up the keys for my new apartment. [The rest of the week] I will try to finish my open errands."

"Just tell us which they are. We can finish them" Another inspector says.

The inspector tells about the projects she is going to relinquish. The other inspector says "just leave it." The inspector says:
"I have to focus on the PCB. I have found routines for this but they are all different."
"Do you know how these errands are going to be archived," the archivist asks.
"I have made a system for finished errands they are marked with a crocodile. It is not easy. I have so much to do."
The leader makes a humming sound, indicating that it is time for the next speaker. The inspector hurries in order to finish:
"So, to summarise: I have a lot to do right now. Ok, now it's your turn," the inspector says while turning to the person sitting next to her.

The next person to talk is the newest inspector at the unit. He has just completed his degree. "I will have to leave early on Tuesday. I will meet with my supervisor and will sign the papers for my apartment."

Another inspector reports:
"I have a lot to do. We have to move the group meeting."
"That's ok."
"I will try to finish errands and we will have a group meeting. I have to leave early Tuesday next week. Wednesday [name of inspector] and I will go through the archive."

The next inspector is going to meet the social services department in the municipality, as well as take part in an emergency education course. Leader:
"It is a good education I took part in this yesterday. They show you how to detect and to put out fires." Inspector: "and they show you how to lift."

The inspector continues his presentation:
"I have to follow-up an inspection at a pizzeria and keep in contact with [the leader of the municipal administration]. And I also heard that it is not going to be any party on Friday."
The inspector inviting to the party says, "You should be glad for that; it's a mess at my apartment."

The last inspector says:
"I am just trying to finish things [before the holidays]. I have the fire education course on Tuesday as well." Then the archivist informs the group regarding the matter of invoices. Someone asks how the results were on the archival test. The archivist says that there were some that didn't pass. Inspector replies, "That's why I don't dare to take the test."

Then the leader informs the group about his coming week. He will attend a leader meeting. Then he asks the researchers: "Are you recording this?" The researchers turn off the tape and the leader informs the group on some sensitive matter.

Comments to the sequence
Leader behaviour – The leader is quite passive during the round robin session of the meeting. On one occasion, he tries to urge the participants to be shorter. This is done by a subtle "hum". He listens to the information from the inspectors and comments on some of the issues.

Participant behaviour – Participation and activation from the participants are higher at this meeting than at previous meetings in this group. The meeting has a lighter and more easy-going atmosphere than the previous ones. The group is ready to ask questions to each other as well as to the leader. During the round robin, the participants share information about their work week but they also share information and thoughts on non-work-related issues, such as when one of the inspectors are going to move and what they is going to do over the weekend.

The structure of the meeting – The purpose of the round robin is to share information and inform one another about the personal work for the coming week. The round robin, which is a part of the fixed agenda, is performed at every meeting. Usually, the round robin is short and informative, where the inspectors tell the group when they are going to be on inspections or otherwise unavailable at the office.

The LIM interaction – The round robin is naturally based in *advocacy* because of the informative character of the round. *Advocacy* is achieved in the form of giving each other information. There is also considerable interaction between the participants about what they are going to do the coming week in addition to providing information.

During the sequence, *inquiry* is quite high in the form of questions. The questions are more like clarifying questions, such as what did you mean and who is going to do that. The participants are engaged in a joint exploration. This exploration may be done in the name of *self*-interest because they want to keep track of the things that the leaving inspector will leave behind. Still, this exploration still sets a mark on the sequence design. The questions they ask are directed toward each other, which may be interpreted as sharing and showing interest in what they do.

There is also a natural focus on *self* in the interaction during the round robin. The discussion is focused on the group, what the routines look like, how to file things and what the participants will do during the week.

Others are presented as passive and enter the discussion in terms of activities the group will engage in; for instance, they mention places that they are going to inspect or persons that they will meet during the week.

Positive and *negative* comments were nearly absent in this sequence. The spirit of the sequence, though, is positive. Figure 10 depicts the interaction pattern from the sequence.
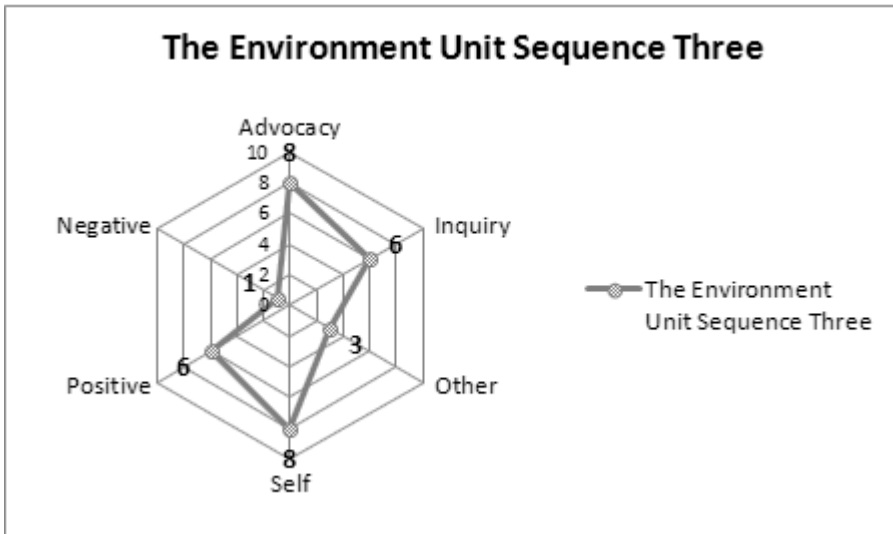
Figure 10 Interaction pattern: Sharing information

The graph shows the interaction pattern during the presented sequence. There is an imbalance towards *advocacy* over *inquiry*, a major imbalance towards *self* over *other*, and more *positive* than *negative* comments. The pattern indicates that the group shares information with each other by using *advocacy*, but regardless they manage to engage in a discussion instead of just reporting to each other, which is indicated by *inquiry* category in the graph. The imbalance in *other-self* indicates that the group is more centred on their own perspective and routines than on the interest of others. Because the topic of the sequence is focused on reporting about their current job situation an imbalance toward *self* is to be expected.

Summary of the findings in the Environment unit

The meetings in the Environment unit contain a good deal of information and the fixed agenda makes the meeting rather stressful when every point of the agenda needs attention at every meeting. This makes room for discussions smaller and gives the meetings an imbalance towards *advocacy*, i.e. there is no time to stop and think. The discussion focus on *self* and much of the communicative playfield is taken up by *advocacy* and *self*.

The *other* mentioned and discussed at the meetings are often other municipalities and examples of how they do in different situations. *Other* can also be the residences of the municipality. As mentioned above, the positive dimension is used but mostly for non-specific positive comments, such as "that is good" and "good work". There are few specific positive comments.

The leader acts as a classic managerial leader in the sense of controlling the meeting and giving information to the group. The leader has the information advantage over the group and the participants use the meetings as a means of getting to know what is going on at the unit and in the municipality.

The participants engage the leader in vertical inquiry during the information session of the meetings. They ask for more information and details concerning their own work. A typical vertical question by a participant to the leader is, "Do I need to..?" During some of the sequences, the participants engage in more horizontal inquiry by asking each other questions and sharing experiences with each other. One good example of horizontal inquiry is when one of the participants tells the group about his experience from a joint project. This is an example of when the meeting functions as an opportunity to share information with the other inspectors in the unit.

An important purpose of this meeting seems to be to keep the group and the office together rather than to discuss any real problems or develop the office. The sub-groups at the office have their own meetings for planning and developing their work. The large office meeting is apparently more for social importance than for work reasons. The inspectors thought that they needed the information given by the head of the office and that the meeting was a good place to catch up on what the others in the office were currently doing. One of the inspectors expressed this and said very clearly that if the observed meetings had been the only ones at the office, he would not have been happy with the situation. Now he thought that the office had a good meeting structure with one smaller group and then the whole office on Fridays. He thought that the office meetings were good but that they did not give much per se to the everyday work of the inspectors. Nevertheless, it seems as though it is good for the general atmosphere of the office to have a gathering

with all of the inspectors and to obtain some information on what is going on in the office and in the municipality.

The assumption taken from the field of POS – that meetings have a relational purpose (cf. Dutton & Ragins, 2007) – fits well in this group. The group uses the meetings to get together and to build and probably maintain the relationship between the different parts of the office. The meetings are work-oriented but with a relational twist. The group shares information on big and small issues at the meetings. Considerable information is conveyed at the meetings, but for the large part it is such information that could be distributed through other channels. The fact that the meetings take place in the end of the week during the last working hours of a Friday afternoon probably has an impact on the energy level at the meetings.

The Environment office is divided into smaller groups and the only time when the whole office meets is at the Friday meetings. These meetings have an affixed agenda and all items are discussed at every meeting. The meetings are led by the head of the office, who dominates the meetings in terms of time. The meetings consist mostly of information from the head of the office concerning current events at the office and in the municipality. Sometimes they also discuss and plan coming events such as teambuilding days. But most of the everyday planning takes place at the lower level in the organisation among the different sub-groups at the office. Participation at the meetings varies and it is mostly the leader and three participants who talk during the meetings. The others come with shorter comments and questions but rarely with any real ideas. The communication is centred on advocacy and most of it is coming from the leader of the group. The participants ask some questions but mostly in order to clarify an issue rather than exploring new territories. The meetings serve a function in terms of creating a feeling of togetherness at the office and learning the latest news around the office.

6. The IT unit

Introduction

The IT unit is responsible for hardware, software, and support in a medium-sized municipality. The professionals working at the office are divided into two main categories: system and support technicians. The system technicians have a longer education and the main responsibility for databases and other software issues. The support technicians are responsible for manning the helpdesk at the office as well as handling hardware and support with printers, etc. The systems technicians are often required to help the support side with manning the helpdesk and solving hardware problems in times of stress and high workload.

The office went through a reorganisation about a year before the observations started. The structure of the office changed and the current leader started to work at the office. According to some of the technicians, the reorganisation caused some turbulence in the office but that the result was a more transparent organisation. The organisation is flat. Part of the senior staff meets together with the leader in a development group that has responsibility for resource and long-term planning and priorities for coming projects. The flat organisation also implies that there are few possibilities for employees who want to take on management roles.

The group and the participants

The IT unit had three types of meetings in their organisation. Unit meetings, which were those that we observed, were held every Tuesday morning between 8.30 and 10.00. At these meetings, the entire staff of the unit were present. The systems technicians had their own meetings on Thursdays and the support technicians had their separate meeting on Mondays. According to one of the systems technicians, these meetings presented the opportunity to raise more specific issues and to discuss problems in the workplace.

Lack of time is an important problem at the unit. Many of the technicians feel stressed and unable to offer the best technical solutions to the clients

because of lack of time. The main problem for all of the systems technicians is the insufficient time to complete a project as they would like. They always have to finish projects quick because they must start with the next project. Sometimes they know that the customers will come back in a couple of weeks and ask for some other things that they did not have time to finish or do the way they had preferred. One technician says, "[Y]ou would like to have the opportunity to do more […] to avoid having to take care a problem coming back to you later." It is also important for the technicians to have a good relationship with their customers, "otherwise they make up their own solutions".

Much of the working hours are spent on acute non-pre-planned errands. One of the system technicians said:

"The work is changing and I have responsibility for different types of system. /…/ Sometimes it is stressful because it is so much going on at the same time. The most difficult part is to get the overall solution as I want it to be." (Interview no. 11, 2008)

The best part of the job, according to the systems technicians, is that the work contains many different tasks and the work days vary. They also find it stimulating to learn about new solutions and new systems and to understand how these new systems work. The technology is in a constant state of change, which means that the technicians have to learn new systems quickly to stay abreast of the rapid technological advances. This challenge is described as one of the challenging and stimulating aspects of working at the office.

The venue of the meetings

The group held their meetings in their break room, which had a whiteboard at one of the walls. The room was furnished with sofas that stood along the walls and a larger table in front of the whiteboard. There were some armchairs in the same material and colour as the sofas. The participants and the leader took a place in the sofas during the meetings. The group sort of formed an open square in the room sitting in the sofas at the walls. The observing researchers sat at one end of this open square next to the exit door. The leader was often sitting in the sofas at either the long end or at the short end of the room. Figure 11 displays the meeting room.
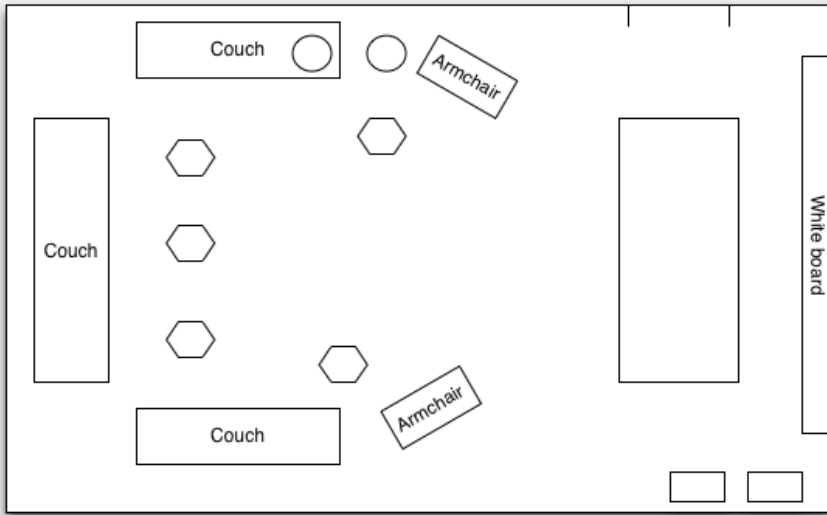
Figure 11 The meeting room of the IT unit

The group used to gather for office meetings once a week to inform the group regarding the week and update them on current events in the municipality. One fixed point on the agenda was the "grade" the unit had achieved the week before. This grade was based on how many errands the unit had solved during the week and on how many that were left unsolved. The quota between solved and unsolved errands resulted in a grade for each week. The unit usually had good grades every week, except for the third week in august when the school started and most of the staff in the municipality returned to their jobs after their summer vacation. During these weeks, the group had many incoming errands and therefore unable to solve all of them resulting in a lower grade. The leader was clear to explain that the grade did not take into account how many incoming errands the unit had had during the week. It was only a measure of how many of the incoming errands that the unit had solved during the week regardless of the number of errands. Accordingly, they could accept a lower grade if the number of incoming errands was large.

The meetings in the group were altered at the start of the observational series. To achieve more active participation from the group the leader changed the meeting form, calling the new meeting for *meeting dialogue*. This meant that the meeting changed from an information meeting into a meeting with more focus on the voice of the participants and on discussion. The meetings followed the same basic pattern whereby the leader introduced the topic or topics of the day (usually two topics to be discussed separately). On some occasions, the leader asked someone to start or even started the meeting by

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presenting her own reflection on the topic. The average group size during the observed meetings is twelve persons. The meeting consisted of the following stages:

Phases in the meeting
1. Gathering during small talk and breakfast
2. Leader opens the meeting and introduces the topic(s)
3. Discussion or information
4. Closing of the meeting

The unit had their office on the ground floor in the large municipality main building. This is where most of the administration of the municipality had their offices. The blinds were down to avoid sunshine on the computer screens. This gave at the office a sort of dark ambient. The unit was also responsible for the handling of hardware in the municipality and thus it had to store a lot of boxes containing everything from computers to paper for their printers.

One person had to man the helpdesk telephone during the meetings. This meant that this person had to leave the meetings to answer incoming calls. There was no one that could answer the door during the meetings. Because the office contained valuable hardware and sensitive information, there was a closed door to the office that only could be opened by the right access card. Thus, when the doorbell rang during the meetings someone had to get up, leave the room and open the door, and then come back again to the meeting. At the worst times, this happened more than five times during a two-hour meeting. This was an obvious disturbance to the meeting and the group lost focus on their topics when someone had to leave every now and then to answer the door. Whenever the doorbell rang, there would also be a discussion about who should get up and answer the door. These interruptions took away time and energy from the meetings. The problem with the helpline could not be as easily solved. The group is required to have the helpline open between 8 am and 4.30 pm all working days.

The leader of the group

The leader of the IT unit had a background from the city council sector, a sector that organises the health care in Sweden. Her professional background was as a nurse. She started as leader of the IT unit after the reorganisation in 2007.

"The most fun part is to help people develop. To be able to make a difference. I think that is cool. To have the power to influence and make a difference. The hardest part is to get people to do the things we actually have decided on. To get every person to understand why we

should do something in a new way. Then there is always someone who says that they continue to do things like they always have done." (Interview no. 21, 2008)

"I think it is easy to take decisions and formulate goals. But to really get people to understand and to change is not easy. But it is real cool when you are able to change. I know what you can do and what capacity you really have." (Interview no. 21, 2008)

According to some of the participants, since the new leader of the unit arrived in mid-2007 there has been a better structure at the unit and the employees have been given more opportunities for taking courses. The new leader has tried to tear down the invisible wall at the unit between the support side and the systems side. They refer to this as "the wall". One major difference in working is that all the employees at the unit have one day when they are responsible for manning the helpdesk. Some of the systems engineers thought that for them this was a waste of knowledge and resources in that their knowledge and time could be better spent somewhere else. However, a different perspective than that of the systems engineers is that it could be a way to include everyone more in the work of the unit and to build a more help-like climate. Earlier in the history of the unit, some of the technicians have been working very individually and there has been no overall responsibility at the unit. These two issues (lack of responsibility and the invisible division between the groups) have been the two major focuses of change taken by the new leader.

The group changed over the observation period and some new persons were employed. The main issue at the office, which was discussed at several meetings, was the balance between giving service and support and handling the databases and software of the municipality. The office had a double mission: handling the day-to-day support of the municipality and related computer and information issues. The task that took the most time and personnel resources was the helpdesk because it had to be manned every day during working hours and the problems most often were acute.

The place for the IT unit in the overall municipal organisation has changed from time to time. Some of the employees note that it is annoying that the upper management in the municipality never seem to be able to make up their mind. Earlier, the unit was organised into a stand-alone IT unit, but it has now been moved back into the service part of the municipality administration. This service and consultancy office involves several administrative functions (e.g. personnel, wages, and telephone switchboard). IT units in public sector organisations are often outsourced in that the IT section is rather easy to outsource without any real problems. This is a constant threat for the in house IT office. The technicians did not seem to be worried about this problem of outsourcing. At least it was of no immediate concern to

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them. One of the system technicians thought that the municipality did not really see how much an outsourced IT unit would cost and what they would be missing in service of not having an in-house IT unit. Most of the interviewees say that this no longer poses an actual threat. The last time discussions about outsourcing were held at the top level in the municipality the unit managed to present detailed estimations of the costs for such an outsourcing. These calculations showed that it was cheaper to do things in-house. Ideologically, there could be motives for outsourcing, but this did not seem to be a major concern.

Meeting sequences in the IT unit

Sequence one: Discussing the distribution and administration of personal computers

In this sequence the group engages in an atypical discussion. The group discusses a technical problem by setting up the discussion in special structured way.

There is some small talk before the meeting begins. The leader welcomes the participants. She says that the meeting will be different from other meetings, because they have not agreed on a theme for the present meeting. Instead, they have two discussion items and some short information items. There are eleven persons present at the meeting.

The leader starts the meeting by giving information on some items. She ends the information part by asking:
"Is there anyone else who feels that they need to talk about something before we move on to the first discussion item?"

Then they move on to the first discussion item on what kinds of routines are needed in order for the office to be able to keep track of the PCs. The leader introduces the topic and asks the group:
"Should we keep the current routine or should we try something else?"
The leader turns to one of the technicians and asks:
"I think you had a suggestion?"
"Yes, I am trying to remember what it was."
The technician proceeds to give some background to the case. One school received 50 PCs and the problem is how the customers are going to sign that they have received the machines. One suggestion he had thought of was that the technicians check the inventory button in the internal computer system

when the equipment is delivered and installed. One of the other technicians tries to make sense of the case:

He asks, "What is it all about? Is it about the inventory record, that you want an acknowledgment that they have received [the computer], or is it that they oppose that they have received the equipment?" He continues:

"Then it [seems to me to be] two separate problems. The inventory record is one thing and the signing from the customers is another."

According to the leader, the main problem is the register of the inventory and how to keep track of the machines in the municipality.

"In the end it is really about the inventory ledger because it is there that we pick up the information." says the leader.

The discussion continues: the inventory should be the responsibility of the customer. The leader steps in and says that there are two problems:

"You're absolutely right that it's two problems or questions. One is that the inventory ledger is correct and the second is that we get a signature that someone has brought the equipment to the customer."

Suggestion one: One of the technicians suggests that "the customers could sign for it when we deliver and then we'll store the signed papers in a binder."

This is met with objections:

"It must be more like a store"

"It will be a lot of paper"

"It will be become quite difficult in practice"

"Paper is not going to work […] it will trace out in a month."

They do, however, agree that it has to be some sort of receipt for the customers to sign that they have received the machines. They decide that the paper method is no good.

Suggestion two: The senior technician comes with a new suggestion to create a receipt in the already existing system.

"It's a really interesting thought. I think, but what do we do when they don't respond," says the leader.

She also raises concerns what will happen if the customers ignore the mail and do not answer. The leader also says that it would be easier for the unit to create an internal routine than to get the employees in the municipality to change their behaviour.

Suggestion three: one of the support technicians makes a suggestion:

"Some kind of a read receipt-- that you have read the email when you have closed it. Couldn't that work?

One of the technicians replies, "That will not be so easy I think."

Another technician says that they have to be better at registering the machines in the inventory register.

The leader tries to sum up the discussion and asks, "Do we have any other ideas? The current routine is […] to create a separate case for each PC. […] It requires that you enter the inventory record each time and that you have the right information and that we handle it correctly every time. But do we have any other ideas? We seem to agree about what is not going to work. Paperwork, no. Okay, do we have any other ideas?"

In the present situation they have to create one errand per PC when they are delivering to schools, which calls for substantial administrative activities. One of the support technicians says that there has to be some registration at the actual time the PC is out. Another of the support technicians says that they need to have more self-discipline at the office. The problem is the sizable time gap between the actual installation and the registration of the installation in the inventory register.

Suggestion four: one of the systems technicians offers a new suggestion:
"Is it possible to build in a feature in the errands [in the computer system]?"
This would mean a function in the errand that automatically links to the inventory register when the errand is closed.
The senior systems technician answers, "No, that will be a bit tricky I think."

The leader once again tries to summarise the discussion.

The leader says that it should be possible to go into the inventory register and check the computers.
"Does it feel like an impossible thing to do," she asks rhetorically.
"What we are talking about is really the livelihood of the unit […] we lose a lot of money when we don't have control over our equipment," the leader says.

The senior technician says that when you click on inventory it means that you confirm that the information standing there is correct. One of the systems technicians comes with a new suggestion:
"Every time you click on the inventory button, an e-mail is sent to the person responsible for inventory." Thus, the customer has to answer the mail if they have not received their machines.
The leader suggests, "We can make the feature such that if no one answers, we assume that the information is correct."
This suggestion gets support from the group:

"Smart!"

"It's a good idea, a real good idea."

The leader asks, "Is there anyone who would be willing to write down this new routine and send it out and put it in the [internal computer system]?"

The senior technician takes responsibility for this. The leader ends this part of the meeting by saying:

"Great, are we pleased with this solution?"

"Yes."

"Really pleased," the participants answer.

Comments to the sequence

Leader behaviour – The leader takes a passive position in this discussion. She takes an indirect part in the discussion by listening and observing. If one of the participants falls into monologue mode, she restarts the discussion by summarising the suggestions thus far. She also acknowledges the first suggestion from the group by saying "this is a really interesting suggestion". This encouragement is important to get the meeting going and motivate the participants to contribute with ideas. The leader exercises her leadership in this sequence by prodding the group forward and avoiding long drawn-out monologues or with ideas that cannot be solved. She seems to want to have a solution to the problem but seems to prefer that the group comes up with a well working suggestion on how to do it. The leader thus plays an important role in the discussion by trying to clarify the issue and providing support. She does not have to distribute the floor or remind the group about the form of the meeting during the sequence. In this respect the discussion is self-driven.

Participant behaviour – The interaction moves between the participants in the meeting room. Several of the technicians come with different suggestions. The first suggestion is not supported by anyone, not even the leader. The second is met with support from the leader. The leader, however, moves on and problematises the suggestion. A third suggestion comes from someone else in the group, but this suggestion is met with a negative reaction from another participant. Almost all of the participants are now taking part in the discussion. They are quick to dismiss some of the suggestions in the discussion. When the discussion about a possible solution starts, there are many of the participants taking an active role in trying to solve the problem. The participants ask a few horizontal questions but most of the queries come from the leader. The participants talk directly to each other during the discussion without using the leader as mediator.

Structure of the meeting – The meeting takes place in the lunch room and the participants are seated in sofas and armchairs. The topic of the meeting is how to organise the distribution of PCs in the municipality. The current sys-

tem is working satisfactory. This is a practical- and problem-oriented topic. It is possible to advance a new practical solution to the problem. There is no agenda for the meeting, i.e. the leader presents the topic of the meeting and she takes notes during the discussion. The discussion had the form of a group discussion. The initial ideas from one of the systems technicians is tested and discussed by all participants. The word is free, everyone who has an idea is allowed to contribute and no one has to ask for the floor. The discussion is based on the presentation of one of the systems technician.

The LIM interaction – The ideas suggested at the meeting could be considered both *inquiry* and *advocacy*. An important exploration that takes place during the sequence is in the beginning of the discussion when a participant is concerned that the problem in question may not be clear. This sets the stage for the rest of the discussion. Two of the proposals are expressed as questions rather than assertions.

Most of the *advocacy* is done by providing information and offering suggestions for different solutions. Some of the *advocacy* has an exploratory nature in which the group tries out ideas and proposals generated by the participants. The participants offer proposals that are then tested in the group. Some ideas are rejected fairly quickly, whereas, others are explored further. With two exceptions, the group rejects an idea by using *advocacy* instead of being negative.

Other are presented indirectly and as a passive other. This is a counterpart that the group has to relate to. Others are referred to as "the customer" or as "they". Later in the sequence the other is starting to have a will ("what do they think"), and even a little later with a vested interest in the department's work routines.

The beginning of the sequence is centred on the group and the discussion concerns the group's needs and the procedures that the group must follow to make everything work. The proposals are about what they can do to solve the problem (self-centred focus). The discussion is about that they need to keep track of the computers are and who has them.

When the group has come up with an idea that they think works, there are several participants who believe the solution is good. These are clearly *positive* comments: "It's clearly an interesting idea, I think", "Smart." "It's a good idea, pretty damn good idea." *Negative* comments are heard mostly in the form of rejecting the suggested solutions, but this could also be viewed as a form of *advocacy*. Figure 12 shows the interaction pattern for the sequence.
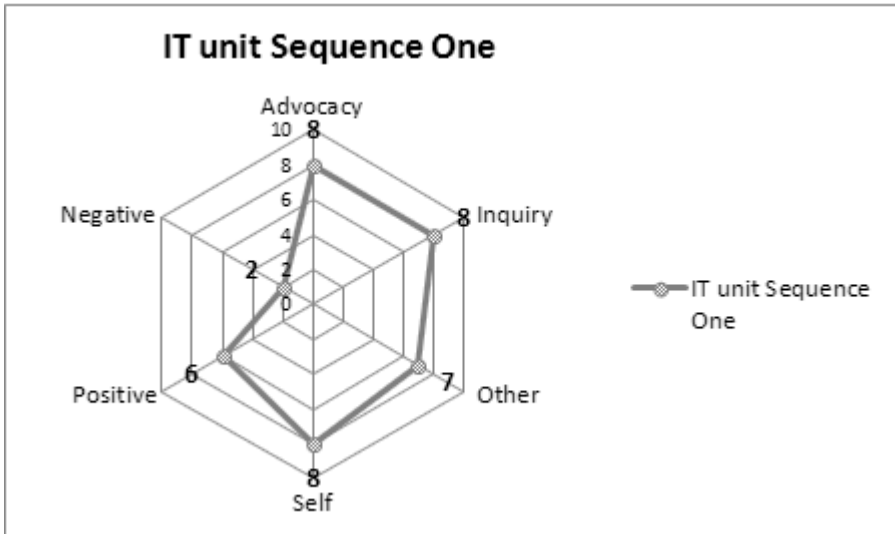
Figure 12 Interaction pattern: Discussing the distribution and administration of PCs

The graph shows the interaction pattern during the presented sequence. There is a balance between *advocacy* and *inquiry*, a slight imbalance towards *self* over *other*, and a trend towards more *positive* than *negative* comments. In all, the pattern shows that the group manages to keep the discussion focused on asking questions and advocating ideas. The group almost manages to balance *other-self* at a high level, indicating that the clients of the group are given an active part in the discussion. The passive leader behaviour allows the other participants to contribute to the meeting. The participants engage in a conversation with each other and the discussion is probably helped by the concrete topic of the meeting. This is an example of when the structure of the meeting combined with the behaviour of the leader allows good collaboration in exploring a problem. The meeting had a balanced interaction pattern in the LIM and it also resulted in practical solutions to the discussed problem.

Sequence two: Discussing "soft" issues

In this sequence the leader plays a major role. She engages the group by asking questions on a topic that the group is not used to discussing.

The group gathers in the lunch room under some small talk when the group first forms. One of the technicians is going to the doctor and he they talk a bit about the doctor's appointment. The small talk subsequently subsides and after a short silent pause the leader says, "Ok, should we begin? /…/ Today, we are going to talk about our work environment and how we prioritise our work tasks."

The leader points out that there have been some thoughts among the technicians on the group's past work environment. The leader also says that "today I would like to put on the pressure and force you to participate more and ask more questions." This is a reaction from the feedback from the researchers from a previous meeting. The group barely used the *inquiry* category at the previous meetings. Now the researchers have encouraged the leader to try to get the group to ask more questions during the meetings. There are eleven persons present at the meeting.

The leader starts the discussion:
"Let's start. I will try to take notes during the discussion. What do you think about the work environment today? Is there anyone who wants to start?"

At first, there is a brief silence and no one likes to be first. Then, one of the techs says, "I think we have a good work environment and it is getting better and better."
"How was it before?" one of the techs ask.
"It was the classic thing with us and them." This is referred to as *the wall* in the office.
"I feel the wall has been torn down: good work by us," says the leader says. The leader goes on to asks, "What can we do to make [the work environment] better.
"We could help each other. And we could be better at cleaning the office. It is a way to show commitment. […] It is not the cleaning of the office that is the idea." One of the techs says."

Two of the techs engage in a discussion about the cleaning of the office space.
"We need to be more open and talk to each other about what is expected at the office."

The Leader says that it is of course hard for everyone to be available every time we clean the office. She then asks, "Is it important to show commitment for the work environment?"
"Yes," someone answers.
"Why?"

"In what other ways can you show commitment for the office?"
"You could take an interest in what the others are doing."
"Anything else?"
This is met with silence. The leader asks the previous speaker:
"What do you mean with taking an interest?"
"To be interested in what they are doing and asking about new things."
"What makes you committed or not in your work?"

"We should share our knowledge more and give more feedback and encouragement to each other. It is to share knowledge in the small things," one of the support techs says.

Leader:
"The work we are doing with goal orientation, is this good for the environment? It's perhaps a leading question, but what do you think, does it help that we are working with goals?"

A senior tech says that it is important with goals for the commitment at the office. Another tech says that the most important thing with commitment is that it benefits the individual or the group, or preferably both.

Leader: "Does it feel like it [benefits us]?" This is followed by a short silence. Then the tech asks, "Are you asking me?" Leader "hmm" Tech: "Yea, sure, in certain aspects, in other aspects, no." Leader: "ok." Silence again. The tech does not want to say anything more about this matter. The others try to get him to explain more: "What aspects are you thinking of?" "I didn't understand what you said. Can you develop this a bit?" The tech says that he does not have any concrete examples. Leader: "I think that most people are committed when they have flow."

The leader goes on to ask about the fitness program at the office and in the municipality: "What do you say about the fitness – is that good for the commitment?" One of the techs says, "It is easier to communicate with each other at work if we are doing things together outside work as well.

Comments to the sequence
Leader behaviour – At the outset of the meeting, the leader explains that she is going to take notes during the discussion, which suggests that she will take a passive observant role during the meeting. During the sequence, the leader asks many questions: "How does it feel?" "What do you think?" "Does anyone have an opinion about this?" "What do you mean?" However, many of these questions are met with silence. The leader tries to take a passive position listening and taking notes. At the same time, she is very active in asking questions and asking the participants to explain what they think. On one occasion during the sequence and again at the end of the sequence, the leader summarises the discussion. When two of the participants get too involved in the issue of cleaning, she steps in to get the discussion moving again.

Participant behaviour – The participants have had no time to prepare for the issue. The focus of the discussion is on how they are cleaning the unit and how important that everyone lends a hand in this cleaning activity. The discussion is focused on ideas that arise in the minds of the participants during

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the meeting. The group is not that keen on answering these questions and the discussion reverts to a discussion on the cleaning of the unit and at which times the group is supposed to gather to collectively clean the common areas of the office space. The first time the leader asks how they feel about the work environment she is met with silence. She reiterates the question and finally someone answers that the climate is good and improves all the time, indicating that that the participants have not prepared the question or that they are unwilling to share thoughts on this matter in a group setting.

The structure of the meeting – The topic of the meeting is work environment. The headline, or discussion topic, for the meeting is formulated as a question: "How can we contribute to a good working climate?" The participants have not had any time to prepare for the topic and this may be one explanation for the weak response and the long discussion about cleaning the office. The basic form of the sequence is that the leader introduces the topic, asking the group about their opinion. The meeting starts with the leader trying to get some input from the group on the first agenda item, namely the work environment at the office. She has to ask the group several times before the discussion gets underway.

The LIM interaction – The interaction is dominated by *advocacy* from the technicians and attempts of *inquiry* from the leader. The discussion seems to be bound to these two categories during the sequence.

Most of the utterances made during the sequence are statements of *advocacy*. The leader asks many questions, which may be interpreted as *inquiry*, but they are mostly controlling questions or short questions. Thus, the frequency of questions is high during the sequence. The participants engage mostly in *advocacy*, at times they engage in horizontal inquiry. In fact, all of the questions asked by the participants are horizontal questions during this sequence.

The discussion is focused on *self*, which is natural given the topic of the discussion. The category of *other* is never used during the discussion. Another missing category is *positive* comments, which is not used during the discussion. Figure 13 shows the interaction pattern from the sequence.
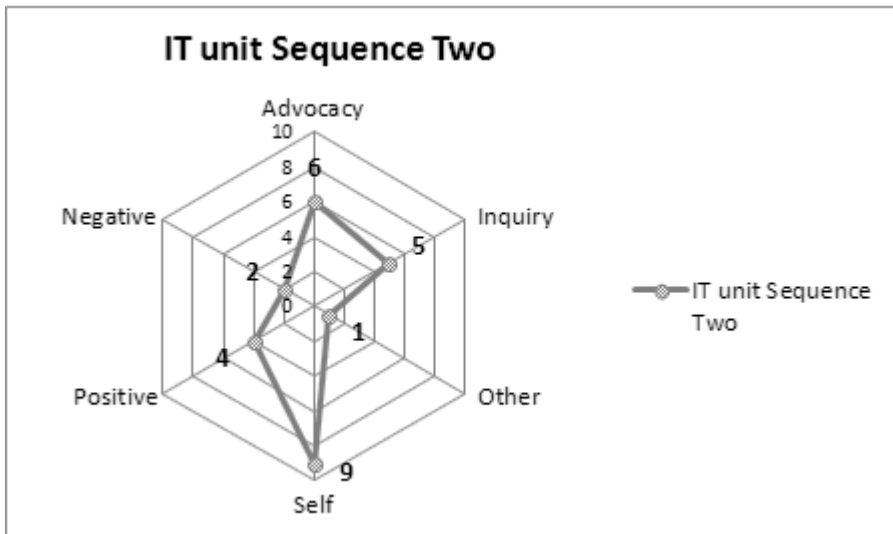
Figure 13 Interaction pattern: Discussing "soft" issues

The graph reveals that both *advocacy* and *inquiry* are at a moderate level. In the dimension *other-self* there is a major imbalance towards *self,* indicating that the focus of the discussion is centred on the group and the views of the participants in the group. This discussion did not involve the *other* category. In the *positive-negative* dimension the group tends to be more positive than negative.

The discussion in the sequence puts the focus on the difference between frequency of statements and the amplitude of the statements. There are many questions asked during the sequence but with low amplitude, and most come from the leader. The same goes for *advocacy* category; *advocacy* is mostly *advocacy* with low amplitude. The leader tries to get the group motivated but it is either a commitment of the participants or the genuine interest of the leader that is lacking. Something makes this sequence more imbalanced than normal. The meeting has an imbalanced interaction pattern and the group seemed to be stuck in a probing phase with no concrete solutions offered.

Sequence three: Discussing the task and mission of the group

In this sequence the participants contribute with their thoughts on the development areas of the unit. They explore and problematise their current work situation.

The group is gathered in the lunch room and seated in the sofas around the room. The group consists of twelve people and the leader is seated in one of the sofas on the long side of the room. This is the first meeting that is ob-

served in a group situation and the leader has started the meeting by introducing the researchers and the topic of the meeting. The group is supposed to discuss the development of the office and how they can handle the missions from the politicians and from their customers. Everyone present says their name and function at the unit and they also add what they think is important to discuss regarding the missions.

The leader explains the purpose of the meeting: "The purpose is to talk and to come up with concrete solutions. Concentrate on how it is now and how we want to have it in the future. The goal is not to do as we always have done; the goal is to create something new. We need to work leaner."
One participant asks, "Is the goal to be leaner or what is the goal?"
"The goal is to have lean deliveries."

The leader goes on to summarise the opinions of the techs:
"[You all said that] things happen that disturb [the daily work]. I would like to know more about this. Does anyone have an idea, what are these other things?"
"Things that do not work."
"Acute events that need to be taken care of."
One participant says, "We have to stop believing that it is unique. /…/ Projects that are finished continue to create work."
Then he gives examples of things that have happened and what they should prioritise. The leader hums and takes notes. One of the support technicians adds that:
"It is common that the system spooks and that this spreads."

The support technician continues to explain that it is a complex environment they are living in:
"We cannot control all of the variation that we have. We live in a spook environment." "These disturbances take resources."

The leader summarises:
"What you are saying is that we have a high factor of disturbances?"
One participant says, "The tasks that are not planned take most of the time and resources." Another gives an example of an acute errand and ends with saying: "Couldn't someone else have done that?"

"I think we focus [too much] on the missions which makes normal work unplanned."
The leader hums. One of the support technicians suggests that they should plan with larger margins. The leader returns, "I hear what you are saying. It is important we are able to say no. It's possible that the current balance between mission and support is wrong- that's possible."

The leader continues to ask about the present situation:

"But the planning we have today, does it feel correct? That we plan the activities: that we have support. Does it feel correct?"

"We are lacking future orientation."

"I thought that we should work with the operations."

"We are not yet."

One of the support technicians says rhetorically, "Have we planned for the workload we have today?"

The leader answers, "I don't know, what do you think?"

"It does not seem like it. We are in a transition period right now. What is it that is so surprising?"

"No, there is nothing that is surprising. We have uphill right now. I don't think that we should start the discussion by saying that we should have more people."

Then they leave the subject of more personnel and the leader asks the group:

"The running of the unit: do you have any ideas regarding this matter?"

"We have focused too much on missions instead of working with the technique in a smart way."

One of the support technicians says, "We should work parallel with technique and missions." One systems technician adds, "We cannot forget the technique." The support technician continues:

"It takes energy not knowing what lies behind things." He suggests that the customers should be informed beforehand and that the information between customers and technicians should be better. One of the system technicians says, "You cannot prepare for everything." And "we have to take things as they come, when they come." The system technician adds, "We should discuss the technique more."

The leader then returns to the issue on the meetings that the group had decided to have:

"The meetings that we decided to have, support meetings and systems meetings, what happened with them?" One systems technician answers:

"They drowned in the missions."

"What did we decide? Does anyone remember? And where should we report from these meetings? /…/ I wonder why these meetings have not been conducted. Is it the time constraint or the fact that we do not dare?"

One technician answered, "There have been other things to do."

Comments to the sequence

Leader behaviour – The leader introduces the meeting's topic. During the meeting, the leader asks the group questions regarding clarifications. The leader also summarises the discussion at some points during the meeting.

The leader does not have to encourage participation or keep track of the people during the meeting. Except in the beginning of the meeting, the leader takes a passive role during the meeting. However, when necessary, the leader steers the meeting by asking questions to get the discussion back on track. This is done either by asking a new question on the topic or by picking up on one of the previous topics and asking the others what they think. The questions asked by the leader are directed towards the whole group and not towards a specific individual.

Participant behaviour – The participants are mostly communicating with the leader during this sequence. The discussion goes to and from the leader. Sometimes the participants agree with the other participants and repeat what the others have just said. The participants are sharing information with the group by giving examples of occasions when the missions have not worked out when the workload has been too large. The participants are quite passive during the sequence. There is no discussion going on in the room; rather, the members of the group share thoughts and insights. The meeting is dominated by a few technicians who do most of the talking together with the leader.

Structure of the meeting – The purpose of the meeting is to share ideas on the current and future work situation of the unit: how could they work differently to avoid acute errands and always solving crises? This topic is thus a development topic. The meeting has no prepared agenda and there is no secretary. Instead, the leader takes the notes during the meeting. The participants do not have to ask for the word in order to speak and they take turns in speaking, addressing most of the discussion towards the leader. It seems that the group is in the beginning of a discussion on change and development but that they have to establish some sort of present state first. One of the systems technicians tries to raise the issue of number of people at the unit and that more people may need to work there. The leader, however, thinks that it is too early to talk about employing new people before they know if there are other possible solutions.

The LIM interaction – The main dimension used during the sequence is *advocacy*. The group is giving information and offering opinions on the situation. The participants are discussing with each other, not just the leader. The leader is asking many questions, which activates the *inquiry* category of the LIM. The entire topic of the meeting is formulated as a question: "How is [the work situation] today and how do we want to have it in the future?" None of the participants manages to capture the second part of that question. The participants are not asking any horizontal questions and one of the participants asks the leader a question.

The discussion is mainly focused on *self* in the *other-self* dimension. Customers, seen as *other* in the LIM, are mentioned during the sequence but mostly as examples on how the group should work towards the customers, not what the customers might think of the units work.

Positive-negative is a rather silent dimension during the sequence. There are no positive remarks at all, and some of the more rhetorical remarks regarding how the unit should work may be regarded as negative. Still, in general the discussion is neutral in relation to the *positive-negative* dimension of the LIM. Figure 14 shows the interaction pattern from the sequence.
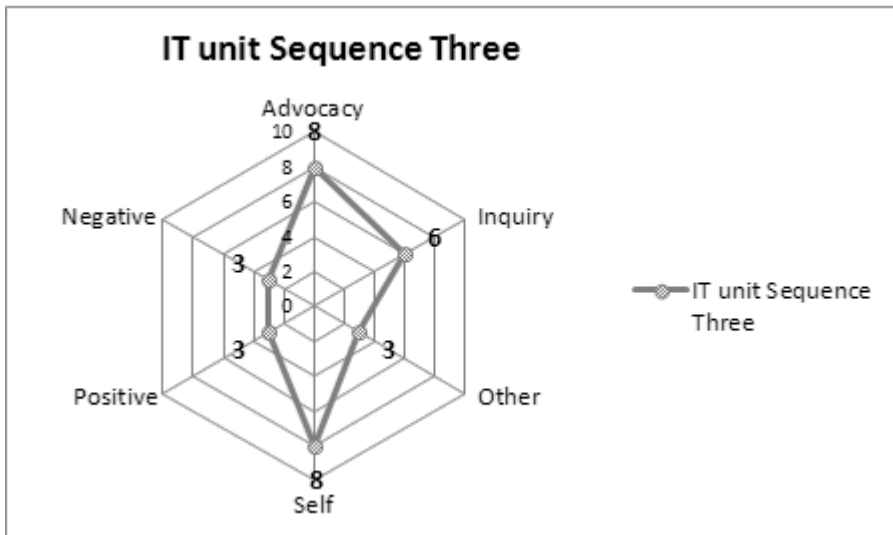
Figure 14 Interaction pattern: Discussing the task and mission of the group

The graph shows the interaction pattern during the presented sequence. There is an imbalance towards *advocacy* over *inquiry*. The *advocacy* category is at a high level and the *inquiry* category at a moderate level. Most of the *inquiry* is done by a single person (i.e. the leader). There is also an imbalance towards *self* over *other*, and more *positive* than *negative* comments. The pattern indicates that the group does not manage to balance questions and suggestions, although the topic involves thinking into the future. The participants in the sequence are trying to explore their current work situation, which is primarily done by giving information and suggesting that their technological environment is complex and unpredictable. The interaction pattern is quite far from the ideal LIM interaction pattern. However, the sequence serves as a first attempt to describe the current situation and the problems that the unit is currently facing.

Summary of the findings in the IT unit

The interaction pattern in the LIM seemed to depend on the subject matter and the behaviour of the leader. When the group had topics that were concrete and that the participants found interesting, such as the problem solving topic with the administration of PCs, the interaction became more balanced. However, when the topics were unprepared or when the leader tried to engage the group through asking questions, the interaction had a bias towards *advocacy*. The same could be said about the participation rate at the meetings. When the group was allowed to discuss topics that they found interesting, the participation rate was quite high, but when the leader requested that the group to have opinions on different soft issues or strategic issues for the unit, the participation rate was lower and the interaction moved slower in the room. The interaction often took the path through the leader during the meetings in such discussions and the participants did not engage each other in any horizontal inquiry. Instead, the interaction started at the leader, then moved slowly to someone in the room, then back to the leader, often with a long silence in between, and then out into the room again. In more concrete discussions the interaction moved more quickly and in a more complex pattern than in the other discussions. On these occasions, the participants talked to each other and not to the leader. These discussions also showed a different, more balanced, interaction pattern. On such instances, the leader took a passive role, which allowed the participants to take a more active part in the discussions.

The leader had prepared a series of development topics that she wanted the group to discuss but the group's understanding of these topics was rather low. The group did probably not feel secure enough to talk about "soft" topics in a formal meeting without preparation. At the closing interview with this group, some of the technicians said that they would have preferred to prepare the topics in smaller groups in order to verbalise their opinions. They felt that the meetings were an insecure arena for unprepared opinions. The leader wanted the meetings to be development meetings in which different topics on the unit were discussed.

When the interaction pattern is balanced in the LIM the group is able to move forward on the issue at hand. This is for example done in sequence one. On the other hand the interaction pattern suffers when the group engages in discussing issues that are new to the participants, such as softer issues. In these situations the interaction pattern becomes imbalanced towards *advocacy* and *self*.

7. The Municipality management group

Introduction

The Municipality management group is made up of the highest non-political leaders in the municipal hierarchy. The group meets for a one-day meeting every month to discuss current events in the municipality and common projects. The group is made up of managers from the municipal administration, chiefs of staff, and vice presidents of the three municipal companies. The administration leaders are responsible for the different parts of the municipal administration, such as the school or the culture administration. The group is led by the municipal director, who is the highest ranking non-political administrator in the municipality. The group answers to the politicians of the municipality.

The group and the participants

The group consists of non-political administrators and several of the managers are relatively new in their posts, ranging from about two months to two years. The leader has been in his current post for one year when the observations started. The average size of the group during the observed meetings is twelve persons. Although the group has existed for several years, the composition has changed and the group is relatively young and still developing. Many of the participants are new and are still looking to find their role in the group. The daily work of the administration leaders consist of management tasks concerning their particular administration. One major responsibility is the staff of the administration and the keeping the administration within its budgetary frame.

During the year of observation, the group went through some significant changes in work form. From the third meeting and onward, they used more break-out groups and engaged the participants more actively in discussions. These meetings were led by the operations development manager in the municipality who wanted to get information and suggestions on the new ERP

system[8]. Having smaller sub-groups worked very well for this group. These smaller sub-groups had 3-4 participants and they reported back their findings to the larger group after about 20-40 minutes of discussion. This form was also used when discussing issues on the organisation of the bureaucracy of the municipality.

Later the group decided that they needed to change their way of working and that the group was too large for having constructive discussions. Therefore, they created a smaller group which prepared the discussions and developed specific ideas to be tested in the larger group. The smaller group met in the morning to discuss issues on the work of the municipality and then they reported their conclusions to the larger group in the afternoon. The idea was that the small group should prepare the decisions by reducing options and that the larger group should be part of the decision-making process.

One of the participants describes her view of the meetings:

"The [meetings] were much more dynamic in [the previous municipality I worked in]. In this group /…/ it has kind of been a lot of one-way communication. We just sit and listen. But now when we have created the smaller group, I think it will be better." (Interview No. 41, 2009)

"It depends of course on us who are sitting in the room but it possible that the questions have not been conducive to discussion. It has been a presentation of more or less complete matters. There is no need to discuss a matter when the decision is already made. And then sometimes the fact is that the [leader's] leadership style does not invite discussion. (Interview No. 41, 2009)

Working in a municipal organisation means that the non-political administrators have to follow and obey decisions made by the elected politicians in the municipality. According to one of the participants, the relationship and trust between politicians and the non-political administration is working well in the municipality:

"For me, I see the immense trust in the non-political administrators that you have here. This is an on-going discussion in every municipality, the division between politicians and the non-political administration, but here the line is a little narrower than it is in many other places. The [politicians] do not interfere as much here as they do in other [municipal] organisations." (Interview no. 36, 2009)

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[8] Enterprise Resource Planning -system

The venue of the meetings

The meetings had an agenda that was distributed to the participants beforehand. The overall aim of the group is to gather all the leaders in the municipality on one occasion monthly to share information and discuss the future of the municipality. The meetings focused on information often with one or two outside guests that gave a presentation on varying issues in the municipality.

The group held their meetings at two locations. One room was used as a conference room in one of the municipal administration buildings. This room had a large oval table in the middle, a white board at one short end of the room, and chairs for visitors and listeners along one of the walls. The room had windows on one long end and on one short end of the room. The room was located on the ground floor. The leader was sitting at the short end of the table in a chair that had a larger back than the other chairs in the room. In front of the leader was a chairman's gavel. The observers were sitting along the long side walls. Figure 15 shows the first meeting room of the Municipality management group. (This room was used in the sequences *discussing the new municipal culture house* and *showing disinterest in external guests*.)
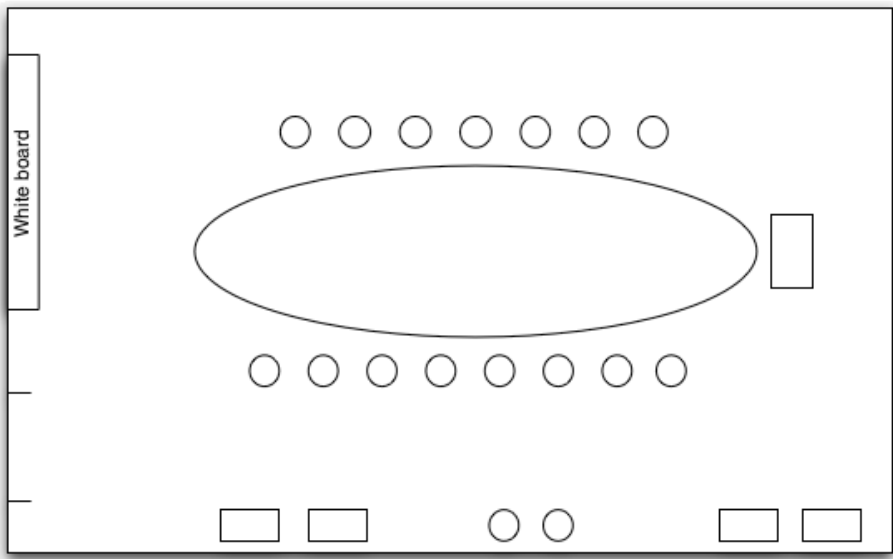

Figure 15 The first meeting room of the Municipality management group

One of the participants describes the problem with the meeting rooms in the group:

"The leader sits there [points to the leader's chair at the short end of the table] and then we are sitting here in a row. And the other [meeting] room [we have] is a disaster. It is hard, I think,

to motivate discussion and dialogue when the leader is sitting on a podium and the rest of us sit around like this. I usually try to sit on one of the short ends so that I can at least see the others." (Interview No. 41, 2009)

When the group meets for one-day sessions, the day is divided into two parts. During the morning hours, the group follows an agenda prepared by the leader of the group while the afternoons are devoted to a more thematic discussion, often on some particular issue in the municipality or listening to presentations from invited guests. This type of meeting has been running for about one year, with the group meeting regularly every fourth week during the spring and fall. An example of points from this agenda is the presentation of current events in the different administrations in the municipality.

Phases in the meeting
  1. Gathering during small talk
  2. Opening of the meeting and introduction by the leader
  3. Discussion, reporting, or small group discussions
  4. Closing of the meeting

Some of the participants questioned the purpose of the meetings, i.e. if they only were there to listen to information, they could spend their time at other places using the time in a more constructive manner. The aim of the meeting was to co-ordinate between the administrations, share information with each other, and get support from one another, particularly when dealing with demanding issues.

The leader of the group

The leader had a background from the Air Force where he had spent a significant part of his working life. When he retired from the Air Force, he went into the city council sector working as a vice president of a large hospital. He subsequently moved to the municipal sector working as a school leader for almost four years in the same municipality he is now leading. His background is thus as a leader and administrator with a firm background in the public sector (governmental, city council, and municipality).

The leader says that leading large organisations in the public sector is quite similar and the only big difference between the air force and municipal sector and city council is the inertia of the public sector.

"A difficulty encountered in both the city council and the municipal world is that there is inertia in the organisations that is not found in the military. If an officer said that now we're going to do like this, the officer knew that it would happen like that. But it does not work like

that either in the city council or in the municipality. In these sectors you have to recruit people to do things. You cannot order them to do things." (Interview no. 28, 2009)

The leader says that "being city manager is like any other job: it becomes what you make of it. /.../ The challenges we face are about the same as those you face as a manager in any organisation." The leader has actively tried to develop the group:

"What I have been working actively to try and change since I took over is the relationships and function of the group. I have the help of a consultant and we are still meeting with this consultant twice a year in two-day sessions. We call these meetings for training camp and we continue working with issues regarding group dynamics and group processes in order to get everyone to feel confident enough in the group to be able to express their views freely. /.../ They should feel that they can express their opinions without being blamed or criticised because of their ideas and opinions." (Interview no. 28, 2009)

Meeting sequences in the Municipality management group

Sequence one: Debating the new municipal culture house

This sequence is a typical meeting in this group. The leader initiates a debate or discussion which is then performed between two of the participants.

The meeting has started in the morning and the observed sequence starts the afternoon part of the meeting. During the mornings, the group usually has a fixed agenda and in the afternoon they discuss a selected theme or topic. The morning part of the meeting contains information from the different administrations in the municipality and the discussion of common projects.

The meeting takes place in a meeting room with a huge oval table. The leader is sitting at one of the short ends of the table in a chair with a larger back than the other chairs in the room. A gavel is lying at the table in front of the leader. The group consists of ten municipality administration managers.

This sequence is from the round robin part of the meeting. The group has met during the morning and that morning part of the meeting ended with the round-robin but they did not finish it. They are now back from a lunch break and during the lunch the leader of the group, the culture leader, and the school leader had had an informal discussion on the new culture house in the

municipality. The leader thinks it would benefit the others to hear and take part in this discussion. The municipality has received money from a celebrity to sponsor the new culture house.

The leader finishes his presentation of what will be going on in the afternoon part of the meeting by saying:

"So that is what we will discuss in the afternoon. But we are not really finished with the discussion that we did in the morning because we were talking about [the new culture house] when we broke for another subject and maybe we should finish it. Everyone was not included in the discussion we had on the way to lunch today."

"No, now I do not… Help me where to start with this" The culture leader says.

"We talked about how [the culture house] was planned really and how it ended up on the investment side."

"Yes, yes, to tell this from the beginning /…/.

The culture leader gives a description and the background of the project, explains that the project has created a moving carousel in the municipality, and that the project is beginning to grow. The cultural leader checks with the leader during his presentation to determine whether the information he gives is in accordance with what they talked about during the lunch break:

"Is that correct?"

The leader answers with a "hum".

"The money that we have received comes from the investment plan and a half million from [the celebrity]. Is that going to be enough for what you want to do or has this half a million, which you've already got, created an expectation of more money?"

The cultural leader affirms that the expectations on the project probably are higher now than they were from the start. The school leader then steps into the discussion. He is involved because it is his responsibility to man the culture house with teachers and recreational time staff. He says, "The most important thing now is to establish *what* we are going to do and which kind of activity we are going to have in the house."

"Yes."

"Is it not?"

"Yes."

"And, we have not done that yet."

"No we haven't, in…"

"So what we are talking about now… it is two activities that will become one and we do not know if it is the same or if there is a new activity or something. So step one now is to investigate what we need to accomplish in the coming year."

"Yes."

He also says that the culture leader has to act on already taken decisions and at the same time keep his eye on the new culture project. The problem for the school leader is that some of the personnel changes have to be done before the end of the year in order to be able to be saved in this year's budget. The school leader asks control questions to the culture leader. The culture leader is not able to answer these questions and the school leader continues:

"So you don't have to leave that house for at least a year?" The culture leader says that they rent the old building for one year at a time and that it would be capital destruction to keep the house without activity in it. The school leader changes from his confrontational style into a more reflective one:

"I just think that it is important for us to take it in the right order."

The school leader says that the politicians already have decided that they do not have enough money to keep both of the houses. The culture leader says that this is correct, but that they also have decided to keep some of the activities and move them to the new building. The culture leader asks the school leader if he is following the reasoning:

"Are you following me?" The school leader asks.

"Well, well." The culture leader answers

The leader steps in and does a summary of the discussion:

"Is it like this that you want to check the possibilities of getting financing from the school and social administration?" The culture leader answers, "I am not looking for /…/ money." The culture leader wants a staff that are trained in recreational centre pedagogy and the school administration can help him with this part.

"This part we can help you with /…/ you just have to decide before the end of the year what your activity is going to be like," says the school leader.

They decide that they are going to discuss the matter in the strategy group of which they both are part. The discussion ends after this and the group is silent for a moment. The leader then says, "Mm, well, but it sounds like it is primarily your challenge [name of culture leader]."

"Yes, yes," the culture leader answers.

There is another short silence, and then the leader says, "[name of the city architect] did you have a question?" The city architect just wondered if they had not already decided on an activity because they have been approved a building permit from the architect's office. This is confirmed by the culture leader.

At the end of this part of the meeting, the leader sums up the discussion once more:

"Then this will be an errand for the strategy group?"

"Yes."

"Yes." The culture leader and the school leader answer and the school leader adds:

"Then we are in agreement."

Comments to the sequence

Leader behaviour – The leader presents the agenda and the topic of discussion for the afternoon session. He helps the presentation by asking a question that pertains to the expectations on the cultural house. The leader steps in twice during the discussion, first when he wants to clarify if the culture leader wants more funding, and second, when the debate/discussion has slowed down. He also steps in to summarise the outcome of the discussion with one sentence.

Otherwise, the leader is not actively participating in the discussion but he is actively monitoring it. This monitoring can be seen by the way he steps in and summarises and by the fact that he keeps track of the ones in the group who want to ask question or make suggestions. The leader is thus not sitting idle but is actively monitoring the group and the discussion. The leader nods and hums at some point and some of the other participants also hum. The leader is both active and passive at the same time. He is not taking part in the discussion thus in this sense is inactive. However, he is active because he monitors and steers the discussion. The reason for the discussion to take part in front of the big meeting is that the issue regards several other leaders in the municipality, such as the city architect, the technical leader, and the social leader. These persons are affected directly or indirectly by the new culture house. The leader takes part in the discussion by asking questions and keeping track of the others who want to speak.

Participant behaviour – The participants are mostly spectators because the discussion does not involve them directly. The discussion is mainly conducted between the culture and school leaders. The others are following the discussion and some ask questions on certain issues. Ten people present in the room and during these twenty minutes of discussion seven persons make at least one verbal utterance. The cultural leader gives his presentation and the others listen. The school leader steps in because he has a stake in the project. He says that they have to look at the problem more systematically. The participants are mostly silent, except for the ones taking part in the actual discussion. From the audiotape, it is impossible determine whether they are idle, taking notes, or following the discussion actively. Nevertheless, they do respond when given an affirmative question, but only in the form of an acknowledging hum.

The structure of the meeting – The structure of the meeting is formal. The participants take turn in speaking and have to ask for the floor through the leader. There are only a few interruptions of the person speaking, suggesting that for the most part the participants show respect for the person on the floor. The formal structure of the meeting, asking for the floor and letting everybody have their say, not only slows down the discussion but also inhibits spontaneous suggestions to solve problems. However, because the discussion does not concern them directly and that they do not have all the available information, they are less likely to try to come up with solutions. What would have happened if they would have presented the discussion in the form of a case to be solved instead of a discussion between the school and cultural leader? Perhaps the group participants would have been more willing to contribute suggestions and ideas to the school and culture leader.

The LIM interaction – Inquiry is used in two ways in the discussion: to affirm that the others have received the message or that the message was presented in a correct way and as *inquiry* into the nature of the project. The main dimension during the discussion is *advocacy* in the form of presentation of a background and giving possible solutions.

Other-self is always hard to measure but the discussion involves some other perspective. However, the problem is largely framed as a self-oriented problem involving several of the administrations in the municipality. To summarise the sequence, the communication is mainly done using *advocacy* statements.

The discussion is neutral in terms of observable *positive* or *negative* comments. No one comments on the suggestions of others by either affirming them with positive comments or rejecting them with negative comments. Some of the affirmative sounds (such as "humming") could perhaps be interpreted as positive comments. Figure 16 depicts the interaction pattern from the sequence.
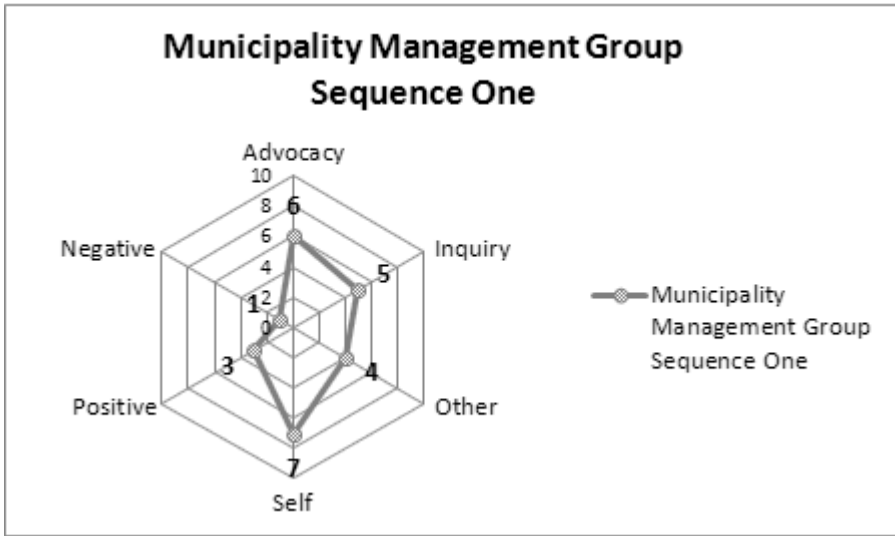
Figure 16 Interaction pattern: Debating the new municipal culture house

The graph shows the interaction pattern from the sequence. The dimension *advocacy-inquiry* is at a moderate level and there is a slight imbalance towards *advocacy*. There is a major imbalance towards *self* over *other* and there are more *positive* than *negative* comments. The pattern indicates that the discussion centres on the interests of the participants and the group and that the type of advocacy is at a discussion level, i.e. the amplitude of the utterances is moderate.

The discussion is typical for this group in many respects. The group uses a formalised structure of their meetings resembling a similar structure of the entire municipality administration. The formality of the group and the form of the meeting room slow down the pace of the meetings and reduces of most of the participants from participators to spectators.

All of the LIM categories are at a moderate level, except for the *self* category which is at a high level. The leader controls the discussion during the sequence by summarising the debate so far and asking questions. Most of the participants are not directly involved in the discussion, which lowers the score in several of the categories. The leader initiates the discussion and helps the participants to follow the discussion but this does not help the fact that most of the participants are not involved and they have no opinion or stake regarding the question. The result of the discussion is that the other participants are made aware of the issue, but the discussion does not result in any concrete ideas from the group on how to move forward on the issue.

Sequence two: Showing (dis)interest in external guests

In this sequence the participants are exploring the information given by an outside presenter. They try different approaches to make sense of the presentation.

This meeting follows the structure of the first example in this group. The observation starts in the afternoon and three external guests present different ideas to the group. The first is a guest from the health project group that is co-operating with municipalities in creating open air rehabilitation. The leader of the group asks the three external guests to introduce themselves. They are representing a health project and will present the idea and give some background to the health project. After they introduce themselves, the leader asks the group to present themselves. At the same time, one of the representatives of the project passes out a list so the participants can sign their name and e-mail addresses. The group then presents themselves by stating their name and function in the municipality organisation. There are eleven persons present at the meeting.

One of the representatives presents the agenda for the presentation and the pre-tests that were done for the project. It is a health project focused on the nature and health and rehabilitation of persons on sick leave. The representative tells the group that several persons have started to develop these services in Sweden.

The representative starts to wrap up and summarise her goals of the project. The project is supposed to create employment and create an opportunity for the residents of the municipality to have access to nature. The technical leader takes the word and says, "We are already working with that."
"Mm, I know that."
"We do everything to get people out in the nature. Uh, the economy for this-is that…"
"That's not really established yet."
"But what kind of support would we as a municipality get from you?"

Before the project representative is given an opportunity to answer, the leader interjects, "It will not cost the administration any of their own money to participate in this. It will be entirely funded by the Board."

The environment leader tells the group about some of the current projects in his administration. They are presently working on a project to make the nature parks in the municipality more easily accessible for the residents in the municipality. He also suggests that they try to link these two projects with each other to avoid working on the same thing.

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The representative of the project suggests a round robin where the participants discuss their thoughts on project. This is met with silence from the group. The school leader then takes the lead and asks, "How many other municipalities are represented in the project?" The representative names the different municipalities in the area that are represented in the project. The school leader then asks if they want the same type of schools to be represented in every municipality or whether it is enough with every type represented in the overall project. The answer is that the project does not need all types of school in a single municipality to be represented. This is met by silence. After a brief period of silence, the leader asks about how rehabilitation is connected to the project in that health is one of the main goals of the project. The personnel leader also asks about rehabilitation. The social leader does not want to buy any welfare services from the project, but says that they may be interested in using nature more for their own administration.

The school leader reports that he has been involved in the pre-study phase of the project.
"What I need is a little more specifics of what is expected of those who provide these project teams. I still feel like it's a bit fuzzy if you are suggesting that we should buy or sell these services or whether we will provide the concept that someone else buys. It's not… I still don't know really what it's like."

He wants much clearer information on the project and what is expected from the administration if they decide to take part. The representative answers that the idea is that the school could buy services for pupils that need training. As she sees, it the school would be the buyers of the services. The school leader answers that if this is the case, then the reason for his administration to take part in the project would be to make sure that the sellers understand the task and deliver what they are expected to deliver. He is still wondering what is expected from his municipality and clearer information overall regarding the project:
"What is expected from us?"

The school leader decides to take part in the project but the technical leader is reluctant. After the presentation is finished, it turns out that it is more than just a presentation of the project. It is also a sales pitch to participate in the project, which the leaders have to decide whether to take part in the project. The leader of the group pushes for participation by summing up the rather vague promises from the participants and saying that the municipality now has decided to be part of a working group in this project. The leader of the technical administration says that his administration has too much going on anyway and that they do not have time to take part in yet another committee or working group. The school leader wants to take part but he has some criti-

cal questions related to the presentation and he feels that what is expected from the participating administrations in the project is unclear.

Comments to the sequence
Leader behaviour – The leader takes his role as leader, presents the group, and asks the external guests to present themselves. After the presentation, the leader encourages a round robin discussion where the municipal managers are asked to how their administration could fit into the project. This forces the participants to at least contribute something to the meeting.

Participant behaviour – There are only two of the participants who are actively taking part in the discussion, namely the school leader and the technical leader. The rescue officer steps in to explain about the youth fire brigade. The participants are asked by the leader to say a few sentences about what they think of the issue.

The structure of the meeting – The meeting is used to have an external presentation and three external guests are standing at the short end of the large boardroom table in front of a power point screen. The rest of the group is located around the table with the leader sitting at the opposite short end of the external guests. After the presentation, the group is allowed to ask questions, but because they do not seem to be very interested in the topic, the questions are mostly from the external guests to the participants.

The LIM interaction – When the presentation is over and the rest of the group has a chance to talk, the LIM is starting to give indications in other categories than just *advocacy*. The technical leader starts by first using *advocacy* and then follows up with doing real *inquiry* with respect to the possibilities of the project and the funding of the project. The questions from the group show in the LIM and this makes this sequence almost balanced in the *advocacy-inquiry* dimension. The questions need closer examination before we can tell how they are explored by the group. The questions in this sequence at least have the functions of activating the group and exploring the theme of the meeting. The representative is not always able to give a clear reply to the questions and an explanation for this will be given in a later sequence when the aim and scope of the project are put to the test.

The discussion thus moves in the *advocacy-inquiry* dimension. The other categories are not used as much. Most of the *inquiry* in the sequence is connected to *self*; the questions asked are about how the project will be relevant for the administrative leaders and their administrations.

The participants are engaged in both polite *inquiry* and critical *inquiry* while examining the propositions of the external representative. The question

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about funding could be seen as critical inquiry. The school leader uses *inquiry* as a way to focus on the weak point of the presentation – what is expected of the administrative leaders if they decide to take part in the project.

There are not many positive comments during the sequence and some of the answers from the administrators may be interpreted as sarcasm. This passive hostility shows in the *negative* category of the LIM. Figure 17 shows the interaction pattern from the sequence.
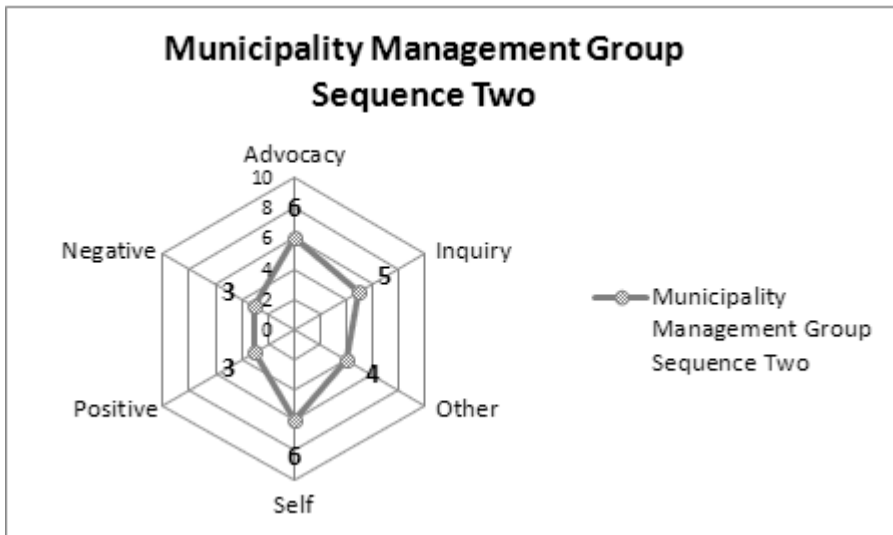

Figure 17 Interaction pattern: Showing (dis)interest in external guests

The graph shows the interaction pattern of the sequence. The meeting has a slight imbalance towards *advocacy* over *inquiry*, a major imbalance towards *self* in the *other self*-dimension, and balance in the *positive-negative* dimension.

The interaction of the sequence scores low in all of the LIM categories, except *negative* category which is higher than usual for Swedish meetings. The sometimes ironic comments to the external presenters and the irony given in some of the questions to the presenters give a higher score in *negative* category than usual. The score in the *other* category is at a moderate level based on the participants' lack of engagement during the sequence. The participants are trying to make sense of the presentation by asking the external guests questions. The interaction pattern is balanced but at a low level and the result of the discussion are vague promises from some of the administration leaders.

Sequence three: Trying to solve an organisational problem

This sequence differs from other meetings in this group. In the sequence the group explores an organisational problem presented by one of the participants. The structure of the meeting plays a major role for how the meeting sequence unfolds.

The group forms in the morning during small talk. The leader stands at the front desk waiting for everyone to take a seat. The small talk settles and the leader says good morning. He asks one of the researchers, who is new to the group, to present himself. He then remarks that today's meeting is about salaries and the new organisation of the municipality staff administration. He further notes that he cannot take part at the meeting because of an acute personal matter. He explains what has happened and that he must immediately leave the meeting. He says that he will not be able to concentrate at the meeting anyway. One of the participants says "go"; the leader says "thank you" and leaves the room. There is some mumbling in the room and one of the participants asks, "What do we do now, who will take over?" Because the two first items at the agenda are prepared by persons in the group the personnel leader suggests that those responsible for these items take over the meeting.

After a few minutes of silence the group decided that they still could have the meeting, as well as discuss almost all of the agenda for the day. Someone in the group asked for leadership and that someone else should run the meeting. However, the group settled on letting the person that had the main responsibility for the current agenda lead the meeting. This arrangement resulted in that three persons came to dominate the meeting. Some of the presentations lacked proper preparations but in general the participants managed to improvise well despite the absence of the leader.

The group begins the meeting without the leader present. The sequence is mostly information from the personnel leader. This would qualify as almost a pure form of information giving. The personnel leader is well prepared and does not seem to be inhibited that the leader is not present.

The group consisted of thirteen participants and despite its size, the group managed to keep their established meeting practices.

The group returns from the coffee break. There is some small talk while the participants take a seat. The leader of one of the municipal companies says that he has a case that he wants to discuss with the group. There are twelve persons present at the meeting after the break. The case is already on the agenda for the day and is thus a prepared discussion from the VP's part.

"I would like to ventilate an issue in this group in order to sift any ideas about it. A brief background…"

The issue is about one of the buildings owned by the company. This building had received previous subsidiaries from the municipality to pay for its costs. These subsidiaries were now revoked and therefore the company could not afford to own the house any longer. But before the VP would sell the house to someone outside the municipality, he wanted to hear the opinions of the rest of group and if they had use of the house or useful ideas of how the building could be kept in municipality ownership. The VP presented this issue as a case in which he gave background information and the involved costs of the building. The VP ends his presentation by asking two questions to the group: "Are you able to see any possibilities, any possible uses of the now empty building? Are there any other ideas?"

"So I was asked to listen around, talk to some persons and check with different interest groups. I have mentioned it to [the school leader] and he was very quick to respond with creative ideas, which I gratefully accepted. /…/ So, that's where we stand now. I wanted to raise this issue to see whether anyone can come up with possible uses for the house. I will stop there."

"What kind of ideas did [the school leader] have," the technical leader asks.

The school leader presents his suggestions. One idea could be to move the sport gymnasium into the building. Another idea is to utilise the building for office spaces for his principals who currently lacks proper office space or sitting in different parts of the municipality. It would also be possible to eventually move the entire social office into the building.

The discussion continues. The school leader has a third idea in which the culture office moves into the house instead of the house in current use. The school leader also points out that the moving of another office into the building must be accompanied by cutbacks somewhere else. The municipality must save money. There is much laughter during the sequence because the school leader points in the wrong direction during his talk. The others try to correct him but he just looks annoyed. The school leader asks the others about their view on his ideas. The culture leaders points to the needs of the culture office and the VP of another municipal company says that their organisation needs a new building but that this particular building is not suitable. He also asks the other VP if it is really worth all the money to leave the building. The VP answers that in the current situation he does not like the fact that the other parts of the company are sponsoring the house. He also says that the company (a hotel and conference company) would be able to give better service to their guests if the house were left.

The culture leader says, "What feels wrong to me is that this whole site, including [the hotel], has such high quality that losing this to external people would not be good. We don't want to bring in other people into the tourism activity, which is presumably the future of [the municipality]. I believe that tourism and the entertainment industry will be important."

The VP of the other company asks if the VP wants to leave the house. The VP answers that he wants to get rid of the cost of the house, which would be the same thing. Several other participants ask questions with regards to the need for the company of the building and how it could be used. The culture leader still does not want to leave the house; he says that they at least should think about it before they use the house for something else.

Comments to the sequence

Leader behaviour – Because the leader of the group is absent, there is no formal leader in this sequence. Instead, the group organises the meeting according to the agenda, with the personnel manager leading the first part of the meeting. The discussion presented and led by the VP has been prepared by him.

Participant behaviour – In the first part of the sequence there is only one person talking and giving information about the issue. The fact that the VP has talked with some of the other leaders helps drive the discussion forward. The ideas from the school leader are presented as a platform for the others to depart from when discussing the case. The presentation of the case has also given all of the participants the same information to depart from when discussing the case. Interestingly, the VP has already decided that the company does not need the house, or cannot afford to keep the building in his company. The participation is enhanced by the open-ended question to the group and the interaction is moving between several of the participants in this sequence. Several participants come up with ideas or ask questions to the VP about the building and how it could be used.

The structure of the meeting – The structure of the sequence is informal and there are no formal rules to the interaction to be followed. The basic structure is that the VP presents his case while the others are listening.

The LIM interaction – The VP gives the background to the case by using the *advocacy* category of the LIM. The presentation ends with open-ended questions, i.e. *inquiry*, which helps the discussion gain momentum. *Inquiry* is used here in the form of open-ended questions instead of just controlling questions. There is a qualitative difference between these two types of question. The school leader finishes his presentation of ideas by asking the others, the culture leader, and the VP of the other municipal company for their

ideas. These questions trigger discussion and help the discussion to stay concrete. The discussion therefore involves *advocacy* and *inquiry*.

Others are represented and some of the participants think what will benefit the municipality in the long term. Some of the participants are not directly involved in the problem and their commitment to the discussion is lower than those who are involved. The participants sometimes give suggestions that will have an effect on their own administrations, which could be interpreted as *self* in the discussion.

There are no clear *positive* or *negative* comments. The atmosphere is positive and the participants seem to be interested in trying to help the VP solve his organisational problem. Figure 18 shows the interaction pattern from the sequence.
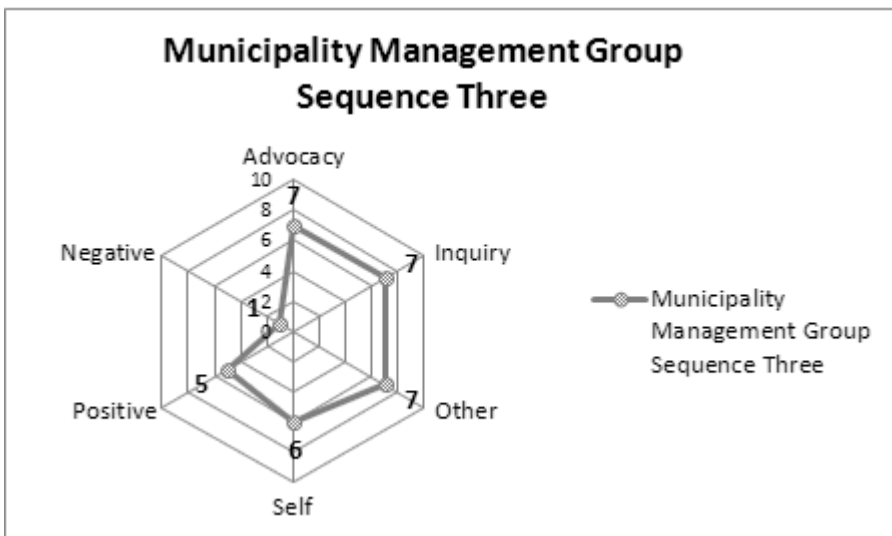
Figure 18 Interaction pattern: Solving an organisational problem

The graph shows the interaction pattern during the presented sequence. There is balance between *advocacy* and *inquiry* at a high level, a slight imbalance towards *other* over *self*, and more *positive* than *negative* comments. In all the pattern shows that the group manages to keep the discussion focused on both asking questions and advocating ideas.

The meeting balances at a high level in all of the LIM categories, except *self*, which is at a moderate level. However, the lack of preparations motivates the relatively low score of seven in the categories. The structure of the meeting helps to balance the interaction pattern and the presentation from one of the participants helps to give a clear problem statement and background to the

discussion. The lower score in the *self* category indicates that the discussion does not directly involve all of the participants. Most of the discussion is done in the *advocacy* category but the utterances often indicate *inquiry*. The group discusses possible solutions to the problem and tries to help the VP to solve his problem.

Summary of the findings in the Municipality management group

The meetings in the Municipality management group included a wide variety of topics and procedures. The interaction varied according to topic and the commitment of the participants. Because of the composition of the group, it seldom managed to have topics that engaged all of the participants. When asked to contribute, there was no lack of ideas but the participants also seemed to realise that some of the topics did not concern them or their administration directly.

The topics and discussions at the meetings are work-oriented. The participants discuss such issues as the organisation of the municipality and which administration is responsible for a particular errand. The participants are present as representatives for their administration or company and at the same time as members of the management group. Thus, the participants have to think about their workload and their administration or company and at the processes of the management group.

The interaction in the group suffered because they had so many different topics and branches of the municipality to talk about. For instance, at the first meeting the school leader and the head of the culture office had a discussion on a topic which, for the most part, concerned only them. At the end of this discussion, the school leader realised that the discussion could have been done at another time to avoid taking time from the meeting.

The group had a rather formalised structure that allowed the meetings to be orderly. However, such a formal structure and the agenda items limit the freedom to discuss more openly. Another problem was to find topics that concerned every participant at the meeting.

The leader is active during the meetings asking the participants questions, and distributing the floor during the meetings. He tries to activate the participants by asking direct questions. He controls the meeting but in several discussions takes a passive role, i.e. restricts his role to monitoring the discussion.

The idea with the meetings was that the group should get together and share information with each other in order to be more updated and better able to meet the challenges of running the municipality. The leader expressed this as "getting things known in the organisation". The meeting, however, had stagnated into becoming mostly information meeting. For this, and other reasons, the group decided to alter the organisation of the group in the middle of the spring.

8. The Culture unit

Introduction

The culture unit is responsible for the administration of both the culture school and the culture office in a large-size municipality. The task of the culture office and cultural school is to organise the cultural activities of the municipality. The culture school consists of music and dance teachers giving classes and individual lessons to children living in the municipality. The mission of the culture office is to administer all of the cultural events in the municipality (e.g. festivals and exhibitions). Together they form the culture unit of the municipality.

The group and the participants

The observed group is a leader group that combines the leaders from both the culture office and the culture school into one group. The average size of the group during the observations is five persons and it is led by the head of the office. The work of the culture school focuses on bringing musical and artistic education to the children living in the municipality. This education could be in the form of individual education of a chosen instrument or in a dance class. The other half of the culture unit is the culture office, which is the administrative heart of the culture in the municipality with overall responsibility for everything pertaining to culture in the municipality. Much of the work is conducted in the form of projects. The culture office and culture school have recently been merged into one single culture unit. Previously, the culture school was a separate autonomous unit.

In the previous organisation the culture school and culture office had been separate units. The staff of the culture school now had to be subjugated to the leadership of the culture unit instead of being a separate independent unit. The teachers in the culture school were used to the old way of doing things, which gave them a lot of personal freedom and they did not need to report any activities to their managers. The new organisation tries to organise the teachers in a more traditional fashion, including greater control over the activities of the teachers, but proved to be difficult. Resistance from the

music teachers often took a passive form. They resisted by not obeying, talking back, or obstructing decisions.

The group had also changed members and hired a new activity leader. The activity leader was new to the role and she needed strong support from the head of the cultural office. This new activity leader took over the work of the previous leader. Later, after about two months, another activity leader was hired to handle the music school. This took some of the workload off the shoulders of the first activity leader. This new activity leader was more experienced and was not afraid to take on the music teachers.

The group is small (n=6 persons). Two activity leaders, who are responsible for the work of the culture school, one administrator, one leader from the culture office, who is responsible for many of the cultural projects in the municipality, one music teacher, who represents the union at the meetings, and the leader of the entire culture unit. The activity leaders have a background as cultural administrators from other municipalities and their work is to organise the culture school and take care of personnel issues and facilities. The leader has a background as a teacher and she has worked in the municipality for several years, both as a teacher and as a speciality teacher.

One of the participants think that the group needs to develop and that it is the responsibility of the participants to take on more responsibility in the group:

"The group has been controlled by [the leader]. She controls and takes responsibility for this group: she plans the agenda and check that things have been done. [The leader] is a very active person who wants much. It has not been an easy group. There has been considerably insecurity regarding the composition and role of the group. Many of the issues should have been discussed in a leader group. I think that this group should work more with the overall issues and with a focus on the future and not so much on practical details." (Interview no. 2, 2008)

The participants in the culture unit took the use of the concepts of the LIM seriously. The leader of the group said the she always thought of the model and that she kept it in the front of her mind during all conversations. Another participant said that she thought of the model in conversations with her children, trying to be more positive.

The venue of the meetings

The group held their meetings at several locations. The main location was a conference room in the head administration building of the municipality. Other venues were a conference site and a conference castle. The location in the municipality head administration building was a corner office on one of

the high floors in the building. The room consisted of an oval table and at the short end of the room there was a white board. Figure 19 shows the main meeting room of the culture unit. (This room was used for the sequences *a new beginning* and *planning for the offsite meeting.*)
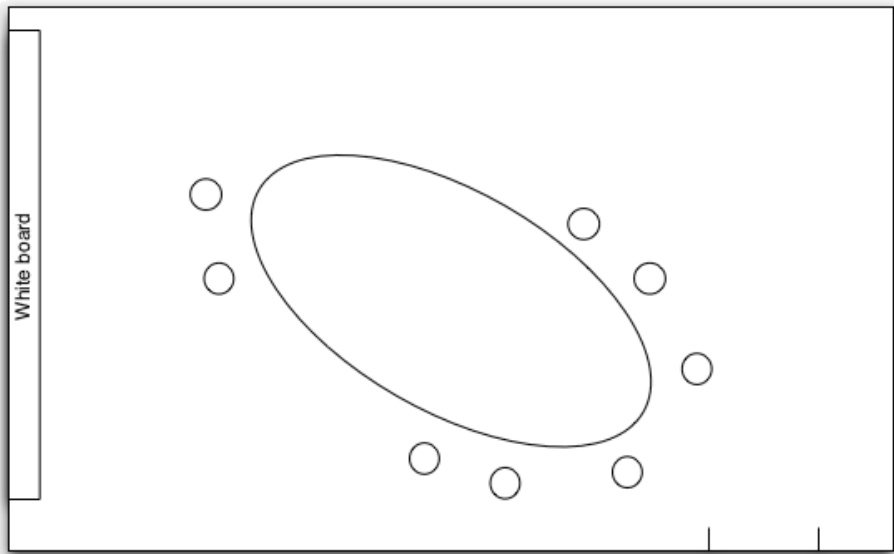
Figure 19 The main meeting room of the Culture unit

The meetings were scheduled as one- or half-day. The half-day meetings typically lasted for 3-3.5 hours with a coffee break in the middle. The culture office had decided to have long meetings. They also had frequent get to-gether meetings when the group met outside the office for one or two con-ference days. The meetings contained the following phases.

Phases in the meeting
  1. Gathering during small talk
  2. Opening of the meeting and introduction by the leader
  3. Discussion
  4. Break
  5. Re-gathering during small talk
  6. Discussion
  7. Closing of the meeting

The leader of the group

The leader started as a junior high school teacher, but also worked as a union representative. During her work, she has been involved in several cultural

projects and part of different units. After her career as a teacher, she worked with culture administration. In mid-2006 she was appointed to her current position as leader for the culture unit. One of her main responsibilities as a new head of the unit is to organise the merger between the culture school and the music school into one unit.

"I have been too dominating a figure in the group. Maybe I am too focused on that. /…/ I have been forced to dominate; otherwise, we would not have come as far as we have. I thought that it would be possible to break earlier. Now we will try to have a new beginning in the group." (Interview no. 3, 2008)

The meetings were well organised with a very well prepared leader. The group spent much of its time planning ahead and solving problems that materialised since the last meeting. There was no time pressure at the meetings and the group seemed to be able to take the time they needed to discuss different matters. When the group gathered they started with a short introduction from the leader, who had prepared an agenda for the meeting. They also had a short coffee break in the middle of the meeting. Most of the time during meetings was spent trying to organise the work of one of the newly employed activity leaders. She needed strong support in her new role as a leader and this was one of the reasons why they spent so much time on this. The leader of the group did most of the talking. She invited the others to talk but she reserved most of the time for herself. The others did not seem to mind this at all, but they were allowed to talk if they wanted. The group seemed to have a good dynamic in that fashion.

Meeting sequences in the Culture unit

Sequence one: A new beginning and starting to plan for the long run

In this sequence the leader plays a major role, both by spreading and sharing positive energy, as well as by strictly controlling and monitoring the meeting.

The meeting takes place in the municipal head building in a small conference room. There are five persons present: the leader of the unit, two activity leaders from the culture school, one activity leader from the culture office, and the head secretary. The leader has prepared an agenda for the meeting. Earlier meetings have focused on control of the unit and how to solve acute

problems but now the group is able to focus on the long range planning and the future of the group instead of just solving acute problems.

The meeting starts with the leader expressing relief and happiness over the fact that the unit now is facing a new beginning:

"I have felt these weeks like I am dancing in a summer meadow- it feels really good. What a difference! It's really nice. I thought about the meeting today and if I should make any agenda or not. We must in some way change our management meetings. Earlier meetings focused heavily on control and monitoring in order for us to go forward. I think there are some things we need to decide and maybe we should take some time to talk about what we want the work in this group to look like."

The group is going to discuss the coming events in the office and the leader has prepared some agenda issues for the group to discuss. The leader also gives the others present at the meeting an opportunity to say what they think would be important to discuss at the meeting.

"You have received the items that I think we should discuss. Do you want to take them in any special order?"

The participants suggest some other items that they want to discuss or be informed about. The leader then says, "I suggest that we go through the previous notes because I took it upon myself to look through the items not completed yet, and it was four. I will just talk through these notes and then you just say if they are done or not."

The leader goes through the checklist with the remaining items from previous meetings and the participants comment or explain how far they have processed the items. When this part of the meeting is finished, they discuss the coming staff meeting and which items to bring up at that meeting.

One of the activity leaders talks about how they are going to involve the staff group in the work with the goals. Everyone in the staff will have to write two questions regarding goals and the unit. The leader acknowledges this and says, "That is really good."

The questions generated by the staff will then be used by the smaller group. The third activity leader steps in and explains that the goal of the smaller group is not to give any answers, but to ask questions. The leader once again comments on this idea:

"It is a good model. It becomes very concrete."

The activity leader responsible for the idea informs the group that she is currently having individual talks with the staff. The leader is thoughtful with respect to the voluntary participation in the group. Will it really be voluntary, and what happens if the staff do not want to participate?

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The leader asks the group what will happen if no one wants to participate in the group

"What will we do then?" She is also critical of the voluntary participation in the group:

"Is it voluntary?"

The others do not answer right away and she asks them once again:

"Is it voluntary?"

She is met with a short silence (perhaps reflective silence).

Then one of the activity leaders says that perhaps it should be representative participation from the work teams instead. The others also want to have a say, pointing out that there is the risk of forcing some of the teachers into the group because they are alone or part of small work teams. One of the activity leaders notes that they have not thought about and discussed this yet. The leader asks if they want more time to discuss it alone or if they should discuss it at the meeting. The third activity leader steps in and says that she wants it to be finished today. The administrator suggests that they could use the work teams instead. There are four work teams in the culture school.

Comments to the sequence

Leader behaviour – The leader is the most active person during the sequence. In the first part of the meeting the group is going through those items that were not completed from the previous meetings. This gives the first part the character of a control sequence. The leader checks with the other participants as to whether they have more information on the items and or if they have solved the issues. When they talk through the checklist of unfinished errands the leader dominates the interaction. Later in the sequence she leaves space for the participants.

Participant behaviour – It is a sequence with high participation. The activity leaders from the culture school also participate at a high level. All of the others contribute something at least once. The activity leader steps in and explains that the previous activity leader was supposed to have left a written report regarding this but that she has not been able to find any written information. Then one of the activity leaders takes over and tells the group what to discuss and talk about with the group. The leader asks the participants about the agenda and this gives them an opportunity to speak their mind, which provides an opportunity to influence what will be discussed at the meeting.

Structure of the meeting – The meeting has a prepared agenda but the group discusses those items they need to consider during the meeting. The leader controls the structure of the meeting but the participants are free to break the form when they want.

The LIM interaction – The sequence is about sharing information and this is done with the use of *advocacy*. Some questions can be heard but none that are really focused on doing inquiry. The questions are more of the form "have you done this?" or "have you heard that?" This is a form of controlling *inquiry*. When such questions are asked at meetings they are sometimes met with silence or with an acknowledging mumble. These kinds of questions have thus not contributed to the discussion or prompted the group explore new and different positions (i.e. no real inquiry). This discussion also makes it clear that the interaction analysis approach is not as useful in determining these matters.

The group uses the *other* category when referring to the teachers at the cultural school; in other respects, the discussion is mainly focused on *self*. The interaction during the sequence is centred on *advocacy* and *self*. Both the leader and the activity leaders are using *advocacy* to explain their viewpoints. The discussion is also centred on the group and the organisation, i.e. *self*.

The leader starts the sequence by expressing positive emotions. Although this is not positive feedback given to any specific person it could still be argued that the utterance is *positive* in the LIM. This use of the positive category also sets the positive feeling for the rest of the meeting. The laughter in the middle of the sequence could be seen as *positive*. I interpret it as *positive* in this sequence because it brings the group together with regards to the issue and lightens the mood of the group. Laughter is not normally considered positive comments, but it can serve as a positive force in groups. Figure 20 shows the interaction pattern from the sequence.
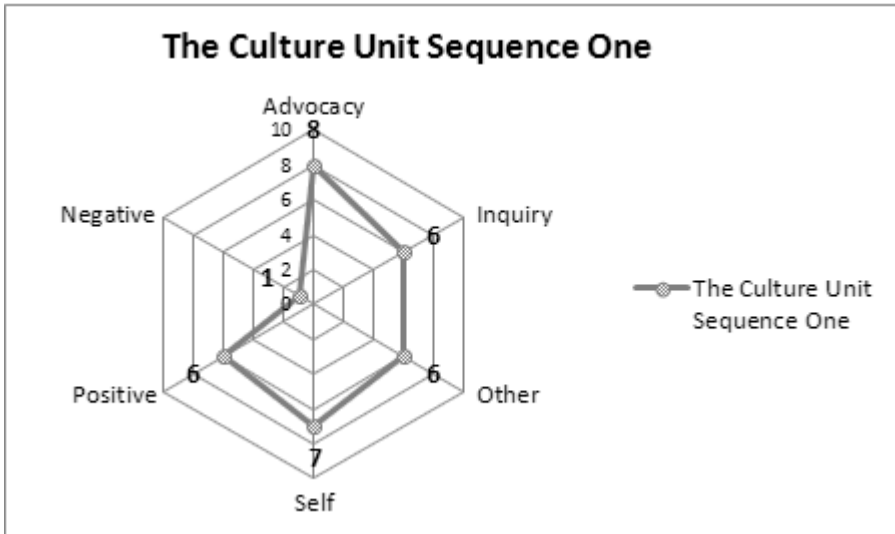
Figure 20 Interaction pattern: A new beginning

The graph shows the interaction pattern during the presented sequence. There is an imbalance towards *advocacy* in the *advocacy-inquiry* dimension, a slight imbalance towards *self* over *other,* and more *positive* than *negative* comments during the sequence. *Advocacy* and *self* are used at a high level.

When the leader starts the meeting, she shares her positive feelings about the present situation in the group and in the organisation. This positive energy remains throughout the sequence. The leader also controls much of the formal parts of the meeting and she decides when they are ready to leave a subject, setting strict and clear frames for the discussion.

Sequence two: Sharing positive highlights

In this sequence the structure of the meeting plays a major role. Each participant is asked to share positive highlights with the group.

This meeting takes place at a conference site. The group is meeting for two days to discuss such things as planning and development. In the present sequence there are only three participants: the leader and two activity leaders. One of the activity leaders is new and has worked as leader for the culture school for only three months.

The leader starts the new subject:
"Let's take an evaluation of the year [2007]. I have already prepared you for this but I will repeat the task. I want you to give three highlights from the

year and three development areas. I also want you to provide feedback regarding the process in the group, this group."

There is a short pause, and then the leader says, "Think a few minutes."

The participants are silent and noting things down.

The leader breaks the silence and asks, "Are you ready, or do you want to think for a few minutes more?"

"It's easy to find highlights, but harder to note down development points," one participant says.

"For me, it is mostly personal things, and not so much about the organisation," the other participant says.

"So are you ready to give your highlights," asks the leader.

"I think the trip to [name of city] was very good. Everyone thought it was fun. I thought it was fun."

"I also think that trip was a highlight." The leader fills in.

"Next! Keep going."

"Next highlight was when [name of activity leader] came."

"And the last was the child culture festival."

"My first highlight was when I started at this job," the new activity leader says and laughs. "Ok, seriously, I have noted the leader days. It was very rewarding for me, especially since I was new at the job (the development days). These days gave me a lot; otherwise, I would have died. And the last I noted the parent meeting. The teachers really showed their positive side at that meeting. The meeting was a success after all."

"Why did you say after all," the leader asks.

"You mean regarding the meeting? We weren't sure if we should have the meeting and I was very insecure before the meeting, I didn't know what a parent meeting entailed at the culture school."

"The parents were really happy with the meeting," the leader says. Then the leader goes on to present her highlights.

"Alright, I have noted the trip, the leader days and… These three show that we are moving forward. They become symbols. At the leader meeting, we managed to talk about other things than just small and practical things- it took off."

"Ok, should we talk about development areas? Do you want to start?"

"The quality project, the dance and theatre programme, and Play. Do you want me to elaborate?"

"Yes, please do."

"We can still develop the dance and theatre programme, but we are getting there. I talked on the phone with one of the leaders last night. Play is still at the embryo stage. It is good that we dare to try new methods. The quality

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programme is a must. I am happy for your support there. It is fantastic and fun. It feels like new."

The leader asks the other participant, "And you?"

"I think that the leader group can be developed, that we can take on more responsibility and that it is not just [name of the leader] who takes on all the responsibility. I would like that the culture office could be a larger part of the society. And I also want to develop the film area. We have received money for a project that I am preparing right now."

"I have written administration and computerisation. Number two we should give each other positive feedback. Three: continue to work with the goals of the unit," the leader says.

"Shall we [talk about development areas]?"

"What did you mean by that?"

"It was feedback on the process."

"Could you start? It was hard to note down thoughts about the process in bullet points," says one of the participants to the leader.

"All of my points are named 'take care'. The first one is take care of me. Many of your problems end up with me, but when you have solved a problem I am not informed. This means that I sometimes I have ten monkeys on my back instead of one. The next point is to take care of [name of administrator]. I am worried about her. She is going to start working full time again and she is sometimes too ambitious. That's important. The third is to take care of yourselves. Do things right and do the right things. Give each other positive feedback and try to focus on the positive things."

The leader continues: "The development [of the unit] is going in the right direction. Think 20-80. Take care of yourselves and create time and security. We have a unique opportunity. We are the only ones in the municipality who work in a non-regulated area."

There is a short silence then the leader asks, "Do you understand what I mean?"

"Hm."

"What do you think?"

"That it's easier said than done."

The other activity leader fills in, "It is much dependent on yourself. Sometimes I think things just happen, things that you need to attend to. I cannot sit and work undisturbed. The three priorities we talked about- they are not possible."

"What was that?"

"It was three things that I should concentrate on."

"What does it look like for you in February and March?"

"Good so far."

"Make sure to note days that you can use. Control your environment."

"Be proactive instead of being hunted. I'm giving you that in homework to note down days. Or find another way. No one else is controlling your time."

"What do you say about the process in the leader group?
"I think it feels really good. You and I [looking towards the other activity leader] are working together in a natural way. We have only worked together for three months. It is interesting to work like that. This is when you get the best results. Earlier I have been alone very much."
"I also think that it is good. I feel that I can trust you and that things are getting done."
"It's nice to see that you have found each other. Let's take a break and let some fresh air inside." They leave the room for a coffee break.

Comments to the sequence
Leader behaviour – The leader has prepared an item on the agenda so they can share positive highlights with each other from the year. They are also going to give suggestions to areas that still need to be developed. The participants were prepared for the meeting but the leader gives them time anyway to silently think through what they are going to say. The leader thus controls the meeting by asking the participants to share their information (highlights and their thoughts). The leader decides when to begin and asks the participants if they are ready.

Participant behaviour – The participants share positive highlights with each other, contributing with personal thoughts about their work and the work of the group. They are giving opinions about the past year. They also show respect for each other by not interrupting and listening attentively to the comments of the participants and the leader.

The structure of the meeting – There are only three people present at the meeting. The item with sharing positive highlights has been prepared in advance but the leader still allows for a few minutes to note things down. The participants are then asked to share their thoughts.

The LIM interaction – The interaction during the sequence is focused on sharing positive highlights through *advocacy*. This could be referred to as contributing advocacy. During the discussion, there is not so much *inquiry* among the participants. On some occasions, the leader poses questions. The topic of the meeting could be said to have inquiry built into it.

The highlights are both focused on self and on others, but the participants do not take the perspective of *others* during the meeting. Most of the discussion

is focused on the group and the process within the group. This would mean that the *self* category is used more than the *other* category.

By sharing positive highlights, all of the dimensions of the LIM come into natural use. Giving each other positive highlights automatically triggers the positive category and connectivity among the participants, especially the highlight that the activity leader from the culture office presented regarding the arrival of the new activity leader. Sharing positive highlights with the group also gives a balance in the LIM. When the group links the highlights with development areas, a future-oriented focus is obtained. They ask the question how would we like the future of the group to be.

In this example the *negative* category is used as a means for constructive criticism. This criticism is done by the leader when she requests better feedback. Figure 21 shows the interaction pattern for the sequence.
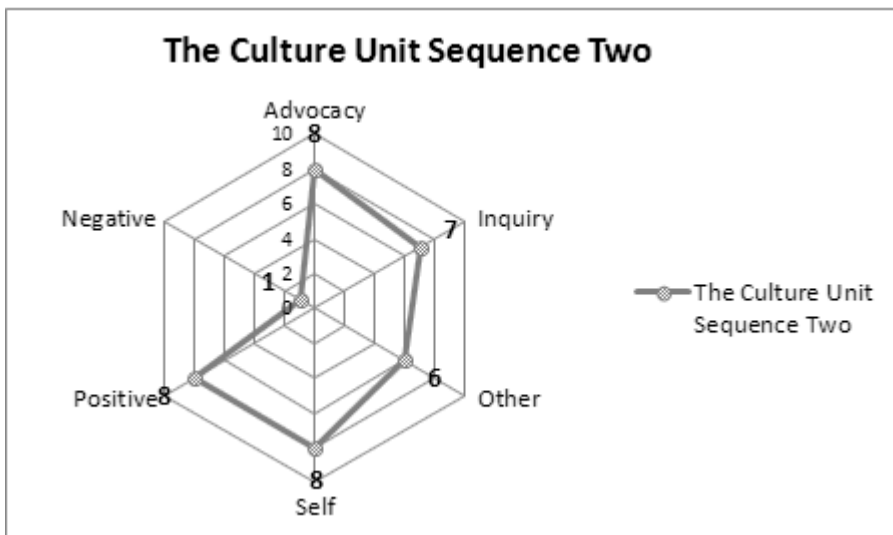

Figure 21 Interaction pattern: Sharing positive highlights

The graph shows the interaction pattern during the presented sequence. There is an imbalance towards *advocacy* over *inquiry*, an imbalance towards *self* over *other*, and more *positive* than *negative* comments. Both *advocacy* and *inquiry* are at a high level.

The sequence scored high in all of the LIM categories, except for the category *other,* which is at a moderately high level. The topic of the sequence invites for positive energy and genuine *inquiry*. The group is centred on itself, which explains the imbalance towards self in the *other-self* dimension. The topic of sharing positive highlights and thinking about the current situa-

tion of the members in the group gives the meeting a very positive and generous atmosphere. The advocacy is of a contributing kind, where the participants give each other input and insights in terms of new ideas.

Sequence three: Planning for the offsite meeting

In this sequence the participants are in focus of the meeting. They discuss the offsite meeting by including others into the discussion.

This meeting is mostly used to finalise the plans for a common trip that the entire culture school and culture office will take part in at the end of the summer when the staff returns from their summer vacation. The trip will be a two-day meet spent in a nearby recreational area during which they are going to do both recreational activities and planning for the coming semester. Most of the planning has been delegated by the leader to the two leaders of the culture school. They have also created a temporary staff group that is responsible to plan and help with the trip. Present at the meeting are four persons: the leader and three activity leaders.

The leader introduces the topic and establishes the structure of the meeting:
"This meeting is going to be led by you [the activity leaders] but I have prepared some items. We have to look into all of this today and I want to be able to make all the reservations today after the meeting. We need to decide for the structure of the offsite days, the content, and responsibilities. Is there anything else?"
"No."
"Should we start with the content of the two-day meet? I want to listen to you."
"We can start by telling you about the discussion we had."
"We have access to various health and fitness activities, which are included in the cost of living. The idea of these activities is to do things together. We also thought that it would be nice to make a boat trip during our lunch hour."

The activity leader continues:
"I've looked into the cost of the boat trip and it would cost 5400 SEK, excluding lunch. That would be almost 10000 SEK when we have paid for lunch for everyone."
"That's quite a lot of money. Remember, this is the first day [after the vacation]. People need to talk and socialise."
"There are so many other things to do there instead."
"Make sure that the boats and the tennis courts are scheduled to us." The leader says.

"Also, one of the employees wanted to bring her massage table and give free massages. I think it feels unnecessary with the boat trip. We don't have to spend the money on this."

"It is better to lie low," says the leader.

"It would be nice to do something together with the group."

"It is two days. The first day we can let loose. The second day we may create groups."

"That is a good idea. It's their first day at work. They need to feel free." There is a short silence.

"Activities that require preparation need to be on the second day."

"Regarding the massage table, is that really good for her and how many persons will she be able to massage," the leader asks.

"Two hours, which means that she may massage four people. I think it is stupid."

"The group may be very passive towards new things," the leader says.

"Has she done that before," one activity leader asks.

"Not with the massage chair. She wanted to do chi gong with the group."

"Then it will be possible for her to take part in the other activities during the afternoon."

Then the leader asks, "How do we do with the notes today?"

"I took notes at the last meeting."

"I can write today."

"We need to have a list of things and we need to decide who is going to do what. May we leave that item with health," the leader asks. This is followed by a short silence.

"I have a question. Offsite salary is being paid out. Is that for everyone?"

"It is for everyone, but it is really a stupid thing. We have to administer a thing that is going to give them 20 SEK maximum. It is the union who wants to have it so. On the last trip, I managed to take it away."

"How come you get a salary when everything is included?"

"I don't think we should mention it at all to the group," says the leader.

"Then the union will have to inform the group."

"We keep a low profile instead. It is hard to fight about a thing that they are entitled to."

"It would be interesting to discuss the item now; it is about principles. One may wonder how come it is so important."

"Historically, it was important when the group travelled abroad. It is work days," the leader points out.

"It is very little money. If they think that it is important to stick to the principles…"

The meeting continues with the other items.

Comments to the sequence

Leader behaviour – The leader sets the structure for the meeting by saying that the persons responsible for the offsite planning are going to predominate over the meeting. She is clear on that issue as she wants to listen to what they have to report. The leader has also prepared a checklist that needs attention. She also sets the time limit for some of the decisions that need to be made by stating early that some things need to be solved at the meeting. The leader gives some suggestions and directions in the sequence regarding what needs to be done.

Participant behaviour – The participants take a large part in this sequence. They are responsible for the planning of the offsite meeting with the staff. The participants accept the proposed structure of the meeting and it is almost as though they are reporting to the leader regarding the planning of the offsite days. All of the participants are involved in the meeting and offer questions or suggestions. One of the participants informs the group about practicalities regarding the offsite and what she has found out about costs for the activities at the site.

Structure of the meeting – The meeting is structured as a discussion or developing meeting in which case the group tries to come up with ideas for the offsite meeting. The leader has set the tone (structure) for the meeting by preparing an agenda and checklist.

The use of the LIM – The group asks each other numerous questions. There is considerable *inquiry* and *advocacy* going on in the sequence. The advocacy is of the positive contributing kind. The inquiry is not manifested through direct questions but rather through the use of the *other* category.

The *other* category is engaged via comments on the employees who are considered *other* for this group. The group tests ideas and tries to figure out how the staff will receive the programme for the offsite meeting. The *other* category is used as an empathic other.

There is one archetypical positive comment. One of the activity leaders agrees with a suggestion from the leader by saying "that's a good idea." Figure 22 shows the interaction pattern from the sequence.
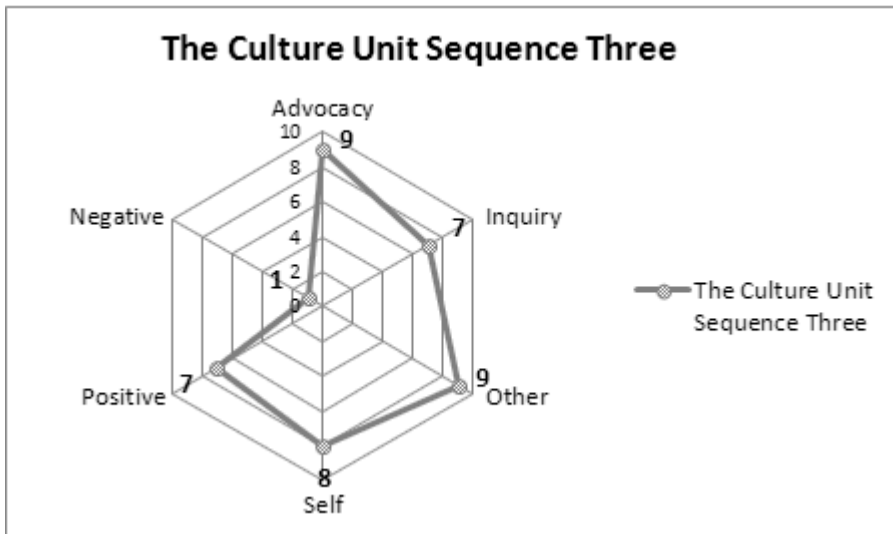
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Figure 22 Interaction pattern: Planning for the offsite meeting

The graph shows the interaction pattern during the presented sequence. There is an imbalance towards *advocacy* over *inquiry*, an imbalance towards *other* over *self,* and more *positive* than *negative* comments. All of the categories are at a high level.

The interaction pattern indicates a positive meeting with high relevance in the utterances and with focus on *inquiry* and *other*. It is the energy of the participants and their concern for the employees that drive the meeting. They are concerned about how the employees will think about the programme for the offsite meeting and concerned about the welfare of the staff in the organisation. There is also a high degree of horizontal inquiry and connectivity between the participants. The leader is taking a more passive position during the sequence. The interaction scored high in all of the LIM categories.

Summary of the findings in the Culture unit

Most of the meetings had a detailed agenda and concerned discussions on most matters. The meetings were mainly work-oriented but the complex situation at the office, with one principal leaving and another starting her new work, takes up much of the time at the meetings. Consequently, the others are forced to listen to things that do not concern them directly. The others seem, however, to have no problem with this situation.

The situation at the office and the fact that the new principal has been appointed to responsibilities that were not intended to be hers makes the meet-

ing take a special turn. The leader tries to support and encourage the new principal as much as possible. Thus, the leader of the group has prepared substantially and the agenda for the meetings is often large.

The group is new, with two new activity leaders and one new information secretary. Three people form the base of the group: the leader, the culture office representative and the musical teacher. Towards the end of the series, when the new activity leaders in the group are getting more comfortably in their posts, the leader started to delegate more responsibility for the meetings to these new persons.

The atmosphere is very positive during the three presented sequences and the group works together on creating a positive climate for their meetings. The other categories vary according to the topic of the meeting, with good balance in the categories of the LIM. At times, however, this is unbalanced towards *advocacy*, especially when the leader controls the participants and takes up most of the time during the meetings. In the other sequences in which the leader is more passive or when she invites the participants to contribute to the conversation, the interaction becomes more balanced.

9. Discussion and analysis

This chapter discusses the empirical descriptions presented in the previous chapters. The purpose of the study was to explore how different contextual factors of leader behaviour, participant behaviour, and structure of the meeting affect the interaction process. What can these perspectives tell us when looking at the interaction at meetings in organisations? The chapter focuses on these three contextual factors and summarises and compares the behaviours of the participating groups in regards to context and interaction. A link to group theory and leadership in meetings is made.

The first three sections cover these three contextual perspectives. The chapter starts with a discussion on leadership and meetings. This is followed by a look at the behaviour of the participants at meetings. The next section pertains to the structure of meetings and how different ways of conducting meetings may impact the communication climate. Two such ways are the case discussion and the future-oriented discussion. The next section is a discussion on order parameters and groups. The final section of the chapter covers the three main functions of a meeting: learning, relation building, and work.

Leaders in meetings

According to Yukl (2006) the leader has to balance two functions when leading a meeting which are the task function and the group maintenance function. The task function consists of process structuring, stimulating communication, clarifying communication, summarising, and consensus testing. The group maintenance function involves gate keeping, harmonising, supporting, standard setting, and analysing the process of the group. Table 8 presents the leadership functions proposed by Yukl (2006)

Table 8 Leadership functions at meetings (Yukl, 2006)

Task function	Group maintenance function
Process structuring	Gate keeping
Stimulating communication	Harmonising
Clarifying communication	Supporting
Summarising	Standard setting
Consensus testing	Analysing the process of the group

In the first sequence from the Municipality manager group (*debating the new municipal culture house*) the leader of the group is active in using the task functions. For instance, the leader is structuring the meeting by guiding the discussion and sequencing the participants talk. He is also clarifying the communication when that is needed in order to keep the discussion on track. When the discussion slows down and the subject matter is resolved by its own momentum, the leader makes a short summary of the outcomes of the discussion. This is also considered a task function of the meeting. In this sequence the leader functions as a *controller* of the discussion and this affects the interaction pattern in a more balanced way.

Yukl (2006) argues that to simply perform task-oriented behaviours is not enough in that the issue of timing is equally important. In the example from the Municipality managers group the timing of the task functions seems to be adequate. The leader of the group allows time for the discussion, makes clarifications when he thinks they are needed, sequences the discussion by inviting others, and finally summarises the discussion when it has slowed down and comes to a natural rest. This implies that the leader is skilfully applying the task-oriented functions during this meeting. The activity of the leader functions as a contributor to the interaction pattern and this behaviour has an impact on it. When the leader performs the task-oriented functions during the meeting by actively monitoring the discussion, keeping track of the sequencing of the participants, and summarising the discussion, they have the effect that the interaction involves more of the participants and more of the categories of the LIM. Thus, when the leader acts as a *controller* the interaction pattern in the LIM benefits.

The leader in the Culture unit had tight control over the task function of the meetings because of the situation in the unit, but her behaviour also had a positive impact on the interaction of the group. She *reminded* the group of the positive things lying in the future in order to help the group to get through the difficult times. These positive reminders opened up the interaction climate in the group and made the interaction pattern in the LIM more balanced. This behaviour clearly functions as a group maintenance function. One particular sequence stands out, namely the sequence where the partici-

pants were asked to contribute with their three highlights during the year, then three areas to improve and then some thoughts on how the process in the group could be enhanced (*sharing positive highlights*). This simple exercise made a difference on the interaction of the meeting and it contained three features that affected the interaction. First, it focused on the positive things in the organisation, i.e. on what the group and the members of the group find works in the unit. Second, it focuses on developmental areas but in a positive way. The group understood this and suggested only things that could improve rather than things that did not work. Third, the discussion focused on the future process of the group and how the group could work in the future.

In the Elementary school unit the leader functions as a *reminder* to the group regarding the rules for the meeting and the topic and preferred outcomes of the meeting. The leader of the group started the sequences with defining the form and clarifying the outcomes of the discussion. Thus, she performs the task function during the meeting. The leader also encourages the group to think in a collaborative manner and to be part of the exploration of ideas, which makes the group more active and transfers responsibility for the outcome of the meetings to the participants. The participants are made aware of the fact that they are expected to contribute to the meeting, i.e. that their ideas are taken seriously and that their thoughts count. As a *reminder* the leader reminds the group that all contributions are welcome during the meeting. This made the interaction in the LIM more balanced by allowing for more information and ideas to be heard and more questions to be asked during the meeting.

The leader of the IT unit sometimes takes a step back and performs the task functions during the meetings and this gives room for the participants to contribute with their ideas. The leader also controls the meeting by summarising the discussion and bringing it back on track when needed. This helps the participants to stay focused on the subject in question. When the leader took a more passive and monitoring role, *listening* to the discussion, instead of being active and trying to push the participants to contribute, the interaction was found to benefit. This was evident in the sequence were the group discussed a concrete issue (*discussing the distribution of PCs*). The leader's behaviour may have been important for creating more opportunity for exchanging ideas regarding the participants' concerns and thoughts, but another contributing factor was probably that the group was given a practical problem to solve.

Williamson (1998) proposes that the leader, or the higher-ranking figure during a meeting, should leave space to allow the other participants to share their views on the topic. This is referred to as a symmetric conversation. The

leaders in the five studied groups adhere to this behaviour, at least on some occasions with the result of a more active group and a more dynamic interaction. Examples in which the leader lets the participants control the discussion is found in the IT unit (*discussing the distribution of PCs*), the Municipality management group (*debating the new municipal culture house*), and the Culture unit (*planning for the offsite meeting*). In these particular sequences the leader of the group follows the discussion actively instead of dominating or controlling the interaction. Because the leaders follow the discussion actively, at any time they can step in and power the conversation forward or summarise what the discussion has produced hitherto.

When the leaders withdraw from their dominating position, they leave the floor open for the participants to contribute and to question the ideas of others. As noted by Williamson (1998), in asymmetric conversations the leaders take up most of the space and the participants often support or serve as a link of the leader's ideas. When the space is opened for new input and questions the perspective of the group broadens and the possibility for greater balance in the dimensions of the LIM is more likely.

Leader behaviour and the LIM

In several cases in the empirical examples the leader has enormous influence on how the meeting is going to unfold, which is natural considering the meeting is the leader's responsibility. In most cases, the leader is responsible for planning the meeting's agenda and calling the meeting to order. Accordingly, much of what is going on at a meeting is in the hands of the leader. The leader of the meeting also has a large responsibility for other factors, including the structure of the meeting and its purpose. The leader also tries to encourage the others to contribute actively at the meetings.

Several of the functions described by Yukl (2006) could be seen as linked to increased *inquiry* in the LIM. For instance, structuring the participation at the meetings means that more of the participants will have an opportunity to be active, and this in turn will increase the total input of ideas and opinions. This could mean an increase in just *advocacy* and not in *inquiry*. However, if the *advocacy* is in the form of contributing information that is believed to be relevant or providing new information, it might as well trigger *inquiry* from the other participants. The task of stimulating the communication could simply be done by asking the participants that are sitting silent what they think about the topic of discussion.

Clarifying the communication implies that the leader explains what the discussion is about. This is also most likely to bring a more balanced interaction pattern if the group knows what will be discussed. One of the more impor-

tant task functions during a meeting is summarising what has been said and assessing the progress of the discussion. This will have an impact on the interaction because the summarisations will move the group forward and in the same direction. There is less risk that the discussion will stray when the leader summarises the outcomes. Controlling the meeting is done by the use of *advocacy* which at the same time helps the participants to focus on the topic and purpose of the meeting. Although the activity limits the span of the discussion, the participants are not allowed to discuss whatever they want. This is because the controlling function gives an opportunity for a more focused interaction concerning the main issue of the meeting.

The leaders in the observed groups used different strategies to support or contribute to the interaction pattern. The most common strategy is to ask the group members for input. Thus, the *inquiry* category in the LIM becomes an important tool for the leader to encourage conversation. Open-ended questions, used by the leaders, often trigger the communication to become more balanced in the LIM. This is sometimes also achieved by asking the group to suggest possible solutions to a specific problem. Another use of the LIM is to ask the group regarding the *other* dimension, but this is not done as much in the presented sequences. Asking about the *other* category would induce the group to take a different view on the situation/topic.

Some of the discussion has a natural focus on *self* because of the discussion's topic. Depending on the situation and the topic of the meeting, an imbalance towards *self* must not necessarily be considered negative. In the original LIM (Figure 1) the corner of *advocacy* and *self* is the fix point attractor of low performing teams. In some situations, however, it may be necessary for the group to focus on their own process and the internal life of the group. For instance, when Environment unit shares information with each other (*sharing information*), this gives an imbalance towards *self* in the *other*-*self* dimension, but the sequence still has an atmosphere in which the participants think that the information is relevant and important for the group to function. This observation demonstrates that it is not always bad to have imbalance. What becomes important is that the group finds other situations where they are either able to balance *other*-*self* or where they focus more on discussion the *other* of the group. The present discussion shows, however, that there does not have to be constant balance in the LIM interaction to have good communication.

The leaders in the sample have different approaches towards both leading and preparing the meetings. Balancing between the agenda and the available time for the meeting is a delicate task for the leader. The problem is that there are always important topics to cover at a meeting and then suddenly a new an interesting topic emerges. The leader of a meeting must therefore be

constantly vigilant to new and emergent topics and willing to spend time on these topics at the expense of the other topics on the agenda.

The behaviour of the leader is important for how the interaction of the meeting develops. The problem for the leader is to create a climate where the participants feel comfortable in contributing their views (cf. Edmondson, 1999). In such a climate the individual can make mistakes or ask unintelligent questions without being condemned or ridiculed. In such a climate a group is able to learn. These two features make it easier for a group to test new ideas and to ask the group when something is unclear. (Edmondson, 1999) Similar ideas can be found in Senge (1990) and Wheelan (2010). Senge (1990:187) notes that "practising inquiry and advocacy means being willing to expose the limitations in your own thinking – the willingness to be wrong. Nothing less will make it safe for others to do likewise." The leader thus facilitates communication and sets the example for the other participants.

This study shows that the behaviour of the leader is an important facilitator and primary source in creating a balanced interaction pattern. The main finding, however, is that the leader behaviour affecting the interaction pattern varies according to the situation. More specifically, the leader affects the interaction pattern in the LIM to become more balanced by function as a *controller, reminder, or listener*.

A passive leader may be a facilitator for interaction if this passivity engages the other participants in the discussion. An active leader, on the other hand, may be able to control the meeting and distribute the communication load more evenly. Recent studies have shown that groups are not dominated by their leaders (Runsten, 2011) and that leaders play a less significant role in highly developed teams (Wheelan, 2005). However, this thesis found that the leader is important for the interaction pattern and the monitoring of the meeting.

The empirical findings of the study show that the leader may affect the interaction pattern and contribute to a more balanced interaction in the LIM by function as a *controller, reminder, or listener*. The leader may also affect the interaction pattern by using the task function and the group maintenance function during a meeting. These behaviours create a more productive meeting, either in terms of work results or as a more open climate in the groups and as a higher commitment and cooperation in the groups.

Participation

Participant behaviour during the meeting is closely linked to the behaviour of the leader. They could in fact be said to be two sides of the same coin. The participant role at a meeting consists of listening to discussions and presentations and contributing with knowledge or ideas (Wheelan, 2010). The participants respond to the behaviour of the leader but they also have the freedom to raise questions and structure the meeting. This, however, is done within boundaries of the leader, given that the leader is strong enough to control the structure of the meeting. Wheelan (2010) suggests that the members of a team should "encourage an open communication climate." Such a climate allows all members of the group to participate in the discussion and increases the productivity of the group. The reason for this increase in productivity is that all of the members will get heard and new ideas will be discussed.

Horizontal inquiry
When the participants engage in active interaction using either *horizontal inquiry* or *horizontal advocacy* the interaction pattern in the LIM becomes more balanced. This is shown in several of the empirical sequences (e.g. in the Environment unit: *discussing joint projects for the coming year*, in the IT unit: *discussing the distribution and administration of PCs* and *discussing "soft" issues*, and in the Culture unit: *planning for the offsite meeting*.) This horizontal inquiry helps the discussion to move forward and it also engages more of the participants actively in the discussion. The findings also suggest that *horizontal advocacy* may contribute to the interaction pattern. Several empirical sequences are unbalanced towards *advocacy* but the *advocacy* contains information that is valuable for the discussion and that is shared between the participants. This is especially clear in the Environment unit (*sharing information*) and in the Culture unit (*sharing positive highlights*). Contributing to the discussion by sharing one's thoughts horizontally helps the interaction to become more balanced in the LIM.

In the first sequence of the Municipality management group (*debating the new municipal culture house*) the participants are bound to the leadership behaviour of the group. The two persons discussing are asked to do so by the leader and the discussion is not prepared in anyway, apart from an informal discussion during the lunch break. It is interesting to see how the informal talk during the lunch break is transformed into a formal discussion in the meeting room. The other participants are silent; their function in this discussion is purely as audience though they are more than just an audience because they can take part in the discussion if they so desire. Some of the participants chose to use this option during the discussion. However, before they can do so, they have to get the leader's permission to take the floor.

Thus, in the Municipality management group the participants need to ask permission to enter the discussion. Consequently, group interaction must pass through the leader, even if the participants want to say something to the other participants. This may be a result of the size of the group, the meeting culture in the municipality, or both. Wheelan (2010) notes that larger groups find it more difficult to be effective. However, in the Environment unit, which is of the same size at the meetings as the Municipality management group, the participants can ask questions directly to one another. One reason for this communication to work is that the group meets in a smaller room than the Municipality management group. It is easier and more natural to direct the interaction towards the other participants than asking the leader for the floor and then asking the other participants a question. The climate in the Environment unit is also quite informal, which allows the participants to be more spontaneous. Thus, it is probably the meeting culture and the size of the meeting room that slow down the interaction in the Municipality management group.

The level of group development would also be a factor to consider when looking at leader and participant behaviour (Levine & Moreland, 1990; Wheelan & Williams, 2003). Early stages of group development are signified by politeness toward each other and a focus on keeping good relations within the group (Wheelan, 2010). It is hard to determine the exact level of group development in the observed groups, but by just looking at the age of the group we can get a general idea at least of how much time the group has had to develop. Depending on group, group composition, and group task groups could evolve quickly through the stages of group development, but given that these groups are work groups that do not meet on a daily basis the development would be quite slow.

In the Municipality manager group and the Environment unit the groups do not meet during their ordinary work. The Culture unit, on the other hand, is a small group consisting of only five persons including the leader and several of the members of the group are working closely with similar tasks outside the group meetings. The culture unit group would therefore have the possibility to develop more quickly into a mature group. It would also be interesting to link the development of groups to the interaction pattern in the group. One may hypothesise that more developed groups would have a more balanced interaction pattern in the LIM. Wheelan (2010), in fact, notes that teams (i.e. highly developed groups) have an open communication structure that allows for more free and open discussions. Wheelan et al., (2003) presents evidence that mature groups have more work statements in the interaction than less mature groups.

As mentioned above, a meeting can either be focused on task or group maintenance (Yukl, 2006). Wheelan (2010) describes this as work-related talk and supportive talk. According to her, the work-related talk should encompass roughly 70% of the interaction. In the presented empirical examples the participants mostly focus on work-related talk during the meetings. The Environment unit is an exception in this regard in that the group engages in supportive talk during the round robin session (*sharing information*). During the discussion about the projects (*discussing joint projects*), the participants link the discussion to their own situation. At the same time as they are evaluating the projects, they are also trying to find out how much of their work time the project would take and what the group could benefit from being part of the project. They are especially concerned with the time aspect of the project and direct their questions regarding this matter towards the person in the group that has been part of a recent project. They also engage in *horizontal inquiry* and contribute with their personal experiences from previous projects.

In the Elementary school unit the participants are actively engaging the leader in inquiry in order to make sense of the information given in the handout (*discussing cutbacks in the staff* and *discussing the organisation of the staff*). They ask the leader for clarification on the information in order to be able to contribute with their own thoughts.

Participation and the LIM

Increased participation rate may lead to increased *advocacy* and a great number of opinions during a meeting. It also means that less time will be allowed for each speaker, which, in turn, points towards a group size or meeting length that allows all of the participants to speak more than one sentence. If the participants are simply stating their own viewpoints, this will lead to greater *advocacy*. On the other hand, when the participants start to connect and share information with each other, the quality of the discussion is likely to increase. The Environment unit may serve as an example of positive sharing of information rather than merely advocating personal views (*sharing information*).

More input could just as well lead to greater imbalances towards *advocacy* and *self*. The quality of the input makes participation more important. If you could get all or even a few of the participants to ask at least one question during the meeting, the level of *inquiry* would rise and the discussion new input to use and develop.

Even in the LIM, where balance between *advocacy* and *inquiry* is the norm, the published result shows that high performance teams are not quite able to

balance between *advocacy* and *inquiry*. The quota between *advocacy* and *inquiry* is 0.87 in high performance teams, indicating that there is still an imbalance towards *advocacy*. This is only to be expected because if you are coding at a sentence level or at a minute level, a question is usually just one line, whereas *advocacy* often goes on for several lines and minutes. This problem can be solved by looking at the content of the interaction instead. If you look at the meaning of the talk you can see if it is talk that is focused on giving information or talk that is focused on clarifying an issue. The latter kind of *advocacy*, when you are trying to clarify an issue, could be seen as belonging to the *inquiry* part of the *advocacy-inquiry* dimension. *Advocacy* always takes a larger space at the meetings. Had the meetings been organised in another way for another purpose, maybe the picture may have looked quite different. However, in work meetings that are focused on bringing the work of the group together, a good deal of *advocacy* seems to be needed. What the groups could do, and did, was to elevate the use of *inquiry* through the structure and form of the meeting. More on this aspect is found in the section *structure and the LIM*.

The category of *positive* is not only used to give positive feedback. It may also be used to connect and listen carefully to each other. This means that the participants are relating to the situation of the other participants and that the learning of the group and the meeting are both enhanced. *Self* may also fill an important function during a meeting, if the participants are prepared to share thoughts and think in terms of the group.

The participants thus have a responsibility for the interaction pattern at the meeting and they can do so by contributing with their best information and knowledge to the discussion. They can also ask open questions to each other (*horizontal inquiry*), and not just ask the leader questions (vertical inquiry). The participants can allow space for the other participants to talk. They also have joint responsibility to keep the discussion focused on the topic. This also applies to positive comments; the participants can engage in supportive talk during a meeting or discussion. Positive comments and feedback are not only the responsibility of the leader.

Structure

If meetings are designed to focus on learning, it is a good idea to try to reduce status differences at the meeting (Senge, 1990:228; Wheelan, 2010). In the Municipality manager group the difference in status between the leader and the other participants is emphasised by the seating arrangement and the larger chair of the leader. The leader is placed at the short end of the oval table and with a longer distance between him and the persons sitting nearest

to him than between the rest of the participants. Status could of course be displayed by other ways than physical means and the seating arrangement. Yukl (2006) notes that high status persons often are allowed to talk more during a meeting than persons that are perceived to be lower down in the hierarchy or in status. This view is confirmed by Wilhelmson (1998) who argues that it is the responsibility of the leader to allow space for the views of the participants.

Structure and communication
How did the structure of the meeting affect the interaction in the groups? The empirical study shows that groups with a clear meeting structure have a more balanced and higher level interaction in the dimensions of the LIM, suggesting that the structure facilitates group interaction and makes it easier for the group to use all the dimensions of the LIM in their meetings. However, in this study it is often combined with the behaviour of the leaders of the groups. The leaders have to allow for interaction and *inquiry* in the structure of the meeting. Still, it seems that the structure of the meeting is a factor that contributes to group interaction though this phenomenon needs to be explored further. It is also important to keep in mind that highly structured and formalised meetings do not necessarily lead to balanced communication.

Structure could also refer to the order in which the items on the agenda are discussed. In a meeting with several goals, such as information giving or discussion, the order of these could be alternated. In the Municipality management group there were examples of both flexible and fixed structures. The leader demonstrates flexibility when he steps leaves the agenda for the day and decides to let the group hear and take part in the discussion that a few of the participants had during the lunch break (*debating the new municipal culture house*). Thus, that the group, with the support of the leader, was able to accept new issues to discuss during the duration of the meeting. At the same time, the structure of the discussion was kept within the frame and rules of their meetings. In this regard the group followed their own rules for how the meeting should be conducted and the participants did not improvise in the sense that they deviated from the rules or the structure of the meeting. This may be referred to as bounded-flexibility. The group is flexible enough to change the agenda during the meeting but not enough to change or break the rules for the interaction.

Wheelan (2010) suggests that effective groups have an open communication structure in which:
 …all member input and feedback are heard. […] When all members take responsibility to ensure that everyone is heard […] the chances of group success increases. Valuable input and skills will be used instead of lost. Ensuring that everyone has the opportunity to be heard can

be as simple as stopping periodically and check with everyone. It takes only a few minutes but can make a big difference in group success. (Wheelan, 2010:60)

The open communication structure is thus different from the balanced interaction proposed by Losada & Heaphy (2004) in that the open communication structure focuses on getting more input into the group discussion by allowing the opinions of everyone in the group to be heard. In theory this would help the group make better decisions in that the group gets access to more information. Losada (1999) does not mention anything about participation, suggests that in his model the number of participants actually talking is not necessary to measure in order to balance the interaction of the LIM.

Wheelan's (2010) concept of an open communication climate is similar to the idea of reducing out status differences as suggested by Senge (1990). The idea underlying this strategy is to elicit more input into the discussion, particularly low-profile participants. Groups that have an open communication structure would automatically receive more input into their discussions. They would also have a higher participation rate during the meetings. However, this does not necessarily mean that the discussions become more balanced in the LIM. There could be a chance of contagion and that the new input leads to more questions and answers or taking other perspectives in the discussion. As discussed previously in this thesis increased participation may lead to an imbalance towards *advocacy* in the *advocacy-inquiry* dimension towards *advocacy* and towards *self* in the *other-self* dimension.

As we have seen in the Elementary school (*discussing cutbacks in the staff* and *discussing the organisation of the staff*), the distribution of a handout at the beginning of the meeting gives an equal opportunity for all participants to take part in the meeting. The handout is a combination of structure and the behaviour of the leader. The leader prepares the handout and who allows time for reflection on the information given in the handout. The handout thus makes the discussion more equal and the participants do not have to spend valuable time preparing for the meeting, which may be important in an organisation where the employees are pressed to perform other duties.

Lack of preparation tends to make the discussions general rather than specific and much time must be spent on explaining concepts and ideas in order for the group to talk about the same things.

The handout worked well in the elementary school meetings. There are several reasons for this. First, the group had had the same people for quite some time and the purpose of the group was to discuss development. Thus, the participants of the group knew what was expected of them. The handout serves as a common ground to start the discussion, but also as a way of trig-

gering associations in the participants. The rules for the discussion were also clearly stated several times by the leader at the beginning of the meeting and during the discussion. Second, the leader was strict on the separation of idea generation and discussing possible solutions, which closely resembles the Nominal Group Technique (NGT) in which groups silently prepare ideas that are subsequently discussed (Kaufmann & Kaufmann, 2005). This active behaviour of the leader helped the group to stay focused on the matter at hand. The leader almost functioned as a dialogue leader, often reminding the group about the rules of the dialogue and helping the participants to keep the discussion on track. The handout further serves as a common *inquiry*. This was seen in the Elementary school when the participants started to discuss the contents in the handout, what the contents really meant, and how it was going to be interpreted (*discussing cutbacks in the staff*). This contributed to the interaction by letting the participants think out loud and asking questions. The handout may also serve as a preparation for a case discussion.

The case discussion

Case discussions focus on solving a specific problem or discussing a specific situation in contrast to other meeting situations in which the discussion is more general. The key word for the case discussion is *specific*. The specificity of the discussion helps the group to keep the discussion on track. Another key feature of the case discussion is the problem solving nature of the discussion, which contributes to a more balanced interaction in the group. A case discussion invites the group to use all of the dimensions in the LIM during the discussion. Two sequences in the empirical sample are distinct case discussions: the IT unit (*discussing the distribution of PCs*) and the Municipality management group (*solving an organisational problem*).

If the case is presented by someone else than the leader of the group, it will have a positive side effect of involving other people in the discussion and making the leader take a more passive role. The risk in ordinary meetings is that the leader does all the talking. Inviting someone else to present at the meeting establishes a different kind of dynamic. A participant who is afraid to ask the leader questions at the meeting may feel more comfortable asking one of their peers.

One precondition for the case discussion is that the members of the group feel secure and protected in their group relationship. The idea of the case discussion is to let someone in the group present a specific problem or dilemma in order to get new input that would help solve the problem. Thus, the person presenting the case must feel at ease in the group and willing to accept potential criticism. If this basic psychological safety (Edmondson, 1999) is present in the group, case discussions may work as a way to include

more people in the discussion and make the meetings more dynamic and effective. Groups without this basic psychological safety should not try the case discussion technique. Psychological safety is linked to learning and so is case discussion. The goal of case discussion is not to have a balanced interaction but to receive input from several persons to solve the problem in the best possible way. Building meetings on case discussions may also help to build a helping climate in the group. The other members of the group know that if they become bogged down they can always rely on help from the group. They also contribute to helping others, which makes them feel better about themselves. The idea with the helping relationship is to give the one in need new input in order for that individual to solve the problem. The problem still belongs to the presenter in that he or she is the person responsible for the problem (Schein, 1999).

The case discussion has the effect of triggering the thoughts of the group participants and to get them to come up with new ideas and ways of looking at things. Most people are helpful and if someone asks for genuine input on a problem most would at least try to help and contribute to this genuine request. Extremely dysfunctional groups could give false advice to the presenter so the problem becomes even worse. Schein (2009) argues that all helping relationships are unequal and that it is crucial to understand the basic principles of helping before engaging in such a relationship.

The true helper is the one who functions as a critical observer and who is willing to ask questions. The solution to the problem, however, still lies with the one asking for help. Other possible standpoints as a helper are to take an expert role knowing all the answers or the role of a doctor proposing remedies. To avoid these roles it is crucial that the problem is not removed from the person seeking help. Because accepting help means that you have received a favour, you are also expected to return that favour. Thus, if the case discussion is rotated somehow in the group the favour of helping will be returned automatically between the members of the group.

The case discussion also makes the interaction more balanced. A well-functioning case discussion includes questions, suggested answers, new ideas, and positive feedback on the suggested ideas. Thus, most of the dimensions of the LIM are naturally incorporated into the case discussion.

Given that the group is able to share ideas with each other and that the presenter is prepared to display his ignorance in front of the group, the case discussion may contribute to a more balanced interaction. The presenter starts by presenting the situation that led to the current problem needing to be solved. This part contains both *advocacy* and *inquiry* from the presenter's part, with emphasis on *advocacy*. The next step in the discussion is for the

other participants to ask the presenter questions in order to achieve a more comprehensive picture and to clarify some issues. This part also includes *advocacy* and *inquiry*, with focus on *inquiry*. The next step involves the participants giving suggestions on how to solve the problem; this part includes *advocacy* and could include *positive* comments. Depending on the problem and on situation, the *other-self* dimension could be used in any part of the discussion. This is the ideal type of case discussion.

In the empirical example in this study the case discussions has been of a different character. There has not been any formal presenter; rather, the group has encountered a problem that needed to be solved and thereafter they engaged in what could be called a case discussion. These sequences in the observed meetings showed a balanced interaction in the LIM and they also had a higher participation rate than other meetings. This was especially clear in the IT unit. The group had a high participation rate in the meetings. The case discussion changed the participation to becoming a volunteer participation and it also changed the direction of the communication into revolving in the room and taking the course between participants instead of going through the leader.

Future orientation

Future orientation seems to bring more balance to the interaction of a meeting. The LIM does not specifically state this but when groups are discussing the future, more of the categories in the LIM are included into the discussion. Historical discussion could also be balanced in the LIM, but for some reason, it seems to be easier to think freely when imagining what could be instead of stating what has happened. Analysing past events in an effort to determine what could have been done as an alternative for the chosen path locks us in the history of an event (Goldsmith, 2003). Goldsmith (2003) proposes a feed forward approach instead of feedback approach and claims that focusing on the future makes the feed forward more actionable. Because history cannot be changed, it is futile to focus on past events. It is still possible to learn from the past and not to repeat mistakes in the future, but the general idea is that the human imagination is better at focusing on the future than trying to learn from past events. The dimensions of the LIM invite the discussion to focus on the future. Future-oriented discussions become more balanced in the LIM in that thinking about the future forces a group to take the perspective of others and to ask more questions. These are the two dimensions with the largest imbalances in ordinary work group meetings (*inquiry* and *other)*. By moving the discussion to the future, it becomes more natural trying to imagine what others would think and how they react and do something.

The LIM is not necessarily focused on future oriented discussion, i.e. the model has no temporal element. The empirical findings in this study, however, indicate that the interaction becomes more balanced when taking a future-oriented perspective. The original study by Losada (1999) indicates, however, the possibility of the observed groups talking about the future. The observed groups gathered to discuss the business strategy of the coming year. This indicates that the discussions were to some extent future-oriented. It is of course possible to discuss the coming year using the past. The fact that the groups discussed the future business strategy means that the *other-self* dimension was more naturally present in the groups. The *other-self* dimension is based on the SWOT analysis, which is used to evaluate the business environment of a company or an organisation. Thus, it was probably easier for Losada to distinguish between *other* and *self* in his meetings than for me to make the same distinction in the present study. Had the observed group in this study been business units discussion the coming business strategy of the unit, the *other-self* dimension would be easier to operationalise. The difficulties to determine the boundaries between the concepts would still exist, but it would be easier to distinguish between them. Future-orientation is thus not a necessity for a balanced interaction, but taking a future perspective enhances the possibility of a balanced and a more dynamic interaction that includes all of the categories of the LIM.

Barge & Oliver (2003) suggest the use of conversational structures for working with appreciation in organisations. The suggested structures closely resemble the categories and ideas of the LIM. For instance, they suggest that the group or manager should take on different roles such as imagining how people outside the organisation perceive an issue or that the group should take on the perspective of other outside persons or organisations. This suggestion closely resembles the idea behind the *other* category of the LIM. They also suggest that groups should talk about the future and verbalise their hopes and dreams. This has no equivalence in the LIM, but as we have seen an orientation towards the future may make the balance in the interaction even more. They also suggest reflective conversations in which one or more of the participants in a group observe and then comment on the interaction.

Could you balance *other* and *self* without a future-oriented perspective? In what we know from the original model the groups in that study focused on developing plans for the coming year. The discussions were strategic and probably focused on future development. Future orientation thus seems to be an important ingredient in the balancing of *other* and *self* in the LIM. An orientation towards the past is more likely to look like a "blame game" that tries to find out who did what and who was right and who was wrong. Goldsmith (2003:17) suggests we look to the future because "[w]e can't change the past". It is thus better to focus on the future than the past.

Looking at the order parameters of some of the groups

Order parameters can be described as the culture in the groups and how the groups conduct their meetings. If you want to change a complex adaptive system, a first step in that change process would be to identity the order parameters of a group. Order parameters are created through the interaction in a group and they at the same time control the interaction. In many respects they can be thought of as norms that are developed in the group because they make things easier for the group. These norms later become things and procedures that control the group and that are taken for granted, even though no one remembers why or how they were created in the first place.

In the Municipality management group the order parameters are not yet stabilised but some patterns are recognisable. First, because the group is newly formed, no order parameters have yet been established. Instead, the group relies on old and secure habits on how to conduct a meeting. This could be one explanation for the group's formalised structure at the meetings. At the same time, there is a struggle to establish new order parameters and a new way of doing things because some participants feel that merely safe ways of conducting meetings are not enough. According to CAS theory, the interaction in system creates the order parameters, which impact the interaction. Thus, the Municipality management group still needs to establish order parameters that will work for this group. In the meantime, the group relies on old habits that most people in the group are happy to accept.

In the Elementary school the order parameters seemed stable and well established in the group. Two major order parameters in this group were the special structure of the meetings and the behaviour of the leader. The group conducted their meetings in accordance with almost the same basic pattern every time. This way of organising became an automatic feature of the group: there was no elaborate design behind the structure – it was *self-organized*. The leader, however, had a clear idea how to run the meetings, promoting participation and contribution. She also wanted the participants to be part of the decision-making process. Instead of deciding everything on her own, she invited the group to take part in decision-making, although she had the formal responsibility and the final word regarding the decisions taken.

The IT unit changed the form and discussion topic of their meetings when the observations started and therefore new order parameters had to be established. This process worked very slowly, where it was obvious that the old habits of the group still remained in the room. The group had problems with establishing functioning order parameters for the new kind of meeting and they were also afraid to lose face or look bad in front of the leader and the researchers. Taken together, these factors meant that the meetings often

came to a halt with long silences and lack of discussion. The group also portrayed a lot of irony. Irony is a tricky issue that could be understood in at least two ways. Irony could be a healthy thing, indicating that the group has a certain jargon that is used to build a good relationship between the members of a group. On the other hand, it could be used in an unhealthy way to laugh away difficult issued that need to be addressed. In this way it serves as a defence mechanism against topics that are hard to discuss or painful.

Order parameters are not always easy to discover. In the Environment unit and the Culture unit I was not able to identify any clear order parameters. This does not mean that they do not exist but that I have not managed to look closely enough. All social systems develop order parameters. It is possible to speculate that one order parameter in the Environment unit is the inspectors' need for information. According to the participants, the previous leader did not give any direction or any information on the office and the inspectors that worked at the unit at that time said that they had a leader that did not care. Thus, they were happy with the new leader who contributed with information from the municipality. This also meant that the meetings contained a lot of information from the leader, but that the participants were happy with this situation because they now felt more involved in the events of the unit.

The concept of order parameters and how they are developed can help us understand why a group behaves as it does. It is important to remember that order parameters serve as a magnet for the interaction in a system. Groups are able to expand their field and use other parts of the phase space, but most of the time the interaction returns to the established order parameters. It is still possible to change order parameters in a group, but this requires great effort from the participants. These changes in order parameters most often take place when an external factor changes or when one or several persons in the group change. A new leader, for instance, has the opportunity to change order parameters more easily than otherwise. However, this change has to be done quickly and with force; in other case, the old habits of the group take control and continue to guide the interaction. The best scenario is of course when the leader and the participants work together to establish new order parameters in the group. The concept of order parameters also helps us to understand why it is so difficult to change a group or an organisation. A first step in any change process would be to identify the order parameters of the organisation that are to be changed.

If order parameters are developed in the same way as norms, which I believe they are, then the leader has a large impact on the creation and change of order parameters. According to Schein (2004), in a leaderless group the person who first suggests a working solution to the problem becomes leader.

This leader then stays as leader as long as his or her solutions seem to work for the group. Thus, if the formal leader of a group is able to show the group that the interaction climate and the quality of the meeting changes if the group engages in more inquiry, takes a more external view on matters, and is more positive towards each other, a true shift in the order parameters is possible. The leader is not alone in the role of creating or changing order parameters in that the participants are involved and play an important role as well.

Because the order parameters are created in the group, the possibility to change them is always in the group's reach. Hence, every group in itself holds the key to its development and that they do not always need to be changed with help from the outside.

Different functions of a meeting

Based on the observations conducted for this study, I suggest three basic functions of a meeting: a meeting that is work-oriented, a meeting that is relation-oriented, or a meeting that is learning-oriented. These results are preliminary findings and the analysis of meeting functions were not an intended aim of the study.

Work-oriented meetings focus on getting things done and making decisions. The relation-oriented meeting focuses on positive interaction and relation building. The learning-oriented meeting focuses on development, discovery, and problem solving. These three major types of meeting function also have different interaction patterns in the LIM. Even though the LIM states that a balance between all the dimensions is to be preferred, different functions of a meeting make different parts of the LIM more important.

A meeting can also have all these different functions at the same time or in a mixed form. A meeting could be focused on both relation- and work-oriented functions. Some support for this contention is found in the literature. Wheelan (2010), for example, suggests that effective meetings should have a ratio of 70:30 for work-oriented speech acts over relation-oriented speech acts. Her focus is thus on a work-oriented meeting but with a relational touch. Dutton & Ragins (2006) suggest that meetings are crucial for building relations in organisations.

Jay (1976) suggests that a meeting should have six functions: (i) meetings are used to define who belongs to the group; (ii) meetings add to the knowledge of the group; (iii) meetings clarify the goal of the group and what the group needs to do to be successful; (iv) meetings create a commitment to-

wards the decisions taken by the group; (v) meetings give an opportunity for the leader to exercise his or her leadership and guide the group process; and (vi) meetings are an arena for displaying status in the group. Table 9 presents the three types of meeting function.

Table 9 Meeting functions and the LIM

Function	Comments
Work-oriented	Facts and the questioning of facts are important. This is done by balancing *advocacy* and *inquiry*. The *positive* component is to provide feedback to ideas and information. Depending on the type of work and the specific topic of the meeting, *self* and *other* will be differentially important and not necessarily in balance.
Relation-oriented	Relations are mainly built by being *positive* to each other and taking an interest in each other. Thus, the group engages in genuine *inquiry* in order to build a relation. Because the group focuses on itself and the members of the group, *self* becomes an important category. The relation-oriented meeting may therefore have an imbalance towards *self* in the interaction of the LIM.
Learning-oriented	Learning orientation gives a natural balance between the categories of the LIM. Learning occurs when groups are able to take different perspectives and encourage each other to contribute with novel ideas. All of the categories of the LIM are equally important

There are three main aims of a meeting: to work, to relate, or to learn. If the aim of a meeting is to work, the group usually has an agenda and some practical issues that need to be discussed. Meetings that are aimed at building relations in an organisation often have another official aim, most often work-related. Relation building is not a task that is sanctioned in most output-oriented organisation and thus the relationship meeting has to be disguised into something that more closely resembles work. The learning meeting is focused on solving a problem and could also be called a development meeting if you want to dress the learning in a more future-oriented language. At this type of meeting, the participants either discuss a problem or both discuss and solve a particular problem or development issue. Such meetings need not end in any decisions being taken or in offering a solution to the specific problems. However, during the discussion, other problems may have been solved and new questions regarding the organisation may have evolved.

Work-oriented meetings

This is a meeting in which the group is task-oriented, i.e. wants to get things done. It could also be a meeting in which decisions are made, but this is not necessarily the case. The focus on these meetings is the task of the group or the organisation and the participants share the responsibility for solving this task. A minimum of time is spent on conflicts and resolving conflicts; instead, the group focuses on the common task, with the goal of solving it in an efficient manner. Many organisations and managers think that their meetings are work-oriented meetings and that the group they are leading is a task-oriented group. This is not always the case. According to Wheelan & Williams (2003), mature groups are more likely to have work-oriented meetings than newly formed groups. Mature groups have already settled most of the conflicts that arise when a group is forming and the participants are searching for their roles within the group.

Work-oriented meetings imply that the focus in the LIM is *inquiry* and *advocacy*. The meeting is based on facts (i.e. advocacy) and on interpreting or questioning these facts (i.e. inquiry). Depending on the work of the group, focus may either be on self or other. Self would be most natural for work groups discussing internal work-related items. The work-oriented meeting may thus be imbalanced towards self, but this is not necessarily the case.

When the Environment unit receives information from the leader (*working together as a group*), they are engaged in work activity. The participants do not just passively receive the information. They interpret the information in regards to their own work and are actively asking the leader for more information or if they need to take any measures and act on the information. This would be an example of a meeting that is focused on work. Work at this meeting is not defined as taking decisions; rather, the inspectors get the information they need in order to perform their tasks.

Relation-oriented meetings

The aim, officially or unofficially, of the relation-oriented meeting is to bring participants closer together. According to Dutton & Ragins (2006), meetings are an arena in organisations that enhance and build connections between the members of an organisation. These connections are preferably of a positive or high quality. Relational meetings also create a sense of participation and belonging in the organisation and perhaps even in the group. Such relation building is especially important in organisations where the workers are interacting with each other on a daily basis. Then it is important to have a meeting or a gathering point where the employees of an organisa-

tion can meet and interact. Such interactions also make it possible to share knowledge and create a more common way of working.

Although the relation-oriented meeting is often frowned upon in organisations, it has an important role to fill. In organisations where other meetings are frequent there may not be room for a sole relation-building meeting, but in organisations with highly individual members and few chances of natural interaction during the daily work week such a meeting can be important.

The office meeting in the Environment unit is the closest to a pure relation-building meeting in this study, but it was disguised as an ordinary work group meeting. A more common form of relation building is the one that takes place within the realm of another type of meeting. It could be argued that all meetings in some respect are relation building. The fact that people are gathering in a meeting to interact with each other often has the secondary result that relations are enhanced as well. All of the meetings in the study had relation-building components but none of them were called relation meetings. In the smaller Culture unit the meeting is a way of bringing the participants closer together. Their meetings sometimes took a coaching turn when the leader of the group, who was very experienced, guided the younger participants of the group in how to solve problems within the organisation. This is a form of mentoring or coaching type of meeting which fits well under the relation-building type of meeting.

The absence of true relation building meetings in organisations is noteworthy. It is as though relations are of no importance in the working of an organisation and that to build or develop relations during meetings is considered meaningless to the overall performance of the organisation. However, high quality connections in organisations have been shown to be important for an organisation to function well. Such high quality connections can be created through meetings, or, if they already exist, enhanced a meeting. The relation building result of a meeting should not be ignored because it is of equally importance as the other positive outcomes of meetings. However, as mentioned above, the relation building aspect of meetings is often found in other types of meeting. Thus, there is no urgent call for meetings that have the sole purpose of enhancing the relations of an organisation.

The relation-oriented meeting would focus its interaction on positive aspects, such as giving each other positive remarks, and on inquiry. Inquiry is used to explore the feelings of the other participants. Self may also be important in the sense of sharing information in the group with the rest of the participants. *Advocacy* may also be important to show the other participants what type of person you are.

Learning-oriented meetings

These types of meeting, which can also be called development meetings, are aimed at solving problems or discussing the future. The purpose of these meetings is to develop and discover. To discuss new ideas the group needs to have an acceptance of bad ideas. The participants must be allowed to come up with bad ideas without loosing status or influence. Otherwise, the development runs the risk of just reproducing old and already proven methods to address new problems that may require a new approach. Learning-oriented meetings are perhaps the hardest to lead. They demand much more from the leader than work- or relation-oriented meetings. The leader sets the space for novel thinking and to communicate the rules of the meeting to the other members of the group.

The Elementary school engages in learning oriented-activity in their exploration of the future organisation of the school. They try to find different solutions in how to organise the staff and simultaneously keep the welfare of the organisation and of the staff in mind during the meeting. The meeting has a clearly formulated problem that needs to be addressed, but the group is not required to solve the problem during the meetings.

The learning-oriented meeting is also focused on development and managing the organisation in new ways. How is this done and how do you encourage novel thinking? One way of encouraging the group to "think outside the box" is to the give them the opportunity to think aloud and to make mistakes. Such a learning climate is often associated with psychological safety (Edmondson, 1999), i.e. there exists an open climate without the risk of losing face because of a lack of communicative performance.

The main idea underlying the learning-oriented meeting is to embark on a future-oriented learning journey together as a group. It is thus aimed not just at novel thinking but also in learning and the spreading of new ideas. When learning-oriented meetings function at their best, the outcome is new and improved ways to think about an organisation and its everyday life. However, one should keep in mind that it is in the everyday life of getting things done that the organisation changes. The ideas presented at a meeting may or may not have an impact on how the members of an organisation behave. Even though meetings are a part of the everyday life of an organisation, frequent as they are, it is still the behaviour outside the meeting, in the daily proceedings of an organisation, which matter most. This is clearly known to anyone who has tried to change the behaviour of an organisation by calling to meetings and developing new guidelines on how to behave.

The LIM is all about the learning-oriented meeting. In fact, the LIM may be seen as a learning model. Learning and development are possible with the group if there is a balance between the categories of the LIM. Thus, the learning-oriented meeting uses *inquiry* to acquire new ideas and development opportunities, *advocacy* to asses these ideas, *self* to asses the group, *other* to examine the impact of the surroundings on the group, and *positive* and *negative* to evaluate ideas during the meeting.

Organisations are made up of the interaction and relations between its members. If these interactions are frequent enough, an emergent self-organised pattern of behaviour will manifest itself. Relations are at the core of an organisation and meetings are the formal way of relating in organisations to control and align the processes of the organisation.

10. Conclusions

This chapter presents the conclusions of the thesis. The purpose of the study was to explore how the contextual aspects of leader behaviour, participant behaviour, and structure of a meeting affect the interaction pattern in meetings. The conclusions of the study relate to these topics. The chapter summarises the findings from the previous chapter. A more elaborate analysis of the findings is found in chapter nine. The narrative structure of the empirical findings also implies that further information regarding the research questions may be found in chapters four through eight.

A major point of the thesis is to look at the context of an interaction and a meeting. The previous published research on the LIM does not present how the groups were organised or what the leadership or meetings looked like. Such questions have been the focus of this study. How does the behaviour of the leader and participants and the structure of the meetings affect the interaction pattern? By examining these questions, I have discovered that different types of discussion have a natural way of balancing the interaction pattern, which would create an interaction pattern closely resembling the ideal interaction pattern in the LIM. The LIM is a useful tool when discussing interaction at meetings but it needs to be complemented with contextual factors to better understand how a balanced interaction pattern emerges. This study has shown the importance of leadership, participation, and structure for the overall interaction pattern.

The study concludes that the behaviour of the leader plays a major role in the development of the interaction pattern. The leader may function as a *controller*, a *reminder*, or a *listener*; these three behaviours may affect the interaction pattern depending on the situation. The participants may affect the interaction pattern by contributing with information and by engaging in *horizontal inquiry*. The structure of the meeting affects the interaction pattern by helping the meeting to stay focused.

Conclusion regarding leader behaviour

In this study much attention has been on the leaders of the groups participating in the study. The reason for this unbalance towards leadership was not

intended from the beginning of the project. As the project unfolded, it became increasingly apparent that *the leader plays a significant role on the outcome of the meeting*. The leader initiates the meetings and is responsible in leading the team. The behaviour of the leader has been shown to be an important factor for group interaction. The leader facilitates the interaction at a meeting and encourages a climate of free interaction. By choice of topic and the meeting form, the leader can have a major effect on the interaction.

The study shows *that the leader affects the interaction by function as a controller, reminder, or listener.* As a *controller* the leader controls the task functions of the meeting and this helps the group to focus on the work aspect of the meeting. This in turn affects the interaction pattern to become more balanced. As a *reminder* the leader reminds the group of the structure and goal of the meeting in order to keep the meeting on track. The leader may also remind the group that all active contributions are welcome in the meeting; the leader reminds the group of the open communication climate. As a *listener* the leader steps back and allows the group to solve the issue at hand. The listener still performs the task functions in the meeting but in a more subtle way than the as a controller. The listener also delegates the group maintenance functions to the participants.

The leader has to balance between active participation and passive participation depending on the situation. Under the right circumstances, the leader is able to encourage participation by either being active or passive. An active leader asks the participants to contribute to the discussion. The passive leader steps back to give room for the participants to interact during the meeting. The leader may also contribute to the interaction pattern by performing the task functions at a meeting. By using such tools as summarising and clarifying the issues, the group is able to keep its focus on the subject of the meeting. The leader is not just only important because he or she takes up so much space during a meeting but also because he or she controls the process of the meeting.

Conclusion regarding participant behaviour

As the empirical results show, the participants at a meeting are bound to the behaviour of the leader. The general assumption regarding participation is that more active participation is good for the balance in the meeting and the interaction pattern in the LIM. *The major way through which the participants are able to contribute to the meeting is to engage each other in active interaction, i.e. horizontal inquiry and horizontal advocacy.* At several meetings the interaction often took the path through the leader; however, when the interaction travelled between the participants, the overall interaction pat-

tern became more balanced, which created more connections in the interaction. *Horizontal advocacy* also plays a role in the meeting. When participants in a meeting engage each other in contributing with ideas and sharing information the interaction pattern benefits.

The participants thus have a responsibility for the composition of the interaction pattern. The study supports theories on group development and the fact that more developed groups have a different way of interacting than groups in early stages of development. This may imply that the high performance teams in Losada's study were groups in the later stages of development. The participants have the responsibility to contribute to the meeting knowledge, ideas, questions, and facts.

Conclusion regarding the structure of the meetings

The structure of the meetings is an important factor for the composition of the interaction pattern. Two major types of structure that change the interaction pattern have been identified. These are the case discussion and the future-oriented discussion. When groups engage in these types of discussion the interaction pattern becomes more balanced. The case discussion is a specific structure of the discussion in which typically a case or a problem to solve is presented to the group. The group then engages in a discussion related to the issue. *The case discussion automatically balances the interaction in the LIM* in the studied groups. The future-oriented discussion aims at looking into the future and this contributes to balance in the interaction by giving a natural focus on exploration and on the perspective of others.

The qualitative interaction analysis done in this thesis also shows how different types of frame for the discussion yield different interaction patterns. Further, the analysis indicates that *a tight meeting structure may sometimes be a contributor to the interaction pattern in the LIM*. A meeting structure that is focused on bringing forward the use of the categories of the LIM contributes to the overall interaction pattern.

Contributions

The study set out to make contributions to the field of interaction analysis. The study accomplished this goal by showing how an interaction analysis model may be used together with contextual factors in to investigate how an interaction pattern actually emerges. It shows that it is possible to move beyond the basic interaction analysis models and take a more holistic and qualitative perspective on group interaction. Rather than merely studying the interaction pattern of groups, the present study took a more inclusive perspective by investigating the entire situation of the groups in terms of history

composition and situation. The study also wanted to show that interaction pattern is closely linked to and dependent on other factors, including the structure of the meetings and the behaviour of leader, and the participants' behaviour. This approach adds to the picture on interaction analysis and allows for a more context-related analysis.

The thesis makes four distinct contributions. First, it makes a theoretical contribution by providing a deeper understanding of the LIM. The thesis adds additional insight to interaction studies by looking beyond interaction patterns and showing how they might arise. Second, the thesis makes a methodological contribution by developing a "qualitative interaction analysis". This qualitative interpretation or estimation model can also be used by both researchers and practitioners. The tool, which is developed by the research team, works as an assessment tool that can be used in any interactional setting. Third, the graphical presentations of the interaction pattern at the meeting sequences show that the interaction patterns are not stable and that they vary depending on subject and situation. Fourth, the thesis shows the empirical composition of Swedish work meetings. There are opportunities for others to investigate further, but my study provides empirical examples of meetings in the Swedish municipal sector.

The LIM works as a traditional interaction model measuring and counting verbal utterances in a group during a specified period. The present study shows that the LIM can also be used as a qualitative interaction analysis model for group interaction. The six basic categories of the LIM help to describe the interaction and visualise the verbal behaviour of a group. In this regard the LIM works as a foundation for discussing the interaction of a group and as a reminder for the group about the kinds of behaviours that are desirable. By using the categories of the LIM to describe the composition of the meeting, the members of the group will be more aware of what they are doing. Furthermore, it may help a group determine what they need to change. During this study, several groups were observed by an outside observer looking at the interaction of the groups. This could have just easily been made by assigning one of the participants as an observer during the meeting or a part of the meeting. This simple exercise will help the group to see their own behaviour in a different light and also as a tool to find what they want to change. The group may feel that they already have a balanced interaction (the exercise will help them to see if this is the case).

The interaction pattern of a group varies between meetings and sometimes between sequences of meetings, suggesting that the LIM should not be used as an evaluative tool diagnosing the interaction in a group. Rather, the LIM should be used as a development tool. By taking topic, form, and interac-

tional behaviour into account, it is possible to assess the interaction and develop a desired interaction pattern.

The study shows that specific behaviours of the leaders and participants, often combined with specific structures of the meetings, contribute to a balanced interaction. The study further demonstrates that by taking into account these contextual factors a richer description of the interaction in the groups than a simple interaction analysis would have done may be achieved.

Future research
The scope of the study was limited to formal meetings. It would be of interest to look into the interaction regarding other encounters and meetings in an organisation to confirm the results of this study and to develop the model further. Instead of just looking at meetings, all interactions at a workplace could be studied by a more constant presence at the research site. The communication at the meetings may not be representative of the communication at other meetings or at other situations in the organisation. Thus, the results of this study cannot be generalised beyond the observed meetings. Other situations and other meetings would probably have different interaction patterns. It would also be of interest to develop the findings of this particular study and look at other meetings to determine whether the implications of this study hold in other situations and meetings.

Areas that this study has not managed to answer need to be studied in future research. Leadership is one such area that requires further study. The leader is able to affect the communication at the meetings in several ways. Looking at different types of leader leadership style that are linked to the interaction of a group would be of particular interest since the leader is proven to play a significant role for how the interaction unfolds in a group. Together with the leadership analysis, it would be worthwhile to look more formally at the development of the groups.

Future research is also needed in order to better understand the three proposed functions of a meeting in the present study. Linking these meeting functions to the interaction pattern in the LIM would also be of interest.

The present results demonstrate that the field of POS is well worth pursuing in organisational research. Drawing on insights from both AI and POS show that groups that are able to be more progressive, innovative, and positive may have an advantage. The idea that every group and organisation has unique strengths is also indicated in the thesis. Playing on those strengths may be more worthwhile than focusing on developing the weaker sides of the group or organisation.

All groups have the potential to create a balanced and open communication climate, which is desirable because it enhances relationships that can increase morale and facilitate productivity. It is the responsibility of the entire group to try and contribute to the communication process. Thus, this is an inclusive process in which all of the members of the organisation are involved.

Appendices

Appendix A
Facsimile of the field diary

Positive
Count:

Negative
Count:

Inquiry
Count:

Advocacy
Count:

Other
Count:

Self
Count:

Front of the field diary

Place and date:
Researchers present:
Visit nr:
Number of participants:
Setting: _____
_____

Description of the meeting: _____
_____
_____

Communication pattern: _____
_____
_____
_____

Intervention/feedback: _____
_____
_____
_____

Reflections: _____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Back of the field diary

Appendix B

List of interviews (in chronological order)

No.	Unit	Date	Title	Interviewers
1	Culture unit	2007-12-20	Activity leader, Culture school	FM, MW
2	Culture unit	2008-01-08	Activity leader, Culture office	FM, MW
3	Culture unit	2008-01-08	Head of unit	FM, MW
4	Culture unit	2008-01-08	Activity leader, Culture school	FM, MW
5	Culture unit	2008-01-09	Activity leader, Culture school	FM, MW
6	Culture unit	2008-01-09	Administrative secretary	FM, MW
7	Culture unit	2008-01-09	Teacher/Union representative	FM, MW
8	IT unit	2008-10-02	Support technician	FM
9	IT unit	2008-10-02	System technician	FM
10	IT unit	2008-10-02	Support technician	FM
11	IT unit	2008-10-03	System technician	FM
12	IT unit	2008-10-03	System technician	FM, BS
13	*IT unit*	*2008-10-03*	*Support technician*	*BS*
14	*Environment unit*	*2008-10-28*	*System technician*	*BS*
15	Environment unit	2008-11-21	Inspector	FM
16	Environment unit	2008-11-21	Inspector	FM, PC
17	*Environment unit*	*2008-11-21*	*Inspector*	*PC*
18	Environment unit	2008-11-25	Inspector	FM
19	Environment unit	2008-11-25	Head of office	FM
20	IT unit	2008-11-25	System technician	FM
21	IT unit	2008-11-25	Head of unit	FM
22	*Environment unit*	*2008-12-05*	*Inspector*	*PC*
23	Environment unit	2008-12-05	Inspector	FM
24	Environment unit	2008-12-05	Inspector	FM
25	*Environment unit*	*2008-12-05*	*Inspector*	*PC*
26	*Municipality manager group*	*2009-01-29*	*Head of unit*	*ÅS*
27	*Municipality manager group*	*2009-01-29*	*School administrative leader*	*ÅS*
28	*Municipality manager group*	*2009-01-30*	*Municipality office leader*	*ÅS*
29	*Municipality manager group*	*2009-01-30*	*Rescue officer, temporary*	*ÅS*
30	Elementary school unit	2009-03-09	Head principal	FM, ÅS
31	Elementary school unit	2009-03-18	Development leader/Teacher	FM
32	Elementary school unit	2009-03-18	Teacher	FM
33	*Elementary school unit*	*2009-04-29*	*Teacher/Union representative*	*ÅS*
34	*Elementary school unit*	*2009-04-29*	*Assistant principal*	*ÅS*
35	Municipality manager group	2009-06-04	Rescue officer	FM, ÅS
36	Municipality manager group	2009-06-04	Personnel leader	FM, ÅS
37	Municipality manager group	2009-06-04	CEO	FM
38	*Municipality manager group*	*2009-06-04*	*Technical administration*	*ÅS*
39	Municipality manager group	2009-06-04	Environment office leader	FM
40	*Municipality manager group*	*2009-06-04*	*Economical administration*	*ÅS*
41	Municipality manager group	2009-06-04	Social administration	FM, ÅS

Note: Italics indicate that the author was not present at the interview. The interviewers, in addition to Molin (FM,) were: Cederholm (PC), Stöllman (ÅS), Södergren (BS), and Waldenström (MW).

Appendix C

Date of observations

No.	Culture unit	IT unit	Elementary school	Municipality Management group	Environment unit
1	2007-11-28	**2008-02-26**	**2008-05-29**	**2008-08-28**	**2008-10-10**
2	2007-12-03	2008-03-25	**2008-11-03**	2008-09-25	**2008-10-17**
3	**2007-12-04**	2008-04-29	2008-11-24	**2008-10-30**	2008-11-21
4	**2008-01-30**	**2008-05-27**	**2008-12-08**	**2008-11-14**	2008-12-05
5	2008-03-04	**2008-08-26**	2009-02-02	2008-12-18	**2008-12-12**
6	2008-04-09	2008-09-23	2009-02-23	2009-01-29	2009-01-23
7	**2008-05-14**	*2008-10-28*	2009-03-09	2009-02-19	2009-01-30
8	2008-06-04	2008-11-25	2009-03-30	2009-05-28	2009-02-20

Note: The bold dates indicate meetings that sequences are presented from in the thesis.

Appendix D

Empirical sequences

Group	Seq. & No.	Title	Gr. size	Length	Coder
The Elementary school	1(1)	*Discussing parental critique*	10	34 min	BS, FM
	2(2)	*Discussing cutbacks in the staff*	9	38 min	MW, FM
	3(4)	*Discussing the organisation of the staff*	10	32 min	MW, FM
The Environment unit	1(1)	*Working together as a group*	9	20 min	MW, FM
	2(2)	*Discussing the possible joint projects for the coming year*	9	23½ min	MW, FM
	3(5)	*Sharing information*	9	8 min	BS, FM
The IT unit	1(5)	*Discussing the distribution of PCs*	11	19 min	BS, FM
	2(4)	*Discussing "soft" issues*	11	18½ min	MW, FM
	3(1)	*Discussing the task and mission of the unit*	12	25 min	MW, FM
The Municipality management group	1(1)	*Debating the new municipal culture house*	10	20 min	MW, FM
	2(3)	*Showing (dis)interest in external guests*	11	20 min	MW, FM
	3(4)	*Trying to solve an organisational problem*	12	26 min	MW, FM
The Culture unit	1(4)	*A new beginning; planning for the future*	5	40 min	MW, FM
	2(3)	*Sharing positive highlights*	3	24 min	BS, FM
	3(7)	*Planning for the offsite meeting*	4	20 min	MW, FM
				368 min	

Note: The number in parenthesis refers to the meeting number in Appendix C. Coders were Molin (FM), Södergren (BS), and Waldenström (MW).

Appendix E

Overview of the empirical examples

Unit	Sequence 1	Sequence 2	Sequence 3
Elementary school	*Discussing parental critique* (The leader controls and monitors the meeting) **Leader**	*Discussing cutbacks in the staff* (The participants explore the situation and involve others in the discussion) **Participant**	*Discussing the organisation of the staff* (The meeting has a distinct structure) **Structure**
Environment unit	*Working together as a group* (The leader informs the group) **Leader**	*Discussing possible joint projects* (The participants contribute to exploring the topic) **Participant**	*Information sharing* (The group works together and shares information through a round robin) **Structure**
IT unit	*Discussing the distribution and administration of PCs* (Case discussion, structure combined with topic) **Structure**	*Discussing "soft" issues* (The leader engages a passive group with questions) **Leader**	*Discussing the task and mission of the group* (The participants try to explore and problematise their work situation) **Participant**
Municipality management group	*Discussing the new municipal culture house* (The leader initiates and controls the discussion) **Leader**	*Showing disinterest for external guests* (The participants explore the purpose of the external presentation) **Participant**	*Trying to solve an organisational problem* (Case discussion, structure and topic) **Structure**
Culture unit	*A new beginning* (The leader spreads positive energy; the leader controls the meeting) **Leader**	*Sharing positive highlights* (The subject invites positive comments and exploration) **Structure**	*Planning for the staff days* (The participants drive the meeting by presenting/reasoning) **Participant**

Appendix F

Diagrams portraying the interaction patterns in the analysed sequences

Figure 2 The ideal interaction pattern in the LIM
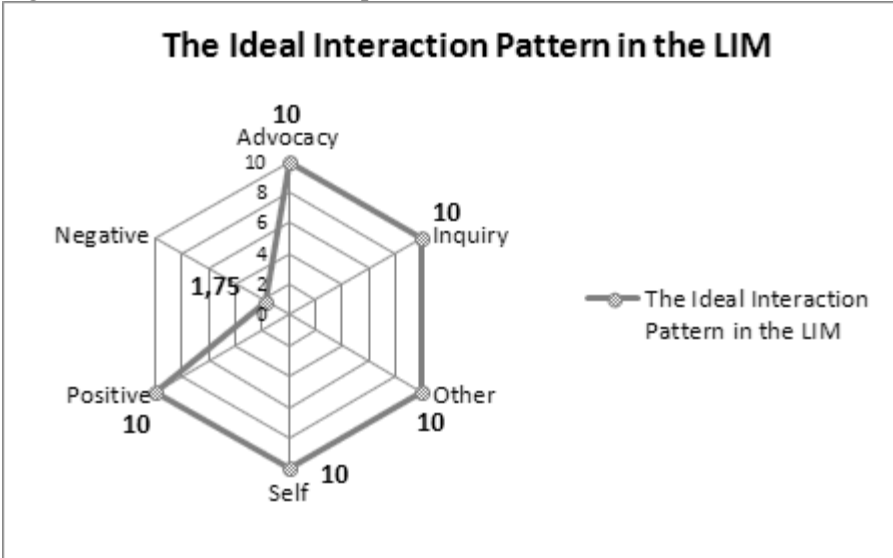
1. The Elementary school unit

Figure 4 The Elementary school: Discussing parental critique
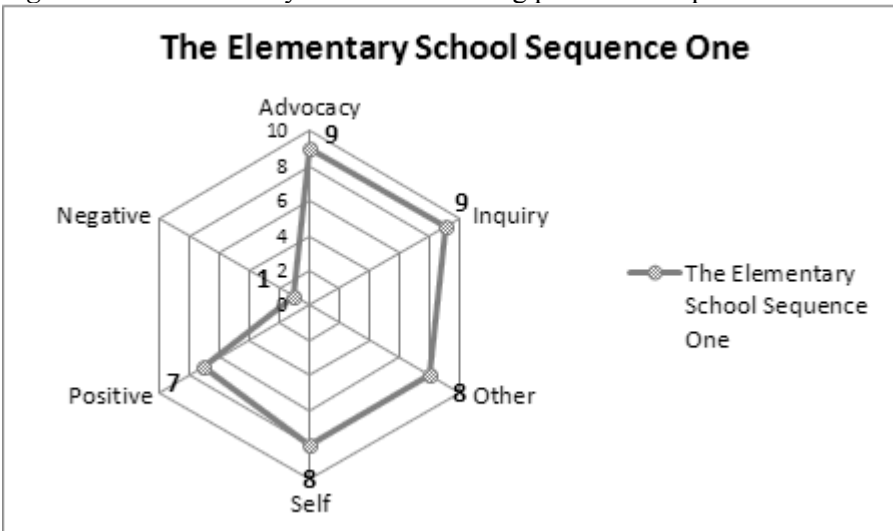
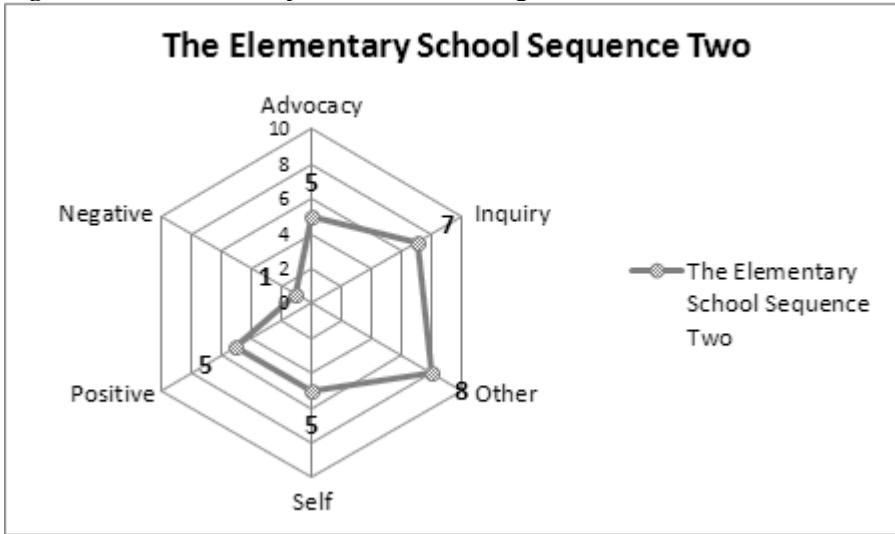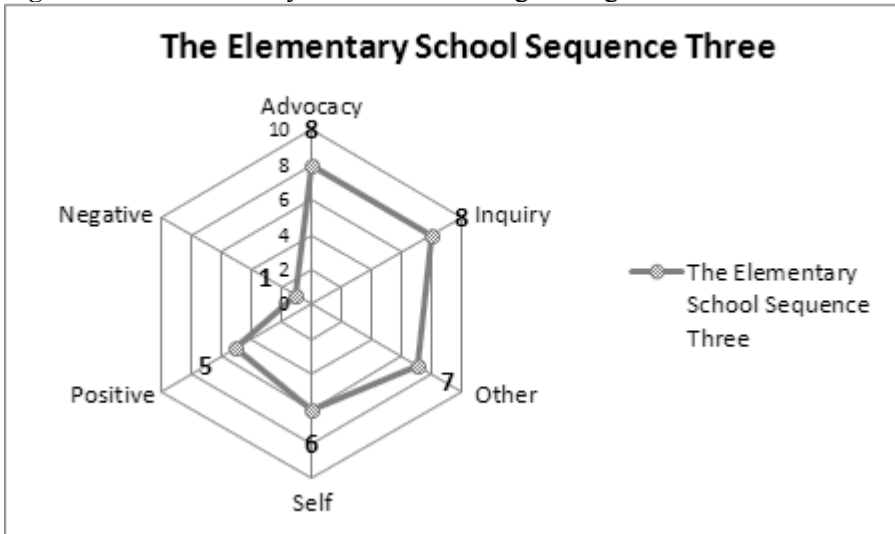*Figure 5* The Elementary school: Discussing cutbacks in the staff

Figure 6 The Elementary school: Discussing the organisation of the staff

2. The Environment unit
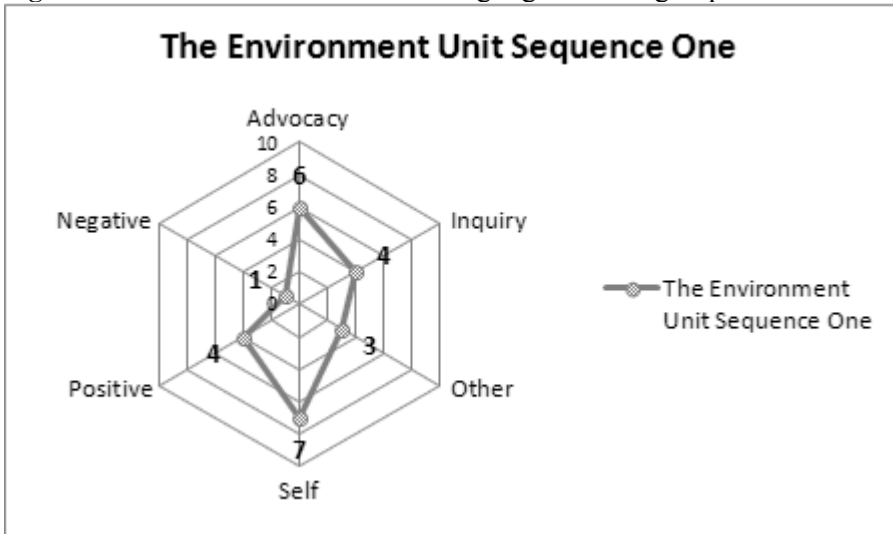
Figure 8 The Environment unit: Working together as a group

Figure 9 The Environment unit: Discussing joint projects for the coming year
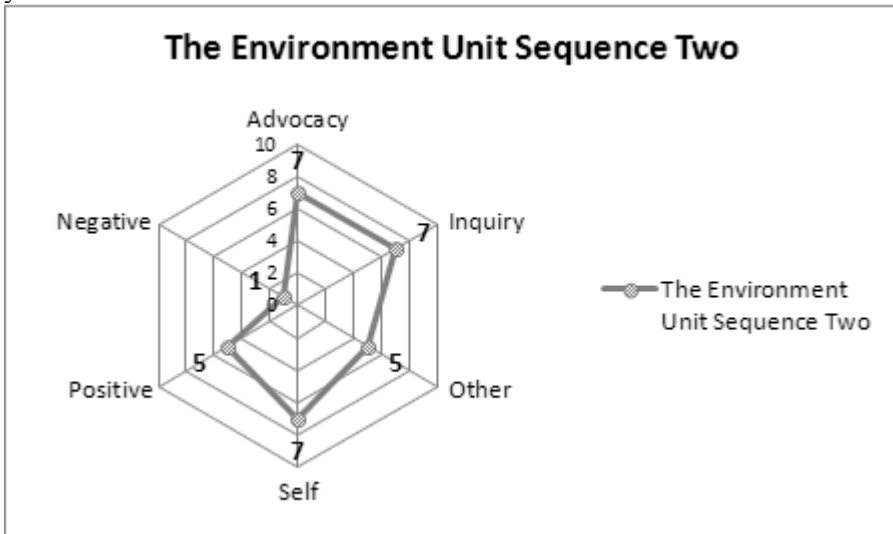
Figure 10 The Environment unit: Sharing information
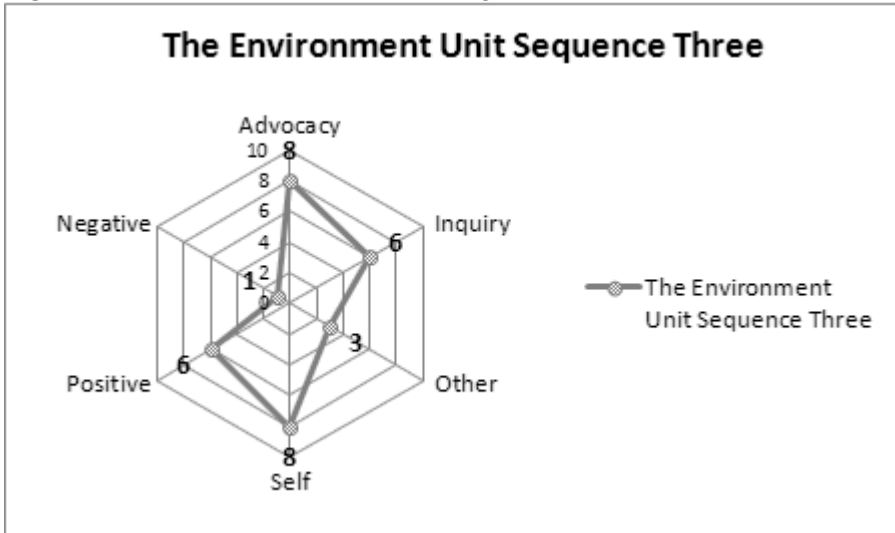
3. The IT unit

Figure 12 The IT unit: Discussing the distribution and administration of PCs
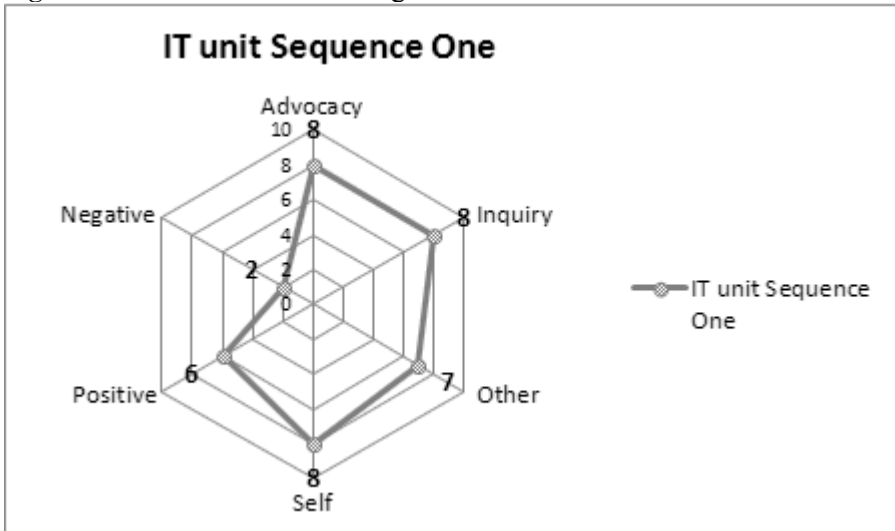
Figure 13 The IT unit: Discussing "soft" issues
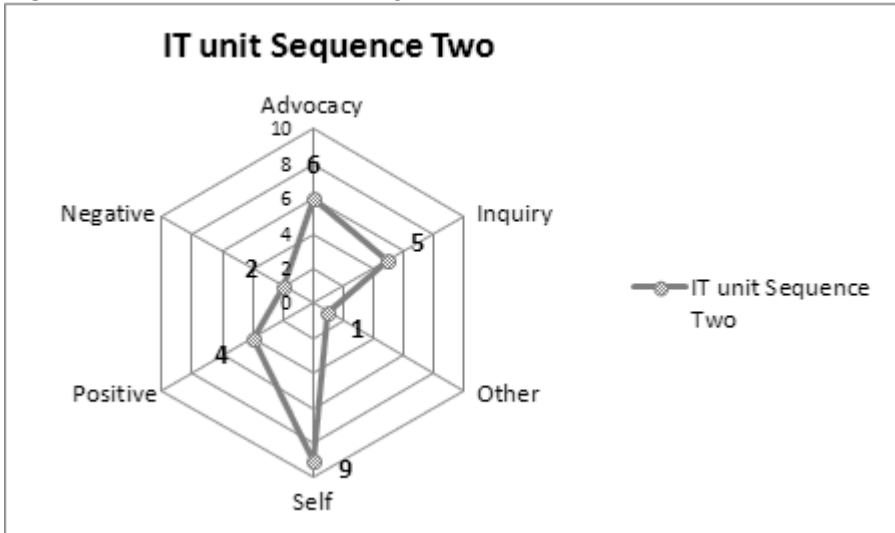
Figure 14 The IT unit: Discussing the task and mission of the group
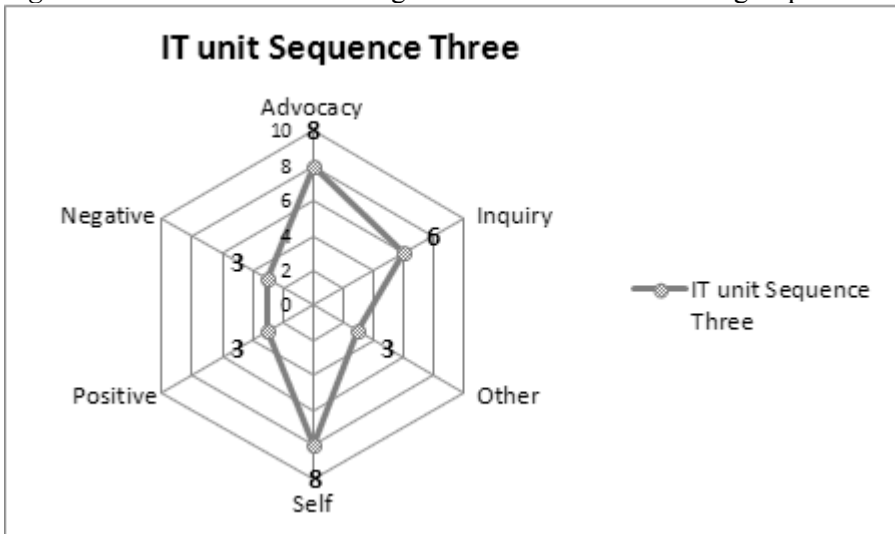
4. The Municipality management group

Figure 16 The Municipality management group: Debating the new municipal culture house
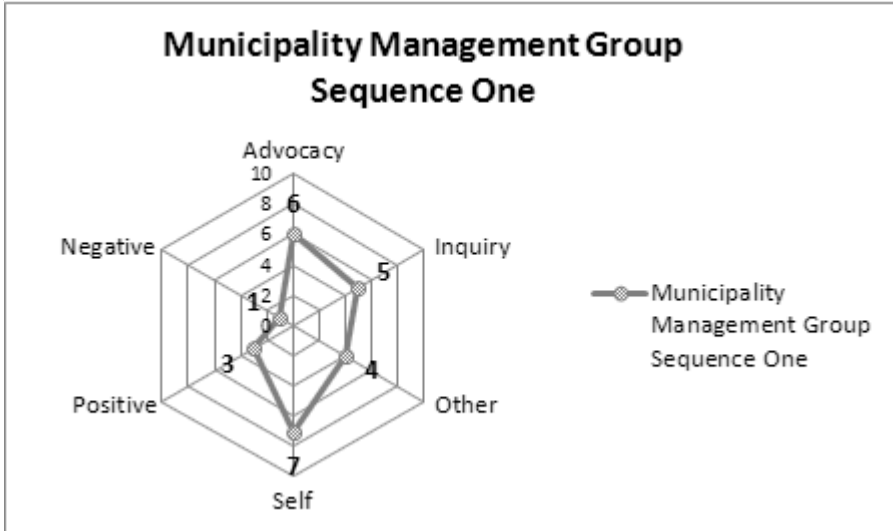
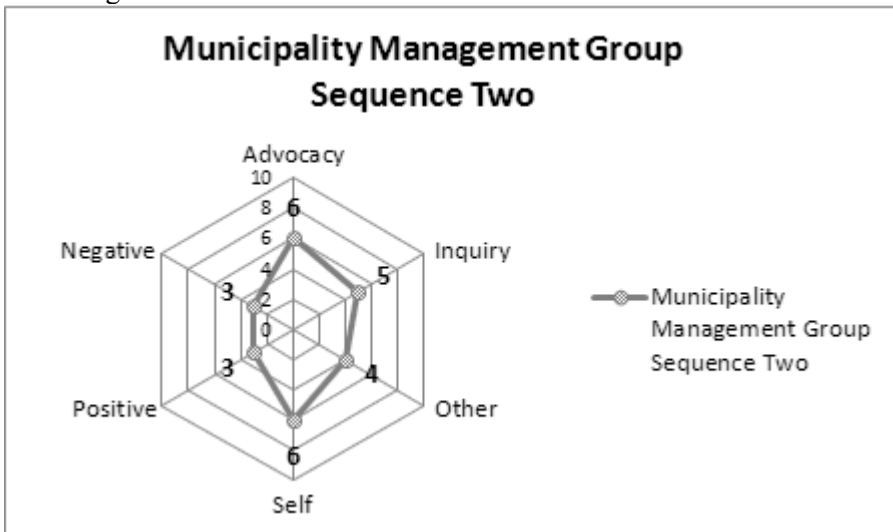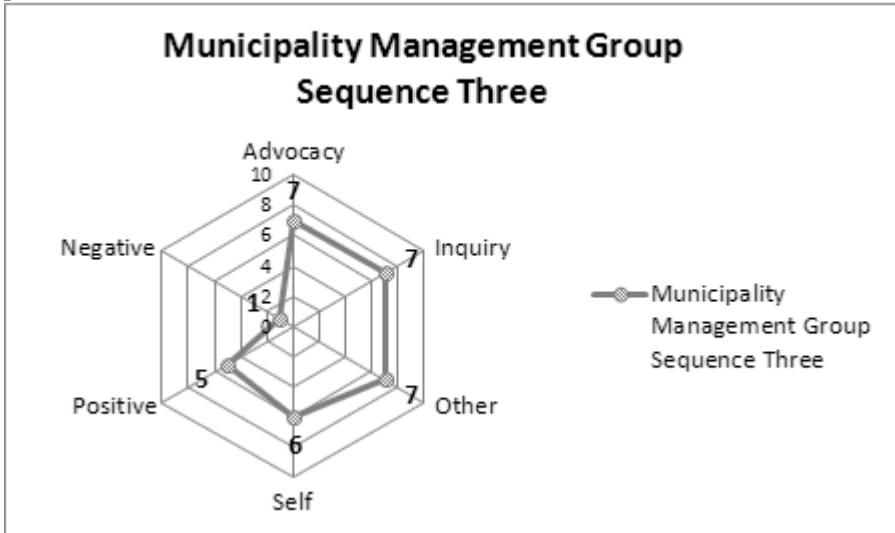*Figure 17* The Municipality management group: Showing (dis)interest in external guests

Figure 18 The Municipality management group: Solving an organisational problem

5. The Culture unit
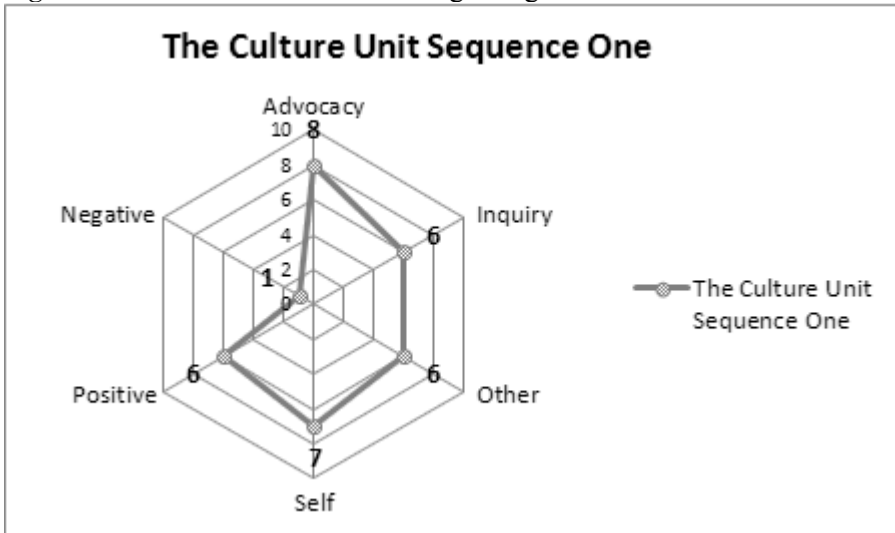
Figure 20 The Culture unit: A new beginning

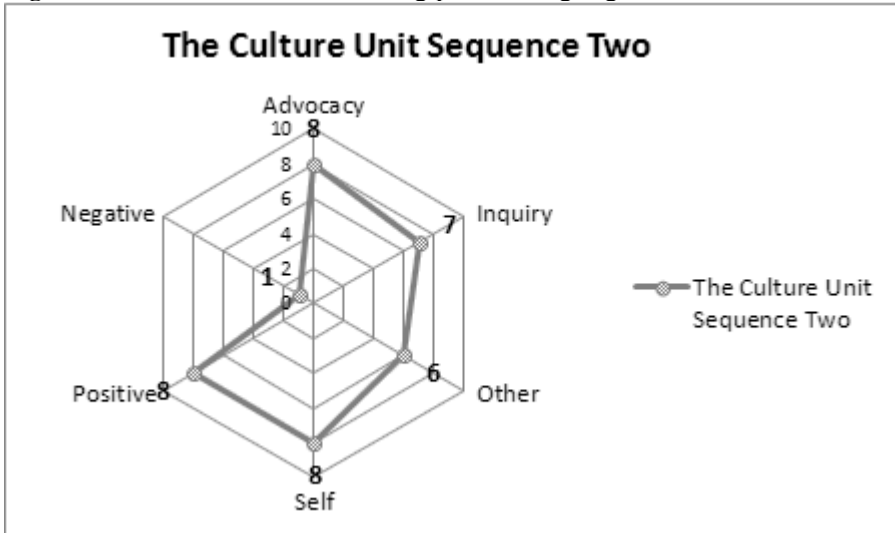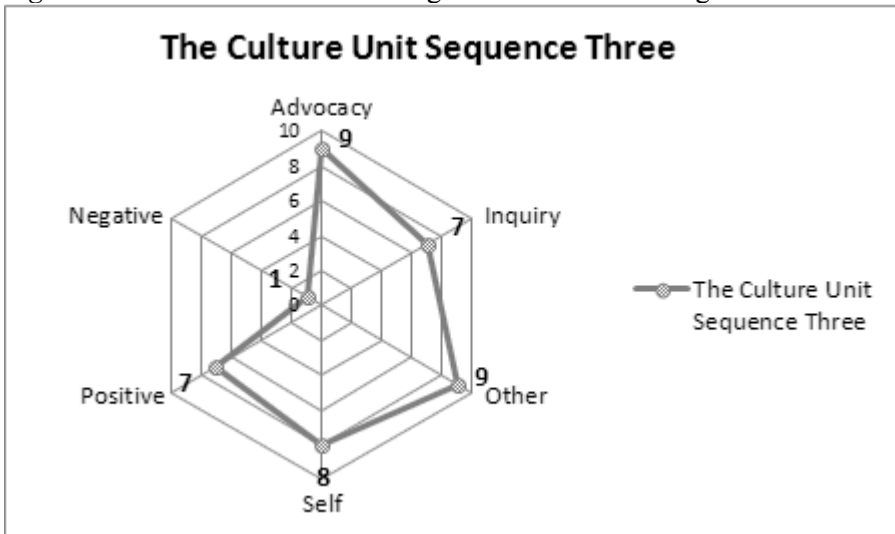*Figure 21* The Culture unit: Sharing positive highlights

Figure 22 The Culture unit: Planning for the offsite meeting

Acknowledgements

List of References

Alvesson, M. (2011). *Interpreting Interviews*, London: SAGE Publications.

Alvesson, M. & D. Kärreman (2007). Constructing Mystery: Empirical Matters in Theory Development, *Academy of Management Review*, Vol. 32, No. 4, pp. 1265-2181.

Argyris, C. (2002). Double Loop Learning, Teaching and Research, *Academy of Management Learning and Education*, Vol. 1, No. 2, pp. 206-220.

Argyris, C. & D. Schön (1979). *Organizational Learning: A Theory of action perspective*, Reading, Mass.: Addison-Wesley.

Avolio, B. J. & W. L. Gardner (2005). Authentic leadership development: Getting to the root of positive forms of leadership, *The Leadership Quarterly*, Vol. 16, pp. 315–338.

Bagozzi, R. P. (2003). Positive and Negative Emotions in Organizations, In Cameron, K. S., Dutton, J. E. & R. E. Quinn, ed. (2003). *Positive Organizational Scholarship: Foundations of a new discipline*, San Francisco: Berett-Koehler Publishers.

Backström, T. (2004). Collective learning: A way over the ridge to a new organizational attractor, *The Learning Organization*, Vol. 11, No. 6, pp. 466-477.

Backström, T. (2010). *Tankar om Komplexa Adaptiva System: Användning av begrepp från komplex systemteori på sociala system.* Course Compendium, Mälardalen University College.

Backström, T., Granberg, T. & L. Wilhelmson (2008). Alternativa former av ledarskap: En kunskapsöversikt om chefers ledarskap. In Döös M. & K. Waldenström, ed. (2008). *Chefskapets former och resultat: Två kunskapsöversikter om arbetsplatsens ledarskap*. VINNOVA Rapport VR 2008:15, Swedish Governmental Agency for Innovation System.

Backström, T, Döös, M. & L. Wilhelmson (2006). Chefen som regissör: Ledarskap och medarbetarskapets självorganiserande processer. In von Otter, C., ed. (2006). *Ledarskap för fria medarbetare: En antologi*. Arbetslivsinstitutet.

Bakeman, R. & J. M. Gottman (1997). *Observing Interaction: An Introduction to Sequential Analysis*; Cambridge: Cambridge University Press.

Bales, R. F. (1950a). *Interaction Process Analysis: A Method for the Study of Small Groups.* Cambridge Mass.: Addison-Wesley.

Bales, R. F. (1950b). A Set of Categories for the Analysis of Small Group Interaction, *American Sociological Review,* Vol. 15, No. 2, pp. 257-263.

Barge, K. J. & C. Oliver (2003). Working with Appreciation in Managerial Practice, *The Academy of Management Review*, Vol. 28, No. 1, pp. 124-142.

Bass, B. M. (1997). Does the transactional–transformational leadership paradigm transcend organizational boundaries? *American Psychologist*, Vol. 52, No. 2, pp. 130–139.

Bass, B.M. & B. J. Avolio (1993). Transformational leadership and organizational culture, *Public Administration Quarterly*, Vol. 17, No. 1, pp. 112-121.

Baumeister, R. F., Bratslavsky, E., Finenauer, C. & K. D. Vohs (2006). Bad is Stronger Than Good, *Review of General Psychology*, Vol. 5, No. 2, pp. 323-370.

Beck, S. J. & J. Keyton (2009). Perceiving Strategic Meeting Interaction, *Small Group Research*, Vol. 40, No. 2, pp. 223-246.

Bennis, W. G. & H. A. Shepard (1956). A Theory of Group Development, *Human Relations*, Vol. 9, pp. 415-437.

Berger, P. L. & T. Luckmann (1966/1991). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, London: Penguin Books.

Bernstein, S. D. (2003). Positive Organizational Scholarship: Meet the movement. An Interview with Kim Cameron, Jane Dutton, and Robert Quinn, *Journal of Management Inquiry*, Vol. 12, No. 3, pp. 266-271.

Boyatziz, R. E. (2006). An Overview of Intentional Change from a Complexity Perspective. *Journal of Management Development*, Vol. 25, No. 7, pp. 607-623.

Brown, R. (2000). *Group processes: Dynamics within and between groups*. Oxford: Blackwell Publishing.

Brown, M. E., Treviño, L. K., & D. Harrison (2005). Ethical leadership: A social learning perspective for construct development and testing, *Organizational Behavior and Human Decision Processes*, Vol. 97, pp. 117−134.

Bryman, A. (1996). Leadership in Organizations, In Clegg, S. R., Hardy, C. & W. R. Nord, ed. (1996). *Handbook of Organizational Studies*, Thousand Oaks: SAGE.

Bryman, A. & E. Bell (2007). *Business Research Methods*, Oxford: Oxford University Press.

Burns, J. M. (1978). *Leadership*, New York: Harper and Row.

Cameron, K. S. (2008). Paradox in positive organizational change, *Journal of Applied Behavioural Science*, Vol. 44, No. 1, pp. 7-24.

Cameron, K. S., Dutton J. E. & R. E. Quinn, ed. (2003). *Positive Organizational Scholarship: Foundations of a new discipline,* San Francisco: Berett-Koehler Publishers.

Champion, M. A., Papper, E. M. & G. J. Medsker (1996). Relations Between Work Team Characteristics and Effectiveness: A Replication and Extension, *Personnel Psychology*, Vol. 49, pp. 429-452.

Cohen, S. G. & D. E. Bailey (1997). What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite, *Journal of Management*, Vol. 23, No. 3. pp. 239-290.

Cooperider, D. L. & D. Whitney (2005). *Appreciative Inquiry: A Positive Revolution in Change*, San Francisco: Berett-Koehler Publishers.

Cooperrider, D. L. & L. E. Sekerka (2003). Toward a Theory of Positive Organizational Change. In: Cameron, K. S., Dutton, J. E. & R. E. Quinn, ed. (2003). *Positive Organizational Scholarship: Foundations of a new discipline*, San Francisco: Berett -Koehler Publishers.

Drath, W. H., McCauley, C. D., Palus, C. J., van Velsor, E., O'Connor, P. M. G. & J. B. McGuire (2008). Direction, Alignment, Commitment: Toward a More Integrative Ontology of Leadership, *Leadership Quarterly*, Vol. 19, pp. 635-653.

Dutton, J. E. & B. R. Ragins, ed. (2007). *Exploring Positive Relationships at Work: Building a Theoretical and Research Foundation*, New York: Lawrence Erlbaum Associates.

Dutton, J. E. (2003). Breathing Life into Organizational Studies, *Journal of Management Inquiry,* Vol. 12, No. 1, pp. 5-19.

Döös, M. (2004). Arbetsplatsens relationik: Om vardagens lärande och kompetens i relationer. *Arbetsmarknad & Arbetsliv*, Vol. 10, No. 2, pp. 77-93.

Edmondson, A. (1999). Psychological Safety and Learning Behaviour in Work Teams. *Administrative Science Quarterly*, Vol. 44, pp. 350-383.

Fairhurst, G. T. & F. Cooren (2004). Organizational Language in Use: Interaction Analysis, Conversation Analysis, and Speech Act Schematics. In Grant, D., Hardy, C., Oswick, C., & L. Putnam, ed. (2004). *The Sage Handbook of Organizational Discourse*. London:Sage Publications.

Feldman, M. S. (1995). *Strategies for Interpreting Qualitative Data*. London: Sage Publications.

Fiedler, F. E. (1967). *A Theory of Leadership Effectiveness*. McGraw-Hill.

Fiedler, F. E. (1976). The leadership Game: Matching the Man to the Situation. *Organizational Dynamics*, Vol.4, No. 3, pp.6-16.

Fredrickson, B. L. (1998). What Good are Positive Emotions? *Review of General Psychology*, Vol. 2, No. 3, pp. 300-319.

Fredrickson, B. L. (2002). Positive Emotions. In: Snyder, C. R. & S. Lopez, ed. (2005). *Handbook of Positive Psychology*. New York: Oxford University Press.

Fuhriman, A. & G. M. Burlingame (1994). Measuring Small Group Process: A Methodological Application of Chaos Theory. *Small Group Research*, Vol. 25, No. 4, pp.502-519.

Garrison, D. R., Cleveland-Innes, M., Koole, M. & J. Kappelman. (2006). Revisiting Methodological Issues in Transcript Analysis: Negotiated Coding and Reliability, *Internet and Higher Education* Vol. 9, pp. 1-8.

Gersick, C. J. G. (1988). Time and Transition in Work Teams: Toward a New Model of Group Development, *The Academy of Management Journal*, Vol. 31, No. 1, pp. 9-41.

Gladstein, D. L. (1984). Groups in Context: A Model of Task Group Effectiveness, *Administrative Science Quarterly*, Vol. 29, pp. 499-517.

Gleick, J. (1998). *Chaos: Making a New Science*. London: Vintage Books.

Goldsmith, M. (2003). Leadership Development: Try Feed forward Instead of Feedback. *Journal of Excellence*, No. 8.

Gorse, C. A. & S. Emmitt (2007). Communication Behaviour during Management and Design Team Meetings: A Comparison of Group Interaction. *Construction Management and Economics*, Vol. 25, pp. 1197–1213.

Gratton, L. & S. Goshal (2002). Improving the Quality of Conversations. *Organizational Dynamics,* Vol. 31, No. 3, pp. 209-223.

Greanleaf, R. K. (1977). *Servant Leadership: A journey into the nature of legitimate power and greatness*, New York: Paulist Press.

Hare, P. A. (1973/2010). Theories of Group Development and Categories for Interaction Analysis, *Small Group Research*. Vol. 41, No. 1, pp. 106–140.

Hare, P. A. (2003). Roles, Relationships, and Groups in Organizations: Some Conclusions and Recommendations, *Small Group Research*. Vol. 34, No. 2, pp. 123–154.

Hartman, J. (2004). *Vetenskapligt tänkande: Från kunskapsteori till metodteori.* Lund: Studentlitteratur.

Holme, I. M. & B. K. Solvang (1997). *Forskningsmetodik: Om kvalitativa och kvantitativa metoder*. Lund: Studentlitteratur.

Isaacs, W. N. (1993). Taking Flight: Dialogue, Collective Thinking, and Organizational Learning. *Organizational Dynamics,* Vol. 22, No. 2, pp. 24-39.

Jaffee, D. (2001). *Organization Theory: Tension and Change*. Boston: McGraw-Hill.

Jay. A. (1976). How to Run a Meeting. *Harvard Business Review*, March-April 1976, pp. 43-57.

Kauffman, S. (1995). *At Home in the Universe: The Search for Laws of Complexity*. England: Penguin Science.

Kaufmann, G. & A. Kaufmann (2005). *Psykologi i organisation och ledning*. Lund: Studentlitteratur.

Levine, J. M. & R. L. Moreland (1990). Progress in Small Group Research. *Annual Review of Psychology,* Vol. 41, pp. 585-634.

Lopes, M. P. & M. P. E. Cunha (2006). All that glitters is not gold: A critically-constructive analysis of positive organizational behaviour. *FEUNL Working Paper Series No. 498*.

Lorenz, E. N. (1963). Deterministic Nonperiodic Flow. *Journal of the Atmospheric Sciences*, Vol. 20, March 1963, pp. 130-141.

Losada, M. (1999). The Complex Dynamics of High Performance Teams. *Mathematical and Computer Modelling,* Vol. 30, pp. 179-192.

Losada, M. & E. Heaphy (2004). The Role of Positivity and Connectivity in the Performance of Business Teams: A Nonlinear Dynamics Model. *American Behavioural Scientist*, 47(6):740-765.

Losada, M. & S. Markovitch (1990). Group Analyzer: A System for Dynamic Analysis of Group Interaction. *Proceedings of the Hawaii int. conf. on Systems Science*, Vol. 4, pp. 101-110.

Luoma, J., Hämäläinen, R. P. & E. Saarinen (2008). Perspectives on Team Dynamics: Meta Learning and Systems Intelligence. *Systems Research and Behavioural Science,* Vol. 25, pp. 757-767.

Luthans, F., & B. J. Avolio (2003). Authentic leadership: A positive developmental approach. In Cameron, K. S., Dutton J. E. & R. E. Quinn, ed. (2003). *Positive Organizational Scholarship: Foundations of a new discipline,* San Francisco: Berett- Koehler Publishers.

McGrath, J. E. & D. A. Kravitz (1982). Group Research. *Annual Review of Psychology*, Vol. 33, pp. 195-230.

McGrath, J. E. (1984). *Groups: Interaction and Performance*. Englewood Cliffs, New Jersey: Prentice-Hall.

McGrath, J. E. (1991). Time, Interaction, and Performance (TIP): A Theory of Groups. *Small Group Research*, Vol. 22, No. 2, pp. 147-174.

McGrath, J. E. (1997). Small Group Research, That Once and Future Field: An Interpretation of the Past With an Eye to the Future. *Group Dynamics: Theory, Research, and Practice*, Vol. 1, No. 1, pp. 7-27.

Mintzberg, H. (1975). The Manager's Job: Folklore and Fact. *Harvard Business Review,* July-August 1975.

Mintzberg, H. (1977). Policy as a Field of Management. *The Academy of Management Review*, Vol. 2, No. 1, pp. 88-103.

Mintzberg, H. & J. Lampel (1999). Reflecting on the Strategy Process. *Sloan Management Review*, Spring 1999, pp. 21-30.

Murphy, P. (1996). Chaos Theory as a Model for Managing Issues and Crises. *Public Relations Review*, Vol. 22, No. 2, pp. 95-113.

Oldham, G. R. & A. Cummings (1996). Employee Creativity: Personal and Contextual Factors at Work, *The Academy of Management Journal*, Vol. 39, No. 3, pp. 607-634.

Owens, D. A. & R. I. Sutton (1999). Status Contests in Meetings: Negotiating the Informal Order. In Turner, M. J. & N. J. Mahwha, ed. (1999). *Groups at Work: Advances in Theory and Research*. New York: Lawrence Erlbaum Associates.

Paulista, G., Moresi, E. A. D., Filho, J. & G. Varvakis (2006). The Critical Role of Nonverbal Expressions on Team's Performance. *Third International Conference on Production Research – Americas' Region 2006 (ICPR-AM06)*

Pincus, D. & S. J. Gaustello (2005). Nonlinear Dynamics and Interpersonal Correlates of Verbal Turn-Taking Patterns in a Group Therapy Session. *Small Group Research*, Vol. 36, No. 6, pp. 635-677.

Quinn, R. W. (2007). Energizing others in work connections. In Dutton, J. E. & B. R. Ragins, ed. (2007). *Exploring Positive Relationships at Work: Building a Theoretical and Research Foundation*. New York: Lawrence Erlbaum Associates.

Richtnér, A. & Södergren, B. (2008). Innovation projects need resilience, *International Journal of Technology Intelligence and Planning*, Vol. 4, No. 3, pp.257-275.

Roberts, L. M. (2006). Shifting the Lens on Organizational Life: The Added Value of Positive Scholarship. *Academy of Management Review*, Vol. 31, No. 2, pp. 292-305.

Ruelle, D. (1991). *Chance and Chaos*, England: Princeton University Press.

Runsten, P. (2011). *Kollektiv Förmåga: En Avhandling om Grupper och Kunskapsintegration.* Diss, Stockholm School of Economics.

Schein, E. H. (1993). On Dialogue, Culture, and Organizational Learning. *Organizational Dynamics*, Vol. 22, No. 2, pp. 40-51.

Schein, E. H., (1998), *Process Consultation Revisited: Building the Helping Relationship*, New York: Addison-Wesley.

Schein, E. H. (2004). *Organizational Culture and Leadership*. San Francisco: Jossey Bass.

Schein, E. H. (2009). *Helping: How to Offer, Give, and Receive Help*. San Francisco: Berrett-Koehler Publishers.

Schutz, W. C. (1958). *FIRO: A Three-Dimensional Theory of Interpersonal Behavior*. New York: Holt.

Schwartzman, H. B. (1989). *The Meeting: Gatherings in Organizations and Communities.*New York: Plenum Press.

Schwartzman, H. B. (1993) *Ethnography in Organizations.* London: Sage Publications

Seligman, M. E. P. & M. Csikszentmihalyi (2000). Positive Psychology: An Introduction. *American Psychologist*, Vol. 55, No. 1 pp. 5-14.

Senge, P. M. (1990). *The Fifth Discipline: The Art & Practice of the Learning Organization.* New York: Currency, Doubleday.

Senge, P. M., et al. (1994). *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization*. London: Nicholas Brealey Publishing.

Silverman, D. (2006). *Interpreting Qualitative Data*. London: Sage Publications.

Silverman, D. (2007). *A very short, fairly interesting and reasonably cheap book about qualitative research*, London: Sage Publications.

Snyder, C. R. & S. Lopez, ed. (2005). *Handbook of Positive Psychology*. New York: Oxford University Press.

Solé, R. & B. Goodwin (2000). *Signs of Life: How Complexity Pervades Biology.* New York: Basic Books.

Spreitzer, G. M. & S. Sonensheim (2004). Toward the Construct Definition of Positive Deviance. *American Behavioural Scientist*, Vol. 47, No. 6), pp. 828-847.

Stacey, R. (2001). *Complex responsive processes in organization: Learning and knowledge creation*, London: Routledge.

Starrin, B. & P. G. Svensson, ed. (1994). *Kvalitativ metod och vetenskapsteori.* Lund: Studentlitteratur.

Stewart, A. (1998). *Qualitative Research Methods: The Ethnographer's Method*. London: Sage Publications.

Strogatz, S. H. (2001). *Nonlinear Dynamics and Chaos: With Applications to Physics, Biology, Chemistry, and Engineering.* Reading MA: The Perseus Book Group.

Stöllman, Å., Lampa, E., Molin, F., Waldenström, M., & B. Södergren (forth*.). Förbättrad kommunikation i arbetsgrupper och dess effekt på den psykosociala arbetsmiljön: En interaktiv studie inom offentlig sektor.* Department of medical sciences: Occupational and environmental medicine. Uppsala University.

Sutton, R. I. & A. Hargadon (1996). Brainstorming Groups in Context: Effectiveness in a Product Design Firm. *Administrative Science Quarterly*, Vol. 41, No. 4, pp. 685-718.

Södergren B. (2005). Om lärandets roll i komplexa innovationssystem. In Benner, M., ed. (2005). *Innovationer: Dynamik i ekonomi och samhällsliv*. Lund: Studentlitteratur.

Södergren, B. (2009). Kan en god arbetsmiljö främja energi, kompetens och innovationskraft? In Mathiassen S. E. & Vingård, E., ed. (2009). *God arbetsmiljö: En framgångsfaktor?* Statens offentliga utredningar (SOU) 2009:47. Stockholm, Arbetsmiljöpolitiska kunskapsrådet, pp. 67-78.

Södergren, B., Molin, F., Stöllman, Å., Waldenström, M., & E. Vingård (forth.). *Balanserad kommunikation: En nyckel till produktivitet och hälsa?* Uppsala University, Department of Business Studies & Occupational and Environmental Medicine. Uppsala University.

Trevino, L. K., Hartman, L. P., & M. Brown (2000). Moral person and moral manager: How executives develop a reputation for ethical leadership. *California Management Review*, Vol. 42, pp. 128–142.

Tuckman, B. W. (1965). Developmental Sequence in Small Groups. *Psychological Bulletin,* Vol. 63, No. 6, pp. 384-399.

Tuckmann, B. W. & M. A. C. Jensen (1977). Stages of Small-Group Development Revisited. *Group and Organization Management*, Vol. 2, pp. 419-427.

van Eijnatten, F. M. (2004). Charodic systems thinking: Some suggestions for a complexity framework to inform a learning organization. *The Learning Organization*, Vol. 11, No 6, pp. 430-449.

van Eijnatten, F. M. & G. D. Putnik (2004). Introduction: "Chaordic systems thinking" for learning organizations, *The Learning Organization*, Vol. 11, No. 6, pp. 415-417.

Wheelan, S. A. & R. L. McKage (1993). Developmental Patterns in Small and Large Groups. *Small Group Research*, Vol. 24, No. 1, pp. 60-83.

Wheelan, S. A., Davidson, B. & F. Tilin (2003). Group Development over Time: Reality or Illusion? *Small Group Research*, Vol. 34, No. 2, pp. 223-245.

Wheelan, S. A. & T. Williams (2003). Mapping Dynamic Interaction Patterns in Work Groups. *Small Group Research*, Vol. 34, No. 4, pp. 443-467.

Wheelan, S. A. (2005). *The Handbook of Group Research and Practice*. London: Sage Publications.

Wheelan, S. A. (2010). *Creating Effective Teams*. 3rd Edition. London: Sage Publications.

Wilhelmson L. (1998). *Learning Dialogue. Discourse patterns, perspective change and learning in small group conversation.* Doctoral thesis, No 88. Department of Education, Stockholm University.

Wilson, G. (1937). Record Keeping in Group Work: A Contribution to Sociology, *American Sociological Review*, Vol. 2, No. 2 pp. 237-246.

Yin, R. K. (2006). *Fallstudier: Design och genomförande*. Malmö: Liber.

Yukl, G. (2006). *Leadership in Organizations,* 6th Edition, Upper Saddler River: Pearson Prentice Hall.

Zalesnik, A. (1977). Managers and Leaders: Are They Different? *Harvard Business Review*, May-June 1977.

Zander, A. (1979). The Psychology of Group Processes. *Annual Review of Psychology*, Vol.

DOCTORAL THESES

1.   Nellbeck, Lennart, 1967, *Trävaruexportens distributionsvägar och förbrukning och Trävaruexportens distributionsled en modell.* Stockholm: Scandinavian University Books.

2.   Ramström, Dick, 1967, *The Efficiency of Control Strategies.* Stockholm: Almqvist & Wiksell.

3.   Landström, Lars, 1970, *Statligt kontra privat företagande. En jämförande organisationsteoretisk studie av det statliga företagets beteende.* Uppsala: Företagsekonomiska institutionen.

4.   Skår, John, 1971, *Produksjon og produktivitet i detaljhandelen. En studie i teori, problem og metoder.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 3.

5.   Wadell, Birgitta, 1971, *Daghemsbarns frånvaro ett kommunalt planeringsproblem.* Uppsala: Företagsekonomiska institutionen.

6.   von der Esch, Björn, 1972, *Skatt, inflation, eget kapital: en ekonometrisk studie av lantbruksföretag.* Uppsala: Företagsekonomiska institutionen.

7-8.   Hörnell, Erik & Vahlne, Jan-Erik, 1972, *The Deciding Factors in the Choice of Subsidiary as the Channel for Exports.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 6.

9.   Mattsson, Anders, 1972, *The Effects of Trade Barriers on the Export Firm.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 5.

10.   Tornberg, Georg, 1972, *Internationell marknadskommunikation.* Stocholm: Prisma.

11.   Wiedersheim-Paul, Finn, 1972, *Uncertainty and Economic Distance. Studies in International Business.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 7.

12. Söderbaum, Peter, 1973, *Positionsanalys vid beslutsfattande och planering.* Stockholm: Läromedelsförlagen.

13. Håkansson, Håkan, 1975, *Studies in Industrial Purchasing with Special Reference to Determinants of Communication Patterns.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 9.

14. Okoso-Amaa, Kweku, 1975, *Rice Marketing in Ghana.* Uppsala: Nordiska Afrikainstitutet.

15. Olson, Hans Christer, 1975, *Studies in Export Promotion: Attempts to Evaluate ExportStimulation Measures for the Swedish Textile and Clothing Industries.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 10.

16. Wootz, Björn, 1975, *Studies in Industrial Purchasing with Special Reference to Variations in External Communication.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 8.

17. Åkerblom, Mats, 1975, *Företag i inflation.* Uppsala: Research Report nr 7 (mimeo).

18. Johansson, Sven-Erik, 1976, *Fåmansbolag.* Uppsala: Research Report nr 1976:1. (mimeo).

19. Samuelsson, Hans-Fredrik, 1977, *Utländska direkt investeringar i Sverige.* (mimeo).

20. Lundberg, Lars, 1982, *Från Lag till Arbetsmiljö.* Malmö: Liberförlag.

21. Hallén, Lars, 1982, *International Industrial Purchasing. Channels, Interaction, and Governance Structures.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 13.

22. Jansson, Hans, 1982, *Interfirm Linkages in a Developing Economy. The Case of Swedish Firms in India.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 14.

23. Axelsson, Björn, 1982, *Wikmanshyttans uppgång och fall.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 15.

24. Sharma, Deo D., 1983, *Swedish Firms and Management Contracts.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 16.

25. Sandberg, Thomas, 1982, *Work Organizations and Autonomous Groups.* Lund: Liberförlag.

26. Ghauri, Pervez, 1983, *Negotiating International Package Deals.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr. 17.

27. Joachimsson, Robert, 1984, *Utlandsägda dotterbolag i Sverige. En analys av koncerninterna transaktionsmönster och finansiella samband.* Stockholm: Liberförlag.

28. Kallinikos, Jannis, 1984, *Control and Influence Relationships in Multinational Corporations: The Subsidiary's Viewpoint. Application of the Resource Dependence Perspective for Studying Power Relationships in Multinational Corporations.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 19.

29. Hadjikhani, Amjad, 1985*, Organization of Manpower Training in International Package deal Projects Temporary Organizations for Transfer of Technology.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 21.

30. Klint, Mats B., 1985*, Mot en konjunkturanpassad kundstrategi.* Uppsala: Företagsekonomiska institutionen.

31. Larsson, Anders, 1985, *Structure and Change Power in the Transnational Enterprise.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 23.

32. Lorendahl, Bengt, 1986, *Regionutvecklings- och lokaliseringsprocesser. Beslut och handling i kommunal näringspolitik och industriell lokalisering.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 24.

33.   Borg, Malcolm, 1987, *International Transfers of Managers in Multinational Corporations. Transfer Patterns and Organizational Control.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 27.

34.   Thunman, Carl G., 1987, *Technology Licensing to Distant Markets Interaction Between Swedish and Indian Firms.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 28.

35.   Hyder, Syed Akmal, 1988, *The Development of International Joint Venture Relationships. A Longitudinal Study of Exchange of Resources, Control and Conflicts.* Uppsala: Department of Business Studies.

36.   Gunnarsson, Elving, 1988, *Från Hansa till Handelshögskola. Svensk ekonomundervisning fram till 1909.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 29.

37.   Wallerstedt, Eva, 1988, *Oskar Sillén. Professor och praktiker. Några drag i företagsekonomiämnets tidiga utveckling vid Handelshögskolan i Stockholm.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 30.

38.   Smith, Dag, 1989, *Structure and Interpretation of Income Models.* Uppsala: Department of Business Studies

39.   Laage-Hellman, Jens, 1989, *Technological Development in Industrial Networks.* Comprehensive Summaries of Uppsala Dissertations from the Faculty of Social Sciences nr 6.

40.   Waluszewski, Alexandra, 1989, *Framväxten av en ny mekanisk massateknik.* Uppsala: Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum nr 31.

41.   Seyed-Mohamed, Nazeem, 1990, *Structural Modelling of Business Relationships.* Comprehensive Summaries of Uppsala Dissertations from the Faculty of Social Sciences nr 21.

42.   Snehota, Ivan, 1990, *Notes on a Theory of Business Enterprise.* Uppsala: Department of Business Studies.

43.   Hultbom, Christina, 1991, *Intern handel. Köpar/säljarrelationer inom stora företag.* Uppsala: Företagsekonomiska institutionen.

44.   Lindvall, Jan, 1991, *Svenska industriföretags internationella företagsförvärv, inriktning och utfall.* Uppsala: Företagsekonomiska institutionen.

45.   Levinson, Klas, 1991, *Medbestämmande i strategiska beslutsprocesser. Facklig medverkan och inflytande i koncerner.* Uppsala: Företagsekonomiska institutionen.

46.   Lee, Joong-Woo, 1991, *Swedish Firms Entering the Korean Market Position Development in Distant Industrial Networks.* Uppsala: Department of Business Studies

47.   Molin, Roger, 1991, *Organisationen inom facket. Organisationsutvecklingen inom de till Landsorganisationen anslutna förbunden.* Stockholm: Carlssons Bokförlag.

48.   Henders, Barbara, 1992, *Marketing Newsprint in the UK Analyzing Positions in Industrial Networks.* Uppsala: Department of Business Studies.

49.   Lampou, Konstantin, 1992, *Vårt företag. En empirisk undersökning av några organisatoriska självuppfattningar och identiteter.* Uppsala: Företagsekonomiska institutionen.

50.   Jungerhem, Sven, 1992, *Banker i fusion.* Uppsala: Företagsekonomiska institutionen.

51.   Didner, Henrik, 1993, *Utländskt ägande av svenska aktier.* Uppsala: Företagsekonomiska institutionen.

52.   Abraha, Desalegn, 1994, *Establishment Processes in an Underdeveloped Country. The Case of Swedish Firms in Kenya.* Uppsala: Department of Business Studies.

53.   Holm, Ulf, 1994, *Internationalization of the Second Degree.* Uppsala: Department of Business Studies.

54.   Eriksson, Kent, 1994, *The Inter-relatedness of Environment Technology and Structure A Study of Differentiation and Integration in Banking*. Uppsala: Department of Business Studies.

55.   Marquardt, Rolf, 1994, *Banketableringar i främmande länder*. Uppsala: Företagsekonomiska institutionen.

56.   Awuah, Gabriel B., 1994, *The Presence of Multinational Companies (MNCs) in Ghana A Study of the Impact of the Interaction between an MNC and Three Indigenous Companies*. Uppsala: Department of Business Studies.

57.   Hasselbladh, Hans, 1995, *Lokala byråkratiseringsprocesser, institutioner, tolkning och handling*. Uppsala: Företagsekonomiska institutionen.

58.   Eriksson, Carin B., 1995, *Föreställningar och värderingar i en organisation under förändring - en studie av identitetsuppfattningar inom konsumentkooperationen*. Uppsala: Företagsekonomiska institutionen.

59.   Jonsson, Tor, 1995, *Value Creation in Mergers and Acquisitions: A Study of Swedish Domestic and Foreign Takeovers*. Uppsala: Department of Business Studies.

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